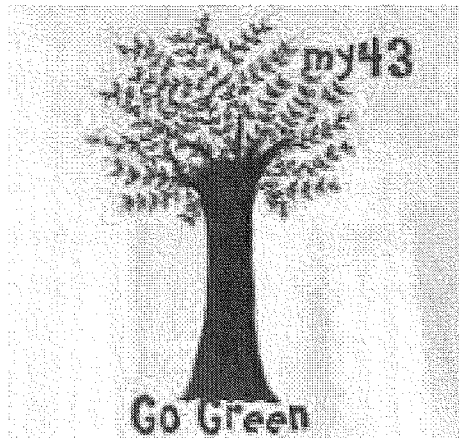


School District No. 43 (Coquitlam) 2011 Carbon Neutral Action Report



Executive Summary

As of 2009, the Coquitlam School Board of Education established climate change as a District priority. As a result, we began educating our staff, students, and parents on the impact of our behaviour around consumption and conservation. Presently, the Coquitlam school district continues to be full supporters of the Climate Action Charter and the targets established by the Greenhouse Gas Emissions Act of 2007. Over the past three years we have established a culture of awareness and action having worked diligently to reduce our carbon footprint through multiple means. The increasing financial and environmental costs of utilities, waste management, fuel and paper supplies were and still remain to be concerns to the management of the District. Although some actions have been addressed proactively, the biggest impact has been noted through sound daily operating practices. These energy efficient strategies employed do not require employees to compromise indoor thermal comfort, lighting or air quality, but simply to manage these resources more responsibly. Becoming Carbon Neutral in 2010 and again in 2011 has forced the Coquitlam School District to expand our environmentally sustainable practices and move forward with policies and procedures to ensure commitment to sustainable change.

Early 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. In 2011 we have continued this mandate working hard to ensure understanding and involvement on the part of our staff and students around environmental initiatives leading to sustainable behaviour change. Financially, the District continues to devote targeted funds to sustainability projects contributing to its carbon neutrality in 2011. Coquitlam school district's larger energy management strategy includes reductions to energy consumption by the end of 2012 outlined in a district Strategic Energy Management Plan (SEMP). Our goal is to reduce our overall energy consumption by 20-25 % from 2007/08 totals. We are well on our way to achieving that target having reduced energy consumption by an average of 6% annually over the past three years. These reductions have been in all areas of energy consumption providing significant cost savings to the district and financing further energy efficient retrofit projects.

Through the work of staff, students and our larger community, Coquitlam School District will continue to implement changes addressing climate change and pursue carbon neutrality through the mantra, *education, activation and innovation* involving staff, students and parents district wide.

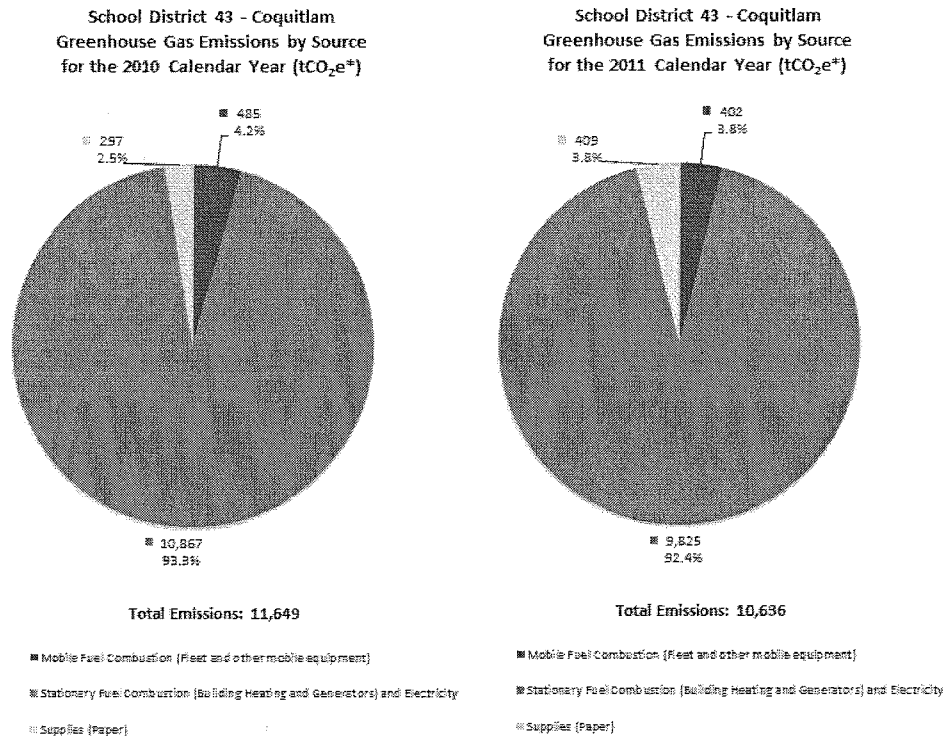
Our mandate for action continues to be based on a draft policy that contributes to our overall goals of energy management and environmental sustainability. Some of the key objectives in our district policy are outlined below:

- 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.
- 5) To promote innovative designs in the implementation of sustainable facilities planning.
- 6) 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.

Overview

Greenhouse Gas Emissions:

School District 43's Total Greenhouse Gas Emissions in 2010 and 2011 are represented in the graphs below.



Offsets applied to become Carbon Neutral in 2011:

The **10,636** tonnes of Carbon Emissions (tCO₂e) noted above require an offset investment of **\$265,575** to become Carbon Neutral.

