

**Carbon Neutral Action Report  
School District No. 92 (Nisaga'a)**

**Executive Summary**

School District No. 92 (Nisga'a) has been contributing towards carbon neutrality for a number of years by actively investing in equipment and lighting retrofits and working with employees, building systems to improve overall systems performance and reduce energy consumption. Over the years we have completed heating and lighting energy improvements through a partnership with BC Hydro in the PowerSmart program. We have started to work toward improving our mechanical and control systems which will improve comfort to our occupants and allow us to operate our buildings economically. We have started working with our employees and students to minimize waste in the schools. Our schools will begin to expand on environmental learning into the curriculum. We will begin with recycling, composting and waste reduction programs in the schools which will increase student and staff participation. We will continue with our vehicle preventive maintenance and are in the process of implementing our anti-idling program. We also plan to move toward using sustainable products for cleaning and building maintenance.

**Objectives**

School District No. 92 (Nisga'a) is in a unique area in northern BC. This puts us in a position to take a leadership role and demonstrate the steps needed to reduce greenhouse gas emissions in each of our communities. We see this as a responsibility and opportunity to engage our students, employees and partners in the School District's mandate to reduce greenhouse gas emissions. The leadership we take in greenhouse gas emissions will allow our organization to become more fiscally responsible by reducing waste through energy conservation. This will allow us to balance social, economic, and environmental issues for our future generations, not only in our District but local communities.

**Part 1: Actions Taken to Reduce Greenhouse Gas Emissions in 2008**

**Overview**

Because electricity is our primary heat source in all our buildings, in past projects we have partnered with BC Hydro through their power smart program to reduce our energy consumption. We have completed two of our Schools with both heating and lighting upgrades by utilizing power management features to control lighting, HVAC and going with lower energy computers. We have also completed the other two Schools with only lighting upgrades. Our next project is to continue to improve our energy consumption on our heating systems in the two remaining Schools. In the mobile fuel category we have continued our vehicle preventive maintenance and have started our anti-idling programs. We have also replaced three of our buses and a couple of our vehicles with improved efficiencies. We are also moving toward recycling and composting programs along with utilizing green cleaning and paint products. In addition, we are also moving toward electronic messaging rather than using paper products, which will minimize our paper waste.

<b>1.1 Mobile Fuel Combustion</b>			
<b>Action</b>	<b>Action Taken</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>
Replaced # of TYPE OF VEHICLE with MORE EFFICIENT VEHICLE/Hybrid	In progress	Lowering our fuel consumption and emissions.	Replace three school buses, two vehicles and one tractor with more fuel efficient vehicles and equipment.
Provided driver training to reduce fuel use	In progress	To reduce fuel consumption.	In progress
Initiated new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups)	In progress	Improved vehicle performance and fuel efficiency.	Preventative vehicle maintenance program.
Established anti-idling behaviour change program (e.g. signs, stickers, messages)	In progress	Reduce fuel costs.	Training staff.
<b>1.2 Stationary fuel combustion and electricity</b>			
<b>Action</b>	<b>Action Taken</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>
Replaced # computers with EnergyStar models	complete	More energy efficient computers in service resulting in reduced electrical consumption	Replaced 80% of desktop computers with laptops
Turned off lights in unused rooms	complete	Reduced energy consumption	Continuing to maintain occupancy sensors in Schools and we encourage staff to turn out lights to conserve energy
Replaced Refrigerators (EnergyStar rated appliance)	In progress	Reduced energy consumption	In progress
Replaced other appliances (with EnergyStar rated appliance)	In progress	Reduced energy consumption	Replacing when needed
Installed multi-function devices (and removed stand-alone printers/faxes)	complete	Reduced energy consumption	Replacing when needed
Replaced standard bulbs with CFLs	complete	Reduced energy consumption	Standard bulbs replaced with CFLs
Installed motion activated lights	complete	Reduced energy consumption	Lighting upgrade in all Schools through BC Hydro power smart program
Undertaken lighting retrofit	complete	Reduced energy consumption	Lighting upgrade in all Schools through BC Hydro power smart program
Undertaken building energy audit at LOCATION(s)	complete	Reduced energy consumption	Lighting upgrade in all Schools through BC Hydro power smart program
Initiated or completed a building energy retrofit	complete	Reduced energy consumption	Lighting upgrade in all Schools through BC Hydro power smart program. Heating in two Schools.
<b>1.3 Supplies</b>			
<b>Action</b>	<b>Action Taken</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>
Committed to hold paperless meetings	In progress	Reduced paper consumption and landfill waste.	in progress
<b>1.4 Sustainability Actions (others)</b>			
<b>Action</b>	<b>Action Taken</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>
Improved recycling measures	In Progress	Reduce waste into landfill stream	Schools will be begin recycling program
Supported composting	In Progress	Reduce waste into landfill stream	Secondary School will begin composting program through School science curriculum.
Purchased green cleaning products	In Progress	Reduced environmental impact.	Green cleaning products will be used by all custodial staff.
Used green (low-e paints)	In Progress	Reduced environmental impact.	We will begin using low -e paint products.

