

SCHOOL DISTRICT NO. 53 (OKANAGAN SIMILKAMEEN)

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2012 Carbon Neutral Action Report

Executive Summary

School District No. 53 is committed to the environment and to reducing its carbon footprint. School District No. 53 believes in the future of its children which includes leaving a clean environment for future generations. We are committed to remain carbon neutral in the future. Past accomplishments include: Environmental Excellence Award by PowerSense (FortisBC 2004), DDC in all facilities, mechanical upgrades.

As an educational organization and members of society, we realize the importance of caring for the planet. Our students benefit greatly by the increased awareness around climate and other environmental issues. The modeling that government is using today will shape the attitudes and responses of today's students when they are charged with leading families and communities in environmentally sound behaviour. Education and awareness will be the focus for the district in the coming years.

Overview

2012 Greenhouse Gas Emissions and Offsets Applied to Become Carbon Neutral in 2012

For the year 2012 School District No. 53 had total emissions of 791 tonnes, and total offset of 578 tonnes.

Actions Taken to Reduce Greenhouse Gas Emissions in 2012

Actions taken in 2012 include:

1. replaced numerous RTU units with heat pumps;
2. implemented multipurpose copying and printing tracking to reduce paper usage;
3. continue to car pool where possible;
4. continue paper purchase of recycled paper;
5. default on all our multi-functional devices to double-sided copies ;
6. a wind turbine at Southern Okanagan Secondary School (SOSS), primarily to educate the students, but one which will also provide a small amount of electricity;
7. Oliver Elementary School and SOSS have installed water solar panels at the school to utilize and obtain environmental benefits from the sun;
8. SOSS will be installing photovoltaic panels to produce electricity;
9. Meetings via webcasting.

Plans to Continue Reducing Greenhouse Gas Emissions 2013 – 2014

Our biggest reductions in greenhouse gases will be through the development of:

1. a continuing effort to replace heating units with more energy efficient models;
2. roll-out of multipurpose copy machines and print tracking; and
3. education and awareness.

Lynda Minnabarriet
Secretary-Treasurer

School District 53 Okanagan Similkameen - 2012 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	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	Drive Smart training provided to all drivers.	Ensure any new drivers are given this training and refresh older employees periodically	2008	No End Date (Continuous)
Introduce anti-idling policy and/or raise anti-idling awareness for fleet drivers (e.g., signs, stickers, messages)	Completed (in Previous Year)				No End Date (Continuous)
Encourage carpooling in fleet vehicles	Ongoing/In Progress	Grounds people often vehicle pool and will utilize a crew cab so more workers can be transported in one vehicle.	Continue with our procedures on car pooling.	2008	No End Date (Continuous)
Vehicle fuel efficiency					
Replace vehicles with more fuel-efficient models	Ongoing/In Progress	Most Vehicles are 2006 or newer	As funding allows us to replace vehicles we will look at more fuel efficient vehicles	2008	No End Date (Continuous)
Replace larger vehicles with smaller models according to fleet "right-sizing" principles	Ongoing/In Progress	In some cases we have increased vehicle capacity which reduced the number of vehicle on the road.	We will review the "right size" when we are replacing vehicles.	2008	No End Date (Continuous)
Perform regular fleet maintenance to improve fuel-efficiency	Ongoing/In Progress	All vehicles have regular maintenance done on them.	Continue providing ongoing service and maintenance.	2008	No End Date (Continuous)
Stationary Fuel Combustion, Electricity					
Behaviour change program					
Help staff reduce personal energy use through ""workstation tune-ups""	In Development	Staff are instructed to turn off lights.	Continuous encouragement of staff to turn off lights.	2009	No End Date (Continuous)
Ask staff to unplug electrical equipment or switch off power bars when not in use	Not Yet Evaluated				No End Date (Continuous)
Ask staff to unplug electrical equipment or switch off power bars when not in use	Not Yet Evaluated				No End Date (Continuous)
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Ongoing/In Progress	Continuous Process	Continuous Process	2009	No End Date (Continuous)
Encourage staff to use air dry setting on dishwashers	Ongoing/In Progress	Continuous Process	Continuous Process	2009	No End Date (Continuous)
Provide tips to staff on saving energy in the office while working outside of regular business hours	Ongoing/In Progress	Continuous Process	Continuous Process	2009	No End Date (Continuous)
Encourage use of stairs instead of elevators	Ongoing/In Progress	Continuous Process	Continuous Process	2009	No End Date (Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress	Continuous Process	Continuous Process	2009	No End Date (Continuous)
Promote hot water conservation	Ongoing/In Progress	Continuous Process	Continuous Process	2009	No End Date (Continuous)
IT power management					
Install power management software which shuts down computers outside of regular business hours	Completed (in Previous Year)				No End Date (Continuous)
Implement server virtualization	Completed (in Previous Year)				No End Date (Continuous)
Apply auto-sleep settings on computer monitors and CPUs	Completed (in Previous Year)				No End Date (Continuous)
Remove stand-alone printers, copiers, and/or fax machines and install	Completed (in				No End Date