Changes to Greenhouse Gas Emissions and Offsets from 2010:

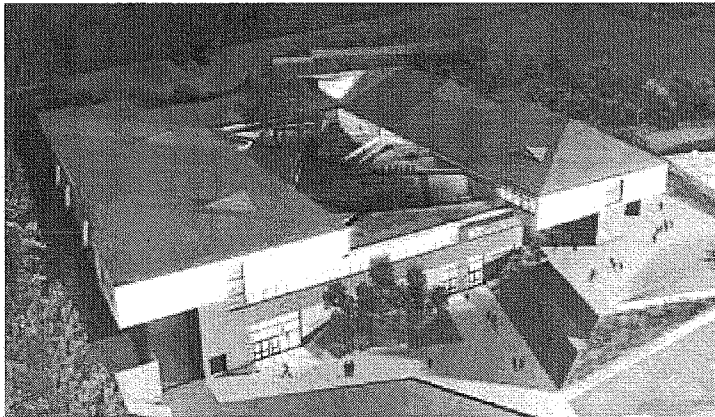
This compares to the investment of **\$290,025*** paid in 2010 to offset **11,649*** tCO₂e. The difference being a decrease of **1,013** tCO₂e and **\$24,450.00**

*****Please note that these numbers have already been adjusted to reflect the underpayment of 2259 tonnes in 2010***

Actions Taken to Reduce Greenhouse Gas Emissions in 2011:

Coquitlam School District has been a Power Smart Partner with BC Hydro for three years and has recently entered into its fourth year employing the services of an Energy Manager. Our Executive level “Green Team” met regularly in 2011, gathering for BC Hydro Quarterly presentations and follow up meetings to provide support and guidance around processes involving policy creation/amendment, visioning, and initiatives promoting environmental sustainability. Our Facilities Department continued to use infrastructure funding for several lighting retrofits and HVAC upgrades in an attempt to increase efficiency and reduce energy cost. Boiler plant upgrades were completed in two elementary schools in 2011 and 3 more complete HVAC upgrades were completed and commissioned recently. Gym lighting upgrades on 9 elementary schools, 2 Secondary and 2 middle Schools were completed as well.

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 electricity in buildings across the district.



The new \$23 million Heritage Woods middle school will be the first in School District 43 with a green roof.

Design planning for 1 new and 3 replacement schools continued in 2011 with all achieving a LEED Gold or higher standard. Planning conversations continued to involve innovative approaches to sustainable design practices.

Education and behavioral change campaigns were limited in the district toward the end of 2011 due

to teacher labour issues. Despite these challenges, staff and students worked on independent projects around “Zero-waste” initiatives and Energy Conservation projects. Schools utilized grant funding from the district and Envision Financial to support this work.

Student leadership or “Green” teams from several schools continued with Climate Change as their goal for the 2011/2012 school year. Results of their efforts can be noted in the District’s overall reduction in energy consumption and carbon emissions. Further, the awareness their work continues to spread to several other schools across the district.

Implementation of “Zero-waste” campaigns expanded recycling and green waste pickups for schools and forged new partnerships with our Facilities Department and our local Municipalities.

The District Energy and Sustainability website, “Our Green Future”, was improved to better encourage the collection and transfer of information to all schools and provide a repository for climate action initiatives. Regular updates and initiatives were communicated through the Principal of Energy Sustainability with support of the Manager of Communications.

Reports to the Board of School Trustees, Superintendent, Secretary Treasurer, and school-based administrators were made regularly throughout the year to acknowledge and promote the education activities and innovative projects being facilitated around the District.



Energy Reports and quarterly paper consumption reports were provided to schools throughout the year. The District moved forward on its overall print strategy identifying Ricoh Canada as the provider to audit and replace several outdated copiers, printers, and fax machines with energy efficient multi-functional devices. This new approach is hoped to help all District staff be more “Print-wise”. Although there will continue to be a need for print, we recognize as a district that we must shift our behaviour to become more conservative with paper and print consumption. 2011 also yielded more teachers, staff and schools going to paperless newsletters and notices, as well as creating virtual classrooms and online homework and discussion boards, to reduce paper consumption. District level meetings encouraged posting handouts online and increased use of tablet technology to review resources and electronically record notes.

Plans to Continue Reducing Greenhouse Gas Emissions 2011 – 2013:

School District 43 will continue to reduce Greenhouse Gas Emission by educating our students, staff and parents, facilitating actions and promoting innovation leading to sustainable behaviour change throughout our community.

As part of our overall strategy to reduce our GHG emissions, Coquitlam School District has made energy management and environmental sustainability over the next 2 to 3 years a priority. With the continued support of the BC Hydro Management program, our goals to reduce our energy consumption will align with measures to be determined by end of April 2012.

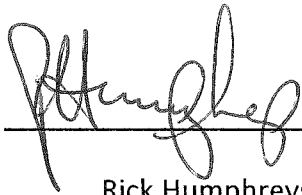


Facilities and Maintenance will continue with HVAC and lighting upgrades in order to contribute to more energy efficient buildings and better learning and working environments for students and staff. As the design and construction process for our new schools progress, the District will continue to consult with energy modelers to ensure all of our new buildings perform at optimal levels of energy efficiency. Innovative design principles will

continue to be considered throughout the design process as District Leadership, partner groups, and the community provides feedback as to the make-up of 21st Century Schools. The BC Hydro Continuous Optimization Program will provide data analyses by way of “real time” natural gas and hydro meters for 15 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 the District’s key foci over the next three years as we continue to shift paradigms and reinforce a systematic approach to carbon neutrality and environmental responsibility. BC Hydro Education programs as well as Ministry and teacher designed curriculum across K-12 will be key to the success of our efforts. Project based and personalized learning opportunities lining up with our sustainability initiatives will be promoted and supported by district personnel and our Staff Development Department. District, school and classroom presentations will continue to strengthen the nature of this mandate. Incentive programs for schools will continue through the support of the District and outside agencies. Regular and targeted communication, both face to face and electronically, will be utilized to actively promote and celebrate our growth and successes.

Overall, the District is counting a combination of both technical and behavioural projects to reduce energy consumption levels by 20 to 24% by the end of the 2012-2013 school years. As noted in the CNAR Actions Template, we are well on our way and are confident that with continued executive support and the enthusiasm of students and educators, the District we will surpass these goals over the next three to five years. In the end, we are educating social responsibility and it is the moral imperative of conservation and sustainability that counts. It is clearly the responsibility of the education sector to be leaders for this sustainable change.



