



School District No. 52 (Prince Rupert)

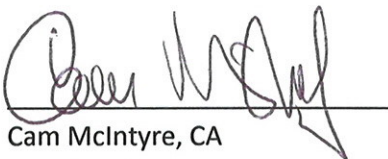
2012 Carbon Neutral Action Report

Executive Summary

School District No. 52 is a district of approximately 2,150 students. In January 2012 the district educated its students in five elementary schools, one middle school, one secondary school, one aboriginal village school and one distributed learning storefront school. The district is supported by a maintenance building, an aboriginal education administration building and a board office. Six trustees at large and one rural trustee represent the communities of School District No. 52. Of its 15 sites, 13 are owned (3 of these are currently closed), 1 is band owned and 1 is leased. The average age of the owned buildings is over 40 years. One school was closed at the end of 2012, with the students moving into a smaller leased space in January 2013.

With funding being scarce and aging facilities, the District looks to carbon neutral projects that deliver savings directly or indirectly by reducing maintenance on its facilities and vehicles. 2012 saw the first full year of operation of new boilers in an elementary school and in the high school. Work continued on a building envelope project at the high school which will result in significantly improved insulation values for the building. The District will look to the future to change culture and to provide leadership to students, staff and the community.

Submitted by:



Cam McIntyre, CA
Secretary-Treasurer

Overviews

2012 Greenhouse Gas Emissions

Tonnes of carbon dioxide equivalent emitted in 2012 and 2011 consisted of:

Source of Emission	2012	2011
Mobile Fuel Combustion	74.24	71.38
Stationary Fuel Combustion	1,036.54	947.78
Purchased Energy	65.17	64.21
Supplies	35.87	34.24
Biomass	2.57	2.46
Total	1,214.39	1,120.07

Offsets Applied to Become Carbon Neutral in 2012

Offsets for 1,191.04 Tonnes of carbon dioxide equivalent were purchased.

Certain bussing services for School District No. 52 are provided by a private contractor. These emissions did not require offsets. Emissions which did not require offsets were 23.35 Tonnes of carbon dioxide.

Actions Taken to Reduce Greenhouse Gas Emissions in 2012

School District No. 52's key actions taken during 2012 toward carbon neutrality were the first full year of operation of boiler upgrades in two schools, continuation of the building envelope project at the high school, and first full year impact of the closure of a school in August 2011. School District No. 52's efforts are aimed at retrofitting aging buildings with higher efficiency equipment and consideration of replacement or closure of buildings. For example the district is working diligently to take advantage of fossil fuel reduction projects like lighting retrofits and HVAC system upgrades, including boilers – particularly where there is sharing of project funding, a reasonable payback period or straight savings to the district. Energy audits of 6 buildings were begun in 2012.

Plans to Continue Reducing Greenhouse Gas Emissions in 2013 – 2015

School District No. 52 closed an older elementary school at the end of 2012, and the students will move into a smaller leased space in January 2013. This will reduce the district's greenhouse gas emissions.

Completion of the building envelope project at the secondary school is expected in 2013. Upon completion, the improved insulation and windows are expected to reduce greenhouse gas emissions for this building.

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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	Steps Taken	Steps Planned	Start Year	End Year
Mobile Fuel Combustion (Fleet and other)					
Behaviour change program					
Introduce anti-idling policy and/or raise anti-idling awareness for fleet drivers (e.g., signs, stickers, messages)	In Development	None.	Review anti-idling policies in other school districts.	2009	No End Date (Continuous)
Other Mobile Fuel Combustion Actions					
Reduce distance/location/frequency of need for staff to drive to various locations.	Ongoing/In Progress	Full year impact of the school closure in August 2011; travel time for maintenance crews and itinerant specialits has been reduced. Assignment of supervision duties during teacher strike tried to minimize travel distances.	Moving Port Edward School into leased premises in January 2013. Major maintenance of the leased premises will be performed by the landlord, resulting in fewer maintenance trips to the facility.	2008	No End Date (Continuous)
Vehicle fuel efficiency					
Replace vehicles with more fuel-efficient models	Ongoing/In Progress	None.	Regular turnover of vehicles. Seeking regular funding for vehicle replacement.	2008	No End Date (Continuous)
Replace larger vehicles with smaller models according to fleet "right-sizing" principles	Ongoing/In Progress	None.	Regular turnover of vehicles. Seeking approval of regular funding for vehicle replacement.	2008	No End Date (Continuous)
Perform regular fleet maintenance to improve fuel-efficiency	Ongoing/In Progress	Continued regular maintenance on all vehicles.	Continued regular maintenance on all vehicles.	2008	No End Date (Continuous)
Stationary Fuel Combustion, Electricity					
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 multi-function devices as part of a print management strategy	Ongoing/In Progress	Encouraged use of network print devices when stand-alone printers needed replacement.	Considering significant reduction in stand-alone devices with renewal of photocopier fleet in 2013.	2008	No End Date (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	Ongoing/In Progress	New computers and appliances purchased are Energy Star models.	Continue to purchase Energy Star computers and appliances.	2008	No End Date (Continuous)
Owned buildings					
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	In Development	Capital Plan submitted for replacement middle school includes a request that the building be certified to LEED Gold.	Repeat request in next capital plan.	2011	2014
Perform energy retrofits on existing, owned buildings	Ongoing/In Progress	Work on the CHSS building envelope project proceeded throughout the year.	Completion of the CHSS building envelope project will result in a significant increase in effective insulation value.	2009	2013
Planning/management					
Reduce office space (square meters) per employee	Ongoing/In Progress	Full year impact of third school closure (August 2011).	January 2013 Port Edward Community School moved into smaller, leased premises. Consolidation of Board offices into one building is being considered.	2008	2014
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle Controls)	In Development	Energy audits of 6 buildings completed.	Move forward with energy metering/energy improvement projects.	2012	2014
Retrofit details for owned buildings					
Upgrade mechanical systems (heating, cooling, ventilation) during	Ongoing/In	First full year impact of new boiler in Roosevelt, and new boiler and	Planned consolidation of Board offices may result in energy	2009	2014

