#### **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
greenhous gas reductions of 1,000,000kg of CO2.

Kelvin Stretch, MBA, CMA, FCMA

Secretary Treasurer

#### 2012 Greenhouse Gas Emissions

- Greenhouse Gas Emissions by Source for the 2012 Calendar Year (tCO2e).
  - o Mobile Fuel Combustion 1989.08
  - Stationary Fuel Combustion and Electricity 3849.05
  - o Paper 199.19

#### Offsets Applied to Become Carbon Neutral in 2012

o Total offsets purchased: 4812

Total offset investment: \$137,525 + GST

o Emissions which do not require offsets: 1522

#### 2012 Greenhouse Gas Emissions Reductions Activities

Replaced 5 buses and 7 vehicles with newer models

#### Plans to Continue Reducing Greenhouse Gas Emissions 2012 – 2013

- 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 689 tonnes of emissions that were not paid for in 2011.

## **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	Ongoing/In Progress	Discussions at department meetings.	Continue to discuss at department meetings.	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	Anti-idling signs in place at most locations. Review of idle times from gps system. Talked to staff about idle times.	Review of idle times from gps system. Continue to talk to staff about idle times.	2008	No End Date (Continuous)
Vehicle fuel efficiency	1 Togicos	gps system. Tained to stail about fale times.	luic times.		(Continuous)
Replace vehicles with more fuel-efficient models	Ongoing/In Progress	Replaced 7 maintenance vehicles and 5 buses.	Replace older vehicles if funding available.	2009	No End Date (Continuous)
Perform regular fleet maintenance to improve fuel-efficiency	Ongoing/In Progress	All vehicles are maintained at 5,000km intervals.	Maintain vehicles at 5,000km intervals.	2009	No End Date (Continuous)
Stationary Fuel Combustion, Electricity	rrogroco				(Germinaeae)
Behaviour change program					
Help staff reduce personal energy use through ""workstation tune-ups""	Not Yet				No End Date
1 1 37 3	Evaluated				(Continuous)
Ask staff to unplug electrical equipment or switch off power bars when not in use	Ongoing/In Progress	Staff at 11 schools are participating in the BC Hydro Workplace Conservation Awareness Program.	None	2012	2013
Ask staff to unplug electrical equipment or switch off power bars when	Ongoing/In	Staff at 11 schools are participating in the BC Hydro Workplace	None	2012	2013
not in use	Progress	Conservation Awareness Program.			
Encourage staff to use air dry setting on dishwashers	Not Yet				No End Date
	Evaluated				(Continuous)
Provide tips to staff on saving energy in the office while working outside	Not Yet				No End Date
of regular business hours	Evaluated		<u> </u>		(Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress	Staff at 11 schools are participating in the BC Hydro Workplace Conservation Awareness Program.	None	2012	2013
Promote hot water conservation	Not Yet				No End Date
	Evaluated				(Continuous)
IT power management					
Install power management software which shuts down computers	Completed (in				No End Date
outside of regular business hours	Previous Year)				(Continuous)
Implement server virtualization	Ongoing/In	3 servers virtualized in 2012.	1 server will be virutalized in 2013.	2008	No End Date
·	Progress				(Continuous)
Apply auto-sleep settings on computer monitors and CPUs	Ongoing/In	All new computers have auto sleep settings enabled.	All new computers will have auto sleep settings enabled.	2008	No End Date
	Progress		, , ,		(Continuous)
Remove stand-alone printers, copiers, and/or fax machines and install	Completed (in				No End Date
multi-function devices as part of a print management strategy	Previous Year)				(Continuous)
Apply auto-sleep settings on printers, fax machines, and/or multi-	Completed (in				No End Date
function devices	Previous Year)				(Continuous)
Replace computers with ENERGY STAR models during regular	Ongoing/In	Replaced 840 CRT monitors with LED-LCD monitors.	Replace 400-500 CRT monitors with LED-LCD monitors.	2010	No End Date
computer upgrades	Progress				(Continuous)
Owned buildings					
Establish energy performance baseline for owned buildings	Not Yet				No End Date
	Evaluated				(Continuous)
Register for performance labelling/certification for operations and	Not Yet				No End Date
maintenance of owned buildings (e.g., LEED EB:O&M)	Evaluated				(Continuous)