Rick Humphreys

Secretary Treasurer,

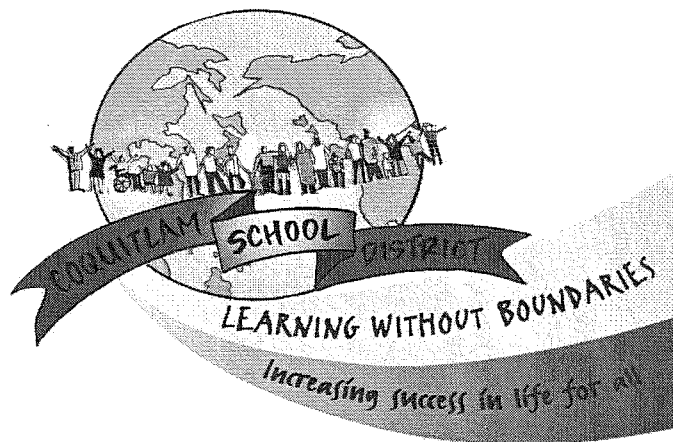
School District 43 (Coquitlam)



Tom Grant

Superintendent of Schools,

School District 43 (Coquitlam)



Appendix

Total GHG Emissions by type:

Reporting Unit:

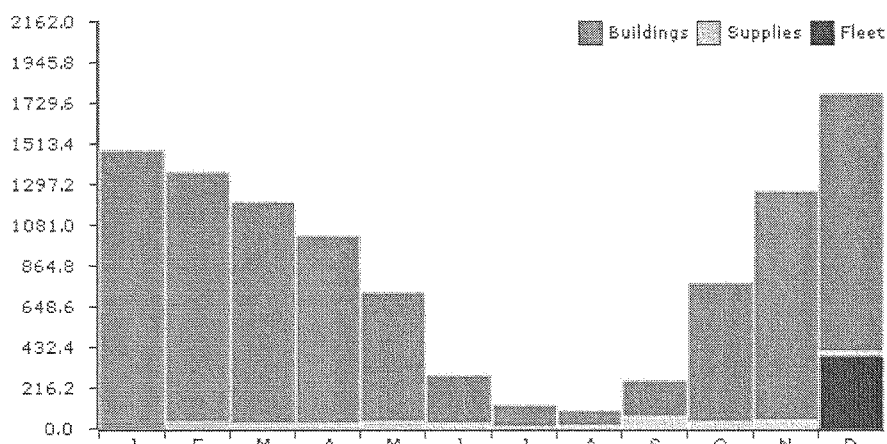
School District 43 - Coquitlam

Calendar Year 2011

Show Report

Total Emissions Calendar Year 2011 School District 43 - Coquitlam

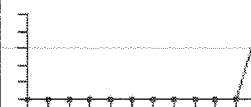
Metric tonnes
CO₂ equivalent (tCO₂e)



Click on the bars to view data for each month

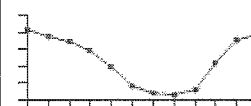
Fleet

GHG Emissions
(Metric Tonnes CO₂e)



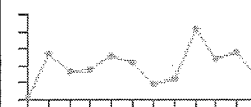
Buildings

GHG Emissions
(Metric Tonnes CO₂e)



Supplies

GHG Emissions
(Metric Tonnes CO₂e)



Totals Calendar Year 2011, School District 43 - Coquitlam

			Greenhouse Gases in Tonnes					
	Measure	Quantity	CO ₂	BioCO ₂	CH ₄	N ₂ O	tCO ₂ e ¹	
Scope 1 (Direct) Emissions								
	Mobile Combustion (Fleet)	Litres	166,209.90	363.59	12.54	0.03	0.08	401.83
	Stationary Combustion, Reported ³	GigaJoules	182,343.83	9,091.66	0.00	0.18	0.16	9,146.37
Scope 2 (Indirect) Emissions								
	Purchased Energy, Reported ³	GigaJoules	98,291.54	678.21	0.00	0.00	0.00	678.21
Scope 3 (Business Travel and Office Paper) Emissions								
	Office Paper	Packages	65,364.00	409.40	0.00	0.00	0.00	409.40
Total Emissions, Calendar Year 2011			10,542.86	12.54	0.22	0.24	10,636	
Carbon Neutral or Offset Exempt			0.00	12.54	0.00	0.00	13	
Total for Offsets⁴			10,542.86	0.00	0.22	0.24	10,623	

1. Each greenhouse gas has been converted to a standard measurement (tCO₂e) by multiplying its emissions by its global warming potential (GWP). The GWP of carbon dioxide (CO₂) from both anthropogenic and biogenic sources is 1: methane (CH₄) is 21, and nitrous oxide (N₂O) is 310. The Totals for tCO₂e are shown here rounded to the nearest whole metric tonne as only whole tonnes of tCO₂e can be purchased for offsets.

