



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, 2011

Re: School District No. 58 (Nicola-Similkameen)

Executive Summary of 2010 Carbon Neutral Action Report

Attached are the following documents that make up the 2010 Carbon Neutral Action Report:

2010 Carbon Neutral Action Report
Actions towards Carbon Neutrality for 2010
Actions towards Carbon Neutrality for 2011 to 2013.

The total Greenhouse Gas Emissions for 2010 were 1191.62 for a total cost of \$24,355.00. The total Carbon tax paid for 2010 was \$19,464.71 for 133,201 units.

The district has continued to initiate actions in areas that will have a positive impact on carbon neutrality.

The focus has been more on action than on writing specific policies as there has not been an issue getting strong buy-in from staff in this area. Ideas are regularly brought forward on where there may be areas worth trying in terms of reducing the carbon impact.

As in the past, decisions around renovations, office procedures, purchasing of equipment, or other changes, involve discussions on how the decision may impact the district's greenhouse gas emissions.

Lighting upgrades, HVAC replacements and adjustment to building operation procedures are just a few of the areas that now form part of any discussion during the operating and capital budget processes as well as in day to day conversations.

This Report provides a framework for the Carbon Neutral Program each year as evidenced by the number of projects from prior year's reports that are completed in subsequent years.

In summary, it is not only the new initiatives that continue to be brought forward that we are excited about but also the fact that there is no slippage in previously implemented programs. There is ongoing commitment to these programs and in fact, they continue to expand where possible.

Yours truly,


H. Bruce Tisdale
Secretary Treasurer



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, 2011

Re: School District No. 58 (Nicola-Similkameen)

Actions towards Reducing Greenhouse Gas Emissions in 2010

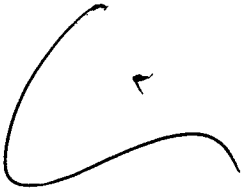
This is a brief overview on actions taken by the district to reduce Greenhouse Gas Emissions in 2010.

- There was a concerted effort to move to paperless meetings within the district, starting with Board meetings and now moving to include other meetings in the district including education and technology. The Board has also held some meetings via video conferencing rather than by travel between the two larger communities within the district's boundaries.
- The installation of motion sensors in gymnasiums that was successfully piloted in several schools was expanded to all schools in 2010. There is now a planned trial on using these sensors for some of the districts higher traffic rooms.
- The biggest investment that was made was to upgrade the Heating/Ventilation/Air Conditioning system at the district's largest elementary school. This was a \$1.7 million dollar project with one third of the funding through provincial initiatives and the majority through a commitment from the Board. This upgrade should have a very positive impact on the carbon neutral program as it replaced a heating system that was more than fifty years old with an air source system.
- An application has now been made for funding to do the same thing to the third largest elementary school in the district, with the Board once again prepared to provide a large share of the funding directly.
- The district implemented electronic pay statements and electronic accounts payable vouchers for staff.
- Progress was made on completing the lighting upgrade in remaining schools.
- Progress was also made on the replacement of single pane windows with one more school completed and another school being started.
- After a successful trial period, all photocopiers were set to do automatic double sided copies.

.../2

- The recycling program was expanded beyond paper products to include electronics and maintenance supplies.
- The total Greenhouse Gas Emissions for 2010 were 1191.62 for a total cost of \$24,355.00. The total Carbon tax paid for 2010 was \$19,464.71 for 133,201 units.

