

# Carbon Neutral Action Report (2010)

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## COMOX VALLEY SCHOOL DISTRICT

# Carbon Neutral Action Report (2010)

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## Executive Summary

The Comox Valley School District is very proud of the gains it has made in lowering Green House Gas emissions (GHG) during 2010. Setting the stage in 2009 we developed plans and implemented conservation measures which included hard wired energy use reductions as well as behavioral change initiatives. The involvement of additional people (students and staff) created a synergy that allowed us to expand our scope during 2010.

We consider our outcomes to be exceptional for a K-12 School District of our size. The support shown by our Board, Senior Staff, School Administration and the staff and students who actually are involved in the work is simply outstanding! It is because of this we have been able to lower our GHG emissions to the extent that we have. This highlights our mantra of *'Helping our Environment and Protecting our Future'*.

The District has initiated a comprehensive plan that involves everyone, allowing us to Reduce, Reuse and Recycle. We have sustainability in mind when we look at energy reduction, GHG emission reduction, paper elimination and exploration of other thoughts to help us achieve carbon neutrality! This not only benefits the School District with lower utility costs and fewer carbon offset purchases, but sets an example for others in the Comox Valley.

We know we can be Leaders and it shows by the involvement of students and staff and by the positive press we receive. We know we are making a difference to the environment and contributing to the well being of our Planet!

## 2010 Greenhouse Gas Emissions

Greenhouse Gas Emissions for 2010 amounted to 2,498.64 tonnes of CO<sub>2</sub>e. Those emission sources included our fleet and other mobile equipment, building utilities and paper supplies. Our School District was able to reduce CO<sub>2</sub> emissions by 201 tonnes! We saved enough electrical energy to power at least 50 homes! That is substantial. With all of the hard wired projects and some behavioral changes we had savings of over 550,000 Kwh. This would not have been possible without the support of the entire District. We are committed to expand our use of renewable energy through additional solar voltaic, solar hot water panels and solar wall use and exploration of adding wind generation to the mix.



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## Offsets Applied to Become Carbon Neutral

School District No. 71 is proud to proclaim we are Carbon Neutral for 2010. Through Pacific Carbon Trust<sup>1</sup> we purchased Carbon Offsets to the value of \$61,553.75 (before taxes) to allow the District to meet its obligations for carbon neutrality for 2010. The purchase of the offsets allows us to reduce our emissions to zero.

Our emissions included 210.14 t from fleet, 2,173.33 t from buildings, 115.17 t from paper supplies and 35.29 t from emissions which did not require offset purchases. The 35.29 t of emissions that did not require offset purchases was because Section 5 of the Carbon Neutral Government Regulations' resulting from the operation of school buses, though reported as part of our GHG emissions profile for 2010, are out of scope under Section 4(2)c of the Carbon Neutral Government Regulations. Also included in that was a small portion of purchased gasoline or diesel which as of January 1<sup>st</sup>, 2010 includes a small percentage of renewable fuels (ethanol or biodiesel) of which the CO<sub>2</sub> portion is offset exempt.

## Emissions Reduction Activities

During 2010 this School District developed and executed contests at district facilities, produced small reminder stickers and placed these on computers and monitors and other equipment, and also developed and initiated near the end of the year, a program to assist with behavioral change. These activities paid off allowing us to generate reductions in consumption and subsequent lowering our CO<sub>2</sub> emissions.

We under took hard-wired retrofits at a number of facilities as well, resulting in upgraded lighting and introduced control at the same time by using occupancy sensors, DDC, CO<sub>2</sub> sensors and daylight control sensors. Upgrades were done in classrooms, gymnasiums, shops, office areas, corridors and on exteriors.

We introduced Solar heated panels to pre-heat domestic hot water at two schools, involved students from an Engineering class at a Secondary School to design a Solar powered, battery operated school sign. The eagerness of the students and the finished product really highlights what is at the core here. A willingness to learn, to participate and be part of the Team as we move forward reducing our footprint! A major component of the hard-wired projects is an educational piece that creates an understanding with students (and staff) on why something works the way it does. This is supported not only with curriculum but an added feature is a real time display in the main foyer that allows occupants and visitors alike to see what is being generated by renewable sources and how many tonnes of CO<sub>2</sub> we may be saving. This has proven to be an exciting feature for the schools!