2. Estimated data has been calculated based on the methods described in the Methodology Document.

3. Reported data refers to consumption which has been directly billed to the organization.

4. Report the tCO₂e value from the "Total for Offsets" line, to the Pacific Carbon Trust.

School District 43 (Coquitlam) - 2011 Carbon Neutral Action Report

Actions Towards Carbon Neutrality							
The actions listed below contribute to a reduction in greenhouse gas emissions from sources for which public sector organizations are responsible under the carbon neutral government regulation of the <i>Greenhouse Gas Reduction Targets Act</i> .							
Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Mobile Fuel Combustion (Fleet and other mobile equipment)							
Vehicle fuel efficiency							
Replace vehicles with more fuel-efficient models	Ongoing/In Progress	10	% of vehicles are fuel- efficient models	Replacement of 3 trucks at the end of the 2011 year to more fuel efficient light trucks	Continued assessment of fleet and downsizing where necessary and financially feasible. Over past three years we have decommissioned six vehicles. Will continue to look at options for purchase of more fuels efficient or hybrid vehicels for certain maintenance shop requirements.	2009	No End Date (Continuous)
Replace larger vehicles with smaller models according to fleet "right-sizing" principles	Ongoing/In Progress	10	% of vehicles down-sized since start year indicated	Replacement of 3 trucks at the end of the 2011 year to more fuel efficient light trucks	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 specifically 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 annually. Regular monthly checks that include routine air filter and tire pressure checks.	Summer 2012 for yearly review. Practice updated on a needs basis.	2009	No End Date (Continuous)
Replace small maintenance vehicles with more fuel-efficient models	In Development	0	% of small maintenance vehicles are fuel-efficient	1 Forklift will be upgraded to a more efficient model when replacement is needed	Consider purchase of electric grounds equipment to reduce fuels consumption and greenhouse gas emissions.	2009	No End Date (Continuous)
Behaviour change program							
Provide fleet driver training to reduce fuel use	In Development	100	% of current drivers are trained	Maintenance staff engaged in minimum training and outlining of professional expectations to reduce fuel consumption. Net reductions in fuel consumption, will continue to 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			All schools encouraged parents and visitors through a variety of strategies to reduce idling on school property. All Fleet vehicles observe these expectations as well.	More comprehensive push to raise awareness of anti-idling. Educate on the impact of idling vehicles at all of our school sites.	2009	No End Date (Continuous)
Encourage carpooling in fleet vehicles	Ongoing/In Progress			Maintenance and delivery personel carpooled when practical and when job requirements supported it.	review existing use of fleet vehicles for both maintenance and delivery to identify where carpooling is a viable option	2009	No End Date (Continuous)
Promote alternatives to fleet vehicle travel where possible (e.g., bicycles, public transit, walking)	In Development			Maintenance personel were encouraged to carpool to common worksites from Maintenance shop. Board Office Staff encouraged to carpool.	Some school sites are taking on own initiatives and Board Office is always being encouraged to carpool to meetings where possible.	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			Monitored and identified inefficiencies in various sites using Hybrid Coquitlam benchmarking program using data supported through Utility Manager Software and SD43 Sharepoint Platform MY43	The development of a"Greening of Coquitlam SD43" moving our Hybrid program forward by way of a checklist-based assessment tool based on our moniker- "Educate Activate Innovate." With this program, schools and district facilities will have an opportunity to enage in incentive earning activities based on initiatives in these three categories. Green Up will also be considered if it is deemed as a more viable and cost effective option.	2009	No End Date (Continuous)

School District 43 (Coquitlam) - 2011 Carbon Neutral Action Report

Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle Controls)	Ongoing/In Progress	20	% of buildings have a real time metering system installed	Process to engage in the program and guarantee funding through BC Hydro was undertaken throughout the 2011 year and confirmed recently.	BC Hydro Continuous Optimization Program will be moving forward in 2012, installing pulse meters at 15 of our larger secondary and middle schools. Further, BC Hydro will begin instalng SMART meters in all District facilities throughout 2012	2009	2014
Owned buildings							
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	Ongoing/In Progress	6	% of owned buildings are certified LEED NC Gold or LEED NC Platinum	2 LEED Gold certified new schools began construction in 2011	2 new schools under construction and 3 more new schools in the planning phases will achieve LEED Gold certification or higher	2010	No End Date (Continuous)
Incorporate integrated design process into new construction or during renovations of owned buildings	Completed in 2011	100	% of buildings built or renovated since start year indicated used the integrated design process	Energy Studies completed at several sites to establish priorities for holistic energy upgrades to several secondary and elementary schools should funding become available from the Ministry.	As established in 2010, all new buildings built over the next 5 years will undergo a holistice approach to energy modelling and sustainable designs. All new buildings will be collabaratively designed through a process utilizing district staff, partner groups and selected consultants.	2009	No End Date (Continuous)
Perform energy retrofits on existing, owned buildings	Ongoing/In Progress	35	% of owned buildings have undergone energy retrofits since start year indicated	Design process for five new schools to be built in SD43 continued in 2011. Another seismic project was completed as well. Additions to two Elementary schools and additions of modular buildings to accommodate Full Day Kindergarten were completed in 2011.	3 more elementary and 2 middle schools are currently looking at designs for whole buildign energy upgrades.	2009	No End Date (Continuous)
Retrofitting owned buildings							
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	20	% of retrofits since start year indicated had heating, cooling, and ventilation systems upgrades	Design and upgrades for 2 elementary school HVAC upgrades were completed. Design for 3 elementary school HVAC upgrades was completed and pahse one high efficiency boiler upgrades were completed.	Completion of 3 more Elementary school and several middle school HVAC upgrades are under consideration in our Facilities Capital Plan.	2009	No End Date (Continuous)
Upgrade lighting systems during retrofits	Ongoing/In Progress	100	% of retrofits since start year indicated had lighting systems upgrades	2 Secondary, 2 Middle and 6 Elementary schools had part of full energy retrofits in the form of gym lighting or whole school lighting retrofit or redesigns.	2 Middle, and 16 Elementary schools are being considered for full lighting redesigns. Exterior LED lighting pilot projects are underway with more to follow throughout the year.	2009	No End Date (Continuous)
Upgrade/adjust control systems during retrofits	Ongoing/In Progress	80	% of retrofits since start year indicated had control system upgrades or adjustments	2 major Seconday school lighting projects completed that included updated controls. Some lighting controls upgrades in smaller elementary school projects as well. DDC upgrades for HVAC and lighting systems in a number of Elementary, Middle and Secondary schools.	More DDC Control upgrades on a number of our larger sites through BC Hydro's Continuous Optimization Program and Lighting upgrades. HVAC upgrades on 3-5 schools will include recomissioning or actual upgrade of DDC controls.	2009	No End Date (Continuous)
Improve building insulation (including windows) during retrofits	Ongoing/In Progress	20	% of retrofits since start year indicated had insulation improvements	2 Elementary schools retrofitted also addressed improvements to building envelope.	Monitoring of fully retrofitted building and their energy consumption as compared to other comparable buildings. Other buildings may have had other energy upgrades (i.e. lighting or HVAC), but not work on the building envelope. Collected data will better inform us of how to be most financially strategic with future projects.	2009	No End Date (Continuous)
IT power management							
Implement server virtualization	Ongoing/In Progress	25	% of servers have been virtualized since start year indicated	17 school and District servers were virtualized in the 2011 year	Will continue to virtualize existing and new servers until capacity to do so is maximized	2009	No End Date (Continuous)
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	Ongoing/In Progress	20	% reduction in printers, copiers, and/or fax machines since start year indicated	Procurement and planning of a District Print Strategy replacing all printers, copiers and fax machines with multi-functional devices	Implementation of multi-functional print/copy/fax devices in support of our overall Print Strategy	2009	2013

