

School District No. 91 (Nechako Lakes) - 2009 Carbon Neutral Action Report

Executive Summary

We continue to be proactive in our efforts to get to carbon neutrality. We have replaced 6- 35+year old inefficient heating boilers with high efficient condensing boilers. We have installed more efficient lighting in a large gymnasium and a small elementary school. Schools in the East half of the District have implemented a waste reduction program this year and are moving into energy conservation. It is anticipated that the West half of the District will participate next year.

Overviews

- Replaced 6 inefficient boilers
- Installed efficient lighting in one large gymnasium and one small elementary school
- Involving staff and student participation initiatives.



Actions Taken to Reduce Greenhouse Gas Emissions in 2009

In 2009 we completed an energy feasibility study for the rest of our District. Based on the results of this study we have applied for additional grants from the “Energy Efficient Mechanical Upgrades” fund. We anticipate an announcement soon which will allow us to upgrade two additional facilities.

Operational Changes in 2010

Budget challenges resulting in school and space closure, transportation (school bus) reductions will undoubtedly have a positive impact on achieving carbon neutrality.

Plans to Continue Reducing Greenhouse Gas Emissions 2010 – 2012

As resources become available we will continue with upgrades to mechanical systems including boilers, furnaces, lighting and controls. We are working hard to have building occupants take more ownership in energy reduction strategies. (turning off lights, waste reduction etc.)

Our Purpose: is to provide a safe, comfortable, pleasant environment for people to learn in by:

Meeting the needs of the District, Maintaining a positive image, Recognizing the challenges,
Supporting mutually beneficial initiatives, Promoting harmonious relationships and mutual respect,
Taking care of the little things...

School District No. 91 (Nechako Lakes) - 2009 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 12/31/09)	Performance to Date (as of 12/31/09)		Steps Taken in 2009	Steps Planned for 2010 -2012	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	5	% of vehicles are fuel- efficient models	replacement vehicles purchased in 2009 have been as efficient as reasonable to meet the task requirements	as vehicles reach the end of their life cycle, the most efficient vehicles will be considered for purchase	2007	No End Date (Continuous)
Replace larger vehicles with smaller models according to fleet "right-sizing" principles	Ongoing/In Progress	0	% of vehicles down-sized since start year indicated	reviewed size of vehicles	as vehicles reach the end of their life cycle, the right sized vehicles will be considered for purchase	2008	No End Date (Continuous)
Perform regular fleet maintenance to improve fuel-efficiency	Complete	100	% of vehicles are subject to regular maintenance for fuel efficiency	Regular fleet maintenance was performed		2005	No End Date (Continuous)
Replace small maintenance vehicles with more fuel-efficient models	Ongoing/In Progress	25	% of small maintenance vehicles are fuel-efficient	when small maintenance vehicles are being replaced fuel efficient factors are a major consideration	when small maintenance vehicles are being replaced fuel efficient factors are a major consideration	2008	No End Date (Continuous)
Behaviour change program							
Provide fleet driver training to reduce fuel use	Ongoing/In Progress	75	% of current drivers are trained	all bus drivers have been trained, supervisory staff continue to participate in programs offered provincially and federally.	Continue to train bus drivers.	2008	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	75	% of current drivers are trained	all bus drivers have been trained, supervisory staff continue to participate in programs offered provincially and federally.	plan to have all drivers of district fleet vehicles participate in training.	2010	No End Date (Continuous)
Encourage carpooling in fleet vehicles	Ongoing/In Progress			Encouraged carpooling	Continue to encourage carpooling	2009	No End Date (Continuous)
Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)							
Planning/management							
Enrol in a building energy benchmarking program (e.g., GREEN UP)	In Development				Review program options	2010	No End Date (Continuous)
Reduce office space (square meters) per employee	In Development				Identifying excess space	2010	No End Date (Continuous)
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle Controls)	In Development				Determining various options	2009	No End Date (Continuous)
Owned buildings							
Establish energy performance baseline for owned buildings	Ongoing/In Progress	50	% of owned buildings have an established energy performance baseline	Started establishing baseline data	Continue to establish baseline data for all sites	2009	2012
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	In Development				Will implement LEED NC for all new major renovations	2010	No End Date (Continuous)
Incorporate integrated design process into new construction or during renovations of owned buildings	In Development				Will incorporate integrated design processes in all new major building projects	2010	No End Date (Continuous)