## Part 2: Plans to Continue Reducing Greenhouse Gas Emissions 2009 -- 2011

### Overview

School District No. 92 is in a position to take a leadership role and demonstrate the measures that can be taken to reduce greenhouse gas emissions in the school community. We see this as a responsibility and opportunity to engage our students, staff and partners in the District's mandate to reduce greenhouse gas emissions. As we move forward, the District will commitment to become carbon neutral by 2010. Our key focus in this area will be making plans and taking actions to reduce greenhouse gasses by engaging our students and staff. This will involve new and revised policies, resolutions and leadership influence to send a message that full participation is necessary to this public priority. We will begin to work with our District leadership to develop polices and action plans that will engage our students, staff, communities and local governments.

### 2.1 Mobile Fuel Combustion

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Replace # of TYPE OF VEHICLE with MORE EFFICIENT VEHICLE/Hybrid		Reduced fuel costs measurable by historical consumption data comparisons.	More fuel efficient vehicles; hybrids will not work is our area.	On going
Provide driver training to reduce fuel use	In progress	Reduced fuel costs measurable by historical consumption data comparisons.	Will begin driver training programs	On going
Initiate new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups)	In progress	Reduced fuel costs measurable by historical consumption data comparisons.	Continue vehicle and equipment preventive maintenance programs.	On going
Establish anti-idling behaviour change program (e.g. signs, stickers, messages)	In progress	Reduced fuel costs measurable by historical consumption data comparisons.	Continue to support awareness of District anti-idling program through driver training, distributing information, stickers and signage.	On going

### 2.2 Stationary Fuel Combustion (including electricity)

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Undertake workstation tune-ups to help staff understand what they can do to reduce personal energy use	Planned	Reduced energy cost measurable by historical consumption data comparisons.	Review employee workstation in the District to identify opportunities for energy savings	2010/20011
Supply power bars – to turn off power to non-essential items when not in use (e.g. phone chargers)	Planned	Reduced energy cost measurable by historical consumption data comparisons.	Review opportunities and costs	2010/2011
Undertaken Monitor turn-off challenge	Planned	Reduced energy cost measurable by historical consumption data comparisons.	Review opportunities and costs	2010/2011
Replace # computers with EnergyStar models	In progress	Reduced energy cost measurable by historical consumption data comparisons.	Replaced computers with lower energy efficient computers when needed	Ongoing
Turn off lights in unused rooms	Completed	Reduced energy cost measurable by historical consumption data comparisons.	Completed lighting upgrades and automatic sensor controls all schools. Encourage all staff to turn out lights when not in use.	Completed
Replace Refrigerators (EnergyStar rated appliance)	Planned	Reduced energy cost measurable by historical consumption data comparisons.	Continue to phase out to more energy efficient models when needed.	Ongoing
Replace other appliances (with EnergyStar rated appliance)	Planned	Reduced energy cost measurable by historical consumption data comparisons.	Continue to phase out to more energy efficient models when needed.	Ongoing
Install multi-function devices (and remove stand-alone printers/faxes)	Completed	Reduced energy cost measurable by historical consumption data comparisons.	went to more central printing stations	Completed
Replace standard bulbs with CFLs	Planned	Reduced energy cost measurable by historical consumption data comparisons.	Standard bulbs have already been phased out and new installations will be fitted with energy efficient type lighting.	Ongoing
Install motion activated lights	Completed	Reduced energy cost measurable by historical consumption data comparisons.	Completed lighting upgrades and automatic sensor controls all schools. Encourage all staff to turn out lights when not in use.	Completed

