

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

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

May 3, 2013

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

Executive Summary of 2012 Carbon Neutral Action Report

Attached are the following documents that make up the 2012 Carbon Neutral Action Report:

Carbon Neutral Action Report 2012 Actions towards Carbon Neutrality for 2012 Actions towards Carbon Neutrality for 2013 to 2015.

The total Greenhouse Gas Emissions for 2012 were 1,069 for a total cost of \$21,650.00. The total Carbon tax paid for 2012 was \$25,907.49 for 116,991 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 specific policies due to strong buy-in from staff in this area. Round table discussions generate ideas regularly and are then brought forward to the appropriate area for potential reduction.

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.

A new initiative in the initial stages is the discussion around electronic records management which will help eliminate paper and provide more room due to the ever increasing amount of storage required for records.

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,

Kevin Black,

Secretary Treasurer

KB/jy



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May 3, 2013

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

Actions Towards Reducing Greenhouse Gas Emissions in 2012

The following is a brief overview on actions taken by the district to reduce Greenhouse Gas Emissions in 2012:

- Maintenance has upgraded lighting to T5s in Princeton Secondary School gymnasium and the Merritt Secondary School gymnasium.
- Maintenance have reviewed all heat/circulating pumps in the district to ensure they are running at the most appropriate times.
- Continue to monitor that all printers, copiers, fax machines and other MFD have been set up with auto sleep settings.
- 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 at Princeton Secondary School (50% completed). This is ongoing.
- Completion of replacement of all tube style monitors to the more efficient LCD models.
- All public meeting material is now available online
- All School Newsletters are sent electronically when possible.
- An application will be made again for funding to upgrade the heating/ventilation/air condition system for Princeton Secondary School the Board is prepared to cost share.
- The total offsets purchased for 2012 is \$21,650.00 for 866 tonnes. The offsets purchased for 2011 payments consist of the payment of \$24,575.00 based on estimates of 983 tonnes.

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	Steps Taken	Steps Planned	Start Year	End Year
Mobile Fuel Combustion (Fleet and other)					
Behaviour change program					
Provide fleet driver training to reduce fuel use	Ongoing/In Progress	Training sessions for drivers held in 2012.	Training planned for 2013.	2009	No End Date (Continuous)
Introduce anti-idling policy and/or raise anti-idling awareness for fleet	Ongoing/In	nothing done	Maintenance supervisor to acquire signs and stickers to remind and	2013	No End Date
drivers (e.g., signs, stickers, messages)	Progress		educate drivers. In addition to training.	0000	(Continuous)
Encourage carpooling in fleet vehicles	Ongoing/In Progress	Car pooling for most district travel now in place.	Continue to monitor and encourage car pooling. Lead by example!	2008	No End Date (Continuous)
Promote alternatives to fleet vehicle travel where possible (e.g., bicycles,	Ongoing/In	Those school that are close have employees walk to and from.	Those school that are close continue to encourage employees to	2008	No End Date
public transit, walking)	Progress		walk to and from.		(Continuous)
Vehicle fuel efficiency					
Replace vehicles with more fuel-efficient models	Ongoing/In Progress	All buses are now on diesel.	We are looking at our service vehicles and one sport utility vehicle for potential upgrade to a more carbon neutral product.	2008	No End Date (Continuous)
Replace larger vehicles with smaller models according to fleet "right-	In Development	Attempted to purchase smaller vehicles based on need but none	Continue to pursue smaller vehicles and look at applying for ministry	2008	No End Date
sizing" principles		available in price range.	of education carbon neutral funding for an electric vehicle (like vancouver did in 2012). We have a fueling station built in Merritt.		(Continuous)
Perform regular fleet maintenance to improve fuel-efficiency	Ongoing/In Progress	Mechanic on site - routinely performing tune ups	Continue with regular maintenance	2008	No End Date (Continuous)
Stationary Fuel Combustion, Electricity					
Behaviour change program					
Help staff reduce personal energy use through ""workstation tune-ups""	In Development	Will start in 2013/2014 year.	Will start process when Techies look at each computer over the 2013/2014 year.	2013	No End Date (Continuous)
Ask staff to unplug electrical equipment or switch off power bars when	Ongoing/In	Continue low key education program on benefits of	Send out memorandum from Secretary Treasurer before Christmas,	2010	No End Date
not in use	Progress	unplugging/switching off units.	Spring Break, and Summer break to remind people to turn off all electronics including power bars.		(Continuous)
Ask staff to unplug electrical equipment or switch off power bars when	Ongoing/In	Same as unplug electrical above	Same as unplug electrical above	2010	No End Date
not in use	Progress				(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 by holding meetings with staff/students to gain 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	Continue to issue reminders to staff in staff rooms, hot lunch	Continue with education process for staff and students.	2009	No End Date
Liteourage stail to use all dry setting on dishwashers	Progress	programs and home economics programs.	Continue with education process for stan and students.	2009	(Continuous)
Provide tips to staff on saving energy in the office while working outside	Ongoing/In	Information sent to school to be brought up at staff meetings.	Continue existing program. Any ideas that can be sent to our district	2009	No End Date
of regular business hours	Progress	and the service of the service and the service	on this would be appreciated.		(Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In	School receive percentage of dollars saved through energy	Continue with a range of activities for schools such as Energy	2008	No End Date
	Progress	conservation.	Savings month that will promote energy conservation and awareness to students and staff.		(Continuous)
			Consider going with a "Biggest Loser" approach for each school. Show them their usage from last year and if they are able to beat it whichever school has the highest percentage of loss receives some extra dollars. Provide incentive		
Promote hot water conservation	Ongoing/In Progress	Ongoing review of HVAC systems to determine areas of savings.	Work with consultants review appliances and usage in highest energy schools.	2008	No End Date (Continuous)
IT power management					
Install power management software which shuts down computers	Ongoing/In	Additional computers added to master shut of switches. Move to	On going education for staff on the need to shut down computers	2008	No End Date

