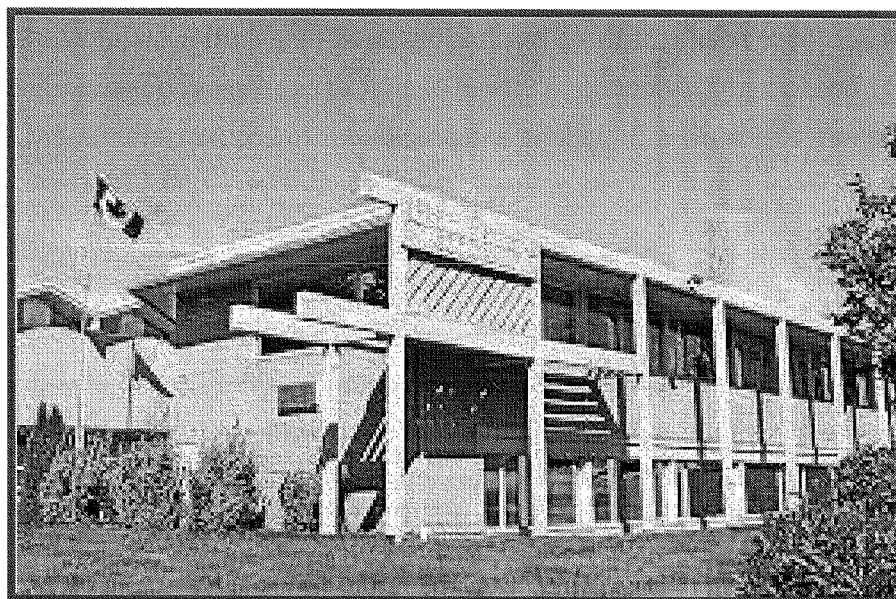
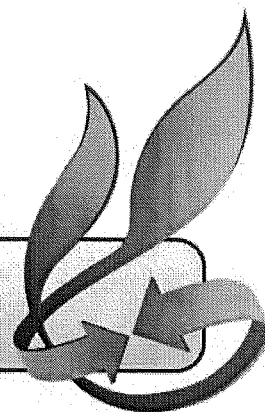


School District No. 43 (Coquitlam) 2012 Carbon Neutral Action Report



Green SD 43



Executive Summary

Since 2009, the Coquitlam School Board of Education has considered climate change and sustainability District priorities. The educating of staff, students, and parents on the impact of our behaviour around consumption and conservation has become integrated into our daily actions. 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 four 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 remain as concerns to the management of the District. And although some issues are 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 the management of these resources more responsibly. Becoming Carbon Neutral in 2010, 2011, and again in 2012 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 2012 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 2012. Coquitlam school district's larger energy management strategy includes reductions to energy consumption by the end of 2014 outlined in a district Strategic Energy Management Plan (SEMP). Our goal is to reduce our overall energy consumption by 25 % from 2007/08 totals. We are well on our way to achieving that target having reduced energy consumption by an average of 5% annually over the past four 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 in the process.

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

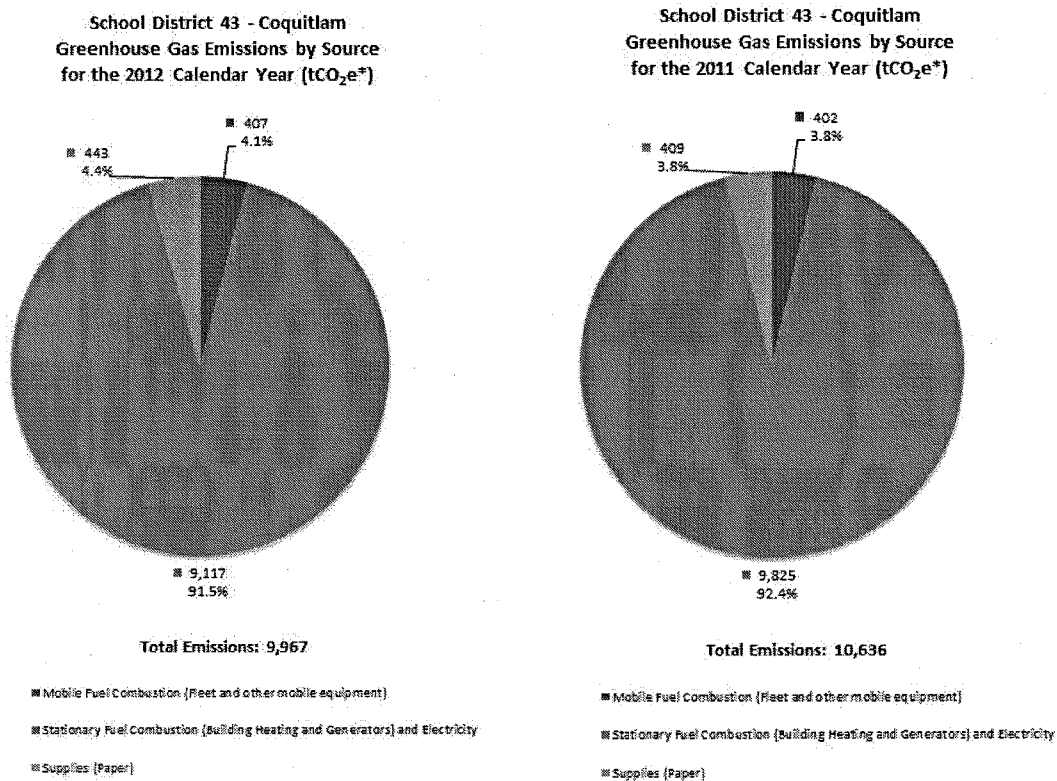
- 1) To educate students and staff on energy consumption, our carbon footprint and issues of sustainability; the moral imperative, ultimately improving student achievement through ecological and environmental literacy.
- 2) To engage staff and students in *Climate Action* programs of change, i.e. reduce 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 2012 (left) and 2011 (right) are represented in the graphs below.