School District 43 (Coquitlam) - 2011 Carbon Neutral Action Report

Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	100	% of computers are ENERGY STAR rated	As part of our on-going computer replacemet program, all computers purchased must be Energy Star or equivalent whether new or pre owned.	Continue to purchase Energy Star or equivalent new and preowned computers through our computer replacement program.	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	50	% of fridges are ENERGY STAR rated	Maintenance of draft focused on sustainable purchasing and procurement practices to support overall energy and sustainability policy.	Audit all domestic refridgeration units in the district to determine a conservation and reduction plan.	2009	2013
Replace other appliances or electronic devices with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress			Maintenance of draft focused on sustainable purchasing and procurement practices to support overall energy and sustainability policy.	Audit all electronic appliances in the district to determine a conservation and reduction plan.	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			Education and awareness activities at all sites are ongoing to promote energy conservation and reduction across the district.	Continued Education and awareness activities at all sites with both students and staff to promote energy conservation and reduction across the district.	2009	No End Date (Continuous)
Behaviour change program							
Help staff reduce personal energy use through "workstation tune-ups"	Ongoing/In Progress	50	% of current staff have completed a workstation tune-up	Education and awareness campaigns and incentives	More Education and awareness campaigns including the recruitment of Energy Champions at each building location to monitor and promote improvements.	2009	No End Date (Continuous)
Ask staff to unplug electrical equipment or switch off power bars when not in use	Ongoing/In Progress			Education through regular email reminders and e-newsletters on what the possible energy losses are and how the little things can make a big difference.	Continued regular reminders and conservation tips out to all staff district wide. Work with custodians to support energy conservation actions of staff and students	2009	No End Date (Continuous)
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Ongoing/In Progress			Education through regular email reminders and e-newsletters on what the possible energy losses are and how the little things can make a big difference.	Continue with information campaigns that promote conservation. Office and school challenges to reduce consumption. The "Greening of Coquitlam School District". Work with custodians to support energy conservation actions of staff and students.	2009	No End Date (Continuous)
Encourage staff to use air dry setting on dishwashers	Ongoing/In Progress			Education through regular email reminders and e-newsletters on what the possible energy losses are and how the little things can make a big difference.	Continue with information campaigns that promote conservation. Office and school challenges to reduce consumption. The "Greening of Coquitlam School District". Work with custodians to support energy conservation actions of staff and students.	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			Education through regular email reminders and e-newsletters on what the possible energy losses are and how the little things can make a big difference.	Continue with information campaigns that promote conservation. Office and school challenges to reduce consumption. The "Greening of Coquitlam School District". Work with custodians to support energy conservation actions of staff and students.	2009	No End Date (Continuous)
Encourage use of stairs instead of elevators	Ongoing/In Progress			Education through regular email reminders and e-newsletters on what the possible energy losses are and how the little things can make a big difference.	Continue with information campaigns that promote conservation. Office and school challenges to reduce consumption. The "Greening of Coquitlam School District". Work with custodians to support energy conservation actions of staff and students.	2009	No End Date (Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress			Education through regular email reminders and e-newsletters on what the possible energy losses are and how the little things can make a big difference.	Continue with information campaigns that promote conservation. Office and school challenges to reduce consumption. The "Greening of Coquitlam School District". Work with custodians to support energy conservation actions of staff and students.	2009	No End Date (Continuous)

