

THE BOARD OF EDUCATION OF SCHOOL DISTRICT NO. 58 (NICOLA-SIMILKAMEEN)

ADMINISTRATION OFFICE

Dr. Robert Peacock, Superintendent of Schools Bruce Tisdale, C.G.A., Secretary Treasurer

P.O. Box 4100, 1550 Chapman Street, Merritt, B.C., V1K 1B8, Phone: (250) 378-5161, Fax: (250) 378-6263

April 29, 2010

Re: Executive Summary of 2009 Carbon Neutral Action Report

The district has continued the actions set out in its first report last year so this will only highlight what has changed since then.

The issue of reducing greenhouse gas has been elevated as a result of this program. This is now a part of any discussions around renovations, office procedures, and purchasing of equipment.

Boilers and heating systems that were the largest energy users were targeted for action in 2009. As a result, a number of the older ones were replaced and plans are in place to continue this in the current year.

Single pane glass windows were replaced in 2009 with remaining windows being scheduled for replacement in 2010.

The numbers of windows in schools were reduced with every second window being removed and replaced with insulated solid coverings.

There was a concerted effort to move to paperless meetings within the district, starting with Board meetings.

The installation of motion sensors in gymnasiums was successfully piloted in several schools with their use to be expanded to all schools in 2010.

A district committee has been appointed to identify and support Carbon Neutral Actions.

A number of the projects that were indentified in last year's reports were completed.

Yours truly,

H. Bruce Tisdale

Secretary Treasurer



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Re: Actions Towards Carbon Neutrality for the 2009 Carbon Neutral Report

The key areas that have been identified as priorities for the next three years include the following:

- Development of policies supporting and encouraging carbon neutrality
- Completion of current plans to reduce the district's carbon footprint
- Comprehensive review of all district heating, ventilation and air conditioning systems to identify areas that will provide the biggest return for dollars invested in retrofits
- Fund at least one major energy retrofit program over the next three years
- Expansion on the use of environmentally friendly products including paper and cleaning supplies
- Expand education program for staff on the importance of this program and to encourage greater participation
- Completion of lighting upgrades in all buildings in the district
- Expansion of the use of video conferencing and web conferencing within the district
- Review existing office practices to determine areas of potential change that will reduce our carbon footprint.

Actions Towards Carbon Neutrality

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

Action	Status (as of 12/31/09)		Performance to Date (as of 12/31/09)	Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year	
Mobile Fuel Combustion (Fleet and other mobile equipment)								
Vehicle fuel efficiency								
Replace vehicles with more fuel-efficient models	Ongoing/In Progress	50	% of vehicles are fuel- efficient models	Two vehicles were replaced.	One bus is scheduled for replacement in each of the next two years. One shop vehicle is scheduled for replacement this year.	1999	No End Date (Continuous)	
Replace larger vehicles with smaller models according to fleet "right- sizing" principles	In Development				Up until recently, there has not been smaller models available that meet the district's requirements for its maintenance vehicles. This will continue to be reviewed each time that new vehicles are ordered.	2008	No End Date (Continuous)	
Perform regular fleet maintenance to improve fuel-efficiency	Complete	100	% of vehicles are subject to regular maintenance for fuel efficiency	Regular mechanical checkups; Regular checking of tire pressures; all service work done within timelines recommended by the manufacturer		1999	No End Date (Continuous)	
Replace small maintenance vehicles with more fuel-efficient models	Ongoing/In Progress	30	% of small maintenance vehicles are fuel-efficient	All vehicles ordered with smallest engines possible.	Continuation of move to smaller engines and smaller vehicles.	2004	No End Date (Continuous)	
Behaviour change program								
Provide fleet driver training to reduce fuel use	Ongoing/In Progress	100	% of current drivers are trained	Training session for all drivers held in 2009	Additional training planned	2009	2010	
Introduce anti-idling policy and/or raise anti-idling awareness for fleet drivers (e.g., signs, stickers, messages)	Complete			Policy adopted and signs posted		2009	2009	
Encourage carpooling in fleet vehicles	Ongoing/In Progress			Ongoing for all staff when attending in district and out of district meetings	Continue to encourage car pooling	2007	No End Date (Continuous)	
Stationary Fuel Combustion, Electricity and Fugitive En	nissions (Buildings)						•	
Planning/management								
Enrol in a building energy benchmarking program (e.g., GREEN UP)	Ongoing/In Progress	100		Spreadsheets have been used to monitor the energy useage at all schools. This will be used in combination with SMART tool to provide udated information. This information will be used to set priorities for planning upgrades within the district.	Monitor reports and review areas of need	2006	No End Date (Continuous)	
Reduce office space (square meters) per employee	In Development			Discussions with schools and the Board about closing unused classrooms	Reduction in use of unused classrooms	2009	2011	
Owned buildings								
Establish energy performance baseline for owned buildings	Ongoing/In Progress	100	% of owned buildings have an established energy performance baseline	Data reviewed on a quarterly basis with adjustments made on the basis of spikes in useage.	Expansion of data collected and expectations for reductions	2006	2011	
Incorporate integrated design process into new construction or during renovations of owned buildings	In Development				This is included in the comprehensive renovation planned for one school. The Board is prepared to put approximately 22% of the funding towards the project to help with the approval.	2009	2012	