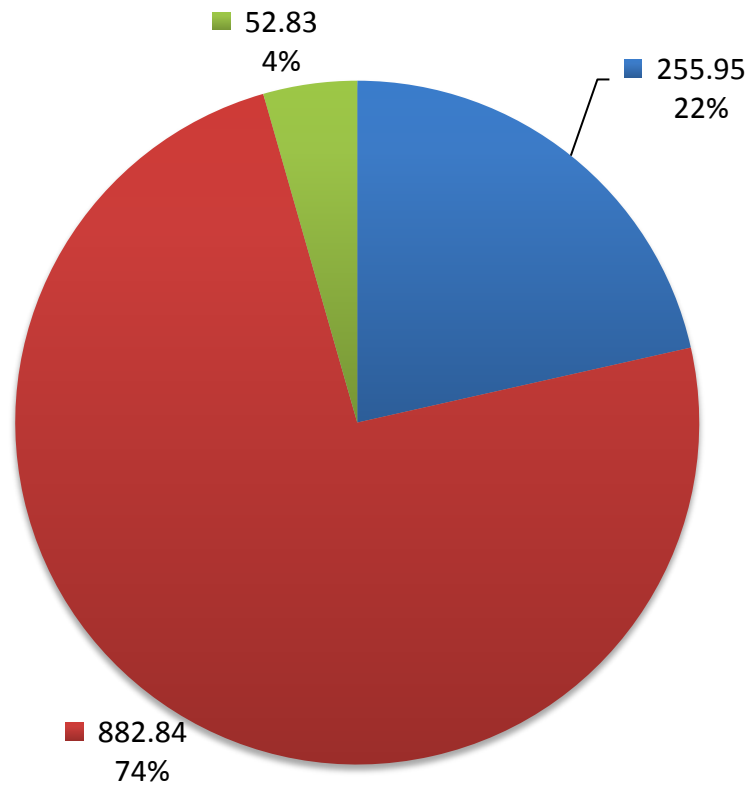
Yours Truly

A handwritten signature in black ink, appearing to be 'H. Bruce Tisdale', with a small arrow pointing to the right.

H. Bruce Tisdale
Secretary Treasurer

School District No 58 (Nicola-Similkameen)

Greenhouse Gas Emissions by Source for the 2010 Calendar Year (tCO₂e*)



Total Emissions: 1191.62

- 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: **974.2**. Total offset investment: **\$24,355.00**. Emissions which do not require offsets: **217.42** **

*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.

School District No 58 (Nicola-Similkameen) - 2010 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 (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
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	one vehicle was approved for approval but purchase delayed until 2011. All but two buses now run on diesel.	Two buses are scheduled for replacement in 2011 with one in each of the next four years.	1999	No End Date (Continuous)
Replace larger vehicles with smaller models according to fleet "right-sizing" principles	in development			Attempted to purchase smaller vehicle based on need but none available in price range	continue to pursue smaller vehilce concept with new models now coming on the market	2008	No End Date (Continuous)
Replace small maintenance vehicles with more fuel-efficient models	ongoing/in progress	40	% of small maintenance vehicles are fuel-efficient	Replaced one vehicle with one with a smaller, more efficient engine.	contiune to pursue purchase of smaller, more efficient 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 sessions for drivers held again in 2010	training planned for 2011	2009	No End Date (Continuous)
Encourage carpooling in fleet vehicles	ongoing/in progress			Car pooling for most intra district travel now in place.	continue to monitor and encourage car pooling	2007	No End Date (Continuous)
Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)							
Planning/management							
Enrol in a building energy benchmarking program (e.g., GREEN UP)	Completed in 2010	100	% of the program is now in use	Smart tool now fully implemented with comparison data available.	use of Smart Tool for monitoring impact of energy savings programs	2006	No End Date (Continuous)
Reduce office space (square meters) per employee	Ongoing/In Progress			A number of unused classrooms were shut down and heat setting for storage areas reduced	Monitor use of classrooms to ensure that vacant rooms are not heated. Review existing space to determine maximum efficiency.	2009	No End Date (Continuous)
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 results.	Increased use of monitoring and reviews	2006	No End Date (Continuous)
Complete energy retrofits on existing, owned buildings	Ongoing/In Progress	7	% of owned buildings have undergone energy retrofits since start year indicated	Grant applications for retrofit to a secondary school based on energy consumption. District prepared to double amount of grant received.	Continue to monitor availability of grants provided for retrofits and hold distrct funds in reserve to support grants received.	2008	No End Date (Continuous)
Retrofitting owned buildings							
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	40	% of retrofits since start year indicated had heating, cooling, and ventilation systems upgrades	Completion of one of three schools identified as having highest energy useage in the district. Reserved additional funding to support possible retrofit program for remaining two schools.	Continue to set aside funding to complete some form of retrofit should the capital programs not proceed as planned	2008	No End Date (Continuous)
Upgrade lighting systems during retrofits	Ongoing/In Progress	80	% of retrofits since start year indicated had lighting systems upgrades	Completed last of two gymnasiums and working on remainder of last two schools	complete the remaining schools	2007	2011