School District 43 (Coquitlam) - 2011 Carbon Neutral Action Report

Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Promote hot water conservation	Ongoing/In Progress			Education through regular email reminders and e-newsletters on what the possible energy losses are and how the little things can make a big difference.	Continue with information campaigns that promote conservation. Office and school challenges to reduce consumption. The "Greening of Coquitlam School District". Work with custodians to support energy conservation actions of staff and students.	2009	No End Date (Continuous)
Supplies (Paper)							
Paper Type							
Purchase 30% post-consumer recycled paper	Ongoing/In Progress	70	% of total paper purchased contains 30% recycled content	Schools encouraged to purchase part or fully recycled paper when financially able and when machines at the school were capable of using this paper quality.	Schools will be encouraged to purchase and use 30% recycled paper with their new multi-functional devices as they are more capable of handling this type of paper.	2009	No End Date (Continuous)
Purchase 100% post-consumer recycled paper	Ongoing/In Progress	30	% of total paper purchased contains 100% recycled content	Schools were encouraged to purchase 100% recycled paper when financially able and when machines at the school were capable of using this paper quality.	Schools will be encouraged to purchase and use 100% recycled paper with their new multi-functional devices as they are more capable of handling this type of paper.	2010	No End Date (Continuous)
Printer/document settings							
Switch networked printers and photocopiers to automatic double-sided	Ongoing/In Progress	80	% of network printers or photocopiers are set to automatic double-sided	Schools were encouraged to experiment with copy / print settings to reduce paper and print consumption. Energy manager monitored this consumption and provide both public acknowledgement and rewards for reduction.	Energy Manager and School administrators will continue to monitor print and copy consumption. The district wide Print Strategy will notify high volume users how they can reduce consumption. Energy Manager will continue to incent and acknowledge low consumers.	2010	No End Date (Continuous)
Apply "print and hold" settings to networked printers to eliminate unclaimed print jobs	In Development	0	% of network printers have 'print and hold' settings applied		Energy Manager and District will continue to inquire about Print/Hold functions within our new Print Strategy multi-functional devices.	2011	No End Date (Continuous)
Reduce default margin size in standard document templates (e.g., letters, briefing notes, forms, etc.)	In Development				Energy Manager, in conjunction with staff development and IT will help support staff I adjusting margins in word processing programs. Further, with the implementation of our multi-functional devices, we will ensure that the devices are set at optimal setting for document printing.	2012	2014
Electronic media in place of paper							
Post materials online that were previously printed	Ongoing/In Progress			All notices from the Board office were delivered via email or the District website. All paperwork regarding school organization or new student registration was completed online. Several schools piloted online forms that could be accessed by parents via their school website. Most schools' or departments newsletters were circulated via electronic means.	Schools will be encouraged to become paperless with the implementation of our District Print Strategy utilizing multi-functional devices and their scanning capabilities. Class and school websites will continue to be promoted in order to decrease paper notices home, including newsletters. Further, online form completion and paperless registration will be encouraged.	2011	No End Date (Continuous)
Switch to an electronic payroll notification system in place of paper pay stubs	Completed in 2011			Payroll department established a process to deliver pay stubbs and T-4 slips electronically. Payroll department will now monitor process and seek other opportunities to provide employees with information through electronic means		2011	No End Date (Continuous)
Behaviour change program							
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	40	% of staff currently have received collaborative software training	Most senior staff, administrators and teacher leaders were exposed to and trained around the use of collaborative software	Further exposure and training around collaborative software with all staff and students. Encouraging staff to utilize collaborative software as part of their teaching practice with students. Support of our District online learning platform (Ihub) and its online delivery of curriculum to students.	2010	No End Date (Continuous)

School District 43 (Coquitlam) - 2011 Carbon Neutral Action Report

Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress			District Leadership meetings have become paperless with the agenda and all items being placed online prior to the meeting. All Administrators and District staff make use of District provided Ipads to access the agenda and any other resources required in the meeting electronically.	Continued encouragement by Senior staff and administrators for other staff to utilize personally owned devices (tablets, smart phones, etc.) or District provided laptops to attend paperless meetings.	2010	No End Date (Continuous)
Other Paper Supplies Actions							
Planned replacement of all printers, copiers and Fax machines with Multi-functional Devices designed to encourage more scanning to save on paper usage.	In Development			Contract secured with Ricoh Canada to deliver and set up Multi-functional devices in all schools by April 2012	All multi-functional devices will be equipped with Equitract software to enable faxing and interoperability with District Sharepoint software	2011	2013

School District 43 (Coquitlam) - 2011 Carbon Neutral Action Report

Actions to Reduce Provincial Emissions and Improve Sustainability							
The actions listed below contribute to a reduction in greenhouse gas emissions from sources that fall outside of the reporting requirements defined in the carbon neutral government regulation of the <i>Greenhouse Gas Reduction Targets Act</i> . Public sector organizations can optionally use this section to report on actions that will help British Columbia meet its provincial greenhouse gas reduction targets, engage the public, and improve environmental sustainability across all aspects of their organization.							
Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Business Travel							
Policy and budgeting							
Create a low-carbon travel policy or travel reduction goal	Ongoing/In Progress			Where possible, all staff were encouraged to travel plan and carpool when attending professional development events and meetings. Walk to school initiatives and campaigns are also supported at all school sites. The Annual Walk to School Week in October always generates increased awareness throughout the District. Policy implementation is still being considered as part of the overall sustainability planning.	Increasing awareness through consistent reminders and special events. District Board Office staff, School-based administrators, and Staff Development personel will continue to model travel planning and carpooling to District meeting events and continue to utilize Live meeting and webcasts for District Leadership meetings.	2009	2012
Virtual meeting technology							
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	Ongoing/In Progress	100	% of computers have web-conferencing software installed	District continued to promote live webcast viewing for professional development activities. At the District level and in some school settings we were able to pilot web conferencing for weekly administrative meetings, interschool web conferencing, Board Office	Continue to promote use of Live media and offer training to support the professional growth of all district employes in this area. Web conferencing infrastructure/installment will continue to be addressed during IT and 21st ccentury learning conversations.	2009	No End Date (Continuous)
Make desktop web-cameras available to staff	Ongoing/In Progress	80	% of staff have access to a desktop web-camera	A high percentage of laptops devices rolled out to schools had web/video camera capacity. Additional desktop web cameras were purchased on a school by school basis and were installed to encourage use of video conferencing and on going live media professional development.	All staff will have access to web cameras in some capacity over the next several years. It will be imperative that once we establish new opportunities with increased bandwidth, that professional development activities support the learning and use of these media tools. Many more opportunities to engage in professional development activities will come about as a result of web cameras and Live meetings.	2009	2013
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	In Development	10	% of meeting rooms have access to video-conferencing equipment	All District buildings, as well as Secondary and Middle schools have wireless capabilities enabling meeting participants to better connect online. The Board office is equipped with phone and video-conferencing equipment and has had made use of this hardware for some virtual meetings.	Currently laptops and web cameras are being used to utilize live video conferencing. The district office phone systems allow for video conferencing. Roll out district wide of the current phone system is up for analysis as we are determining the bandwidth required to support	2010	No End Date (Continuous)
Behaviour change program							
Train staff in web-conferencing	Ongoing/In Progress	80	% of staff are trained web-conferencing	Opportunities to engage in online meetings, webinars and interactive professional development sessions throughout the 2011 year.	More opportunities for all staff to engage in our online community and the larger educational community across Canada and the world.	2009	No End Date (Continuous)
Train staff in video-conferencing or provide technical support for video-conferencing set-up	Ongoing/In Progress	50	% of staff are trained in video-conferencing or have access to technical support	Opportunities to engage in online meetings, webinars and interactive professional development sessions throughout the 2011 year.	More opportunities for all staff to engage in our online community and the larger educational community across Canada and the world.	2010	No End Date (Continuous)
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress			Held several district meetings and professional development virtual opportunities throughout the year.	More opportunities for all staff to engage in our online community and the larger educational community across Canada and the world.	2010	No End Date (Continuous)
Encourage carpooling to meetings	Ongoing/In Progress			Education, promotion and encouragement throughout all levels of the District	More strategic planning for meetings and events to encourage carpooling.	2009	No End Date (Continuous)