Offsets applied to become Carbon Neutral in 2012:

The **9,967** tonnes of Carbon Emissions (tCO₂e) noted above, require an offset investment of **\$248,650** to become Carbon Neutral.

Changes to Greenhouse Gas Emissions and Offsets from 2011:

This compares to the investment of **\$265,575 in 2011** to offset **10,636** tCO₂e. The differences being a **6.4% decrease of \$16,925 and 669 tCO₂e** in 2011.

Actions Taken to Reduce Greenhouse Gas Emissions in 2012:

Coquitlam School District has been a Power Smart Partner with BC Hydro for four years and has utilized Hydro's Energy Manager incentive to employ a "Principal of Energy and Sustainability." The District recently hired an Energy Specialist through funding by Fortis BC to further contribute to the District conservation initiatives. Our Executive level "Green Team" met regularly in 2012, gathering for BC Hydro Quarterly presentations and follow up meetings to provide support and guidance around processes involving visioning and initiatives promoting environmental sustainability. Our Maintenance Department continued to use infrastructure funding for several lighting retrofits and HVAC upgrades in an attempt to increase efficiency and reduce energy cost. Three boiler plant upgrades were completed in 2012 and further HVAC upgrades in seven secondary schools will be forthcoming by way of Hydro's Continuous Optimization Program (C.OP) in the next year. Lighting upgrades on 14 elementary schools, 1 secondary and 1 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 Maintenance Department. Our Energy Specialist is working with our DDC (Direct Digital Control) Technologist and HVAC supervisor in an attempt to align daily, monthly and yearly scheduling to reduce energy consumption in buildings across the district.

Design planning for two replacement schools continued in 2012 with all qualified to achieve a LEED Gold or higher standard. Planning conversations continued to involve innovative approaches to sustainable design practices.

Education and behavioral change campaigns improved in 2012 with teacher labour issues subsiding. Staff and students worked on independent projects around "Zero-waste" initiatives and Energy Conservation projects. Schools utilized grant funding from District "Green Grants" to support this work.

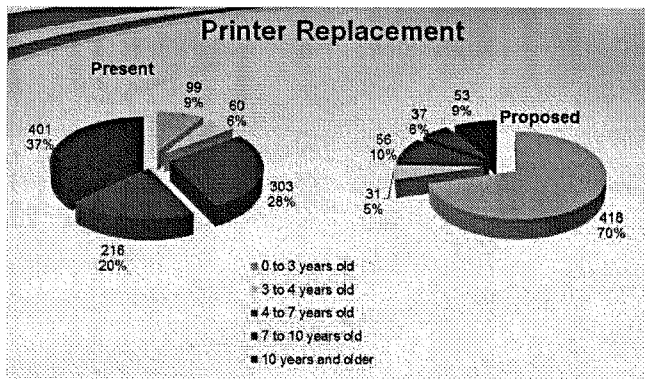


The Coquitlam Youth Sustainability Network (CYSN) emerged from the District's Student leadership group connecting students from across eight secondary and thirteen middle schools identified Climate Change as their goal for the 2012/2013 school year. Results of their efforts can be noted in the District's overall reduction in energy consumption and carbon emissions. Further, the awareness their work has created has spread not only throughout District schools but to Board Trustees, District leaders, and Community through various media sources.

Over a third of District schools expanded their recycling programs to include organic waste pick-ups in an attempt to support "Zero-waste" campaigns. With this increase, the District considered

significant changes to waste management practices reducing solid waste collection. The District Energy and Sustainability website, “Our Green Future”, was further 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, “Print wise” replacing all outdated copiers with energy efficient multi-functional devices. This new approach has already shown a decrease in paper and copy costs. This next

year all schools are expected to reduce and replace printers in schools to further reduce consumable usage. 2012 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 2012 – 2014:

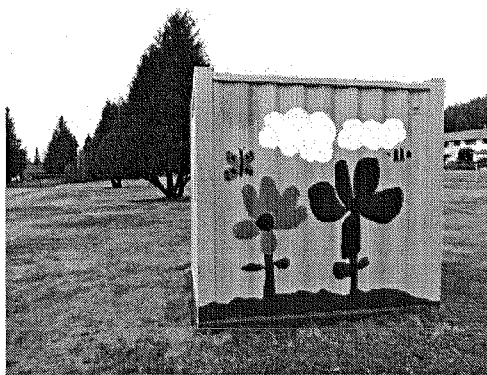
School District 43 will continue to reduce Greenhouse Gas Emission by educating our students, staff and parents, facilitating actions and promoting innovation leading to sustainable behaviour change throughout our community.

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 2013.

Facilities and Maintenance will continue with HVAC and lighting maintenance/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 1 to 2 years to optimize building performance and systems efficiency.

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. Classroom presentations the nature of this mandate. schools will continue District and outside targeted communication, both face to face and electronically, will be utilized to actively promote and celebrate our growth and successes.