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Action	Status	Steps Taken	Steps Planned	Start Year	End Year
outside of regular business hours	Progress	laptop carts with master shut off. District is moving towards tables/ipads that have auto shut off or use	monitors when not in use. In particular during Christmas, Spring and Summer breaks go as far as shutting off all power bars as well.		(Continuous)
		battery.			
Implement server virtualization	Not Yet	,			No End Date
	Evaluated				(Continuous)
Apply auto-sleep settings on computer monitors and CPUs	In Development	·	Ensure we continue to have this function.	2012	No End Date (Continuous)
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices as part of a print management strategy	In Development	Had a meeting with RICOH who did an evaluation of potential cost savings if we move to all MFDs.	Look at moving forward with a plan to only purchase MFDs.	2013	No End Date (Continuous)
		As fax machines break down we will not replace and will also cancel the existing phone lines.			
		We have an adobe program that can send a fax electronically.			
Apply auto-sleep settings on printers, fax machines, and/or multi-	Completed (in				No End Date
function devices	Previous Year)				(Continuous)
Replace computers with ENERGY STAR models during regular computer upgrades	In Development	Continue to replace older items with energy star models.	Continue to replace older items with energy star models.	2008	No End Date (Continuous)
Other Stationary Fuel Combustion					
Replace large hot water tanks with smaller, more efficient units	Ongoing/In Progress	One older unit in 2012 replaced.	Continue with program as AFG funding permits.	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)
Owned buildings					
Establish energy performance baseline for owned buildings	Ongoing/In Progress	Data reviewed on a quarterly basis with adjustments made on the results	Increased use of monitoring and reviews of consumption.	2008	No End Date (Continuous)
Register for performance labelling/certification for operations and	Not Yet				No End Date
maintenance of owned buildings (e.g., LEED EB:O&M)	Evaluated				(Continuous)
Register for performance labelling/certification for commercial interiors of owned buildings (e.g., LEED CI)	Not Yet Evaluated				No End Date (Continuous)
Achieve LEED NC Gold certification at a minimum for new construction	Ongoing/In	NA	Nicola-Canford Elementary School will be rebuilt as a modular school	2013	No End Date
or major renovations	Progress		with a core renovation. This could be a good time to look at this certification.	2013	(Continuous)
Perform energy retrofits on existing, owned buildings	In Development	Have an independent consultant doing a review and they will provide recommendations.	Have an independent consultant doing a review and they will provide recommendations.	2013	No End Date (Continuous)
			Providing costs are not too high act on recommendations of consultant.		
Incorporate a refrigerant management strategy into regular building management/maintenance to reduce fugitive emissions	Ongoing/In Progress	Current strategy is to replace old appliance with more energy efficient ones.	Continue with current strategy of replacing old appliance with more energy efficient ones.	2008	No End Date (Continuous)
Planning/management					
Reduce office space (square meters) per employee	Ongoing/In	Continue to close off unused classrooms - lower heat settings for	Continue to monitor use of classrooms to ensure that vacant rooms	2008	No End Date
	Progress	closed classrooms and storage areas.	are not heated. Also, continue to review existing space to determine maximum efficiency.		(Continuous)

