

School District #73 (Kamloops-Thompson) - 2011 Carbon Neutral Action Report

Executive Summary

- School District #73 (Kamloops/Thompson) has been working to reduce greenhouse gas emissions and to reduce utility consumption in general. Average annual savings of approximately 5,000,000kwhr of electricity and 10,000GJ of natural gas have been achieved, with resulting utility cost savings of over \$400,000 per year and greenhouse gas reductions of 1,000,000kg of CO₂.

Kelvin Stretch, MBA, CMA, FCMA
Secretary Treasurer

2011 Greenhouse Gas Emissions

- Greenhouse Gas Emissions by Source for the 2011 Calendar Year (tCO₂e)
 - Mobile Fuel Combustion 2026.20
 - Stationary Fuel Combustion and Electricity 3882.30
 - Paper 194.50

Offsets Applied to Become Carbon Neutral in 2011

- Total offsets purchased: 4537. Total offset investment: \$113,425 + HST
 - Emissions which do not require offsets: 1565

2011 Greenhouse Gas Emissions Reductions Activities


- Replaced 5 buses and 8 vehicles with newer models
- 100% of employees converted to electronic pay system

Plans to Continue Reducing Greenhouse Gas Emissions 2011 – 2012

- School District #73 (Kamloops/Thompson) will continue with its long term plan for energy reduction. We will continue with our controls upgrades for our mechanical systems, exterior lights, and computer systems, and will continue to upgrade mechanical equipment including boilers to further reduce our energy consumption.
- The school district will be using GPS data to reduce idling times of vehicles.

Changes to Greenhouse Gas Emissions & Offsets Reporting from Previous Years

- School District #73 (Kamloops/Thompson) has paid for 384 tonnes of emissions that were not paid for in 2010.



K.J. STRETCH
Secretary - Treasurer

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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 (as of 12/31/11)	Performance to Date (as of 12/31/11)	Steps Taken in 2011	Steps Planned for 2012 -2014	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		Replaced 8 maintenance vehicles and 5 buses	Replace vehicles if funding available	2002	No End Date (Continuous)
Perform regular fleet maintenance specifically to improve fuel-efficiency	Ongoing/In Progress		All vehicles are maintained at 5,000km intervals	Maintain vehicles at 5,000km intervals	Started before 1995	No End Date (Continuous)
Behaviour change program						
Provide fleet driver training to reduce fuel use	Ongoing/In Progress		Continuous topic at department meetings	Continuous topic at department meetings	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		Gathering idle time data from GPS	Talk to staff about idle times	2011	No End Date (Continuous)
Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)						
Planning/management						
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle Controls)	In Development			Pilot the system if funds become available.	2009	No End Date (Continuous)
Perform energy retrofits on existing, owned buildings	Ongoing/In Progress		None, due to lack of funding.	Dependent on funding.	Started before 1995	No End Date (Continuous)
Retrofitting owned buildings						
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress		None, due to lack of funding.	Dependent of funding.	Started before 1995	No End Date (Continuous)
Upgrade/adjust control systems during retrofits	Ongoing/In Progress		Retrofitted 2 DDC systems in 2011	Retrofit more DDC systems.	Started before 1995	No End Date (Continuous)
IT power management						
Install power management software which shuts down computers outside of regular business hours	Ongoing/In Progress		None	Installation of DDC powered shut down of computer labs.	2007	No End Date (Continuous)
Implement server virtualization	Ongoing/In Progress		4 servers virtualized in 2011	3 servers will be virtualized in 2012	2008	No End Date (Continuous)
Apply auto-sleep settings on computer monitors and CPUs	Ongoing/In Progress		All new computers have auto-sleep settings enabled.	All new computers have auto-sleep settings enabled.	2007	No End Date (Continuous)
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress		Replaced 750 CRT monitors with LED-LCD monitors.	Replace 800 CRT monitors with LED-LCD monitors.		
Supplies (Paper)						
Paper Type						

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Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Purchase 30% post-consumer recycled paper	Ongoing/In Progress	8	% of total paper purchased contains 30% recycled content	Purchased 30% post-consumer recycled paper.	Purchase 30% post-consumer recycled paper.	2009	No End Date (Continuous)
Electronic media in place of paper							
Use electronic document library for filing common documents	Ongoing/In Progress			Use of Zimbra software	Increased use of Zimbra software	2009	No End Date (Continuous)
Post materials online that were previously printed	Ongoing/In Progress			Use of Zimbra software	Increased use of Zimbra software	2009	No End Date (Continuous)
Switch to an electronic payroll notification system in place of paper pay stubs	Completed in 2011			All employees get electronic pay stubs.		2010	2011

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Actions to Reduce Provincial Emissions and Improve Sustainability