Action	Status (as of 12/31/09)	Performance to Date (as of 12/31/09)	Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Complete energy retrofits on existing, owned buildings	In Development			Review of schools with highest energy consumption and bring proposal forward to address concerns, with at least one to be completed by the end of 2011	2008	No End Date (Continuous)
Retrofitting owned buildings						
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	% of retrofits (captured above) 40 had heating, cooling, and ventilation systems upgrades	Three schools have been upgraded in the past fourteen years with proposals for three more schools in progress	Completion of one of the three proposed projecs by 2011	2008	2012
Upgrade lighting systems during retrofits	Ongoing/In Progress	% of retrofits (captured above) had lighting systems upgrades	All schools except two have had most lights replaced with low energy ballasts and bulbs.	One of the two remaining schools as well as the remaining gymnasiums to be completed this year.	2007	2012
Upgrade/adjust control systems during retrofits	Ongoing/In Progress	% of retrofits (captured above) had control system upgrades or adjustments	All schools now have DDC systems installed. The systems are used to control temperature, the timing of heat/airconditioning as well as the operation of pumps and motors.	Review other possibilities for the use of the DDC systems and use existing information in a wider setting.	1999	No End Date (Continuous)
Improve building insulation (including windows) during retrofits	In Development		All remaining single pane windows identified	Budget for replacement of a certain number of single pane windows in each of the next four years, then re-evaluate the program.	2009	2012
IT power management						
Install power management software which shuts down computers outside of regular business hours	Ongoing/In Progress	% of computers shut down automatically outside of regular business hours	Master switches installed in all school labs with monitoring to ensure that the computers are turned off.	Priority in this areas is identify best practices to shut down stand alone computers at night	2007	2012
Apply auto-sleep settings on computer monitors and CPUs	Ongoing/In Progress	% of computers have auto-sleep settings applied	Activated on all computer monitors and cpu's	Priority in this areas is to determine best practices to shut down stand alone computers at night	2007	2012
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	Ongoing/In Progress	% reduction in printers, copiers, 50 and/or fax machines since start year indicated	Most stand alones have been replaced	Continue to remove remaining stand alones as soon as possible taking into consideration restricted budgets	2008	2011
Apply auto-sleep settings on printers, copiers, fax machines, and/or multi-function devices	Complete	90 % of devices have auto-sleep settings applied	Done automatically by technology staff		2007	2010
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	% of computers are ENERGY STAR rated	There has been a large replacement program in place the last two years, with more than 300 hundred new computers being purchased	Continue upgrade program with a plan to have all old computers replaced by the 2011/12 school year	2008	2012
Appliances and electronic devices						
Replace refrigerators with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress	% of fridges are ENERGY STAR rated	All new and replacement appliances are purchased under these guidelines. There is not a planned replacement program at this time due to funding restrictions.	Continue to use this as a guide when replacing or adding appliances.	2008	No End Date (Continuous)
Behaviour change program						
Ask staff to unplug electrical equipment or switch off power bars when not in use	In Development			Develop education program that will be presented to employees	2010	2012
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Ongoing/In Progress		This is raised at staff meetings and also through personal contact made by district staff	Use more formal contacts and eduction programs	2008	2011