A major component that helps drive the achievements we have seen are the contributions of organizations such as B.C. Hydro, The Public Sector Energy Conservation Agreement (PSECA)<sup>2</sup>, Solar B.C.,

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<sup>1</sup> Crown Corporation of the Government of BC, created to deliver quality made-in-BC greenhouse gas offsets to help clients reduce their carbon footprint and drive the growth of BC's low-carbon economy.  
<http://www.pacificcarbontrust.com/>

<sup>2</sup> Initially a Partnership between the Provincial Government and B.C. Hydro but now includes Terasen Gas.

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Terasen Gas (now Fortis) and Natural Resources Canada (NRCan). We are indebted to these organizations for seeing merit in our proposals and approving our applications.

Our District is as excited as ever as we move into 2012 and beyond! Late in 2010 we initiated a behavioral change program called the Energy Reduction Incentive Program (ERIP) that, through three levels of reductions achieved, pays a percentage of those savings back to schools in real cash. This has proven to be a winner. We have experienced savings strictly through behavioral change that created as high as 14% savings in some schools. This is in a three month measurement period. THAT is outstanding!

We continue to explore hard-wired possibilities. With new technologies emerging as rapidly as they are this provides us with expanded opportunities. We are now using LED lighting on some exterior applications on buildings and will soon be moving to parking lot lighting as well. The possibilities seem almost endless.

Our Energy Manager and his Team are doing a fantastic job as ideas are put together and proposed and transformed into real work that produces real examples of reductions many can only be envious about!

Our District website has a link on it to our Energy Blog. We have adopted a mascot, the Energy Bear and it can be accessed from here: <http://web.sd71.bc.ca/energybearden/>

We also have a link on the website to a page that speaks to Greenhouse Gas Reduction (GHG) and that can be found here: <http://www.sd71.bc.ca/greenhouse-gas-reduction.php>

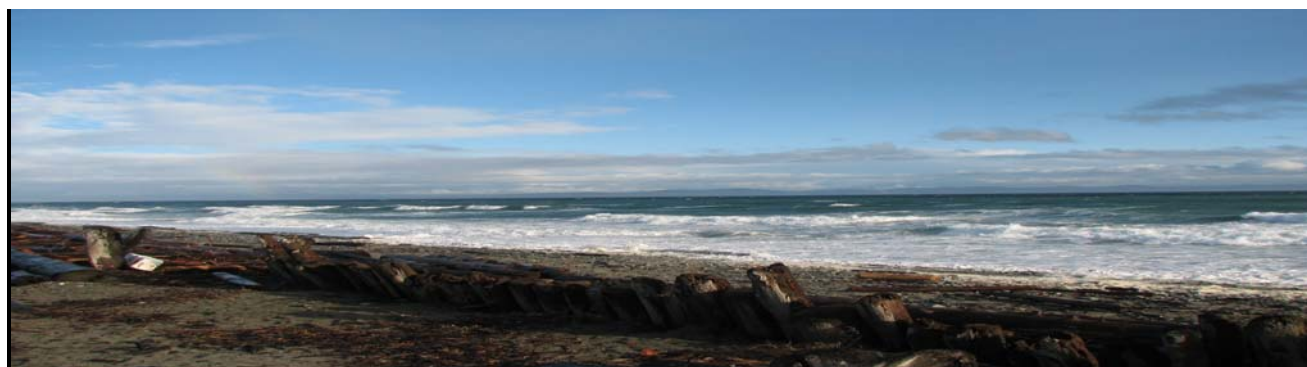
We live in a great part of the Province and the Comox Valley is proving to be a place where conservation is part of everyone's daily life. It is worth saving.