School District No. 91 (Nechako Lakes) - 2009 Carbon Neutral Action Report

Action	Status (as of 12/31/09)	Performance to Date (as of 12/31/09)		Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Incorporate a refrigerant management strategy into regular building management/maintenance to reduce fugitive emissions	In Development			Develop a refrigerant management strategy	Implement a refrigerant management strategy	2010	No End Date (Continuous)
Complete energy retrofits on existing, owned buildings	Ongoing/In Progress	15	% of owned buildings have undergone energy retrofits since start year indicated	Implemented a number of partial retrofits	Seek funding from the Province to enable more energy retrofits to be undertaken.	2008	No End Date (Continuous)
Retrofitting owned buildings							
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	100	% of retrofits (captured above) had heating, cooling, and ventilation systems upgrades	Implemented a number of partial retrofits	Seek funding from the Province to enable more energy retrofits to be undertaken.	2008	No End Date (Continuous)
Upgrade lighting systems during retrofits	Ongoing/In Progress	75	% of retrofits (captured above) had lighting systems upgrades	Implemented a number of partial retrofits	Seek funding from the Province to enable more energy retrofits to be undertaken.	2008	No End Date (Continuous)
Upgrade/adjust control systems during retrofits	Ongoing/In Progress	100	% of retrofits (captured above) had control system upgrades or adjustments	Implemented a number of partial retrofits	Seek funding from the Province to enable more energy retrofits to be undertaken.	2008	No End Date (Continuous)
Improve building insulation (including windows) during retrofits	Ongoing/In Progress	25	% of retrofits (captured above) had insulation improvements	Implemented a number of partial retrofits	Seek funding from the Province to enable more energy retrofits to be undertaken.	2008	No End Date (Continuous)
IT power management							
Implement server virtualization	In Development				Determine server virtualization options	2010	2012
Apply auto-sleep settings on computer monitors and CPUs	Ongoing/In Progress	90	% of computers have auto-sleep settings applied	Applied auto sleep settings	Review additional areas for auto sleep settings	2009	No End Date (Continuous)
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	Ongoing/In Progress	5	% reduction in printers, copiers, and/or fax machines since start year indicated	Review current devices and indentify options	Implement multi use devices where beneficial	2010	No End Date (Continuous)
Apply auto-sleep settings on printers, copiers, fax machines, and/or multi-function devices	Ongoing/In Progress	75	% of devices have auto-sleep settings applied	Applied auto sleep settings	Review additional areas for auto sleep settings	2009	No End Date (Continuous)
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	75	% of computers are ENERGY STAR rated	Purchased ENERGY STAR computer	Continue to purchase ENERGY STAR computers	2007	No End Date (Continuous)
Appliances and electronic devices							
Replace refrigerators with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress	50	% of fridges are ENERGY STAR rated	Purchased ENERGY STAR refrigerators	Continue to purchase ENERGY STAR appliances	2007	No End Date (Continuous)
Replace other appliances or electronic devices with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress			Purchased ENERGY STAR appliances	Continue to purchase ENERGY STAR appliances	2007	No End Date (Continuous)
Behaviour change program							
Ask staff to close blinds at end of work day to reduce heating/cooling demands	In Development				Promote the closing of blinds	2009	No End Date (Continuous)

School District No. 91 (Nechako Lakes) - 2009 Carbon Neutral Action Report

Action	Status (as of 12/31/09)	Performance to Date (as of 12/31/09)		Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Provide reminders for turning off lights (e.g., signs, stickers, messages)	In Development				Inform people about the benefits of turning off lights	2009	No End Date (Continuous)
Promote hot water conservation	In Development				Promote reducing hot water consumption	2009	No End Date (Continuous)
Supplies (Paper)							
Paper Type							
Purchase 30% post-consumer recycled paper	Ongoing/In Progress	90	% of total paper purchased contains 30% recycled content	Increased purchasing of recycled paper	Promote and increase amount of recycled paper purchasing	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	90	% of staff workstations with software installed	Installed software	Investigate collaborative software utilization	2008	2012
Use electronic document library for filing common documents	In Development				Review additional areas for improvement	2007	No End Date (Continuous)
Post materials online that were previously printed	Ongoing/In Progress			Posted material online	Review additional areas for improvement	2008	No End Date (Continuous)
Switch to an electronic payroll notification system in place of paper pay stubs	Complete			Continued to utilize electronic pay stubs		2006	2009
Behaviour change program							
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	In Development				Investigate collaborative software	2011	No End Date (Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	In Development				Reduce handouts at meetings	2010	No End Date (Continuous)
Encourage re-use of scrap paper	In Development				Encourage reuse of paper	2010	No End Date (Continuous)