Undertake lighting retrofit	Completed	Reduced energy cost measurable by historical consumption data comparisons.	Completed lighting upgrades and automatic sensor controls all schools. Encourage all staff to turn out lights when not in use.	Completed
Utilize desk-top power management settings on computer	Planned	Reduced energy cost measurable by historical consumption data comparisons.	Will have computer labs on automatic timed shut down and office image with auto sleep mode turned on. Review opportunities to expand use of these features.	Ongoing
Initiate corporate computer shut-down/wake-up for maintenance	Planned	Reduced energy cost measurable by historical consumption data comparisons.	Costs and benefits to be reviewed for consideration.	Ongoing
Unplug unused equipment	Planned	Reduced energy cost measurable by historical consumption data comparisons.	Reminders to staff	Ongoing
Apply for LEED existing building rating	Planned	Continue to lower energy consumption and lower environmental impact resulting in lower square meter operating costs.	For major upgrades, additions and subject to funding.	Ongoing

### 2.3 Supplies

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Commit to use 30% recycled paper	Planned	Higher costs and lower environment impact	Consider new or revised policies to support increased use of recycled paper products according to District targets and funding.	2010
Commit to use 100% recycled paper	Planned	Higher costs and lower environment impact	Consider new or revised policies to support increased use of recycled paper products according to District targets and funding.	2011
Initiate automatic double sided printing	Planned	Reduced paper consumption and costs and lower equipment maintenance	Consider new or revised policies to support increased use of recycled paper products according to District targets and funding.	2010
Change document template margins	Planned	Reduced paper consumption and costs.	Consider new or revised policies to support increased use of recycled paper products according to District targets and funding.	2010
Commit to hold paperless meetings	Planned	Reduced paper consumption and costs.	Consider new or revised policies to support increased use of recycled paper products according to District targets and funding.	2010
Develop document library (online and one printed copy) for large documents	In progress	Reduced paper consumption and costs.	Consider new or revised policies to support increased use of recycled paper products according to District targets and funding.	2010
Use collaborative software to edit on-line	Planned	Higher costs and lower environment impact on paper consumption and costs.	Consider new or revised policies to support increased use of recycled paper products according to District targets and funding.	2011
Re-use non-confidential scrap paper	In progress	Reduce paper consumption and costs.	Consider new or revised policies to support increased use of recycled paper products according to District targets and funding.	2010
Use laptops/tablets	In progress	Higher computer equipment capital and maintenance costs. Reduced paper consumption and costs.	Consider new or revised policies to support increased use of recycled paper products according to District targets and funding.	Ongoing
Restructure a process to use less paper	Planned	Reduced paper consumption and costs.	Consider new or revised policies to support increased use of recycled paper products according to District targets and funding.	2010

