



SCHOOL DISTRICT NO. 87

P.O. BOX 190
DEASE LAKE, B.C. V0C 1L0
Tel. (250) 771-4440
Fax (250) 771-4441

School District No. 87 (Stikine) – 2012 Carbon Neutral Action Report

Executive Summary

School District No. 87 (Stikine) has been contributing towards carbon neutrality for a number of years by actively investing in equipment and lighting retrofits, as well as working with employees and building systems to improve overall systems performance and reduce energy consumption. Over the past few years we have completed heating and lighting energy improvements through a partnership with BC Hydro in the Power Smart program. We have upgraded 3 schools and have improved our facilities mechanical and control systems which provide for more economical operations and more comfortable facilities for occupants. We will be working with our employees and students to minimize waste in the schools. We will continue with our vehicle purchase and preventive maintenance programs including carpooling and our anti-idling program. We are also planning to move toward using sustainable products for cleaning and building maintenance.

2012 Greenhouse Gas Emissions

The total 2012 greenhouse gas (GHG) emissions from all sources covered by the *Greenhouse Gas Reduction Targets Act* was 451 tCO₂e (as reported in SMARTTool).

Offsets Applied to Become Carbon Neutral in 2012

Total emission offsets in the amount of \$11,275.00 have been applied to become carbon neutral for 2012.

Emissions Reduction Activities

Actions Taken to Reduce Greenhouse Gas Emissions in 2012

During 2012 we continued implementing several measures started in 2008-2011. These measures include the areas of mobile fuel combustion, stationary fuel combustion, supplies, travel, paperless meetings and sustainable actions. We continued to require carpooling of all staff destined for the same location. Lights were continually being turned off in unused rooms; equipment was being unplugged when not in use and we completed replacing "Energy Star" appliances. We continue to use 100% recycled paper throughout the district. The district continues to reuse furniture and equipment when it is practical to do so. We have continued and increased the use of Live Meetings in the district. The School Board has continued to hold paperless meetings and meetings by electronic means. We have instituted sustainable measures of low flow taps & showers, not running dishwashers until they are full, using glass plates, cups and glasses and instituting a recycling program in the district. We completed a full district lighting retrofit to change all of our lights to energy efficient bulbs utilizing BC Hydro and their Power Smart Program.

Operational Changes in 2012

The district replaced the windows in all of their buildings in 2012 to high energy efficient windows which impacted its GHG emissions profile in 2012 and future years.

Plans to Continue Reducing Greenhouse Gas Emissions 2013 – 2015

The district will be replacing the boilers in the Administration building over the next few years. This will complete our district wide heating system upgrade including a DDC system at each site which will improve the emissions by way of the heating system plus the reduction of travel to each site. The district will be installing virtual computer systems in each school which will all but eliminate the travel required to service or repair these computers. The district will be continually reviewing its' operations with a goal of reducing its' carbon output. We will also be continuing to educate our employees and students so that they will make carbon output reduction part of their life style.



Mike Gordon, Superintendent

May 7 2013

Date

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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	In Development	Looking at instituting training in the district but the cost is extreme due to the distances of travel to get the training or have someone come into the district	Review the costs in light of budget cuts.	2009	No End Date (Continuous)
Introduce anti-idling policy and/or raise anti-idling awareness for fleet drivers (e.g., signs, stickers, messages)	Ongoing/In Progress	Raised awareness of anti idling vehicles though this initiative is less successful in winter due to extremely cold weather and potential of freeze up.	Continue promoting and ensuring the guidelines are followed	2008	No End Date (Continuous)
Encourage carpooling in fleet vehicles	Ongoing/In Progress	All employees are required to car pool when they are travelling to the same site or they do not receive travel costs from the district	Continue promoting and ensuring the guidelines are followed	2008	No End Date (Continuous)
Vehicle fuel efficiency					
Replace vehicles with more fuel-efficient models	Ongoing/In Progress	No vehicles replaced in 2012	Replace a vehicle with a dual fuel vehicle as there are no hybrid vehicles available for the terrain in this district.	2008	No End Date (Continuous)
Perform regular fleet maintenance to improve fuel-efficiency	Ongoing/In Progress	All vehicles are required to have regular servicing done every 5,000 km using synthetic fluids.	Continue servicing vehicles every 5,000 km with synthetic fluids.	2011	No End Date (Continuous)
Stationary Fuel Combustion, Electricity					
Behaviour change program					
Help staff reduce personal energy use through "workstation tune-ups"	Ongoing/In Progress	Staff are doing this on an ongoing basis as time permits.	Staff will continue ongoing "workstation tune-ups"	2009	No End Date (Continuous)
Ask staff to unplug electrical equipment or switch off power bars when not in use	Completed (in Previous Year)				No End Date (Continuous)
Ask staff to unplug electrical equipment or switch off power bars when not in use	Completed (in Previous Year)				No End Date (Continuous)
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Completed (in Previous Year)				No End Date (Continuous)
Encourage staff to use air dry setting on dishwashers	Completed (in Previous Year)				No End Date (Continuous)
Provide tips to staff on saving energy in the office while working outside of regular business hours	Completed (in Previous Year)				No End Date (Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress	Continued to educate and request staff to turn off all lights when they leave their classrooms.	Continue to educate and request staff to turn off all lights when they leave their classrooms.	2008	No End Date (Continuous)
Promote hot water conservation	Completed (in Previous Year)				No End Date (Continuous)
IT power management					
Install power management software which shuts down computers outside of regular business hours	Completed (in Reporting Year)	Scheduled tasks to run a script that shuts down the computers nightly on all servers.		2012	2012
Implement server virtualization	Completed (in Reporting Year)	Installed virtual systems in all schools		2012	2012
Apply auto-sleep settings on computer monitors and CPUs	Completed (in Previous Year)				No End Date (Continuous)