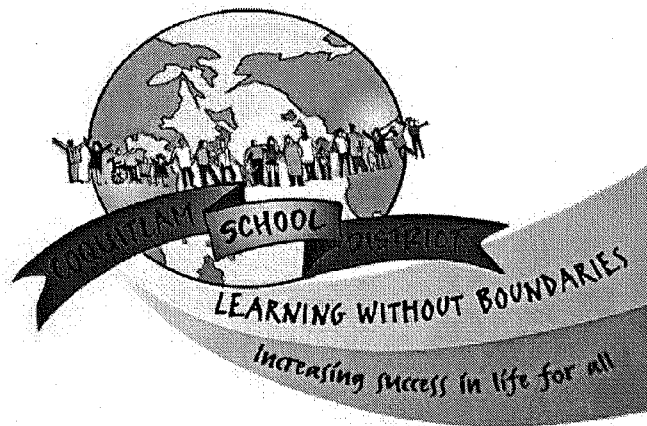


Overall, the District is counting a combination of both technical and behavioural projects to reduce energy consumption levels by 25% by the end of the 2013-2014 school year. As noted in the CNAR Actions Template, we are well on our way and are confident that with continued executive support and the enthusiasm of students and educators, the District will surpass these goals. In the end, we are encouraging global social responsibility and it is this moral imperative of conservation and sustainability that counts. We consider it our responsibility as educators to be leaders for this sustainable change.

Thomas Grant

Tom Grant

Superintendent of Schools,
School District 43 (Coquitlam)



Appendix A:

Total GHG Emissions by type

SMARTTool Greenhouse Gas Inventory Report

Reporting Entity: School District 43 - Coquitlam

Reporting Year: Calendar Year 2012

		Greenhouse Gases in Tonnes				
	Measure	Quantity	CO ₂	CH ₄	N ₂ O	tCO ₂ e ¹
Scope 1 (Direct) Emissions						
Mobile Combustion (Fleet)	Litres	188,908.00	367.34	0.04	0.08	392.16
Stationary Combustion, Reported ³	GigaJoules	189,801.73	8,456.34	0.17	0.15	8,507.22
Total Scope 1 Emissions			8,823.68	0.21	0.23	8,899.38
Scope 2 (Indirect) Emissions						
Purchased Energy, Reported ³	GigaJoules	88,350.46	609.62	0.00	0.00	609.62
Total Scope 2 Emissions			609.62	0.00	0.00	609.62
Scope 3 Emissions						
Business Travel and Office Paper						
Office Paper	Packages	74,623.00	443.44	0.00	0.00	443.44
Total Scope 3 Emissions			443.44	0.00	0.00	443.44
Emissions from Biomass						
Total Biomass Emissions			14.67	0.00	0.00	14.67
Total Emissions, Calendar Year 2012			9,891.42	0.21	0.23	9,967.12

1. Global Warming Potential (GWP) has been applied only to the tCO₂e values.

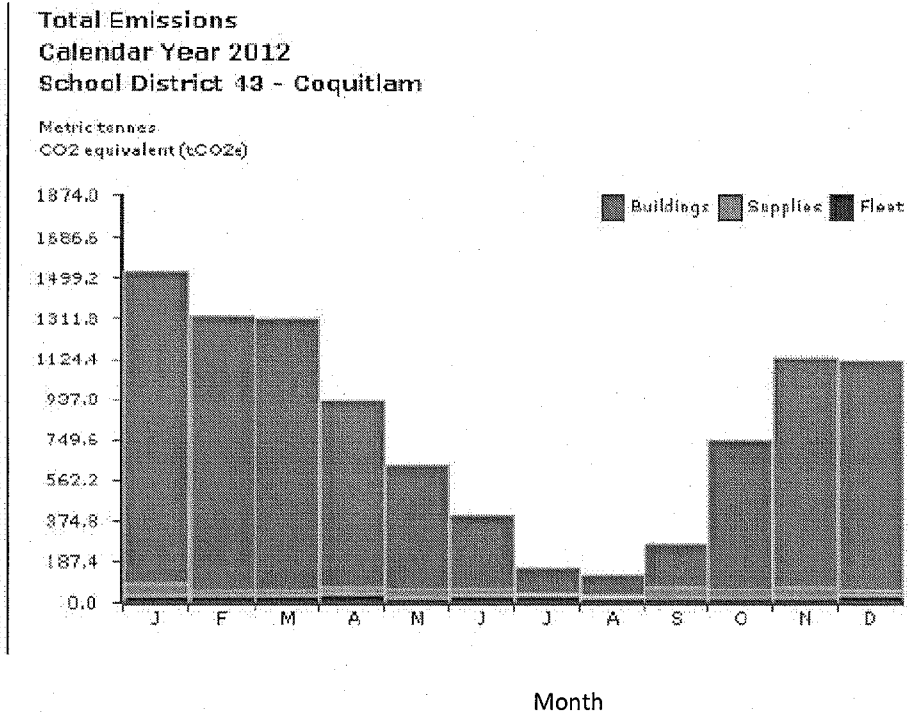
2. Estimated data has been calculated based on the methods described in the Methodology Document.

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

This information is provided by the Government of British Columbia, and is subject to verification.