Mr. Len Ibbs (Secretary Treasurer)

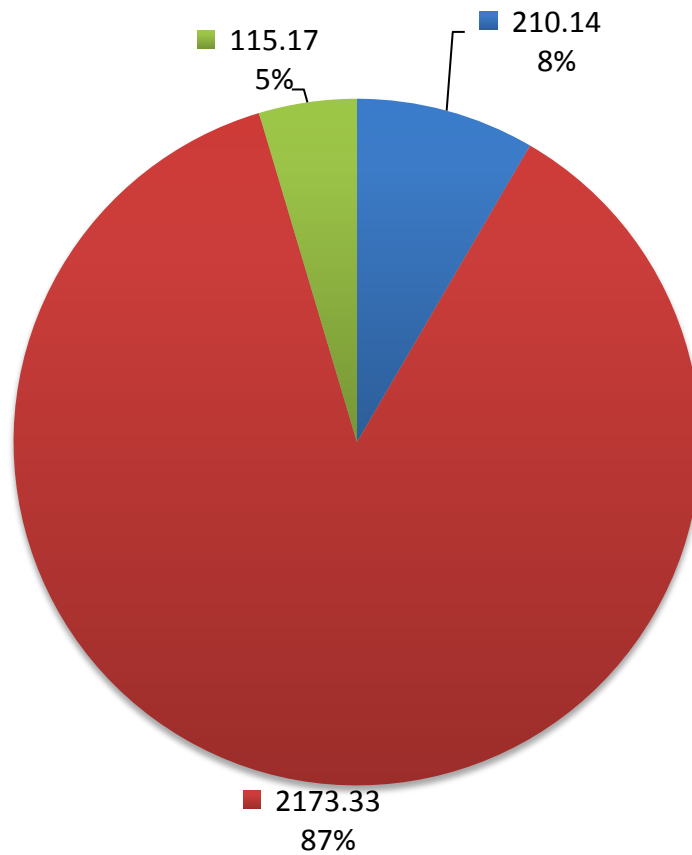


Mr. Chuck Morris (Director of Operations)



# Board of Education School District No. 71 (Comox Valley)

## Greenhouse Gas Emissions by Source for the 2010 Calendar Year (tCO<sub>2</sub>e\*)



**Total Emissions: 2498.64**

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

### Offsets Applied to Become Carbon Neutral in 2010

Total offsets purchased: **2463.35**. Total offset investment: **\$61,583.75**. Emissions which do not require offsets: **35.29** \*\*

\*Tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e) 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.

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

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
<b>Mobile Fuel Combustion (Fleet and other mobile equipment)</b>						
<b>Vehicle fuel efficiency</b>						
Replace vehicles with more fuel-efficient models	Ongoing/In Progress	10 % of vehicles are fuel- efficient models	Replaced Backhoe with new, more efficient Case Hoe	Continue with replacement as budgets allow	2010	No End Date (Continuous)
Replace larger vehicles with smaller models according to fleet "right-sizing" principles	In Development	5 % of vehicles down-sized since start year indicated		Continue with replacement as budgets allow	2008	No End Date (Continuous)
Perform regular fleet maintenance to improve fuel-efficiency	Ongoing/In Progress	100 % of vehicles are subject to regular maintenance for fuel efficiency	Fleet serviced on regular basis. Oil changes, filters, tire pressures and whatever else is required to minimize fuel consumption and maximize life cycle of vehicle.	Continue with servicing schedules and continue to explore better methods of doing things to extend life and minimize emissions.	2007	No End Date (Continuous)
Replace small maintenance vehicles with more fuel-efficient models	In Development	10 % of small maintenance vehicles are fuel-efficient		Continue to explore feasibility of downsizing to this type of vehicle.	2008	No End Date (Continuous)
<b>Behaviour change program</b>						
Provide fleet driver training to reduce fuel use	In Development	5 % of current drivers are trained	Three members of staff attended Train the Trainer session in Nanaimo	Continue to address fleet driver training to ensure fuel reduction by drivers actions. Provide sessions to impart knowledge learned from the Nanaimo workshops.	2010	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	100 % of staff take part in our anti-idling program.	Continue to engage staff and refresh signage as required.	Continue to engage staff and refresh signage as required.	2008	No End Date (Continuous)
<b>Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)</b>						
<b>Planning/management</b>						
Enrol in a building energy benchmarking program (e.g., GREEN UP)	In Development			We have benchmarked our facilities outside of the Green-up program. We are exploring further work within Green-up benchmarking.	2011	No End Date (Continuous)
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle Controls)	In Development	0 % of buildings have a real time metering system installed		We plan to install real time metering at Highland Secondary during 2011	2011	No End Date (Continuous)
<b>Owned buildings</b>						
Establish energy performance baseline for owned buildings	Completed in 2010	100 % of owned buildings have an established energy performance baseline	Established an energy baseline early in 2010		2010	2010
Complete energy retrofits on existing, owned buildings	Ongoing/In Progress	90 % of owned buildings have undergone energy retrofits since start year indicated	Installed Solar Voltaic at one facility, solar hot water at one facility, continued with upgraded lighting fixtures in at least ten more facilities, and involved a secondary school with building a solar powered lighting system for the main school sign.	Complete lighting upgrades in schools, work at using LED for parking areas and expand on solar applications. Install solar hot water at Mark Isfeld Secondary. Install solar voltaic at Vanier Secondary.	2000	No End Date (Continuous)
<b>Retrofitting owned buildings</b>						
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	0 % of retrofits since start year indicated had heating, cooling, and ventilation systems upgrades	Identify projects. Submit application to PSECA seeking approval to move on it.	PSECA approved HVAC and lighting and control upgrade at Arden Elementary, DDC complete install at Hornby Island and Denman Island. Replace original gas fired forced air furnaces at Airport Elementary with condensing boiler and electric classroom unit ventilators.	2011	2011