School District 43 (Coquitlam) - 2011 Carbon Neutral Action Report

Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Encourage alternative travel to meetings (e.g., bicycles, public transit, walking)	Ongoing/In Progress			Education, promotion and encouragement throughout all levels of the District	More strategic planning for meetings and events to encourage the use of alternate forms of transportation	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			An Executive level Green Team consisting of the Principal of Energy and Sustainability and several members of our management and District Leadership team was created. A teacher Environmental LSA and Green Teacher group with over 170 members was also established to represent teacher environmental initiatives throughout the district. Student Green teams are in place either formally or informally in most schools throughout the District.	Continued support of staff and students Green groups ensuring that there is a Green Team in every school and District building.	2010	No End Date (Continuous)
Provide resources and/or dedicated staff to support teams	Ongoing/In Progress			District Principal of Energy and Sustainability continued to promote education, activation and innovation in support of what was already happening in schools and through Action Research Learning Teams. With support of the Staff Development Department, District Leadership, and Facilities staff, some resources were made available to finance and incent environmentally sustainable actions across the district. Green grants were provided to schools engaging in environmental projects at their sites, as part of a partnership with Envision Financial and the School District. Principal of Energy and Sustainability made presentations to administrators highlighting the big picture on climate change and the district's climate action initiatives.	With the labour dispute coming to a close, it is hoped that the Principal of Energy and Sustainability will engage with teaching staff to create curriculum for integration into all classrooms K-12 and provide increased support in schools and classrooms to promoting environmental sustainability initiatives.	2009	No End Date (Continuous)
Awards/Recognition							
Establish a sustainability/green awards or recognition program	Ongoing/In Progress			The "Greening of Coquitlam SD43" was initiated in 2010 and was implemented throughout the 2011 year. Incentives to schools and district facilities for Education, Activation and Innovation projects were provided.	Establishing a "GreenPrint" for schools outlining expectations and actions on becoming a Green and Healthy school. Providing incentives based on assessment of this criteria.	2010	No End Date (Continuous)
Staff Professional Development							
Support green professional development (e.g., workshops, conferences, training)	Ongoing/In Progress			District supported newly formed Green LSA with professional development opportunities amongst teachers in the district. Principal of Energy and Sustainability participated in BC Hydro sponsored power smart events and workshops promoting energy conservation.	With labour issues resolved, the Principal of Energy and Sustainability will be more involved in professional development planning, school visits, and presentations intended to support all staff, students and parents in the District.	2009	No End Date (Continuous)
Staff awareness/education							
Provide education to staff about the science of climate change	In Development			Individual school education in class and whole school assemblies. Limited between September-December 2011 due to teacher job action.	Continued Educate, Activate, Innovate awareness campaigns at both district and school based levels.	2009	No End Date (Continuous)
Provide education to staff about the conservation of water, energy, and raw materials	Ongoing/In Progress			Continued public conservation awareness and sustainability initiatives with community across all 3 of our municipalities within our district.	With labour issues resolved, the Principal of Energy and Sustainability will be more able to provide education and sustainability workshops, information sessions and public conservation awareness campaigns with teacher leaders.	2009	No End Date (Continuous)

School District 43 (Coquitlam) - 2011 Carbon Neutral Action Report

Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Provide green tips on staff website or in newsletters	Ongoing/In Progress			When able due to teacher job action, Green tips were distributed to all staff through email for use in monthly newsletters and on websites. District Environmental Sustainability Website "Our Green Future" was revamped for improved accessibility for schools and the community. Teachers across the district also began to contribute to a repository of environmental sites, learning activities and project based learning opportunities that build on our mandate to Educate, Activate and Innovate.	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 Sd 43 in conversation about energy and sustainability. A student initiated and published Green Generation Newsletter will be distributed bi-monthly highlighting Green initiatives by staff, students and schools throughout the District.	2009	No End Date (Continuous)
Provide sustainability education during new staff orientation	Ongoing/In Progress			The moniker, Educate, Activate, Innovate was continually exposed to all employee groups and sustainability initiatives were discussed regularly at Board meetings and school and district staff meetings.	More education and sustainability workshops information sessions and public conservation awareness campaigns.	2009	No End Date (Continuous)
Client/public awareness/education							
Provide education to clients/public about the science of climate change	Ongoing/In Progress			District initiatives regarding Earth Day, Sweater Day, Walk to School Week and others all promoted on the School District and school web pages.	More awareness campaigns at both district level and school based levels around various Green initiatives, public forums on the "Greening of SD 43" and greater exposure in local newspapers with respect to District and School-based Green initiatives.	2009	No End Date (Continuous)
Provide education to clients/public about the conservation of water, energy, and raw materials	Ongoing/In Progress			Maintained connections with representatives of all 3 municipalities regarding public conservation awareness and sustainability initiatives, including waste management and energy partnerships.	More education and sustainability information sessions and public conservation awareness campaigns and continued partnership with Municipalities regarding waste management.	2009	No End Date (Continuous)
Provide green tips on client/public website or in newsletters	Ongoing/In Progress			Green tips and reminders on district and school websites, and electronic newsletters	Increased exposure to Green tips and reminders via social media (Facebook, Twitter, etc.)	2009	2014
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			Three new schools being designed in 2011 considered water efficient faucets and toilets as part of the LEED program. Maintenance addressed critical issues of water waste as they monitored each site's consumption levels on a monthly basis.	2 more new schools, in the early planning phases, will consider water efficient fixtures as part of their LEED Gold standard. Maintenance will continue to monitor water usage at individual sites to identify extreme waste situationa and District wide campaigns will encourage conservation of water at all sites.	2010	No End Date (Continuous)
Put in place a potable water management strategy to reduce potable water demand of building-level uses such as cooling tower equipment, toilet fixtures, etc. and landscape features	Ongoing/In Progress			All 3 new schools presently designed, considered water efficiency as a priority in design. All landscaping is characterized by hearty, self sufficient plants.	2 more new schools, in the early planning phases, will consider potable water strategies as part of their LEED Gold standard.	2010	No End Date (Continuous)
Introduce a stormwater management landscape strategy (e.g., vegetated roofs, permeable paving, rain gardens, bioswales)	Ongoing/In Progress			All three new schools designed in 2011 considered storm water management as a high priority as required through code and the LEED program. A variety of landscaping options were utilized to support the highest levels of natural stormwater management. Bioswales, permeable pavers, and natural rain gardens were all chosen for these sustainable site designs.	2 more new schools, in the early planning phases, will consider storm water management strategies as part of their LEED Gold standard.	2010	No End Date (Continuous)
Waste reduction/diversion							