Appendix B:

GHG Emissions by Type and Month



School District 43 Coquitlam - 2012 Carbon Neutral Action Report

Actions Towards Carbon Neutrality					
The actions listed below contribute to a reduction in greenhouse gas emissions from sources for which public sector organizations are responsible under the carbon neutral government regulation of the Greenhouse Gas Reduction Targets Act.					
Action	Status	Steps Taken	Steps Planned	Start Year	End Year
Mobile Fuel Combustion (Fleet and other)					
Behaviour change program					
Provide fleet driver training to reduce fuel use	Ongoing/In Progress	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 maintenance personnel in Fleet vehicles are required to observe and model these expectations.	More comprehensive push to raise awareness of anti-idling through District Safety and Awareness conversations with school-based administrators and literature to parents educating them 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 personnel 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	2010	No End Date (Continuous)
Promote alternatives to fleet vehicle travel where possible (e.g., bicycles, public transit, walking)	Ongoing/In Progress	Maintenance personnel were encouraged to carpool to common worksites from Maintenance shop. Board Office Staff encouraged to carpool to District meetings and professional development events	Encouraging all School sites to consider carpooling for all individual initiatives including field trips and professional development events. Board Office is always being encouraged to carpool to meetings where possible.	2009	No End Date (Continuous)
Vehicle fuel efficiency					
Replace vehicles with more fuel-efficient models	Ongoing/In Progress	Replacement of three trucks at the end of the 2012 year to more fuel efficient light trucks and one hybrid vehicle	Continued assessment of fleet and downsizing where necessary and financially feasible. Over the past four years we have decommissioned 9 vehicles. We will continue to look at options for the purchase of hybrid vehicles for certain maintenance transportation requirements.	2009	No End Date (Continuous)
Replace larger vehicles with smaller models according to fleet "right-sizing" principles	Ongoing/In Progress	Replacement of 3 trucks at the end of the 2012 year to more fuel efficient light trucks	Continued assessment of 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	Introduced in summer 2009 and carried out annually. Regular monthly checks that include routine air filter and tire pressure checks.	Summer 2013 - yearly review and audit. Practice updated on a needs basis.	2009	No End Date (Continuous)
Stationary Fuel Combustion, Electricity					
Behaviour change program					
Help staff reduce personal energy use through ""workstation tune-ups""	Ongoing/In Progress	Education and awareness campaigns in collaboration with Health and Safety Department to reduce CRT monitors and utilize power bars.	Continued Education and awareness campaigns including "Energy is Awesome" Campaign designed to generate more awareness around safety and conservation of energy	2010	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, especially prior to major breaks in school year, to support energy conservation actions	2011	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, including plug load and	Continued regular reminders and conservation tips out to all staff district wide.	2011	No End Date (Continuous)

School District 43 Coquitlam - 2012 Carbon Neutral Action Report

Actions Towards Carbon Neutrality					
The actions listed below contribute to a reduction in greenhouse gas emissions from sources for which public sector organizations are responsible under the carbon neutral government regulation of the Greenhouse Gas Reduction Targets Act.					
Action	Status	Steps Taken	Steps Planned	Start Year	End Year
		phantom energy sources, and how these things can make a big difference.			
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, like closing blinds and removing debris from ventilation sources, can make a big difference.	Continue with information campaigns that promote conservation. Office and school challenges to reduce consumption - "Greening of Coquitlam School District". Work with custodians to support energy conservation actions of staff and students.	2012	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, such as heat settings on dishwashers, and how these 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.	2011	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 after hours energy conservation practice including only turning on lights when needed. Employees are also encouraged to report energy wasting practices such as faulty lighting timer and after hours and weekend HVAC operation	Work with District Health and Safety Committee to establish and share information that promote conservation while also maintaining the safety of employees in buildings after hours.	2011	No End Date (Continuous)
Encourage use of stairs instead of elevators	Ongoing/In Progress	Education through regular email reminders and e-newsletters on energy tips and how the little things, like use of stairs, can make a big difference in energy conservation.	Continue with information campaigns that promote conservation.	2011	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 Lights Off campaigns. Participation in Global Earth hour and Lights Off Canada.	Office and school challenges to reduce consumption. Work with custodians to support energy conservation actions of staff and students.	2010	No End Date (Continuous)
Promote hot water conservation	Ongoing/In Progress	Education through regular email reminders and e-newsletters on hot water conservation including lowering hot water tank settings during summer break.	District wide audit of domestic Hot Water heaters to be completed by District Energy Specialist and replacements where needed.	2010	No End Date (Continuous)
IT power management					
Install power management software which shuts down computers outside of regular business hours	Ongoing/In Progress	Audit of Power Save settings in Windows 7 on all District Computers to ensure computer shut down after inactivity and outside school hours	Continue to monitor Power Save options of Computers based on users observation and reports	2009	No End Date (Continuous)
Implement server virtualization	Ongoing/In Progress	12 more school and District servers were virtualized in the 2012 year and 40% progress was made on the installation of the District's new Qnet fibre project.	Will continue to virtualize existing and new servers until capacity to do so is maximized	2011	No End Date (Continuous)
Apply auto-sleep settings on computer monitors and CPUs	Ongoing/In Progress	Audit of Power Save settings in Windows 7 on all District Computers and monitors to ensure sleep modes are operational	Continue to monitor Power Save options of Computers and monitors based on users observation and reports	2009	No End Date (Continuous)
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices as part of a print management strategy	Ongoing/In Progress	All stand alone photocopiers replaced by multi-functional devices throughout the District in support of our overall "Printwise" strategy	Reduction and replacement of older printers to comply with overall Print Strategy established through audit by Ricoh Canada. Secondary schools will replace 3-4 units, Middle 2 units and Elementary 1 unit with more energy efficient models in the 2013 year.	2011	No End Date (Continuous)
Apply auto-sleep settings on printers, fax machines, and/or multi-function devices	Ongoing/In Progress	New multi-functional devices equipped with power save settings implemented upon installation	Implementation of more up-to-date, energy efficient printers with programmed sleep settings for energy conservation	2011	No End Date (Continuous)