Actions Towards Carbon Neutrality

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Action	Status	Steps Taken	Steps Planned	Start Year	End Year
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle	Not Yet				No End Date
Controls)	Evaluated				(Continuous)
Retrofit details for owned buildings					
Jpgrade mechanical systems (heating, cooling, ventilation) during etrofits	Ongoing/In Progress	Looking at upgrading HVAC in one to two schools funding permitting.	Continue to set aside funding to complete some form of retrofit should the capital programs not proceed as planned.	2008	No End Date (Continuous)
Jpgrade lighting systems during retrofits	Ongoing/In Progress	MSS Gym was completed this year as well.	PSS and DV will be done next year and NC will be done during the new construction and then the district will be at all T5 or T8s.	2008	No End Date (Continuous)
Jpgrade/adjust control systems during retrofits	Completed (in Previous Year)				No End Date (Continuous)
mprove building insulation (including windows) during retrofits	Ongoing/In Progress	Princeton Maintenance shop recently done and has made an enormous difference in heat savings.	Continue to assess buildings to ensure adequate insulation is in place.	2008	No End Date (Continuous)
Supplies (Paper)					
Behaviour change program					
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	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	All board meeting agenda packages are now sent electronically. Ipads are now used as a meeting tool notes are taken on and agenda and contracts are stored on both ipads and iphones for review when needed. All school updates are now sent electronically. Board and district committees now using technology to reduce both the paper content at meetings.	Continue to increase focus in this area through information, professional development and personal visits.	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	Use of shareware 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.	Looking at moving to MS365 in the cloud which will reduce servers needed and offer a number of other collaboration software programs that will be a benefit to both staff and students.	2009	No End Date (Continuous)
Switch to an electronic payroll notification system in place of paper pay stubs	Ongoing/In Progress	All employees except relief and TTOCs now receive electronic pay slips.	Effective immediately change the hiring package to include a spot for a personal email address so all relief and TTOCs will now receive pay slip electronically. For those already on the relief and TTOC list call and get an email	2009	No End Date (Continuous)
			address.		
Paper Type					
Purchase 30% post-consumer recycled paper	In Development	Continue to include in tenders and evaluate cost of implementation.	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	Completed (in Previous Year)				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 reporting requirements defined in the carbon neutral government regulation of the Greenhouse Gas Reduction Targets Act. Public sector

Action	Status	Steps Taken	Steps Planned	Start Year	End Year
Business Travel					
Behaviour change program					A contract of
Train staff in web-conferencing	Ongoing/In Progress	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 districts conferencing equipment and the benefits of using it.	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. Behavior 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)
Policy and budgeting					
Create a low-carbon travel policy or travel reduction goal	Not Yet Evaluated				No End Date (Continuous)
Virtual meeting technology					
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	Ongoing/In Progress	Elluminate is being used for our distance education for PD as well as a number of district PD opportunities. Gotomeeting has been used as well.	Continue pushing this option where a face to face meeting will not work.	2012	No End Date (Continuous)
Make desktop web-cameras available to staff	Not Yet Evaluated				No End Date (Continuous)
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	Ongoing/In Progress	Both communities have a location outfitted with poly-com equipment for video conferencing purposes.	No new plans yet in place for expansion of video conferencing.	2008	No End Date (Continuous)
Education, Awareness, and Engagement					
Awards/Recognition					
Establish a sustainability/green awards or recognition program	Not Yet Evaluated				No End Date (Continuous)
Staff Professional Development					
Support green professional development (e.g., workshops, conferences, training)	Ongoing/In Progress	Nothing occurred in 2012	Provide funding to staff to attend various workshops.	2008	No End Date (Continuous)
Include green options in employee performance measurement system	Not Yet Evaluated				No End Date (Continuous)
Staff awareness/education					A
Provide education to staff 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 staff 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)
Provide green tips on staff website or in newsletters	Ongoing/In Progress	Nothing occurred in 2012	Will start something when we send our memo out each Christmas, Spring Break and Summer holidays.	2013	No End Date (Continuous)
Provide sustainability education during new staff orientation	In Development	Working on something for new staff.	Plan to have something for new staff in 2013 year.	2013	No End Date (Continuous)
Team-building					
Create Green, Sustainability, Energy Conservation, or Climate Action Teams with executive endorsement	Not Yet Evaluated				No End Date (Continuous)
Provide resources and/or dedicated staff to support teams	Not Yet				No End Date
	Evaluated				(Continuous)
Providing behaviour change education/training to teams (e.g.,	Not Yet				No End Date