School District No 58 (Nicola-Similkameen) - 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
Upgrade/adjust control systems during retrofits	Ongoing/In Progress	100	% of retrofits since start year indicated had control system upgrades or adjustments	All school properties now have DDC systems installed.	Upgrade the number of zones for some sites.	1999	No End Date (Continuous)
IT power management							
Install power management software which shuts down computers outside of regular business hours	Ongoing/In Progress	90	% of computers shut down automatically outside of regular business hours	Additional computers added to master shut off switches. Move to mobile laptop carts with master shut off.	Education program for staff on the need to shut down computers/monitors when not in use. Additional computers to be added to master switch cut off.	2007	2012
Apply auto-sleep settings on computer monitors and CPUs	Ongoing/In Progress	95	% of computers have auto-sleep settings applied	More auto-sleep settings activated	Expand to all computers in district.	2007	2011
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	Ongoing/In Progress	70	% reduction in printers, copiers, and/or fax machines since start year indicated	All schools now have copiers set up for wireless access. Where stand alones are necessary, they have been replaced with more efficient printers complete with guidelines as to when they are to be used.	Continue to encourage staff to use copier printing rather than stand alone.	2008	2013
Apply auto-sleep settings on printers, copiers, fax machines, and/or multi-function devices	Completed in 2010	95	% of devices have auto-sleep settings applied	Now set on all models with that option. All photocopiers in the district have been set up for this.	Upgrade older printers without this option to ones with a auto-sleep setting.	2007	2011
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	90	% of computers are ENERGY STAR rated	Two more labs replaced with more energy efficient computers.	Complete replacement program in approximately half of the remaining labs.	2008	2012
Appliances and electronic devices							
Replace refrigerators with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress	25	% of fridges are ENERGY STAR rated	Continued replacement of existing fridges with more energy efficient models.	Continue to use this as a guide when replacing or adding appliances	2008	No End Date (Continuous)
Replace desk lamp incandescent bulbs with compact fluorescent (CFL) bulbs or source more efficient desk lamps for future purchases	Completed in 2010			A report was prepared by the maintenance staff and there are no desk top lamps in the district.	report on the number and use of lamps in the district. Formulate a replacement plan	2010	2010
Behaviour change program							
Ask staff to unplug electrical equipment or switch off power bars when not in use	in development			Started low key education program on benefits of unplugging/switching off units.	Increase awareness and also review the need for some of this equipment.	2010	2012
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Ongoing/In Progress			Continue to increase awareness in this area. Had meetings with student representatives in high schools to get their support.	Continue move to more formal education process for staff and students	2008	No End Date (Continuous)
Encourage staff to use air dry setting on dishwashers	Ongoing/In Progress			Reminders still sent out for staff rooms, hot lunch programs, and home economic programs.	Continue education program and increase awareness	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			Information sent out to schools to be brought up at staff meetings	continue existing program with consideration being given to a more formal district newsletter	2009	No End Date (Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress			Schools receive percentage of dollars saved through energy conservation	Create a range of activities for schools such as Energy Savings month that will promote energy conservation and awareness to students and staff	1998	No End Date (Continuous)
Promote hot water conservation	Ongoing/In Progress			Ongoing review of HVAC systems to determine areas of savings.	Consultant has been retained to review appliances and useage in highest energy schools.	2008	No End Date (Continuous)
Other Stationary Fuel Combustion and Electricity Actions							
Replace large hot water tanks with smaller, more efficient ones	ongoing/in progress			two more units replaced	continue with programs using newly approved AFG funding	2008	No End Date (Continuous)