School District 43 Coquitlam - 2012 Carbon Neutral Action Report

Actions Towards Carbon Neutrality					
The actions listed below contribute to a reduction in greenhouse gas emissions from sources for which public sector organizations are responsible under the carbon neutral government regulation of the Greenhouse Gas Reduction Targets Act.					
Action	Status	Steps Taken	Steps Planned	Start Year	End Year
Replace computers with ENERGY STAR models during regular computer upgrades	Completed (in Reporting Year)	As part of our on-going computer replacemet program, all computers purchased must be Energy Star or equivalent whether new or pre owned.		2010	2012
Leased buildings					
Establish energy performance baseline for leased buildings	Ongoing/In Progress	Assessment of leased buildings along with District used buildings for consideration of sale.	Dispose of unused or leased buildings for funding of other capital projects	2012	No End Date (Continuous)
Lease space with operations and maintenance performance labelling/certification (e.g., LEED EB:O&M)	In Development	Unable to address defficiencies due to budget restraints	Dispose of unused or leased buildings for funding of other capital projects	2012	No End Date (Continuous)
Lease space with commercial interiors performance labelling/certification (e.g., LEED CI)	In Development	Unable to address defficiencies due to budget restraints	Dispose of unused or leased buildings for funding of other capital projects	2012	No End Date (Continuous)
Lease space in buildings with new construction performance labelling/certification (e.g., LEED NC)	In Development	Unable to address defficiencies due to budget restraints	Dispose of unused or leased buildings for funding of other capital projects	2012	No End Date (Continuous)
Develop a green lease policy that requires green features to conserve energy be included in all lease negotiations	In Development	Discussions have begun with users group establishing utility costs for using space	Future use of District building space will include utility service charges, based on building size and level of education (elementary, middle, secondary) to encourage efficient use of resources	2012	No End Date (Continuous)
Owned buildings					
Establish energy performance baseline for owned buildings	Ongoing/In Progress	Energy performance baseline was established in 2011.	Recently hired Fortis Energy Specialist is re-evaluating this data and comparing against both BC NRCAN and Lower Mainland NRCAN statistics for maintenance prioritization purposes	2011	No End Date (Continuous)
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	Ongoing/In Progress	All new construction projects in SD 43 "must" meet LEED Gold certification, but official certification was not sought due to registration costs	Continued observation of LEED Gold standard in 3 new projects - Centennial Secondary rebuild, Heritage Mountain Middle rebuild and Moody Middle rebuild	2010	No End Date (Continuous)
Perform energy retrofits on existing, owned buildings	Ongoing/In Progress	2 HVAC Retorfits completed in 2012.	District budget shortfalls have reduced our ability to act in this area, but we continue to plan whole building retrofits so that projects are in place and prioritized when funding becomes available	2010	No End Date (Continuous)
Incorporate a refrigerant management strategy into regular building management/maintenance to reduce fugitive emissions	In Development	School-based administrators and custodians were encouraged to audit existing appliances and remove or replace energy inefficient models	Continued encouragement around reducing the number of appliances in buildings (classrooms/office areas) producing fugitive and phantom emissions	2013	No End Date (Continuous)
Planning/management					
Reduce office space (square meters) per employee	Ongoing/In Progress	District focus on reducing numbers of portables on school and Board Office sites resulting in decreases in energy demands and inefficiencies	Continued assessment of District buildings to remodel existing interiors of sites as an alternative to portables	2012	No End Date (Continuous)
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle Controls)	Ongoing/In Progress	All Secondary and Middle Schools are involved in BC Hydro's Continuous Optimization Program designed to assess all energy systems and recommend energy efficient improvements and upgrades. Further, BC Hydro completed installation of SMART meters in all District facilities by the end of 2012.	BC Hydro Continuous Optimization Program continues to move forward in 2013, completing the "investigation phase" of the process of our larger secondary and middle schools. Installation of real-time metering for 7 additional smaller schools as part of Fortis BC's "Enertracker" program	2011	No End Date (Continuous)