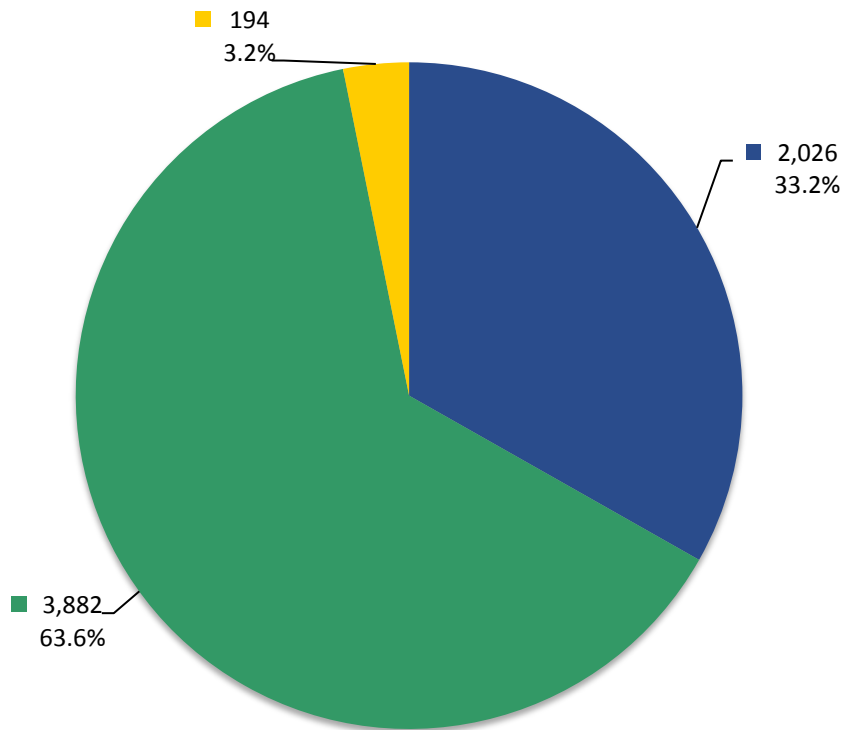
The actions listed below contribute to a reduction in greenhouse gas emissions from sources that fall outside of the reporting requirements defined in the carbon neutral government regulation of the *Greenhouse Gas Reduction Targets Act*. Public sector organizations can optionally use this section to 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 12/31/11)	Performance to Date (as of 12/31/11)	Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Business Travel						
Virtual meeting technology						
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	In Development			Start using Conference Me software for meetings	2009	No End Date (Continuous)
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	Ongoing/In Progress		Used the video conference equipment.	Expansion of video conference systems.	2005	No End Date (Continuous)
Behaviour change program						
Train staff in web-conferencing	Ongoing/In Progress		More staff trained to use video conference equipment.	Train more staff to use video conference equipment.	2005	No End Date (Continuous)
Train staff in video-conferencing or provide technical support for video-conferencing set-up	Ongoing/In Progress		More staff trained to use video conference equipment.	Train more staff to use video conference equipment.	2005	No End Date (Continuous)
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress		Video conference system is used when possible.	Continued use of video conference system.	2005	No End Date (Continuous)
Education, Awareness, and Engagement						
Team-building						
Create Green, Sustainability, Energy Conservation, or Climate Action Teams with executive endorsement	In Development			More school green teams.	2003	No End Date (Continuous)
Client/public awareness/education						
Provide education to clients/public about the science of climate change	Ongoing/In Progress		Part of student curriculum.	Part of student curriculum	2007	No End Date (Continuous)
Provide education to clients/public about the conservation of water, energy, and raw materials	Ongoing/In Progress		Part of student curriculum.	Part of student curriculum	2007	No End Date (Continuous)
Other Sustainability Actions						
Water conservation						
Establish a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models	Ongoing/In Progress		Any fixture that is replaced is replaced with a more efficient model.	Any fixture that is replaced is replaced with a more efficient model.	2003	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	Ongoing/In Progress		Any fixture that is replaced is replaced with a more efficient model.	Any fixture that is replaced is replaced with a more efficient model.	2003	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	Ongoing/In Progress		All schools have recycling programs in place. E-waste is centrally collected and sent to recycling.	Continue the program	2008	No End Date (Continuous)

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Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)	Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Implement a hazardous waste reduction and disposal strategy	Ongoing/In Progress		Materials are removed as required.	Continue to remove materials as required.	1998	No End Date (Continuous)
Procurement (non-paper supplies)						
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	Ongoing/In Progress		Purchase green custodial products.	Continue to purchase green custodial products.	2004	No End Date (Continuous)
Indoor air quality						
Incorporate low volatile organic compounds (VOCs) standards into procurement policy for products such as paints, carpets, and furniture	Ongoing/In Progress		We only purchase low voc paint.	Continue to purchase low voc paint.	2000	No End Date (Continuous)

**School District 73 - Kamloops / Thompson
Greenhouse Gas Emissions by Source
for the 2011 Calendar Year (tCO₂e*)**



Total Emissions: 6,103

- 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 2011 (Generated May 18, 2012 12:32 PM)

Total offsets required: **4,537**. Total offset investment: **\$113,425**. Emissions which do not require offsets: **1,565** **

*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.