<b>2.4 Travel</b>				
<b>Action</b>	<b>Action Planned</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>	<b>Timeframe</b>
Set a X% Travel reduction goal	Planned	Lower travel costs associated with staff travel.	Review option to efficiently collect sufficient data to determine baseline history and conduct analysis of reduction opportunities. Consider a new revised travel policy to support reduction goals set by the District.	2011
Train staff in the use of Live Meeting (or other desktop collaborative software)	Planned	Lower travel costs associated with staff travel.	Collaborative software installation.	2011
Install Video Conferencing facilities	Planned	Lower travel costs associated with staff travel. Higher video conferencing equipment capital and operating.	Collaborative software installation.	2011
Initiate Travel Policy	Planned	Lower travel cost associated with staff travel.	Consider a new or revised travel policy.	2011
<b>2.5 Employee Engagement</b>				
<b>Action</b>	<b>Action Planned</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>	<b>Timeframe</b>
Provide climate change education	Planned	Increased employee involvement. Increased training costs. Reduction in Greenhouse emissions.	Organize a sustainability working group or committee to identify climate change education opportunities for consideration by the school District Board.	2009-2011
Provide conservation education	Planned	Increased employee involvement. Increased training costs. Reduction in Greenhouse emissions.	Organize a sustainability working group or committee to identify climate change education opportunities for consideration by the school District Board.	2009=2011
Hold contests to change make/make pledge	Planned	Increased employee involvement. Increased training costs. Reduction in Greenhouse emissions. Reduction in greenhouse emissions	Organize a sustainability working group or committee to lobby, coordinate, promote, develop targets, implement greenhouse gas initiatives, contests and education within the District.	2009-2011
Hold contests/support to generate ideas	Planned	Increased employee involvement. Increased staff resource time and cost. Reduction in greenhouse emissions.	Organize a sustainability working group or committee which will have a mandate to encourage participation to generate ideas through contests.	2009-2011
Develop Green Teams	Planned	Increased employee involvement. Increased staff resource time and cost. Reduction in greenhouse emissions.	Organize a sustainability working group or committee and sub-committees to fulfill the goals of the District.	On going
Support Green Teams (resources)	Planned	Increased employee involvement. Increased staff resource time and cost. Reduction in greenhouse emissions.	Organize a sustainability working group or committee and provide the necessary support and resources to fulfill the goals of the District.	2009-2011
Provide green tips	Planned	Increased employee involvement. Increased staff resource time and cost. Reduction in greenhouse emissions.	Organize a sustainability working group or committee to lobby, coordinate, promote, develop and implement greenhouse emission initiatives, contests and education and awareness.	2009-2011
Support professional development	Planned	Increased employee involvement. Increased staff resource time and cost. Reduction in greenhouse emissions.	Organize a sustainability working group or committee to identify professional development opportunities for consideration by the school District.	2009-2011
Add a green work goal to performance management	Planned	Increased employee involvement. Increased staff resource time and cost. Reduction in greenhouse emissions.	Organize a sustainability group or committee to develop goals, targets, actions and performance measures.	2009-2011

**2.6 Sustainability Actions (others)**

<b>Action</b>	<b>Action Planned</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>	<b>Timeframe</b>
Take water conservation measures – low flow showers or toilets, fix leaks	Planned	Reduce water consumption and energy costs.	Install low flow devices for repairs and replacements. Review incentive opportunities available for replacing standard fixtures with low flow. Continue to prioritize water leak repairs as urgent.	2009-2011
Improve recycling measures	Planned	Reduce waste into landfill stream.	Through the sustainable working group or committee to promote measure to improve recycling participation and continuous improvement at all sites.	2009-2011
Support composting	Planned	Reduce waste into landfill stream.	Through the sustainable working group or committee to promote measure to expand participation in composting.	2009-2011
Purchase green cleaning products	Planned	Reduce environmental impact. Higher cost than non-green products.	Continue to utilize green cleaning products and take measures to keep staff current on green cleaning advancements. Provide ongoing green cleaning training to custodial staff.	2009-2011
Support sustainable procurement practices	Planned	Reduce environmental impact. Potential for higher costs.	Review opportunities and costs to increase the volume of sustainable products procured and review potential controls that could be implemented to standardize procurement practices according to available funding. Consider adopting a new policy.	2009-2011