Actions to Reduce Provincial Emissions and Improve Sustainability

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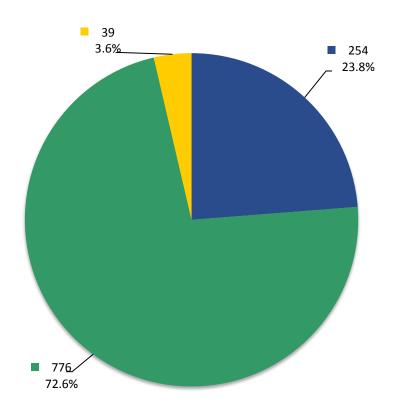
Action	Status	Steps Taken	Steps Planned	Start Year	End Year
community-based social marketing)	Evaluated	·	·		(Continuous)
Other Sustainability Actions					
Adaptation to Climate Change					
Assessed whether extreme weather events and/or long term changes in	Not Yet				No End Date
climate will affect the organization's business areas	Evaluated				(Continuous)
Integrated considerations of extreme weather events and/or long term	Not Yet				No End Date
changes in climate into the organization's decision making.	Evaluated				(Continuous)
Building construction, renovation					
Incorporate lifecycle costing into new construction or renovations	Not Yet				No End Date
	Evaluated				(Continuous)
Commuting to and from home					
Offer staff a compressed work week	Not Yet				No End Date
	Evaluated				(Continuous)
Encourage commuting by foot, bicycle, carpool or public transit	Not Yet				No End Date
	Evaluated				(Continuous)
Provide shower or locker facilities for staff/students who commute by	Ongoing/In	High schools have showers for students and staff (separate).	Continue to encourage students and staff to make use of bikes as a	2008	No End Date
foot or by bicycle	Progress		method of transportation and the district will provide showers at the		(Continuous)
			high schools.		
Provide secure bicycle storage	Ongoing/In	Bike stands in place where requested.	Continue current program.	2008	No End Date
	Progress				(Continuous)
Other Sustainability Actions					
Switched to use of water and low odor paints	Ongoing/In	Continuation of program using these products.	Continue with this program.	2008	No End Date
	Progress				(Continuous)
Replacing older toilets with more modern low flush units	Ongoing/In	Instituted replacement plan on oldest toilets	Continue replacement program subject to budget restrictions.	2009	No End Date
	Progress				(Continuous)
Install automatic rain detection shut offs on all sprinkler systems	Ongoing/In	Rain sensors were installed on a number of areas. These shut the	Expand program to remaining fields.	2010	2012
	Progress	sprinklers off totally when there is any amount of rain. Prior to this,			
		one sprinkler would run regardless of what the weather was doing.			
Procurement (non-paper supplies)					<u> </u>
Incorporate minimum recycled content standards into procurement	Not Yet				No End Date
policy for consumable, non-paper supplies (e.g., writing instruments,	Evaluated				(Continuous)
binders, toner cartridges, etc.)	NetVet				No Foot Date
Establish green standards for goods that are replaced infrequently	Not Yet				No End Date
and/or may require capital funds to purchase (e.g., office furniture,	Evaluated				(Continuous)
carpeting, etc.)	NetVet				No Foot Date
Implement sustainable purchasing program for cleaning products,	Not Yet				No End Date
disposable paper products and trash bags	Evaluated				(Continuous)
Waste reduction/diversion	0 ' "			0040	N. E. I.B. (
Put in place an operations policy to facilitate the reduction and diversion	Ongoing/In	Maintenance has implemented a program to pick up, house and	Continue current program.	2010	No End Date
of building occupant waste from landfills or incineration facilities	Progress	dispose of all hazard waste in the district.		0040	(Continuous)
Implement a hazardous waste reduction and disposal strategy	Ongoing/In	Maintenance has implemented a program to pick up, house and	Continue current program.	2010	No End Date
	Progress	dispose of all hazard waste in the district.			(Continuous)
Water conservation	0 . "			0040	N 5 15 1
Establish a water conservation strategy which includes a plan or policy	Ongoing/In	Maintenance department has implemented a program to pick up	Continue current program.	2010	No End Date
for replacing water fixtures with efficient models	Progress	house and dispose of all hazard waste in the district.			(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 reporting requirements defined in the carbon neutral government regulation of the Greenhouse Gas Reduction Targets Act. Public sector

Action	Status	Steps Taken	Steps Planned	Start Year	End Year
Put in place a potable water management strategy to reduce potable	Not Yet				No End Date
water demand of building-level uses such as cooling tower equipment,	Evaluated				(Continuous)
toilet fixtures, etc. and landscape features					`
Introduce a stormwater management landscape strategy (e.g.,	Not Yet				No End Date
vegetated roofs, permeable paving, rain gardens, bioswales)	Evaluated				(Continuous)

School District 58 - Nicola-Similkameen Greenhouse Gas Emissions by Source for the 2012 Calendar Year (tCO₂e*)



Total Emissions: 1,069

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

Offsets Applied to Become Carbon Neutral in 2012 (Generated May 31, 2013 10:15 AM)

Total offsets required: 866. Total offset investment: \$21,650. Emissions which do not require offsets: 203 **

^{*}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.