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Action	Status	Steps Taken	Steps Planned	Start Year	End Year
retrofits	Progress	hot water system in CHSS.	upgrades.		
Upgrade lighting systems during retrofits	Ongoing/In Progress	Outdoor lights at CHSS switched to LED during building envelope project.	Energy audits underway on 6 buildings includes a review of lighting.	2009	2014
Upgrade/adjust control systems during retrofits	Ongoing/In Progress	None.	Energy audits underway on 6 buildings includes a review of control systems.	2008	No End Date (Continuous)
Improve building insulation (including windows) during retrofits	Ongoing/In Progress	CHSS insulation upgraded during building envelope project.	Completion of building envelope project at CHSS. Proposed consolidatino of Board offices would include improvements to insulation in the consolidated building.	2009	2014
Supplies (Paper)					
Electronic media in place of paper					
Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Completed (in Previous Year)				No End Date (Continuous)
Use electronic document library for filing common documents	Ongoing/In Progress	Continue use of LaserFiche for specified documents.	Review possible record management systems to allow more documents to be stored electronically.	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					
Train staff to use collaborative software for electronic document editing.	Ongoing/In Progress	Provided Moodle training to more staff.	Provide further Moodle training.	2010	No End Date (Continuous)
Make documents available online in a user friendly format	Ongoing/In Progress	Work underway on a more user-friendly online policy manual.	Begin use of new online policy manual.	2009	No End Date (Continuous)
Printer/document settings					
Switch networked printers and photocopiers to automatic double-sided	Ongoing/In Progress	Default is set to double-sided on new printers, however user can still override.	Consider changing default on more devices to double-sided.	2009	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

Action	Status	Steps Taken	Steps Planned	Start Year	End Year
Business Travel					
Behaviour change program					
Train staff in web-conferencing	Ongoing/In Progress	Continue to train staff as required.	Continue to train staff as required.	2009	No End Date (Continuous)
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress	Continued use of "webinars" and online training. Some meetings are attended through teleconferencing.	Continued use of "webinars" and online training. continue to attend some meetings through teleconferencing.	2008	No End Date (Continuous)
Encourage carpooling to meetings	Completed (in Previous Year)				No End Date (Continuous)
Encourage alternative travel to meetings (e.g., bicycles, public transit, walking)	Ongoing/In Progress	Small size of community allows many staff to walk to work. Participated in "bike to work week."	Continued promotion of walking and biking.	2008	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	All new laptops include web cameras.	Continue to buy new laptops with web cameras.	2009	No End Date (Continuous)
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	In Development	Continue to use various web-based conferencing tools. For example, interviews have been conducted through Skype.	Consider installing designated video-conferencing equipment in proposed consolidated Board offices.	2009	No End Date (Continuous)
Education, Awareness, and Engagement					
Staff Professional Development					
Support green professional development (e.g., workshops, conferences, training)	In Development	None.	Ask teacher professional development committee to consider green courses.	2010	No End Date (Continuous)
Staff awareness/education					
Provide sustainability education during new staff orientation	Ongoing/In Progress	Sustainability education is provided to students as part of the curriculum.	Sustainability education is provided to students as part of the curriculum.	2010	No End Date (Continuous)
Team-building					
Create Green, Sustainability, Energy Conservation, or Climate Action Teams with executive endorsement	Ongoing/In Progress	Raised awareness at all sites through incentives, contests and policy/procedure. Promoted participation in "Lights Out Canada."	Raise awareness at all sites through incentives, contests and policy/procedure. Promote participation in "Lights Out Canada."	2009	No End Date (Continuous)
Providing behaviour change education/training to teams (e.g., community-based social marketing)	Ongoing/In Progress	Raised awareness at all sites through incentives, contests and policy/procedure. Promoted participation in "Earth Day."	Raise awareness at all sites through incentives, contests and policy/procedure. Promote participation in "Sweater Day" and "Earth Day."	2010	No End Date (Continuous)
Other Sustainability Actions					
Building construction, renovation					
Establish a policy to reuse materials where possible and divert construction and demolition debris from landfills and incineration facilities	In Development	Request for LEED Gold for proposed new middle school would incorporate reuse of materials where possible.	Request for LEED Gold for proposed new middle school would incorporate reuse of materials where possible.	2010	No End Date (Continuous)
Incorporate lifecycle costing into new construction or renovations	In Development	Request for LEED Gold for proposed new middle school would incorporate reuse of materials where possible.	Request for LEED Gold for proposed new middle school would incorporate reuse of materials where possible.	2010	No End Date (Continuous)
Commuting to and from home					
Encourage commuting by foot, bicycle, carpool or public transit	Ongoing/In Progress	Small size of community allows many staff to walk to work. Participated in "Bike to Work Week."	Continued promotion of walking and biking.	2008	No End Date (Continuous)
Provide secure bicycle storage	Ongoing/In Progress	Most facilities have bicycle racks.	Continued maintenance of bicycle racks.	2008	No End Date (Continuous)
Other Sustainability Actions					
Reduce and/or replace bottled water with filtered or refrigerated water.	Ongoing/In Progress	Board passed a motion requesting a formal review of the use of bottled water.	Complete review of the use of bottled water.	2008	No End Date (Continuous)