## **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
Register for performance labelling/certification for commercial interiors of	Not Yet				No End Date
owned buildings (e.g., LEED CI)	Evaluated				(Continuous)
Achieve LEED NC Gold certification at a minimum for new construction	Not Yet				No End Date
or major renovations	Evaluated				(Continuous)
Perform energy retrofits on existing, owned buildings	Ongoing/In	Completed some small lighting upgrade projects. Energy retrofits	Exterior lighting upgrades and possibly 2 boiler plant upgrades.	2008	No End Date
	Progress	have been on going for over 20 years.			(Continuous)
Incorporate a refrigerant management strategy into regular building	Not Yet				No End Date
management/maintenance to reduce fugitive emissions	Evaluated				(Continuous)
Planning/management					
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle	Not Yet				No End Date
Controls)	Evaluated				(Continuous)
Retrofit details for owned buildings					
Upgrade mechanical systems (heating, cooling, ventilation) during	Ongoing/In	Replaced 5 older rooftop units.	Replace 2 boiler systems and 5 older rooftop units.	2008	No End Date
retrofits	Progress				(Continuous)
Upgrade lighting systems during retrofits	Ongoing/In	Completed some small lighting upgrade projects.	Exterior lighting upgrades.	2008	No End Date
	Progress				(Continuous)
Upgrade/adjust control systems during retrofits	Ongoing/In	Upgraded 2 DDC systems.	Upgrade 2 DDC systems.	2008	No End Date
	Progress				(Continuous)
Improve building insulation (including windows) during retrofits	Not Yet				No End Date
	Evaluated				(Continuous)
Supplies (Paper)					
Behaviour change program					
Train staff to use collaborative software for electronic editing (e.g.	Not Yet				No End Date
SharePoint, Groove, etc.)	Evaluated				(Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no	Not Yet				No End Date
handouts)	Evaluated				(Continuous)
Electronic media in place of paper					
Install collaborative software for electronic editing (e.g. SharePoint,	Not Yet				No End Date
Groove, etc.)	Evaluated				(Continuous)
Use electronic document library for filing common documents	Ongoing/In	Use of Zimbra software.	Increased use of Zimbra software.	2009	No End Date
, ,	Progress				(Continuous)
Switch to an electronic payroll notification system in place of paper pay	Completed (in	All employees receive electronic pay stubs.		2011	2011
stubs	Reporting Year)				
Paper Type					
Purchase 30% post-consumer recycled paper	Ongoing/In	Purchase 30% post-consumer recycled paper.	Purchase 30% post-consumer recycled paper.	2009	No End Date
, , , , , , , , , , , , , , , , , , ,	Progress				(Continuous)
Purchase 40% post-consumer recycled paper	Not Yet				No End Date
	Evaluated				(Continuous)
Purchase 100% post-consumer recycled paper	Not Yet				No End Date
• • • • •	Evaluated				(Continuous)
Printer/document settings					
Switch networked printers and photocopiers to automatic double-sided	Ongoing/In	Some work locations default print to double sided.	Get more locations to default print to double sided.	2012	No End Date
L	Progress				(Continuous)

## **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

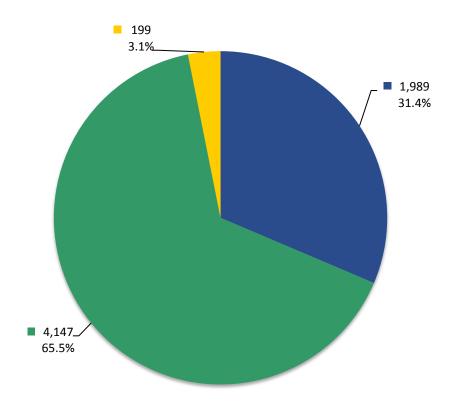
Action	Status	Steps Taken	Steps Planned	Start Year	End Year
Business Travel					
Behaviour change program					
Train staff in web-conferencing	Ongoing/In Progress	More staff were trained on the use of video conference equipment.	Train more staff on the use of video conference equipment.	2008	No End Date (Continuous)
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress	Video conference system is used when possible.	Expanded use of video conference systems.	2008	No End Date (Continuous)
Encourage carpooling to meetings	Not Yet Evaluated				No End Date (Continuous)
Encourage alternative travel to meetings (e.g., bicycles, public transit, walking)	Not Yet Evaluated				No End Date (Continuous)
Policy and budgeting	210.00.00				(50::
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	Started using Conference Me Software and Live stream for meetings.	Continued use of Conference Me Software and Live stream for meetings.	2009	No End Date (Continuous)
Make desktop web-cameras available to staff	Ongoing/In Progress	Provide staff with web-cams upon request.	Provide more web-cams as requested.	2012	No End Date (Continuous)
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	Ongoing/In Progress	Added more video conference equipment.	Add more video conference equipment.	2008	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	Evaluated				(Continuous)
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					(Continuous)
Provide education to staff about the science of climate change	Not Yet Evaluated				No End Date (Continuous)
Provide education to staff about the conservation of water, energy, and raw materials	Not Yet Evaluated				No End Date (Continuous)
Provide green tips on staff website or in newsletters	Not Yet				No End Date
Provide sustainability education during new staff orientation	Evaluated Not Yet Evaluated				(Continuous) No End Date (Continuous)
Team-building	Lvaluated				(Continuous)
Create Green, Sustainability, Energy Conservation, or Climate Action	In Development	School based green teams. Staff at 11 schools are participating in	More school green teams.	2008	No End Date
Teams with executive endorsement		the BC Hydro Workplace Conservation Awareness Program.			(Continuous)
Provide resources and/or dedicated staff to support teams	Ongoing/In Progress	Small funding amounts have been provided for the BC Hydro Workplace Conservation Awareness teams.	None	2012	No End Date (Continuous)
Providing behaviour change education/training to teams (e.g.,	Ongoing/In	Staff at 11 schools are participating in the BC Hydro Workplace	None	2012	No End Date