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Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)		Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Upgrade lighting systems during retrofits	Ongoing/In Progress	60	% of retrofits since start year indicated had lighting systems upgrades	Lighting upgrades completed in 2010 were: Miracle Beach, NIDES, Sandwick, Ab Ed, SBO, Glacier View, Robb Road.	Lighting upgrades at Denman Island and Vanier Secondary.	2010	2010
Upgrade/adjust control systems during retrofits	Ongoing/In Progress	60	% of retrofits since start year indicated had control system upgrades or adjustments	Occupancy sensor controlled lighting at Robb Road and Miracle Beach	Daylight controls at Cape Lazo, Queneesh, Aspen Park and Vanier Secondary will be installed over the next two years. If we can expand that we will at the time of installation.	2010	No End Date (Continuous)
Improve building insulation (including windows) during retrofits	Ongoing/In Progress	15	% of retrofits since start year indicated had insulation improvements	Replace windows at Lake Trail Secondary, Vanier Secondary and Ab Ed and all portable buildings.	Continue window replacement at Lake Trail Secondary, Maintenance and Vanier Secondary and begin with Courtenay Elementary	2010	No End Date (Continuous)
Install an on-site renewable energy demonstration project	Ongoing/In Progress	10	% of retrofits since start year indicated had on-site renewable energy components	Solar Voltaic panels installed at Huband Park Elementary with a kiosk in the foyer showing energy generated. Installed student developed solar powered / battery operated lighting for school sign at Vanier Secondary.	Will install monitoring in foyer at Isfeld and Highland to allow students and staff to see what the solar hot water system is producing and the greenhouse gases that are being eliminated. Vanier will receive a solar voltaic system and grid tie with monitoring applications for students and staff.	2010	No End Date (Continuous)
<b>IT power management</b>							
Implement server virtualization	In Development	0	% of servers have been virtualized since start year indicated		We are developing a strategic plan with our IT department	2011	No End Date (Continuous)
Apply auto-sleep settings on computer monitors and CPUs	Ongoing/In Progress	90	% of computers have auto-sleep settings applied	Check systems to ensure software continues to operate correctly.	Continue with Program	2007	No End Date (Continuous)
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	Ongoing/In Progress	45	% reduction in printers, copiers, and/or fax machines since start year indicated	Continued evaluation of devices and replacement once unit has failed.	Monitor equipment.	2009	No End Date (Continuous)
Apply auto-sleep settings on printers, copiers, fax machines, and/or multi-function devices	Ongoing/In Progress	90	% of devices have auto-sleep settings applied	Monitor systems to ensure auto-sleep functions correctly.	Continue with plan.	2009	No End Date (Continuous)
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	100	% of computers are ENERGY STAR rated	Continue to purchase Energy Star rated computers.	Check with IT staff to ensure Energy Star Models are purchased.	2007	No End Date (Continuous)
<b>Appliances and electronic devices</b>							
Replace refrigerators with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress	35	% of fridges are ENERGY STAR rated	As replacement is identified, Energy Star rated is requested.	Continue with plan.	2008	No End Date (Continuous)
Replace other appliances or electronic devices with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress	100	% staff involvement.	Encourage staff to replace appliances with Energy Star rated Appliances only.	Make this a directive	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	75	% of staff have changed to date.	Identify where incandescent bulbs are and replace with CFL or LED lamps.	Complete removal of as many incandescent bulbs as feasibly possible. Currently an audit is underway to identify remaining incandescent bulbs.	2009	No End Date (Continuous)
<b>Behaviour change program</b>							
Help staff reduce personal energy use through "workstation tune-ups"	Ongoing/In Progress	10	% of current staff have completed a workstation tune-up	Encourage staff to 'turn it off'!	Plan on expanding to full scale 'tune up' later this calendar year.	2009	No End Date (Continuous)
Ask staff to unplug electrical equipment or switch off power bars when not in use	Ongoing/In Progress	100	% of staff have been advised to 'turn it off'.	Explained to staff the benefit of turning off and unplugging loads.	Audits of plug loads in all facilities is currently underway	2008	No End Date (Continuous)
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Ongoing/In Progress	100	% of staff have been asked to close blinds if appropriate.	Memos to staff to remind them to utilize shades where applicable.	This is an ongoing reminder to staff.	2008	No End Date (Continuous)