Action	Status (as of 12/31/09)		Performance to Date (as of 12/31/09)	Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Encourage staff to use air dry setting on dishwashers	Ongoing/In Progress			Reminders sent out regularly and personal contact made by district staff	Use more formal contacts and eduction programs	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			Regular visits by maintenance to remind staff.	A more formal process is to be developed.	2007	No End Date (Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress			Prizes offered to schools for participating. Monthly inspections by maintenance staff	Coninue existing program and augment it with more education for staff	1998	No End Date (Continuous)
Promote hot water conservation	Ongoing/In Progress			Circulating pumps are shut down during times when hot water is not required.	Review all facilities to make sure that all pumps have been identified. Inspect fixtures to make sure there are is no leakage.	2008	No End Date (Continuous)
Other Stationary Fuel Combustion and Electricity Actions							
Replace large hot water tanks with smaller ones	Ongoing/In Progress			Reduction in operating costs.	Continue with program using newly approved AFG funding	2008	No End Date (Continuous)
Use fans instead of airconditioning to circulate air during summer work.	Complete			Airconditioners were used to circulate fresh air and regulate temperature for staff working during the summer. This practice has been changed to only use fans which run significantly cheaper.		2008	No End Date (Continuous)
Recycling of old electronic equipment	Ongoing/In Progress			Use of recycling depots for unused electronic equipment including computers.	Expand current recycling program to include additional areas	2009	No End Date (Continuous)
Supplies (Paper)							
Paper Type							
Purchase 30% post-consumer recycled paper	In Development				Include recycled paper option in annual paper tender	2010	2010
Printer/document settings							
Switch networked printers and photocopiers to automatic double-sided	Ongoing/In Progress				Completed test project on this in district office. Program to be expanded to all sites.	2010	2011
Apply "print and hold" settings to networked printers to eliminate unclaimed print jobs	Ongoing/In Progress	20	% of network printers have 'print and hold' settings applied	Information provided indicates that with the size of the schools in the district, this does not seem to be an issue. The two largest schools are using this feature.	ongoing discussion with the schools to monitor issue	2009	2011
Electronic media in place of paper							
Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	In Development				To be reviewed to determine possible uses in the district.	2009	2011
Use electronic document library for filing common documents	Ongoing/In Progress			Schools have shared folder files for staff. All teachers have access to computers at or near their workstations. Various workshops have been held on the use of Moodle to share documents.	To be reviewed to ensure that the use of this continues to expand.	2009	2011
Post materials online that were previously printed	Complete			All policy books and many other general district documents are now posted online.		2008	2010
Switch to an electronic payroll notification system in place of paper pay stubs	Ongoing/In Progress			Approximately 20% of staff have agreed to this as of September.	Convince remainder of staff to participate	2009	2010
Behaviour change program							

Action	Status (as of 12/31/09)	Performance to Date (as of 12/31/09)	Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	% of staff currently have 10 received collaborative software training	Training started in 2009 for technology staff only	Expand training to other interested staff members	2009	No End Date (Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress		Laptop computers purchased for trustees and laptop program offered to teachers to facilitate a more paperless environment.	Paperless meetings now in place for the Board as well as for various committees	2009	2010
Encourage re-use of scrap paper	Complete		staff use scraps of paper rather than ordering note pads		2008	2010
Other Paper Supplies Actions						
Evalutate change of fax machines to computer software to reduce paper useage	Ongoing/In Progress		Survey sent to other districts to determine effectiveness of program	Implementation of program at smaller schools	2009	2011