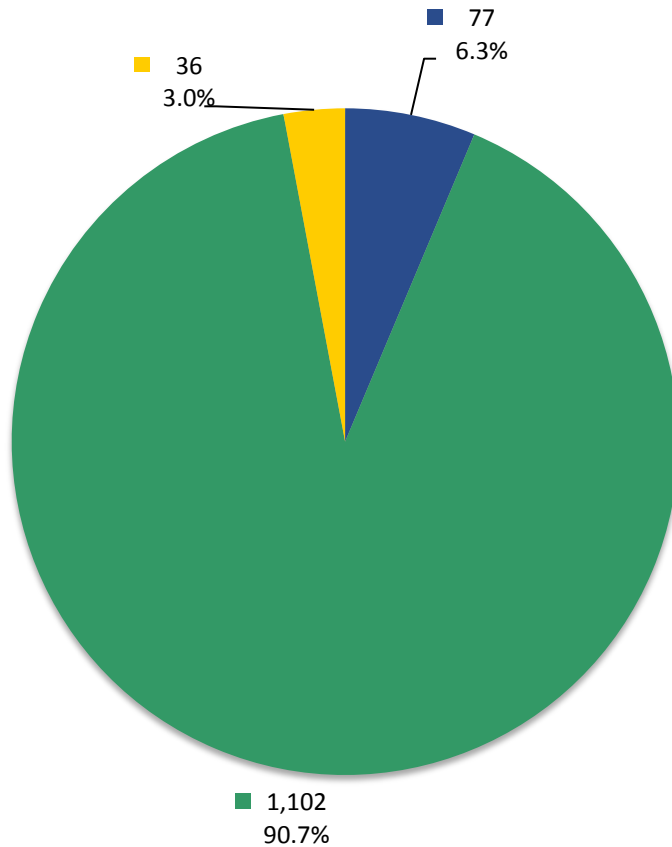
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Action	Status	Steps Taken	Steps Planned	Start Year	End Year
Procurement (non-paper supplies)					
Incorporate minimum recycled content standards into procurement policy for consumable, non-paper supplies (e.g., writing instruments, binders, toner cartridges, etc.)	In Development	Evaluating recycled content options in purchasing.	Implement recycled content options in purchasing.	2011	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.)	Ongoing/In Progress	Old technology is recycled or sold. Used furniture is stored and re-used where possible. Moving away from oil-based gym floor products.	Old technology is recycled or sold. Used furniture is stored and re-used where possible. Moving away from oil-based gym floor products.	2011	No End Date (Continuous)
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	Ongoing/In Progress	Buyer uses green where possible when centrally ordering custodial products.	Buyer uses green where possible when centrally ordering custodial products.	2008	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	Paper, cardboard and drink containers recycled at all facilities.	Paper, cardboard and drink containers recycled at all facilities.	2008	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	Replaced toilets with low flush toilets and replaced faucets with metered faucets as part of regular maintenance.	Replace toilets with low flush toilets and replace faucets with metered faucets as part of regular maintenance.	2008	No End Date (Continuous)

**School District 52 - Prince Rupert
Greenhouse Gas Emissions by Source
for the 2012 Calendar Year (tCO₂e*)**



Total Emissions: 1,214

- 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: **1,191**. Total offset investment: **\$29,775**. Emissions which do not require offsets: **23** **

*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.