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Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)		Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Encourage staff to use air dry setting on dishwashers	Ongoing/In Progress	100	% of staff have been asked to use the air dry setting on dishwashers.	Continued with communication to staff to use air dry settings where possible.	Will remind staff on a continuing basis about the benefits of using air dry settings on dishwashers.	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	100	% of staff have been briefed on energy conservation while working in office outside of normal hours.	Dialogue with school Administrators to remind them about saving energy during off hours.	Continued encouragement to Administrators to generate energy savings.	2009	No End Date (Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress	100	% of staff are aware they need to turn lights off by use of stickers placed on switches.	Light switch stickers have been applied. Don't leave me on stickers have been applied to most monitors and other equipment.	Will continue to encourage staff to turn off lights and equipment when not in room or not in use. We have now provided reminder stickers for computers and monitors as well as light switches.	2008	No End Date (Continuous)
Promote hot water conservation	Ongoing/In Progress	100	% of staff have been made aware of savings through hot water conservation.	Continually remind staff to conserve hot water.	Install more hot water solar units and teach staff the benefits of this type of conservation. The most recent installation is at Mark Isfeld Secondary.	2009	No End Date (Continuous)
<b>Other Stationary Fuel Combustion and Electricity Actions</b>							
Upgrade portables with high efficiency furnaces and heat recovery units, and install new doors and windows in portables as required.	Ongoing/In Progress	60	% of portable buildings have upgraded furnaces.	Majority of portables were upgraded during 2010	Continue work on portables and complete the work this year (2011).	2009	No End Date (Continuous)
Domestic hot water tank (electric) scheduling as well as circ pump scheduling	Ongoing/In Progress	90	% of hot water tanks have controls on them now.	Installed clocks on uncontrolled electric hot water tanks.	Complete installation of DDC controlled electric hot water tanks and circ pumps.	2009	No End Date (Continuous)
<b>Supplies (Paper)</b>							
<b>Paper Type</b>							
Purchase 30% post-consumer recycled paper	Ongoing/In Progress	7	% of total paper purchased contains 30% recycled content	Ascertain volume and content of paper purchased within the district	Determine cost benefit analysis of increasing re-cycled content as we move toward 100% recycled content.	2010	No End Date (Continuous)
Purchase 100% post-consumer recycled paper	Ongoing/In Progress	0	% of total paper purchased contains 100% recycled content	Ascertain volume and content of paper purchased within the district	Determine cost benefit analysis of increasing re-cycled content as we move toward 100% recycled content.	2010	No End Date (Continuous)
<b>Printer/document settings</b>							
Switch networked printers and photocopiers to automatic double-sided	Ongoing/In Progress	75	% of network printers or photocopiers are set to automatic double-sided	Identify printers that can print double sided and adjust them to do so.	If printers currently cannot print dble sided, when replacing them ensure new printer can print dble sided.	2009	No End Date (Continuous)
Reduce default margin size in standard document templates (e.g., letters, briefing notes, forms, etc.)	Ongoing/In Progress	100	% of staff encouraged to reduce margins.	Have advised staff that wherever possible, to reduce margins	Continue to follow up on this with staff	2009	No End Date (Continuous)
<b>Electronic media in place of paper</b>							
Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	20	% of staff workstations with software installed	Initiated the use of Share Point	Wherever possible we are looking at broadening the use of Sharepoint, etc.	2009	No End Date (Continuous)
Post materials online that were previously printed	Ongoing/In Progress	100	% of Human Resource forms now online.	Human Resources is the first Department to move toward the paperless environment.	Human Resources have gone 'paperless' with the vast majority of their work where feasible.	2009	No End Date (Continuous)
<b>Behaviour change program</b>							
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	10	% of staff currently have received collaborative software training	We have begun to utilize this technology and train some staff in it's use.	We intend to expand upon this type of technology where applicable.	2009	No End Date (Continuous)