School District 43 (Coquitlam) - 2011 Carbon Neutral Action Report

Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Put in place an operations policy to facilitate the reduction and diversion of building occupant waste from landfills or incineration facilities	Ongoing/In Progress			Continued Zero Waste Campaign in several schools as pilot projects and promoted the program district wide. Coordinated and supported 5 more elementary school pilot projects to raise level of recycling and waste diversion. More schools expanded their resource management program across the district. City of Port Coquitlam, port Moody and Coquitlam are now providing full resrouce management of recyclables and organics to 20 schools in our District.	Continue to enroll more schools to become Zero-Waste through student/staff leadership. Share results of the pilot projects with Administrators and staff at non-participating schools to ensure that they are aware of the impact. Maintain positive partnership with municipal representatives around waste management.	2009	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			Implemented language into our Administrative Policies and Procedures to support sustainable practices across the district.The district purchasing department monitored and educated all staff at schools to consider sustainable purchasing practices.	With the implmentation of the District Print Strategy Initiative, schools will continue to be encouraged by the purchasing department to practice sustainable purchasing practices	2009	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.)	In Development			Continued support of purchasing and procurement draft language to support green standards for furniture and equipment procurement. This was particularly evident in our procurement practice around choosing a provider of multi-functional devices to support our District Print Strategy.	Continue to promote awarenes for sustainable product purchasing of furniture, floor coverings and infrequently replaced equipment. All potential suppliers will have to undergo product scrutiny in the process of procurement. "Green" products will be considered of higher value as we move forward with our procurement practices.	2009	No End Date (Continuous)
Require a minimum purchase of sustainable, and organic food and beverages supplied by contracted food suppliers or caterers	Ongoing/In Progress	20	% of the combined total food and beverage purchase (in cost) meets these requirements	In 2011, SD43 encouraged food services to purchase as much organic and sustainable food products for all schools with cafeterias and cooking kitchens. The amount was limited by cost and accessibility.	As part of the overall sustainable procurement strategy and practice, SD43 will continue to encourage food services to purchase as much organic and sustainable food products for schools with cafeterias and cooking kitchens. As schools enage in community gardens they will utilize their organic produce to support our District guidelines around sustainable living.	2010	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	In Development			New Modular units for Full Day Kindergarten and several seismic upgrades to schools practiced 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 minimun LEED Gold standards. Construction waste management, used or recycled content, regional materials and certified wood are all to be considered within design plans for schools and seismic upgrades.	2010	No End Date (Continuous)
Incorporate lifecycle costing into new construction or renovations	Completed in 2011	100	% of business cases incorporating lifecycle costing since start year indicated	All new construction projects, lighting redesigns, HVAC upgrades, seismic upgrades and minor renovations took into account life cycle costing as a deteminant for projects moving forward.		2009	No End Date (Continuous)
Indoor air quality							
Enforce a scent-free policy (e.g., no strong perfumes, deodorants, etc.)	Ongoing/In Progress			Scent-free awareness policy or programs in place at 40 % of our schools and facilities, including our District Board Office. The addition of scent-free reminders are consistently provided prior to meetings, professional development opportunities and social events.	Continue to promote and enforce scent-free or scent aware programs across district with the goal to have all schools and facilities working towards actions that would support a scent-free or scent aware environment that enhances the current learning and working conditions.	2008	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			Only low VOC paints, carpets, furniture floor tiles and coverings were purchased for maintenance, renovations, and upgrades.	Continue to purchase low VOC products for all facilities maintenance, renovations, upgrades and in all new school construction. Establish stronger language and expectations for use of low VOC products in our purchasing and procurement policy and procedures.	2008	No End Date (Continuous)

School District 43 (Coquitlam) - 2011 Carbon Neutral Action Report

Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Commuting to and from home							
Encourage commuting by foot, bicycle, carpool or public transit	Ongoing/In Progress			100 % of our schools actively promoted walking, biking, carpooling or bussing to school. Staff were also encouraged to find alternate sources to travel to school yet, some staff are required to use a vehicle as part of their work requirements.	Will promote a more comprehensive district wide campaign focused on employee carpooling, biking and walking. The Distict Board Office and other staff leadership groups will engage in a promotion campaign at least twice a year to model healthy communting practices.	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. Planning for new construction considered staff showering facilities in their design.	New and replacement school construction will include staff shower and change facilities to promote healthy lifestyles and opportunities for better commuting practices.	2010	No End Date (Continuous)
Provide secure bicycle storage	Ongoing/In Progress			Three new buildings designed considered secure bike storage as part of the LEED requirements.	All new buildings will consider secure bike storage as part of the LEED requirements.	2010	No End Date (Continuous)