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Action	Status	Steps Taken	Steps Planned	Start Year	End Year
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices as part of a print management strategy	Ongoing/In Progress	The photocopiers at 1 site were setup as network printers and are used as such.	Review the balance of the photocopiers in the district and replace them with network copiers when the budget allows for such expense.	2008	2014
Apply auto-sleep settings on printers, fax machines, and/or multi-function devices	Completed (in Previous Year)				No End Date (Continuous)
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	Some computers were replaced in 2012 to Energy Star rated.	When budget allows we will be replacing all computers with Energy Star models. If a computer is purchased it is mandatory that it is an Energy Star model.	2008	No End Date (Continuous)
Owned buildings					
Establish energy performance baseline for owned buildings	Not Yet Evaluated				No End Date (Continuous)
Register for performance labelling/certification for operations and maintenance of owned buildings (e.g., LEED EB:O&M)	Not Yet Evaluated				No End Date (Continuous)
Register for performance labelling/certification for commercial interiors of owned buildings (e.g., LEED CI)	Not Yet Evaluated				No End Date (Continuous)
Retrofit details for owned buildings					
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	Reviewing the replacement of the heating system in the Administration office in the near future	Design the replacement of the heating system in the Administration office in the near future	2012	2014
Upgrade lighting systems during retrofits	Completed (in Previous Year)				No End Date (Continuous)
Upgrade/adjust control systems during retrofits	In Development	Started to design the DDC for the Denetia School.	Install the DDC in the Denetia School.	2012	2013
Improve building insulation (including windows) during retrofits	Completed (in Reporting Year)	Replaced all the windows in the district with Low E, argon gas filled, bronze tinted energy efficient windows.		2012	2012
Supplies (Paper)					
Behaviour change program					
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Not Yet Evaluated				No End Date (Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Completed (in Previous Year)				No End Date (Continuous)
Electronic media in place of paper					
Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Not Yet Evaluated				No End Date (Continuous)
Use electronic document library for filing common documents	Not Yet Evaluated				No End Date (Continuous)
Switch to an electronic payroll notification system in place of paper pay stubs	Completed (in Previous Year)				No End Date (Continuous)
Paper Type					
Purchase 30% post-consumer recycled paper	Completed (in Previous Year)				No End Date (Continuous)
Purchase 40% post-consumer recycled paper	Completed (in Previous Year)				No End Date (Continuous)
Purchase 100% post-consumer recycled paper	Completed (in Reporting Year)	100% recycled paper is used in the district.		2008	2012

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Action	Status	Steps Taken	Steps Planned	Start Year	End Year
Printer/document settings					
Switch networked printers and photocopiers to automatic double-sided	Ongoing/In Progress	We are promoting the use of double sided paper at all sites.	Continue promoting the use of double sided paper at all sites.	2008	No End Date (Continuous)