School District No 58 (Nicola-Similkameen) - 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
Recycling of old electronic equipment	Completed in 2010			expanded recycling program based on wider range of old equipment accepted.	continue with existing program	2009	No End Date (Continuous)
Install timed block heater devices for all buses	Completed in 2010	100	% of all eligible plug ins	Installed timers on all block heater devices to reduce amount of electricity required from 24 hours per day to approximately six hours per day		2009	2010
Review timing of the operation of unused heat/circulating pumps	Ongoing/In Progress			Have historically turned off heating units when buildings not occupied and through regular maintenance, became aware that some circulation pumps were still running with the units turned off. The district is now compiling a list of pumps and reviewing what changes to the DDC system are needed to be able to shut the pumps off as well.	Complete inventory of pumps that are running and make changes needed to shut them off	2010	2011
Replacing desktop computers with laptops which also removes the need for monitors.	Ongoing/In Progress	50	% of eligible desk tops	Initiated project with approximately half of the school labs completed	Continue program by including funding in budget.	2009	2012
Replace remaining tube style monitors with LCD models	In Development			Discussion initiated with direction to form action plan	Start the implementation of the plan	2010	2013
Motion sensors in classrooms	in development			Review of options to replace standard switches in larger with motion sensors.	Start the implementation of the plan	2010	No End Date (Continuous)
Supplies (Paper)							
Paper Type							
Purchase 30% post-consumer recycled paper	in development				Continue to include in tenders and evaluate cost of implementation.	2009	No End Date (Continuous)
Printer/document settings							
Switch networked printers and photocopiers to automatic double-sided	Ongoing/In Progress	100	% of network printers or photocopiers are set to automatic double-sided	all copiers now set at automatic double-sided copying.	maintain existing program	2010	2011
Apply "print and hold" settings to networked printers to eliminate unclaimed print jobs	Ongoing/In Progress			This continues to be monitored and this does not appear to be an issue yet.	Continue to monitor	2009	No End Date (Continuous)
Electronic media in place of paper							
Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	10	% of staff workstations with software installed	use of share ware for note taking and meeting minutes initiated.	expand use of software in this area. Identified as a priority for district technology coordinator when planning professional development.	2009	No End Date (Continuous)
Use electronic document library for filing common documents	Ongoing/In Progress			All teachers have access to laptops with workshops being offered on the use of Moodle and other share sites.	Expand training programs on the use of these types of software. Another priority identified for the technology coordinator.	2009	No End Date (Continuous)
Post materials online that were previously printed	Completed in 2010			All documents, notices, policy books and other official documents now on line. Notices advising of documents now sent electronically rather than by paper.	Posting of union notices and other legal documents to be done electronically rather than by paper	2009	2011
Switch to an electronic payroll notification system in place of paper pay stubs	Ongoing/In Progress	90	% of employees receiving electronic notification	All employees except for relief staff and toc's now received electronic pay slips.	transition relief staff and toc's to electronic pay slips	2009	2011
Behaviour change program							

School District No 58 (Nicola-Similkameen) - 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
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	20	% of staff currently have received collaborative software training	Training continuing in this area. Additional Smart Boards purchased for classrooms and schools	Continue to increase focus in this area through information, professional development, and personal visits	2009	No End Date (Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress	35	% of meetings held are now paperless	All board meeting agenda packages now sent electronically, eliminating paper based meetings. Board and district committees now using technology to reduce both the paper content at meetings and also the traveling involved.	Continue to increase focus in this area through information, professional development, and personal visits	2009	No End Date (Continuous)
Encourage re-use of scrap paper	Completed in 2010			Continue to review to ensure full use of scrap paper rather than note pads. No note pads ordered for district office in 2010	Monitor to ensure there is no slippage in the use of scrap paper.	2008	2011
Other Paper Supplies Actions							
Reduce fax machines to make use of cheaper, greener photocopiers and computer software to reduce paper	Ongoing/In Progress	5	% of available fax machines	One school in trial on operating without a fax machine	Monitor to determine if this program is practical for use in all schools	2009	2012
All school district employees now receive non payroll payments (ie: expense claims, reimbursement for supplies, etc) by electronic transfer without paper back up	Completed in 2010			All payments to employees are now made electronically		2010	