School District 53 Okanagan Similkameen - 2012 Carbon Neutral Action Report

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Action	Status	Steps Taken	Steps Planned	Start Year	End Year
multi-function devices as part of a print management strategy	Previous Year)				(Continuous)
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	Completed (in Previous Year)				No End Date (Continuous)
Owned buildings					
Establish energy performance baseline for owned buildings	Ongoing/In Progress	Continue our ongoing review of costs.	Continue our ongoing review of costs.	2008	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)
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	Not Yet Evaluated				No End Date (Continuous)
Perform energy retrofits on existing, owned buildings	Ongoing/In Progress	Replacement of roof top units with heat pumps.	Continue with improvements as funding allows	2009	No End Date (Continuous)
Incorporate a refrigerant management strategy into regular building management/maintenance to reduce fugitive emissions	Not Yet Evaluated				No End Date (Continuous)
Planning/management					
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle Controls)	Not Yet Evaluated				No End Date (Continuous)
Retrofit details for owned buildings					
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	Replaced old roof top units to energy efficient air to air roof tops.	Continue to replace older units with more efficient units as older units expire.	2009	No End Date (Continuous)
Upgrade lighting systems during retrofits	Completed (in Previous Year)				No End Date (Continuous)
Upgrade/adjust control systems during retrofits	Completed (in Previous Year)				No End Date (Continuous)
Improve building insulation (including windows) during retrofits	Ongoing/In Progress	Upgrade when older units get retrofitted.	Upgrade when older units get retrofitted.	2008	No End Date (Continuous)
Supplies (Paper)					
Behaviour change program					
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	Use SharePoint to file some Government reports.	Continue to expand use of SharePoint.	2011	No End Date (Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress	Remind staff to re-use scrap paper.	Remind staff to re-use scrap paper.	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	Have installed Sharepoint to send in documents and reports to Ministry.	Ongoing evaluation of software.	2012	No End Date (Continuous)
Use electronic document library for filing common documents	Ongoing/In Progress	Working on building document library.	Working on building document library.	2009	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)
Other Paper Supplies Actions					
Software that tracks Printing and Copying on Multipurpose Machines.	Completed (in	Installed Printing and copying software on Multipurpose Machines to		2013	2013

School District 53 Okanagan Similkameen - 2012 Carbon Neutral Action Report

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Action	Status	Steps Taken	Steps Planned	Start Year	End Year
	Reporting Year)	track printing costs by individual.			
Paper Type					
Purchase 30% post-consumer recycled paper	Ongoing/In Progress	We purchase paper in May for the following year and try and get the best price	We review the green paper choices offered.	2008	No End Date (Continuous)
Purchase 40% post-consumer recycled paper	Ongoing/In Progress	We purchase paper in May for the following year and try and get the best price	We review the green paper choices offered.	2008	No End Date (Continuous)
Purchase 100% post-consumer recycled paper	Ongoing/In Progress	We purchase paper in May for the following year and try and get the best price	We review the green paper choices offered.	2008	No End Date (Continuous)
Printer/document settings					
Switch networked printers and photocopiers to automatic double-sided	Completed (in Previous Year)				No End Date (Continuous)

School District 53 Okanagan Similkameen - 2012 Carbon Neutral Action Report

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	Staff being trained or have been trained in web-conferencing.	Have used web-conferencing for meetings.	2010	No End Date (Continuous)
Encourage staff to consider virtual attendance/presentation at events where possible	In Development	Have used for Board Meetings.	Have used for Board Meetings.	2010	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	In Development	Under review	Under review	2010	No End Date (Continuous)
Virtual meeting technology					
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	Completed (in Previous Year)				No End Date (Continuous)
Make desktop web-cameras available to staff	Ongoing/In Progress	Some staff now have camera's for online conferencing.	Refresh of all desktops with newer desktops.	2011	No End Date (Continuous)
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	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	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 Evaluated				No End Date (Continuous)
Provide sustainability education during new staff orientation	Not Yet Evaluated				No End Date (Continuous)
Team-building					
Create Green, Sustainability, Energy Conservation, or Climate Action Teams with executive endorsement	In Development	Reviewing process.	Reviewing process.	2010	No End Date (Continuous)
Provide resources and/or dedicated staff to support teams	In Development	Reviewing process.	Reviewing process.	2010	No End Date (Continuous)
Providing behaviour change education/training to teams (e.g., community-based social marketing)	In Development	Reviewing process.	Reviewing process.	2010	No End Date (Continuous)
Other Sustainability Actions					