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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					
Train staff in web-conferencing	Ongoing/In Progress	Approximately 75% of our staff have training in web-conferencing but we have staff at every site that is trained to assist other staff.	Continue training more staff on web-conferencing	2008	No End Date (Continuous)
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress	We have encouraged staff to take training by way of web access. Staff are starting to use this technology.	Continue to encourage staff to take training by way of web access.	2009	No End Date (Continuous)
Encourage carpooling to meetings	Completed (in Previous Year)				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	Approximately 85% of our computers in the district have Elluminate and Webex installed.	As we purchase new computers the software will be installed.	2009	No End Date (Continuous)
Make desktop web-cameras available to staff	Completed (in Previous Year)				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)	Not Yet Evaluated				No End Date (Continuous)
Include green options in employee performance measurement system	Not Yet Evaluated				No End Date (Continuous)
Staff awareness/education					
Provide education to staff about the science of climate change	In Development	Nothing	Looking at a process to do this as we are a very widely spread out small district.	2010	No End Date (Continuous)
Provide education to staff about the conservation of water, energy, and raw materials	In Development	Nothing	Looking at a process to do this as we are a very widely spread out small district.	2010	No End Date (Continuous)
Provide green tips on staff website or in newsletters	In Development	In the process of looking at including a section on the website.	To include on the website.	2010	No End Date (Continuous)
Provide sustainability education during new staff orientation	In Development	We are looking at including as part of our new staff orientation process.	We are looking at including as part of our new staff orientation process.	2010	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

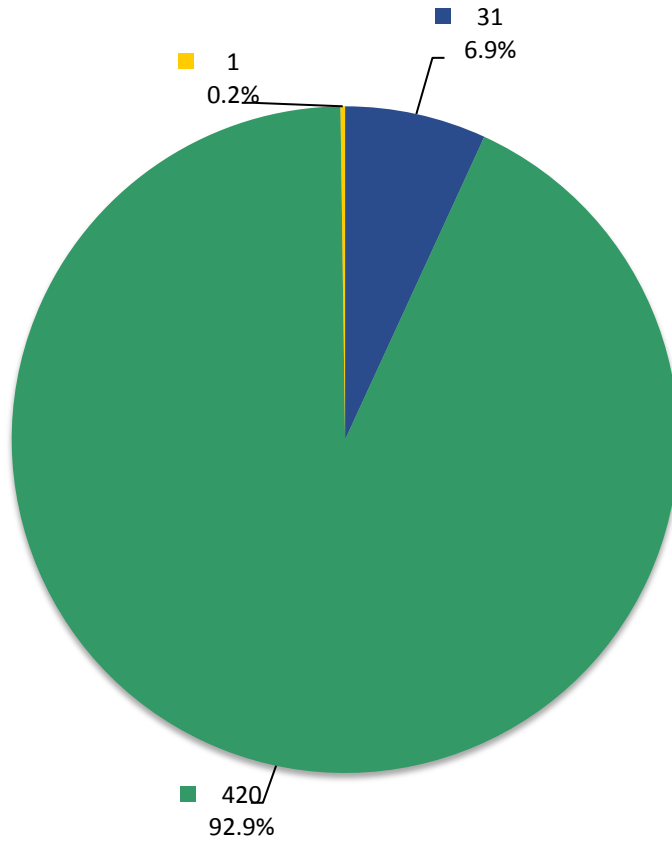
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Action	Status	Steps Taken	Steps Planned	Start Year	End Year
	Evaluated				(Continuous)
Providing behaviour change education/training to teams (e.g., community-based social marketing)	Not Yet Evaluated				No End Date (Continuous)
Other Sustainability Actions					
Adaptation to Climate Change					
Assessed whether extreme weather events and/or long term changes in climate will affect the organization's business areas	Not Yet Evaluated				No End Date (Continuous)
Integrated considerations of extreme weather events and/or long term changes in climate into the organization's decision making.	Not Yet Evaluated				No End Date (Continuous)
Procurement (non-paper supplies)					
Establish green standards for goods that are replaced infrequently and/or may require capital funds to purchase (e.g., office furniture, carpeting, etc.)	Not Yet Evaluated				No End Date (Continuous)
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	Completed (in Previous Year)				No End Date (Continuous)
Waste reduction/diversion					
Put in place an operations policy to facilitate the reduction and diversion of building occupant waste from landfills or incineration facilities	Not Yet Evaluated				No End Date (Continuous)
Implement a hazardous waste reduction and disposal strategy	Not Yet Evaluated				No End Date (Continuous)
Water conservation					
Establish a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models	Not Yet Evaluated				No End Date (Continuous)
Put in place a potable water management strategy to reduce potable water demand of building-level uses such as cooling tower equipment, toilet fixtures, etc. and landscape features	Not Yet Evaluated				No End Date (Continuous)

**School District 87 - Stikine
Greenhouse Gas Emissions by Source
for the 2012 Calendar Year (tCO₂e*)**



Total Emissions: 452

- 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 12:14 PM)

Total offsets required: **451**. Total offset investment: **\$11,275**. Emissions which do not require offsets: **1** **

*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.