



SCHOOL DISTRICT NO. 87

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School District No. 87 (Stikine) – 2010 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 are working towards improving our facilities mechanical and control systems which will 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.

2010 Greenhouse Gas Emissions

The total 2010 greenhouse gas (GHG) emissions from all sources covered by the *Greenhouse Gas Reduction Targets Act* was 485.16 tCO₂e (as reported in SMARTTool).

Offsets Applied to Become Carbon Neutral in 2010

Total emission offsets in the amount of \$12,129.00 have been applied to become carbon neutral for 2010.

Emissions Reduction Activities

Actions Taken to Reduce Greenhouse Gas Emissions in 2010

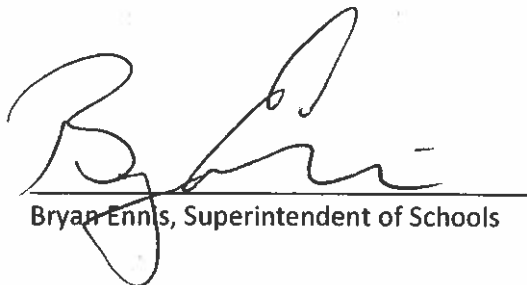
During 2010 we continued implementing several measures started in 2008. These measures include the areas of mobile fuel combustion, stationary fuel combustion, supplies, travel, paperless meetings and sustainable actions. We purchased another dual fuel vehicle that is more environmentally oriented and more efficient. We improved on our already good fleet maintenance program and continued to require car pooling 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 started to buy "Energy Star" appliance. We increased the use of 100% recycled paper used throughout the district. The district continues to reuse furniture and equipment when it is practical to do so. We have started using Live Meetings in the district the School Board also instituted paperless meetings. 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 2010

The district upgraded the HVAC system in one school in 2010 which impacted its GHG emissions profile in 2010 and future years.

Plans to Continue Reducing Greenhouse Gas Emissions 2011 – 2013

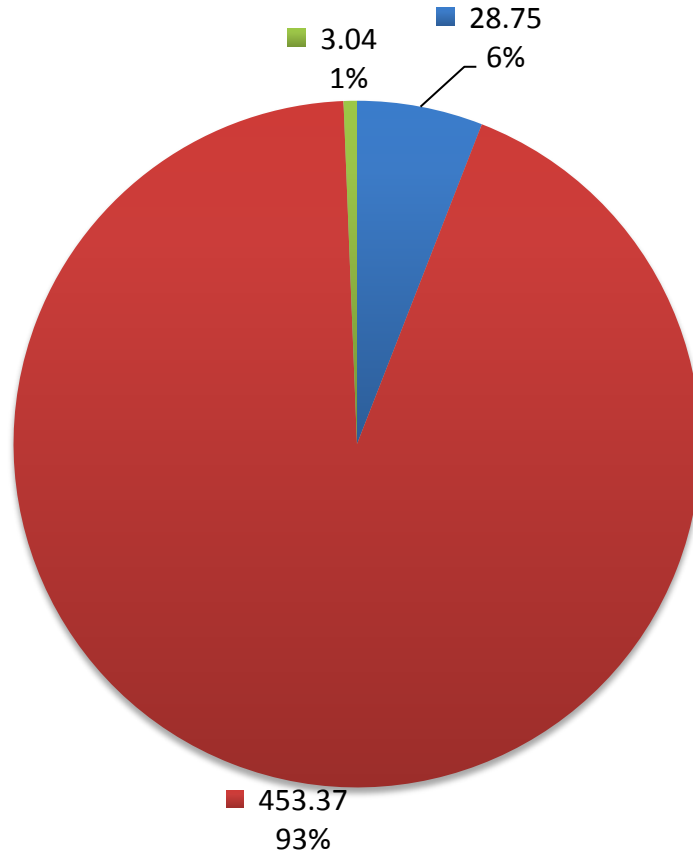
The district will be replacing the boilers in one of our schools during 2011. This will complete our district wide heating system upgrade including a DDC system at each site which will improve the emissions by way of the heating system plus the reduction of travel to each site. The district will be continually reviewing its' operations with a goal of reducing its' carbon output. We will also be educating our employees and students so that they will make carbon output reduction part of their life style.


