

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

ADMINISTRATION OFFICE

Dr. Robert Peacock, Superintendent of Schools Kevin Black, C.G.A., Secretary Treasurer

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May 29, 2012

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

Actions Towards Reducing Greenhouse Gas Emissions in 2011

The following is a brief overview on actions taken by the district to reduce Greenhouse Gas Emissions in 2011:

- Operations have reviewed all heat/circulating pumps in the district to ensure they are running at the most appropriate times.
- Auto-sleep settings on printers, copiers, fax machines and other multi-function devises
 has been completed and will be monitored to ensure new equipment is set-up with autosleep settings.
- Continued progress on completing lighting upgrade in reaming schools Princeton maintenance shop and vehicle bay were upgraded.
- Princeton maintenance shop and vehicle bay were re-insulated.
- Installation of video-conferencing in meeting rooms now complete. This reduces some of the cross-district travel between the two communities 90 km apart.
- Continued progress with the replacement of single pane windows with one more school completed. This is ongoing.
- Near completion of total elimination of tube style monitors to the more efficient LCD models.
- All public meeting material is now available online.
- An application has been made for funding to upgrade the heating/ventilation/air condition system for Princeton Secondary School the Board is prepared to provide a large share of the funding.
- The total offsets purchased for 2011 is \$24,575.00 for 983 tonnes. The offsets purchased for 2010 payments consists of the payment of \$24,355.00 based on estimates of 974.20 tonnes and an additional payment of \$1,825.00 to reflect the actual offset tonnes of 1,047.20 (73 tonnes adjustment).

Yours truly,

Kevin Black,

Secretary Treasurer

KB/jy

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 12/31/11)		Performance to Date (as of 12/31/11)	Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year	
Mobile Fuel Combustion (Fleet and other mobile equipment)								
Vehicle fuel efficiency								
Replace vehicles with more fuel-efficient models	Ongoing/In Progress	50	% of vehicles are fuel- efficient models	One new bus, leaving only one bus left not on diesel.	One bus scheduled in 2012 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 vehicle with new models now coming on the market.	2008	No End Date (Continuous)	
Perform regular fleet maintenance specifically to improve fuelefficiency	Ongoing/In Progress	100	% of vehicles are subject to regular maintenance for fuel efficiency	Mechanic on site - routinely performing tune ups.	Mechanic on site - routinely performing tune ups.	Started before 1995	No End Date (Continuous)	
Replace small maintenance vehicles with more fuel-efficient models	Ongoing/In Progress	40	% of small maintenance vehicles are fuel-efficient		Continue to pursue smaller, more efficient vehicles through attrition.	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 2011.	Training planned for 2012	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 Em	nissions (Buildings)							
Planning/management								
Reduce office space (square meters) per employee	Ongoing/In Progress			Continue to close off unused classrooms - lower heat settings for closed classrooms and storage areas.	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 ona quarterly basis with adjustments made on the results.	Increased use of monitoring and reviews of consumption.	2006	No End Date (Continuous)	
Retrofitting owned buildings								
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	45	% of retrofits since start year indicated had heating, cooling, and ventilation systems upgrades	Reserved addition funding to support possible retrofit program for remaining two schools identified.	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	Princeton Maintenance Shop.	Complete the remaining schools: PSS, NC and DV.	2007	2014	
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)	

Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)	Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Improve building insulation (including windows) during retrofits	Ongoing/In Progress		Princeton Maintenance Shop.	Continue to assess buildings to ensure adequate insulation in place.	1998	No End Date (Continuous)
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	Additional computers added to master shut off switches. Move to laptop carts with master shut off.	On-going education program for staff, on the need to shut down computers/monitors when not in use. Remaining desktop computers to be added to master switch cut off.	2007	2013
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	90 % of computers are ENERGY STAR rated	Contemplating moving towards replacing desktop computers & laptops to IPads	Complete replacement program in approximately half of the remaining labs with laptops. Further explore the integration of IPads.	2008	2014
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	Continue 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)
Behaviour change program						
Ask staff to unplug electrical equipment or switch off power bars when not in use	In Development		Continue low key education program on benefits of unplugging/switching off units.	Increase awareness and continue to review/provide equipment.	2010	No End Date (Continuous)
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 with meetings with students/staff to gain their support.	Continue with education process for staff and students.	2008	No End Date (Continuous)
Encourage staff to use air dry setting on dishwashers	Ongoing/In Progress		Continue to issue reminders to staff-staff rooms; hot lunch programs and home economics programs.	Continue with education process for staff and students.	2009	No End Date (Continuous)
Provide tips to staff on saving energy in the office while working outside of regular business hours	Ongoing/In Progress		Information sent to schools to be brought up at staff meetings.	Continue existing program.	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.	Continue with 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.	Work with consultants review of appliances and useage in highest energy schools.	2008	No End Date (Continuous)
Other Stationary Fuel Combustion, Electricity, and Fugitive Emissions Actions						
Replace large hot water tanks with smaller, more efficient units.	Ongoing/In Progress		One older unit replaced.	Continue with program using newly approved AFG funding.	2008	No End Date (Continuous)
Recycling of old electronic equipment	Ongoing/In Progress		Expanded recycling program based on wider range of old equipment accepted.	Continue with existing program.	2009	No End Date (Continuous)
Install timed block heater for devices for all buses	Completed in 2011		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	2011
Review timing of the operation of unused heat/ciculating pumps	Completed in 2011		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.	Continue to review DDC functioning.	2010	2011