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Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)		Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress	100	% of staff have been encouraged to hold paperless meetings.	Encouraged staff to hold paperless meetings where possible.	Will continue to encourage a reduction of paper use	2009	No End Date (Continuous)
Encourage re-use of scrap paper	Ongoing/In Progress	100	% of staff encouraged to re-use scrap paper.	Encouraged staff to re-use paper where possible.	Scrap paper is being recycled for other uses, we will continue to push this idea.	2009	No End Date (Continuous)
<b>Other Paper Supplies Actions</b>							
Purchase 40% post consumer recycled paper	Ongoing/In Progress	6	% of total paper purchased contains 40% recycled content	As we look at cost benefit we will expand our purchases of re-cycled as we move toward 100% re-cycled content.	Determine cost benefit analysis of increasing re-cycled content as we move toward 100% recycled content.	2009	No End Date (Continuous)
Experimenting with eReaders for our Foremen.	In Development				Many pieces of equipment come with .pdf files for product information and troubleshooting. We are looking at putting these on an eReader for the Foremen to eliminate printing the documents.	2011	No End Date (Continuous)

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## Actions to Reduce Provincial Emissions and Improve Sustainability

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

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)		Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
<b>Business Travel</b>							
<b>Virtual meeting technology</b>							
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	Ongoing/In Progress	10	% of computers have web-conferencing software installed	Encouraged staff to use more web conferencing.	Continue to encourage web conferencing where applicable and provide support for this type of work	2008	No End Date (Continuous)
Make desktop web-cameras available to staff	Ongoing/In Progress	8	% of staff have access to a desktop web-camera	Encourage use of Skype and other programs for web conferencing	Where applicable, support the move to web conferencing with desk top camera's	2008	No End Date (Continuous)
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	Ongoing/In Progress	5	% of meeting rooms have access to video-conferencing equipment	A few rooms have been set up for video conferencing.	Will continue to look at expanding the setting up rooms for video conferencing as demands arise.	2008	No End Date (Continuous)
<b>Behaviour change program</b>							
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress	100	% of staff encouraged to consider virtual attendance at meetings where applicable.	A number of staff attended virtual presentations whenever possible.	With the use of LCD projectors and conferencing more and more staff are willing to commit to virtual attendance wherever possible.	2009	No End Date (Continuous)
Encourage carpooling to meetings	Ongoing/In Progress	100	% of staff encouraged to carpool where practical.	Whenever feasible carpooling is done by staff.	Continue to remind staff to carpool whenever possible.	2008	No End Date (Continuous)
<b>Education, Awareness, and Engagement</b>							
<b>Team-building</b>							
Create Green, Sustainability, Energy Conservation, or Climate Action Teams with executive endorsement	Ongoing/In Progress	100	% of schools involved.	We created (Student Based)Green Teams at each of our schools. These are led by committed Teachers.	Encourage continued involvement of Staff and students and work to expand duties of Green Team members.	2010	No End Date (Continuous)
Provide resources and/or dedicated staff to support teams	Ongoing/In Progress	100	% involvement from a dedicated staff person.	Our Energy Manager has spear headed management of the district Green Teams.	Continue to support our Energy Manager with his management of the district wide Green Teams.	2010	No End Date (Continuous)
Providing behaviour change education/training to teams (e.g., community-based social marketing)	Ongoing/In Progress	100	% of schools involved	Training provided by BC Hydro and our Energy Manager to Students and staff.	Education is key to knowledge and we continue to follow through, educating our building occupants.	2010	No End Date (Continuous)
<b>Awards/Recognition</b>							
Establish a sustainability/green awards or recognition program	Ongoing/In Progress	100	% of schools involved	Created and introduced our ERIP Program (Energy Rewards Incentive Program) to encourage behavioral change amongst students and staff. Rewards are a percentage of the financial savings from Electrical and gas in any given quarter.	We intend to continue to use ERIP to create savings opportunities within our schools. A percentage of financial savings are returned to each school should they be successful in reducing consumption.	2010	No End Date (Continuous)
<b>Staff Professional Development</b>							
Support green professional development (e.g., workshops, conferences, training)	Ongoing/In Progress	100	% schools involved	Our Energy Manager attended Staff meetings at schools.	Our Energy Manager continues to attend staff meetings at all schools to educate staff about energy conservation and the benefits to us and the Valley we live in.	2010	No End Date (Continuous)
<b>Staff awareness/education</b>							
Provide education to staff about the science of climate change	Ongoing/In Progress	100	% of staff have been given information on climate change.	This has been a continuous topic in schools.	All facilities involved in Earth Hour (noon on the Friday before Earthday) and encouragement of staff and students to participate at home for earth day.	2010	No End Date (Continuous)