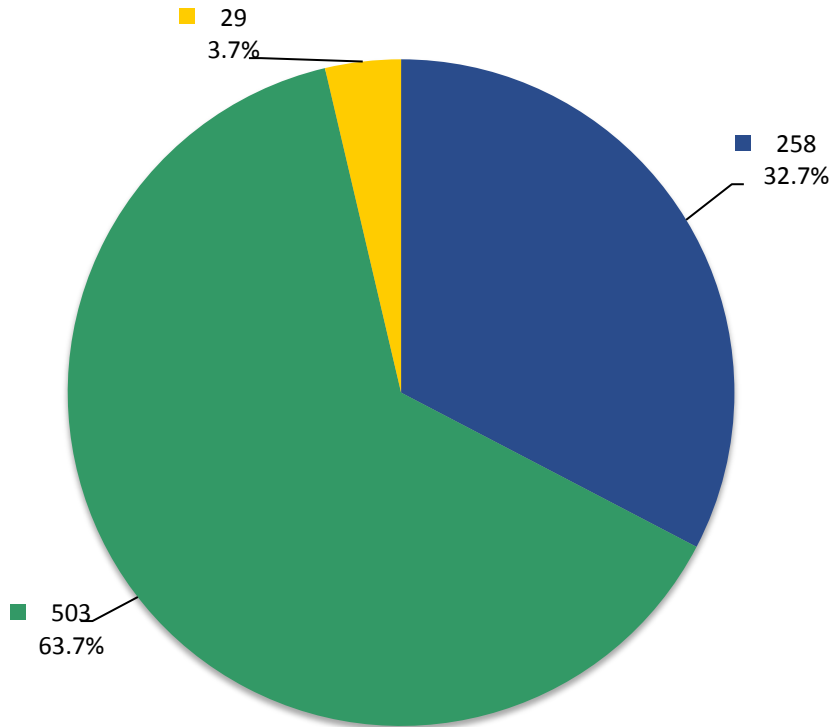
School District 53 Okanagan Similkameen - 2012 Carbon Neutral Action Report

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Action	Status	Steps Taken	Steps Planned	Start Year	End Year
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)
Building construction, renovation					
Establish a policy to reuse materials where possible and divert construction and demolition debris from landfills and incineration facilities	Ongoing/In Progress	Under review.	Under review.	2010	No End Date (Continuous)
Incorporate lifecycle costing into new construction or renovations	Ongoing/In Progress	Under review.	Under review.	2010	No End Date (Continuous)
Commuting to and from home					
Introduce telework/work from home policy	Not Yet Evaluated				No End Date (Continuous)
Provide shower or locker facilities for staff/students who commute by foot or by bicycle	Ongoing/In Progress	Showers located at schools for students and staff.	Showers located at schools for students and staff.	2010	No End Date (Continuous)
Provide secure bicycle storage	Completed (in Previous Year)				No End Date (Continuous)
Procurement (non-paper supplies)					
Incorporate minimum recycled content standards into procurement policy for consumable, non-paper supplies (e.g., writing instruments, binders, toner cartridges, etc.)	In Development	Beginning Development	Beginning Development.	2010	No End Date (Continuous)
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	Ongoing/In Progress	Farm to School and Community Food action committee programs.	Continuation of Farm to School and Healthy meals programs. Purchase food from local organic farmers.	2009	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	Recycle program. Recycle bottles, cardboard, paper.	Continue program.	2009	No End Date (Continuous)
Implement a hazardous waste reduction and disposal strategy	Ongoing/In Progress	Reviewing policy.	Reviewing policy.	2009	No End Date (Continuous)
Water conservation					
Establish a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models	Ongoing/In Progress	Continue changing water fixtures	Replace old equipment with newer equipment that are low flow models	2009	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	Began changing water fixtures. Part of upgrade to schools.	Part of the renovation of the schools.	2009	No End Date (Continuous)
Introduce a stormwater management landscape strategy (e.g., vegetated roofs, permeable paving, rain gardens, bioswales)	Ongoing/In Progress	Reviewing policy	Look at establishing a community garden.	2010	No End Date (Continuous)

**School District 53 - Okanagan Similkameen
Greenhouse Gas Emissions by Source
for the 2012 Calendar Year (tCO₂e*)**



Total Emissions: 791

- 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 10:12 AM)

Total offsets required: **578**. Total offset investment: **\$14,450**. Emissions which do not require offsets: **213** **

*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.