School District 43 Coquitlam - 2012 Carbon Neutral Action Report

Actions Towards Carbon Neutrality					
The actions listed below contribute to a reduction in greenhouse gas emissions from sources for which public sector organizations are responsible under the carbon neutral government regulation of the Greenhouse Gas Reduction Targets Act.					
Action	Status	Steps Taken	Steps Planned	Start Year	End Year
Retrofit details for owned buildings					
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	Due to financial restraints, only annual maintenance and repairs were completed. District is considering Thermal Energy Program with Fortis BC to address needed upgrades in various District buildings.	Several Elementary schools are being considered for full mechanical upgrades, funding dependant.	2009	No End Date (Continuous)
Upgrade lighting systems during retrofits	Ongoing/In Progress	2 Middle, and 14 Elementary schools underwent full lighting redesigns. Exterior LED lighting pilot project was installed at one elementary school to establish lighting levels and quality.	8 Elementary schools are being considered for full lighting redesigns. Exterior LED lighting audit to be completed with projects planned for all schools.	2009	No End Date (Continuous)
Upgrade/adjust control systems during retrofits	Ongoing/In Progress	2 Elementary schools retrofitted with lighting upgrade and controls along with 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)
Improve building insulation (including windows) during retrofits	In Development	Assessment of 5 elementary schools for Envelope deficiencies. Continued monitoring of fully retrofitted building and their energy consumption as compared to other comparable buildings to assess value of Building envelop upgrades. Collected data is still being collected and assessed.	Continued upgrade of building envelope deficiencies as budget permits.	2010	No End Date (Continuous)
Supplies (Paper)					
Behaviour change program					
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	All senior staff, administrators and teacher leaders were exposed to and trained around the use of Sharepoint collaborative software	Further exposure and training around collaborative software such as Thoughtstream and Survey Monkey for feedback and input on school-based and District initiatives. Encouraging staff to utilize collaborative software as part of their teaching practice with students. Support of our District online learning platform (Ihub and COL) and its online delivery of curriculum to students.	2011	No End Date (Continuous)
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 meetings. All Administrators, District staff and Trustees 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 to guest speakers and other staff to utilize personally owned devices (tablets, smart phones, etc.) or District provided laptops to hold to paperless meetings. This includes sending out presentations ahead of time for better user interaction.	2012	No End Date (Continuous)
Electronic media in place of paper					
Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	Installation of "Thoughtstream" software for use in collaborating and collecting feedback on various District initiatives and processes	Extended awareness and use of Thoughtstream, Survey Monkey, and other Sharepoint tools for feedback and collaboration purposes in all schools.	2012	No End Date (Continuous)
Use electronic document library for filing common documents	Ongoing/In Progress	All notices from the Board office were delivered via email or the District website. All paperwork regarding school organization, new student registration, and cross boundary transfers was completed online. Most schools utilized online forms (Sharepoint infopath) that could be accessed by parents via their school website. All schools and departments newsletters were circulated via electronic means.	Schools will continue to 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. Further, parents will be encouraged to complete registration and emergency information online.	2012	No End Date (Continuous)
Switch to an electronic payroll notification system in place of paper pay stubs	Completed (in Reporting Year)	Payroll department established a process in 2011/2012 to deliver pay stubbs and T-4 slips electronically. Payroll department will		2011	2012

School District 43 Coquitlam - 2012 Carbon Neutral Action Report

Actions Towards Carbon Neutrality					
The actions listed below contribute to a reduction in greenhouse gas emissions from sources for which public sector organizations are responsible under the carbon neutral government regulation of the Greenhouse Gas Reduction Targets Act.					
Action	Status	Steps Taken	Steps Planned	Start Year	End Year
		continue to monitor this process and seek other opportunities to provide employees with information through electronic means.			
Paper Type					
Purchase 30% post-consumer recycled paper	Ongoing/In Progress	Schools encouraged to purchase part or fully recycled paper. District policy established on purchasing 30% recycled paper as a minimum expectation for schools.	Schools will be encouraged to purchase and use 40-100% 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 40% post-consumer recycled paper	Ongoing/In Progress	Schools were encouraged to purchase 30% or greater recycled paper for photocopy and printing purposes.	Schools will be encouraged to purchase and use a greater% of recycled paper with their new multi-functional devices as they are more capable of handling this type of paper.	2010	No End Date (Continuous)
Purchase 100% post-consumer recycled paper	Ongoing/In Progress	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	New Multi Functional Devices set up with default double siding. Schools were encouraged to experiment with other copy/print settings to reduce paper and print consumption. Energy manager monitored this consumption through quarterly reports and provided 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 software will notify schools of high volume users how they can reduce consumption. Print/Hold Software will also require users to input individual code for pick up at printer/mfd reducing misplaced copy/print jobs. Energy Manager will continue to incent and acknowledge low consumers.	2010	2012

School District 43 Coquitlam - 2012 Carbon Neutral Action Report

Actions to Reduce Provincial Emissions and Improve Sustainability					
The actions listed below contribute to a reduction in greenhouse gas emissions from sources that fall outside of the reporting requirements defined in the carbon neutral government regulation of the Greenhouse Gas Reduction Targets Act. Public sector					
Action	Status	Steps Taken	Steps Planned	Start Year	End Year
Business Travel					
Behaviour change program					
Train staff in web-conferencing	Ongoing/In Progress	Provided opportunities to engage in online meetings, webinars and interactive professional development sessions throughout the 2012 year.	Continued 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	Provided opportunities to engage in online meetings, webinars and interactive professional development sessions throughout the 2012 year.	Continued opportunities for all staff to engage in our online community and the larger educational community across Canada and the world.	2010	2010
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 transit and transportation alternatives.	2009	No End Date (Continuous)
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 transit and transportation alternatives.	2009	No End Date (Continuous)
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 were also supported at all school sites. The Annual Walk to School Week in October agenerated 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. Energy Manager will work with School-based administrators and City of Coquitlam personel on a task force aimed at reducing traffic in and around school sites.	2010	No End Date (Continuous)
Virtual meeting technology					
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	Ongoing/In Progress	District continued to promote live webcast viewing and conference call technology for professional development activities and meetings with outside consultants/contractors. Further, District programs such as "iHub" COL (Coquitlam Online Learning) have provided alternative learning environments for students utilizing technology.	Continue to promote use of Live media and offer training to support the professional growth of all district employees.Web conferencing infrastructure/installment will continue to be addressed during IT and 21st Century learning conversations.	2009	No End Date (Continuous)
Make desktop web-cameras available to staff	Ongoing/In Progress	All laptops and iPads rolled out to schools have web/video camera capacity to encourage use of video conferencing and on going live media professional development.	All staff will continue to have access to web cameras ongoing. It will be imperative that as we establish new opportunities with increased bandwidth (in progress), that professional development activities support the learning and use of these media tools.	2010	No End Date (Continuous)
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	In Development	All District buildings, including Elementary, Secondary and Middle schools have wireless capabilities enabling meeting participants to better connect online. Further, all Central office locations are equipped with phone and video-conferencing equipment and continue to make use of this hardware for virtual meetings.	Continued training and use of video conferencing for District professional development and meetings	2010	No End Date (Continuous)
Education, Awareness, and Engagement					
Awards/Recognition					
Establish a sustainability/green awards or recognition program	Ongoing/In	The "Greening of Coquitlam SD43" was initiated in 2010, was	Establishing a "GreenPrint" for schools outlining expectations and	2010	No End Date