Action	Status (as of 12/31/11)		Performance to Date (as of 12/31/11)	Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Replacing desktop computers with laptop which also removes the need for monitors. Initial stage of IPad introduction to the classroom.	Ongoing/In Progress	70	% of eligible desk tops	Near completion of all computer labs in district.	Continue program by including funding in budget	2009	2013
Replacing remaining tube style monitors with LCD models	Ongoing/In Progress	80		Nearly complete.	Continue with program.	2010	2013
Motion Sensors in Classrooms.	In Development			Reviewing options to replace standard switches in larger classrooms with motion sensors.	Continue to review for products that are not so cost-prohibative	2010	2014
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	No End Date (Continuous)
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. Greater selection of software recently purchased.	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	Ongoing/In Progress			All documents, notices, policy book 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	No End Date (Continuous)
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	No End Date (Continuous)
Behaviour change program							
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.	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	Ongoing/In Progress			Continue to review to ensure full use of scrap paper rather than note pads. No note pads ordered for district office 2011.	Monitor to ensure there is no slippage in the use of scrap paper.	2008	No End Date (Continuous)
Other Paper Supplies Actions							

Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)	Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Reduce fax machines to make use of cheaper, greener photocopiers and computer software to reduce paper.	Ongoing/In Progress	5 % of available fax machines	Still just one school operating with fax machine as part of their copier setup.	Monitor to determine if this program is practical for use in all schools (and as fax machines expire).	2009	No End Date (Continuous)
All school district employees now receive non payroll payments (ie: expense claims, reimbursement for supplies, etc) by electronic transfer without paper back up.	Ongoing/In Progress		All payments to employees are now made electronically.	Continue with this program, very successful.	2010	No End Date (Continuous)

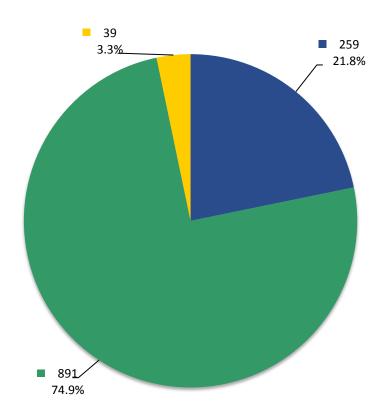
Actions to Reduce Provincial Emissions and Improve Sustainability

The actions listed below contribute to a reduction in greenhouse gas emissions from sources that fall outside of the report on actions that will help British Columbia meet its provincial greenhouse gas reduction targets, engage the public, and improve environmental sustainability across all aspects of their organization.

Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)	Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Business Travel						
Virtual meeting technology						
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	Ongoing/In Progress	% of meeting rooms have access to video-conferencing equipment	Nothing new done in this area in 2011. Both communities in SD #58 have a location outfitted with Poly-com Equipment for video-conferencing purposes.	No new plans yet in place for expansion of video-conferencing.	2007	2014
Behaviour change program		_				
Train staff in web-conferencing	Ongoing/In Progress	% of staff are trained web- conferencing	Continued with training of staff on web-conferencing equipment.	Expand training to include other local government agencies to ensure they 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		Training 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	No End Date (Continuous)
Other Sustainability Actions						

Action	Status (as of 12/31/11)		Performance to Date (as of 12/31/11)	Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Switched to use of water and low odor paints for maintenance.	Ongoing/In Progress			Continuation of program using these products.	Continue with this program.	2008	No End Date (Continuous)
Instituted a more efficient grounds watering system.	Completed in 2011			Watering of the district fields is now 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.		2010	No End Date (Continuous)
Replacing older toilets with more modern low flush units.	Ongoing/In Progress			Instituted replacement plan on oldest toilets.	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	75	% 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 remaining fields.	2010	2012
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 programs. These pickups are in conjunction with routine mail delivery. District reduced delivery from five days a week to three (thus reducing fuel emissions).	Continue to expand the program where possible.	2009	No End Date (Continuous)

School District 58 - Nicola-Similkameen Greenhouse Gas Emissions by Source for the 2011 Calendar Year (tCO₂e*)



Total Emissions: 1,189

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 2011 (Generated May 18, 2012 12:20 PM)

Total offsets required: 983. Total offset investment: \$24,575. Emissions which do not require offsets: 206 **

^{*}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.