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Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)		Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Provide education to staff about the conservation of water, energy, and raw materials	Ongoing/In Progress	100	% of staff have received conservation information.	Conservation was discussed and the topic broadened as the year went on.	Conservation on all consumption is a hot topic amongst students and staff. We continue to meet with all of them and talk about our responsibility to conserve, reduce, re-use.	2010	No End Date (Continuous)
Provide green tips on staff website or in newsletters	Ongoing/In Progress	100	% of green tips have been provided on website and in newsletters.	Tips have been placed on the District website at <a href="http://web.sd71.bc.ca/energybearden/">http://web.sd71.bc.ca/energybearden/</a>	We continue to place tips on the district website both under the Energy Bear conservation info and under the Greenhouse Gas info line. We also have begun a newsletter extolling conservation.	2010	No End Date (Continuous)
Provide sustainability education during new staff orientation	In Development			This is in development and will become a part of the staff orientation process.	We are working on implementing a piece about energy conservation during new staff orientation. It is done annually with all new staff, and from time to time throughout the year as we bring others on board.	2010	No End Date (Continuous)
<b>Client/public awareness/education</b>							
Provide education to clients/public about the science of climate change	Ongoing/In Progress	100	% of our performance is made available to the public.	Many articles in the local paper about our progress and at least two television clips about energy conservation	We will continue to provide access to information for the media to inform the public about the work we are doing to encourage conservation and the hard wired facts about what we have done.	2010	No End Date (Continuous)
Provide education to clients/public about the conservation of water, energy, and raw materials	In Development	100	% of our efforts are made available to the public.	On the District website is the Energy Bear Blog shown above as well as a link called Greenhouse Gas Reduction at <a href="http://www.sd71.bc.ca/greenhouse-gas-reduction.php">http://www.sd71.bc.ca/greenhouse-gas-reduction.php</a>	Much of this information is passed to the public in articles in the papers about what we have done as well as TV coverage and information placed on our website.	2010	No End Date (Continuous)
Provide green tips on client/public website or in newsletters	Ongoing/In Progress	100	% of staff receive 'green tips' and much of that goes home with students.	Many 'Green' tips were provided on our Energy Bear 'Blog' off our website.	We update our conservation and Greenhouse gas information on the website and have started a .pdf distribution of a newsletter focused solely on energy conservation and reduction.	2010	No End Date (Continuous)
<b>Other Education, Awareness, and Engagement Actions</b>							
Energy Ambassadors at all Secondary Schools	Ongoing/In Progress	100	% of Secondary Schools engaged with this.	Formation of Energy Ambassadors at all Secondary Schools.	Continue with involvement of Energy Ambassadors	2010	No End Date (Continuous)
School Based Newsletters	Ongoing/In Progress	100	% of schools send newsletter home with students.	Most schools, if not all include conservation information within their newsletters that go home to Parents	Continue to encourage newsletter based dialogue about conservation and GHG	2010	No End Date (Continuous)
<b>Other Sustainability Actions</b>							