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Action	Status	Steps Taken	Steps Planned	Start Year	End Year
	Progress	implemented throughout the 2011 year and continued through 2012. Incentives to schools and district facilities for Education, Activation and Innovation projects were provided in the form of Green Grants.	actions on becoming a Green and Healthy school. Providing incentives based on assessment of this criteria.		(Continuous)
Other Education, Awareness, and Engage					
Collaboration around Sustainability initiatives contributing to both school and community success	Ongoing/In Progress	Maintained healthy connections with representatives of all 3 municipalities regarding public conservation awareness and sustainability initiatives, including waste management and energy partnerships. Increased numbers of schools engaged in Organic waste recycling and Zero Waste programs.	More education and sustainability information sessions and public conservation awareness campaigns and continued partnership with Municipalities regarding waste management.	2011	No End Date (Continuous)
Staff Professional Development					
Support green professional development (e.g., workshops, conferences, training)	Ongoing/In Progress	District supported Green LSA and Green Teacher Networking group together with professional development opportunities amongst teachers in the district. Principal of Energy and Sustainability participated in BC Hydro and Fortis sponsored energy savings and zero waste workshops promoting energy conservation.	Principal of Energy and Sustainability will be more involved in professional development planning and presentations intended to support all staff, students and parents in the District.	2009	No End Date (Continuous)
Include green options in employee performance measurement system	In Development	Not Started	Will solicit feedback from District staff and look at possible strategies, opportunities and incentives.	2013	No End Date (Continuous)
Staff awareness/education					
Provide education to staff about the science of climate change	Ongoing/In Progress	Presentations to District Executives, Administrators and Teachers on the state of our District and opportunities for growth including energy conservation, maintenance and behaviour changes.	Continued Educate, Activate, Innovate awareness campaigns at both district and school based levels.	2010	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.	Principal of Energy and Sustainability will work with municipalities to provide education and sustainability workshops, information sessions and public conservation awareness campaigns with teacher and administrative leaders.	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 email for use in monthly newsletters and on websites. District Environmental Sustainability Website "Our Green Future" is updated and was accessible for all schools and the public. A student initiated and published Green Generation Newsletter was also distributed bi-monthly highlighting Green initiatives by staff, students and schools throughout the District.	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. Teachers across the district will be able to contribute more readily and easily to a repository - environmental sites, learning activities and project based learning opportunities that build on our mandate to Educate, Activate and Innovate.	2010	No End Date (Continuous)
Provide sustainability education during new staff orientation	Ongoing/In Progress	The moniker, Educate, Activate, Innovate continued to be exposed to all employee groups and sustainability initiatives were consistently 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)
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 met three times over the year. A teacher Environmental LSA and Green Teacher group with over 170 members was also established to represent teacher environmental initiatives throughout the district - This group met two times for	Continued support of individual Green groups ensuring that they are connected through student, staff, and District executive teams.	2010	No End Date (Continuous)

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Action	Status	Steps Taken	Steps Planned	Start Year	End Year
		sharing and presentations. A Student Youth Sustainability Network was established to connect Green Student groups across Secondary and Middle Schools.			
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 through School District financing. Principal of Energy and Sustainability made presentations to both administrators and Board Trustees highlighting the big picture on climate change and the district's climate action initiatives.	Principal of Energy and Sustainability will continue to 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.	2010	No End Date (Continuous)
Providing behaviour change education/training to teams (e.g., community-based social marketing)	Ongoing/In Progress	In addition to District Green Websites both Facebook and Twitter profiles (GreenSD43) were established to connect with students, staff, parents and the public at large generating awareness around District, Community, National and Global concerns and initiatives	Continued communication through social media and District websites providing resources and awareness information around a numerous Sustainability initiatives.	2011	No End Date (Continuous)
Other Sustainability Actions					
Adaptation to Climate Change					
Assessed whether extreme weather events and/or long term changes in climate will affect the organization's business areas	Not Yet Evaluated				No End Date (Continuous)
Integrated considerations of extreme weather events and/or long term changes in climate into the organization's decision making.	Not Yet Evaluated				No End Date (Continuous)
Building construction, renovation					
Establish a policy to reuse materials where possible and divert construction and demolition debris from landfills and incineration facilities	Ongoing/In Progress	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. District procedures were considered to parallel these expectations "All new building construction must meet minimum LEED Gold standards (although LEED Gold Standard certification will not be sought due to costs).	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.	2009	No End Date (Continuous)
Incorporate lifecycle costing into new construction or renovations	Ongoing/In Progress	All new construction projects, lighting redesigns, HVAC upgrades, seismic upgrades and minor renovations took into account life cycle costing as a determinant for projects moving forward.	All new construction and renovation projects will continue to take into account life cycle costing as a determinant for project quality.	2009	No End Date (Continuous)
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 continue to 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 commuting 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	New and replacement school construction will include staff shower and change facilities to promote healthy lifestyles and opportunities	2010	No End Date (Continuous)