Actions to Reduce Provincial Emissions and Improve Sustainability

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

Action	Status (as of 12/31/09)		Performance to Date (as of 12/31/09)	Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Business Travel							
Virtual meeting technology							
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	Complete	50	% of computers have web- conferencing software installed	All staff requesting this software to participate in meetings now has it installed.		2007	2009
Make desktop web-cameras available to staff	Complete	100	% of staff have access to a desktop web-camera	Cameras available at all schools and all teacher laptops include web- cameras		2008	2009
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	Complete	25	% of meeting rooms have access to video-conferencing equipment	All web-conferencing equipment upgraded		2007	2009
Behaviour change program							
Train staff in web-conferencing	Ongoing/In Progress	50	% of staff are trained web- conferencing	Training in this area has been completed for all staff requesting it	Expansion of current program to more staff members combined with providing more education of staff in this area	2008	No End Date (Continuous)
Train staff in video-conferencing or provide technical support for video-conferencing set-up	Ongoing/In Progress	100	% of staff are trained in video- conferencing or have access to technical support	Training in this area has been completed for all staff requesting it	Expansion of current program to more staff members combined with providing more education of staff in this area	2008	No End Date (Continuous)
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress			Ongoing reminders and prior approval to attend are used	Expansion of current program to more staff members combined with providing more education of staff in this area	2008	No End Date (Continuous)
Encourage carpooling to meetings	Ongoing/In Progress			Ongoing reminders and prior approval to attend are used	Expansion of current program to more staff members combined with providing more education of staff in this area	2008	No End Date (Continuous)
Education, Awareness, and Engagement							
Staff Professional Development							
Support green professional development (e.g., workshops, conferences, training)	Ongoing/In Progress			Funding provided to staff members requesting attendance at various workshops	Continuation of current program	2008	No End Date (Continuous)
Staff awareness/education							
Provide education to staff about the conservation of water, energy, and raw materials	Ongoing/In Progress			This is a community project with the district being an active participant	Provide information on specific district use on a more regulara basis	2009	No End Date (Continuous)
Provide sustainability education during new staff orientation	In Development				Program to be included in 2010 new staff orientation	2010	No End Date (Continuous)
Client/public awareness/education							
Provide education to clients/public about the science of climate change	Ongoing/In Progress			Part of student education program	Part of student education program	2008	No End Date (Continuous)
Provide education to clients/public about the conservation of water, energy, and raw materials	Ongoing/In Progress			part of student education program	Program to be included in 2010 new staff orientation	2008	No End Date (Continuous)

Action	Status (as of 12/31/09)	Performance to Date (as of 12/31/09)	Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year			
Other Sustainability Actions									
Indoor air quality									
Enforce a scent-free policy (e.g., no strong perfumes, deodorants, etc.)	Complete		This is in place in schools and the district office		2006	2010			
Incorporate low volatile organic compounds (VOCs) standards into procurement policy for products such as paints, carpets, and furniture	Ongoing/In Progress		This is in place for all renovations to classrooms	Continue current practices	2007	No End Date (Continuous)			
Commuting to and from home									
Provide shower or locker facilities for staff/students who commute by foot or by bicycle	Complete		Such areas already exist in most schools		1990	No End Date (Continuous)			
Provide secure bicycle storage	Complete		Areas already set aside in schools		2007	No End Date (Continuous)			
Other Sustainability Actions									
Switched to use of water based and low odor paints for maintenance	Complete		Changed to waterbased and low odor paints for all school projects to improve air quality.		2008	No End Date (Continuous)			