<b>Water conservation</b>							
Establish a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models	Ongoing/In Progress	100	% of focus is on water conservation	The District selected one model of water closet to standardize with what fits the 1.6 liter flush mandate.	We are evaluating all products used to ensure water conservation.	2010	No End Date (Continuous)
<b>Waste reduction/diversion</b>							
Put in place an operations policy to facilitate the reduction and diversion of building occupant waste from landfills or incineration facilities	In Development				Currently we have in place a large re-cycling program at all schools where paper, cardboard, glass and plastics are re-cycled. Blue bins are at each site and a local contracted company picks them up weekly.	2010	No End Date (Continuous)
Implement a hazardous waste reduction and disposal strategy	In Development				We use a hazardous waste company to pick up once per year, this type of waste from schools, including any pcb ballasts we may have collected. We also use a 'bulb eater' to dispose of our used lamps and cfls.	2010	No End Date (Continuous)
<b>Procurement (non-paper supplies)</b>							
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	In Development				Exploring product availability and effectiveness currently.	2011	No End Date (Continuous)
<b>Building construction, renovation, and leasing</b>							
Establish a policy to reuse materials where possible and divert construction and demolition debris from landfills and incineration facilities	In Development				Current practise by Directive is to re-use material as much as possible. At this point we have not completed development of policy or regulation around this practise. It is coming.	2011	No End Date (Continuous)

**Board of Education School District No. 71 (Comox Valley) - 2010 Carbon Neutral Action Report**

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)		Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Incorporate lifecycle costing into new construction or renovations	In Development	10	% of business cases incorporating lifecycle costing since start year indicated		We have just begun to explore what this will look like and how we will implement it.	2011	No End Date (Continuous)
<b>Indoor air quality</b>							
Enforce a scent-free policy (e.g., no strong perfumes, deodorants, etc.)	In Development				Data being gathered as part of the process to develop regulation and/or policy for a scent free environment.	2011	2012
Incorporate low volatile organic compounds (VOCs) standards into procurement policy for products such as paints, carpets, and furniture	In Development				This is already done on an ad-hoc basis but is being formulated into regulation or policy.	2011	No End Date (Continuous)
<b>Commuting to and from home</b>							
Encourage commuting by foot, bicycle, carpool or public transit	Ongoing/In Progress			Many staff choose to attend work in this fashion.	Encourage where possible, staff to commute to work other than in a vehicle.	2008	No End Date (Continuous)
Provide secure bicycle storage	Ongoing/In Progress			We have provided secure storage for majority of our facilities.	As issues are identified we respond by providing secure solutions for storage.	2009	No End Date (Continuous)
<b>Other Sustainability Actions</b>							
Evaluation of water usage during irrigation	Ongoing/In Progress			We introduced application of a product that retains moisture in a field and as the soil begins to dry out, it slowly releases what water it holds, thereby allowing reduction of length of time sprinklers run.	Expand distribution of this product to other fields.	2010	No End Date (Continuous)