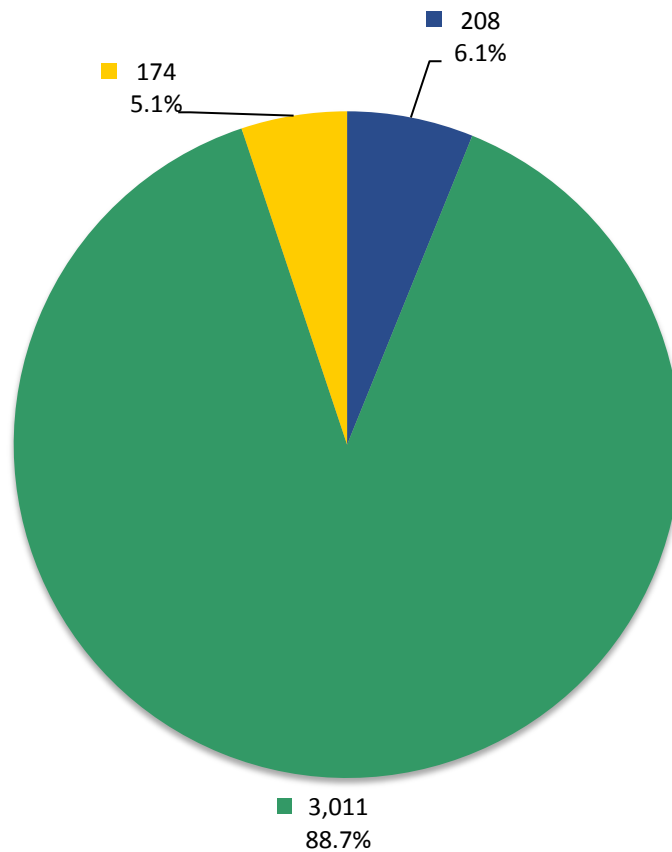
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Actions to Reduce Provincial Emissions and Improve Sustainability					
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Action	Status	Steps Taken	Steps Planned	Start Year	End Year
		construction considered staff showering facilities in their design.	for better commuting practices.		
Provide secure bicycle storage	Ongoing/In Progress	Three new buildings designed considered secure bike storage as part of the LEED requirements. New and replacement school construction will include staff shower and change facilities to promote healthy lifestyles and opportunities for better commuting practices.	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)
Other Sustainability Actions					
District initiatives regarding Earth Day, Sweater Day, Walk to School and Zero waste Week, among others were all promoted on the School District and school web pages.	Ongoing/In Progress	60% participation by schools in District initiatives regarding Earth Day, Sweater Day, Walk to School and Zero waste Week. All were all promoted on the School District and school web pages and supported by local media.	Increase the level of Participation of Schools and other District Services (i.e. Board Office, Maintenance, Facilities department, etc.). Generate 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.	2011	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.)	Completed (in Reporting Year)	Completed in 2011. The district purchasing department monitored and educated all staff at schools to ensure consistent sustainable purchasing practices. With the full implementation of the District Print Strategy, schools will continue to be encouraged to continue to practice sustainable purchasing practices.		2009	2011
Establish green standards for goods that are replaced infrequently and/or may require capital funds to purchase (e.g., office furniture, carpeting, etc.)	Ongoing/In Progress	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 awareness 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.	2010	No End Date (Continuous)
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	Completed (in Reporting Year)	Implemented "Green" cleaning products and hand soap in all schools in 2011 and provided training to custodians around proper use. Evaluations of other cleaning products including, but not limited to floor stripping and gym refinishing chemicals are being reviewed.		2010	2011
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	Continued Zero Waste Campaign in several schools and implemented another 5 pilot projects in promoted the program district wide. More schools expanded their resource management program across the district. City of Port Coquitlam, Port Moody and Coquitlam are now providing full resource management of recyclables and organics to a third of our schools in the 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)
Implement a hazardous waste reduction and disposal strategy	Completed (in Reporting Year)	Completed in 2011. Continued effective disposal of Hazardous waste inline with District Health and Safety Procedure		2009	2011

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Action	Status	Steps Taken	Steps Planned	Start Year	End Year
Water conservation					
Establish a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models	Ongoing/In Progress	Three new schools being designed in 2012 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 2012 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)

**School District 42 - Maple Ridge
Greenhouse Gas Emissions by Source
for the 2012 Calendar Year (tCO₂e*)**



Total Emissions: 3,393

- Mobile Fuel Combustion (Fleet and other mobile equipment)
- Stationary Fuel Combustion (Building Heating and Generators) and Electricity
- Supplies (Paper)

Offsets Applied to Become Carbon Neutral in 2012 (Generated May 28, 2013 3:51 PM)

Total offsets required: **3,387**. Total offset investment: **\$84,675**. Emissions which do not require offsets: **7** **

*Tonnes of carbon dioxide equivalent (tCO₂e) is a standard unit of measure in which all types of greenhouse gases are expressed based on their global warming potential relative to carbon dioxide.

** Under the *Carbon Neutral Government Regulation of the Greenhouse Gas Reduction Targets Act*, all emissions from the sources listed above must be reported. As outlined in the regulation, some emissions do not require offsets.