School District No 58 (Nicola-Similkameen) - 2010 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 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
Business Travel							
Virtual meeting technology							
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	Completed in 2010	100	% of computers have web-conferencing software installed	all administrative computers now equipped with required software	continue to encourage use of software whenever practical	2007	2010
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	Ongoing/In Progress	25	% of meeting rooms have access to video-conferencing equipment	nothing new done in this area in 2010	New meeting room planned for 2011 and it will be equipped with video conferencing equipment	2007	2011
Behaviour change program							
Train staff in web-conferencing	Ongoing/In Progress	60	% of staff are trained web-conferencing	Continued with training of staff on web-conferencing equipment.	Expand training to include other local government agencies are aware of availability of district's conferencing equipment and the benefits of using it.	2008	No End Date (Continuous)
Train staff in video-conferencing or provide technical support for video-conferencing set-up	Ongoing/In Progress			Trained all new staff on this.	continue to encourage use of software whenever practical	2008	No End Date (Continuous)
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress			Ongoing reminders on benefits of this. Behaviour modeled by senior staff	continue to encourage use whenever practical	2008	No End Date (Continuous)
Encourage carpooling to meetings	Ongoing/In Progress			Ongoing reminders on benefits of this. Behaviour modeled by senior staff	continue to encourage use whenever practical	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 to attend various workshops	continuation of current program	2008	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. Encourage participation of student councils in this area	2008	No End Date (Continuous)
Provide education to clients/public about the conservation of water, energy, and raw materials	ongoing/in progress			reminders sent to staff. Included as part of orientation for new employees	continuation of current program	2008	No End Date (Continuous)
Other Sustainability Actions							
Waste reduction/diversion							
Implement a hazardous waste reduction and disposal strategy	Ongoing/In Progress			Maintenance department has implemented program to pick up, house and dispose of, all hazard waste in the district.	Continue current program	2010	No End Date (Continuous)
Commuting to and from home							
Provide shower or locker facilities for staff/students who commute by foot or by bicycle	Ongoing/In Progress			bike stands in place where requested	Continue to encourage students and staff to make use of bikes as a method of transportation.	2007	2010

School District No 58 (Nicola-Similkameen) - 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
Other Sustainability Actions							
Switched to use of water based and low odor paints for maintenance	Completed in 2010			Continuation of program using these products		2008	2010
Instituted a more efficient grounds watering system	Completed in 2010	100	% of all fields	Watering of the district fields is now monitored on a bi-weekly basis. The amount of watering is adjusted based on the temperature and colour of the grass. Previously, once settings were adjusted at the start of the year, they went unchanged for the remainder of the season.			
Replacing older toiletters with more modern low flush ones	Ongoing/In Progress			Institued replacement plan on oldest toilettes	Continue replacement program subject to budget restrictions.	2009	No End Date (Continuous)
Install automatic rain detection shut offs on all sprinkler systems	Ongoing/In Progress	65	% of all fields	Rain sensors were installed on a number of test areas. These shut the sprinklers off totally when there is any amount of rain. Prior to this, the sprinklers would run regardless of what the weather was doing.	Expand the program to remainig fields	2010	2011
Recycling program for all products including paper, metals, electronics, wood and whatever else is possible	Ongoing/In Progress			The recycling program was expanded from just paper to now include a wide range of products. There are now pickups made at schools at least three times a week due to the increased use of this program.	continue to expand the program where possible	2009	No End Date (Continuous)