Bryan Ennis, Superintendent of Schools


Date

School District No. 87 (Stikine)

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



Total Emissions: 485.16

- 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: **485.16**. Total offset investment: **\$12,129.00**. Emissions which do not require offsets: **0** **

*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. 87 (Stikine) - 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	86	% of vehicles are fuel- efficient models	There are no hybrid vehicles available for the terrain in this district	Replace or deduce 1 more vehicle with a dual fuel vehicle	2006	No End Date (Continuous)
Behaviour change program							
Provide fleet driver training to reduce fuel use	In Development	12	% of current drivers are trained	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	100	All employees are required to car pool when they are travelling to the same site.	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	2009	No End Date (Continuous)
Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)							
Retrofitting owned buildings							
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	75	% of retrofits since start year indicated had heating, cooling, and ventilation systems upgrades	We replaced 1 school's heating system in 2010	Replace the boilers in Tahltan School in the summer of 2011	2010	2011
Upgrade/adjust control systems during retrofits	Completed in 2010	100	% of retrofits since start year indicated had control system upgrades or adjustments	DDC set up in Atlin school during 2010		2007	2010
IT power management							
Install power management software which shuts down computers outside of regular business hours	Ongoing/In Progress	80	% of computers shut down automatically outside of regular business hours	Using scheduled tasks to run a script that shuts down the computers nightly on all servers except 1 school.	Complete the one school left to implement	2008	2012
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	Ongoing/In Progress	50	% reduction in printers, copiers, and/or fax machines since start year indicated	The photocopiers at 3 sites are 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.	2007	2013
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	40	% of computers are ENERGY STAR rated	Computers in 2 sites are Energy Star models.	When budget allows we will be replacing all computers with Energy Star medels. If a computer is purchased it is mandatory that it is an Energy Star model.	2007	No End Date (Continuous)
Appliances and electronic devices							
Replace refrigerators with ENERGY STAR models or source ENERGY STAR models for future purchases	Completed in 2010	100	% of fridges are ENERGY STAR rated	Replaced the last refrigerators with Energy Star models		2006	2010

School District No. 87 (Stikine) - 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
Replace other appliances or electronic devices with ENERGY STAR models or source ENERGY STAR models for future purchases	Completed in 2010	100	% of appliances are ENERGY STAR rated	Replaced the last appliances with Energy Star models		2006	2010
Behaviour change program							
Help staff reduce personal energy use through "workstation tune-ups"	Ongoing/In Progress	70	% of current staff have completed a workstation tune-up	Staff are doing this on an ongoing basis as time permits.	Staff will continue ongoing "workstation tune-ups".	2009	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.	We will be purchasing stickers for all light switches.	2008	2011
Supplies (Paper)							
Paper Type							
Purchase 100% post-consumer recycled paper	Ongoing/In Progress	75	% of total paper purchased contains 100% recycled content	Approximately 75% of the district has started purchasing 100% recycled paper	Promote the purchase of 100% recycled paper in the district	2007	2012
Printer/document settings							
Switch networked printers and photocopiers to automatic double-sided	Ongoing/In Progress	60	% of network printers or photocopiers are set to automatic double-sided	We are promoting the use of double sided paper at all sites.	Continue promoting the use of double sided paper at all sites.	2007	No End Date (Continuous)
Reduce default margin size in standard document templates (e.g., letters, briefing notes, forms, etc.)	Ongoing/In Progress	40	% of documents have margin sizes reduced	We have continued to promote the reduction in the size of margins on all documents.	Continue to promote the reduction in the size of margins on all documents.	2009	No End Date (Continuous)
Electronic media in place of paper							
Post materials online that were previously printed	Ongoing/In Progress			We are posting more documents on our website that were previously printed (e.g. financial statements, budgets, policies, administrative procedures, etc.).	Continue to review all documents that could be posted to our website or central email server.	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 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.)	Ongoing/In Progress	75	% of computers have web-conferencing software installed	Approximately 75% 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 2010	100	% of staff have access to a desktop web-camera	100% of our staff have access to a webcam		2009	2010
Behaviour change program							
Train staff in web-conferencing	Ongoing/In Progress	50	% of staff are trained web-conferencing	Approximately 50% 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)
Education, Awareness, and Engagement							
Staff awareness/education							
Provide education to staff about the science of climate change	In Development				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				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 the website	To include in 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.	2011	No End Date (Continuous)
Client/public awareness/education							
Provide green tips on client/public website or in newsletters	In Development			In the process of including as part of our website	To include as part of our website	2011	No End Date (Continuous)