## **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
community-based social marketing)	Progress	Conservation Awareness Program.			(Continuous)
Other Sustainability Actions	- U				,
Adaptation to Climate Change					
Assessed whether extreme weather events and/or long term changes in	Not Yet				No End Date
climate will affect the organization's business areas	Evaluated				(Continuous)
Integrated considerations of extreme weather events and/or long term	Not Yet				No End Date
changes in climate into the organization's decision making.	Evaluated				(Continuous)
Building construction, renovation					
Establish a policy to reuse materials where possible and divert	Not Yet				No End Date
construction and demolition debris from landfills and incineration facilities	Evaluated				(Continuous)
Incorporate lifecycle costing into new construction or renovations	Not Yet Evaluated				No End Date
Communities to and from home	Evaluated				(Continuous)
Commuting to and from home  Encourage commuting by foot, bicycle, carpool or public transit	Not Yet				No End Date
Encourage commuting by root, bicycle, carpoor or public transit	Evaluated				(Continuous)
Provide shower or locker facilities for staff/students who commute by	Not Yet				No End Date
foot or by bicycle	Evaluated				(Continuous)
Provide secure bicycle storage	Not Yet				No End Date
3	Evaluated				(Continuous)
Procurement (non-paper supplies)					
Incorporate minimum recycled content standards into procurement	Not Yet				No End Date
policy for consumable, non-paper supplies (e.g., writing instruments,	Evaluated				(Continuous)
binders, toner cartridges, etc.)					
Establish green standards for goods that are replaced infrequently	Not Yet				No End Date
and/or may require capital funds to purchase (e.g., office furniture,	Evaluated				(Continuous)
carpeting, etc.)	Ongoing/In	Durch and group quotodial products	Durch and group quate dial products	2008	No End Date
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	Ongoing/In Progress	Purchase green custodial products.	Purchase green custodial products.	2008	(Continuous)
Waste reduction/diversion	Flogless				(Continuous)
Put in place an operations policy to facilitate the reduction and diversion	Ongoing/In	All sites have recycling programs in pace. All E-waste is centrally	Continue the programs.	2008	No End Date
of building occupant waste from landfills or incineration facilities	Progress	collected and sent to recycling.	Continue the programs.	2000	(Continuous)
Implement a hazardous waste reduction and disposal strategy	Ongoing/In	Hazardous materials are removed as required.	Continue to remove hazardous materials as required.	2008	No End Date
	Progress				(Continuous)
Water conservation					<u> </u>
Establish a water conservation strategy which includes a plan or policy	Ongoing/In	Any fixture that is replaced, is replaced with a more water efficient	Any fixture that is replaced, is replaced with a more water efficient	2008	No End Date
for replacing water fixtures with efficient models	Progress	model.	model.		(Continuous)
Put in place a potable water management strategy to reduce potable	Ongoing/In	Any fixture that is replaced, is replaced with a more water efficient	Any fixture that is replaced, is replaced with a more water efficient	2008	No End Date
water demand of building-level uses such as cooling tower equipment,	Progress	model.	model.		(Continuous)
toilet fixtures, etc. and landscape features	N. O.				N. 5 15 :
Introduce a stormwater management landscape strategy (e.g.,	Not Yet				No End Date
vegetated roofs, permeable paving, rain gardens, bioswales)	Evaluated				(Continuous)

## School District 73 - Kamloops / Thompson Greenhouse Gas Emissions by Source for the 2012 Calendar Year (tCO<sub>2</sub>e\*)



#### **Total Emissions: 6,335**

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 12:07 PM)

Total offsets required: 4,812. Total offset investment: \$120,300. Emissions which do not require offsets: 1,522 \*\*

<sup>\*</sup>Tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e) 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.

<sup>\*\*</sup> 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.