



The Board of Education of School District #28 Quesnel

2012 Carbon Neutral Action Report

Executive Summary

The Climate Action Committee did not meet in 2012, due to job action and limited availability of funding to invest in carbon neutral projects. The Board did implement plastics, cardboard, tin and glass recycling at each site. This change however did not impact our greenhouse gas emissions, but was an environmentally responsible decision for the future of our students.

2012 Greenhouse Gas Emissions

By Source:

- | | |
|---|---------------|
| • Stationary Fuel Combustion and Electricity (Buildings) | 1,537 (62.7%) |
| • Mobile Fuel Combustion (Fleet and other mobile equipment) | 862 (35.2%) |
| • Supplies (Paper) | 53 (2.2%) |

Offsets Applied to Become Carbon Neutral in 2012

In order to become carbon neutral for 2012 the Board of Education purchased at total of 1,727 offsets for a total offset Investment of \$43,175.

As required by section 5 of the Carbon Neutral Government Regulations, 726 tonnes CO₂e of emissions resulting from the operation of school buses were reported as part of our greenhouse gas emissions profile in 2012.

However, they were not offset as they are out-of-scope under section 4(2) (c) of the Carbon Neutral Government Regulation.

Actions Taken to Reduce Greenhouse Gas Emissions in 2011

- ◆ The Board of Education introduced Policy #702 – Environmental Sustainability. This policy recognizes the importance of the environment in building a health and sustainable future. The Board is committed to environmental sustainability and acknowledges the influence that the district has on student and employee behaviours, district operations, the supply chain and greater community.
- ◆ Replaced the antiquated HVAC system at Correlieu Secondary School with a new energy efficient system that included a solar wall panel. This is the first solar panel the district has installed and it includes a web-based software component that will allow teachers and students to integrate this technology into the classroom. The teaching component will not be in operation until 2012.
- ◆ The district implemented a “Green Tips” section in our weekly newsletter. The section is dedicated to providing simple advice that contributes to environmental sustainability.
- ◆ The district created and installed a “water filling station” at Correlieu Secondary School for students to fill reusable water bottles, thereby reducing the use of purchased plastic water bottles.

Operational Changes in 2011

Plans to Continue Reducing Greenhouse Gas Emissions 2012 – 2014

The Board of Education plans to:

1. Launch efforts to reduce hydro usage in facilities by focusing on reducing usage of hydro and natural gas. We will use benchmark information from previous years to establish targets and develop a participative sharing of savings methodology to encourage involvement.
2. Continuing purchasing Energy Star appliances and computers when replacing units.
3. Continue to remove stand-alone printers, copiers, and/or fax machines and install multi-functional devices.

Operational Changes in 2011 (cont'd)

Plans to Continue Reducing Greenhouse Gas Emissions 2012 – 2014

The Board of Education plans to: (cont'd)

4. Work with all locations to determine current efforts towards carbon neutrality.

Further, it is expected that the Climate Action Committee will submit to The Board of Education a set of focused recommendations and those recommendations will begin to be implemented in the above timeframe.

Respectfully submitted,



Sue-Ellen Miller, Superintendent



Teri Stoneman, 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	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	Completed (in Previous Year)				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	When projects involve many trade disciplines or more than single manpower, staff will carpool to the project worksite.	Continue to carpool to job sites when feasible for project work.	2008	No End Date (Continuous)
Promote alternatives to fleet vehicle travel where possible (e.g., bicycles, public transit, walking)	Not Yet Evaluated				No End Date (Continuous)
Vehicle fuel efficiency					
Replace vehicles with more fuel-efficient models	Ongoing/in Progress	None	Future replacements are expected to be fuel-efficient.	2008	No End Date (Continuous)
Replace larger vehicles with smaller models according to fleet "right-sizing" principles	Ongoing/in Progress	None	Sell excess vehicles in fleet as organization "right-sizes" staffing complement.	2008	No End Date (Continuous)
Perform regular fleet maintenance to improve fuel-efficiency	Ongoing/in Progress	Fleet vehicles are serviced regularly at every 5,000 kilometres	Continue with our preventative regular fleet services of vehicles	2008	No End Date (Continuous)
Stationary Fuel Combustion, Electricity					
Behaviour change program					
Help staff reduce personal energy use through ""workstation tune-ups""	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 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	Not Yet Evaluated				No End Date (Continuous)
Encourage staff to use air dry setting on dishwashers	In Development	In our staff newsletter, we encouraged all staff to use the air dry setting on dishwashers in their school, as well as, at home.	Continue to remind staff of the importance of utilizing this feature on dishwashers.	2011	No End Date (Continuous)
Provide tips to staff on saving energy in the office while working outside of regular business hours	Completed (in Previous Year)				No End Date (Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Completed (in Previous Year)				No End Date (Continuous)
Promote hot water conservation	Not Yet Evaluated				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	Ongoing/in Progress	None.	Continue to virtualize where feasible.	2008	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	As printers fail, moved paper traffic to multi-functional devices where reasonable and practicable.	Continue to remove standalone printers where feasible.	2008	No End Date (Continuous)
Apply auto-sleep settings on printers, fax machines, and/or multi-	Ongoing/in	As printers/fax machines and/or multi-function devices were	Continue to set auto-sleep settings, where possible.	2008	No End Date (Continuous)

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function devices	Progress	upgraded or serviced, the auto-sleep setting was applied.			(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	Monitor trends utilizing the database with 3 year average usage information.	Develop targets to reduce energy consumption.	2010	No End Date (Continuous)
Register for performance labelling/certification for operations and maintenance of owned buildings (e.g. LEED EB.O&M)	Ongoing/In Progress	None	Ongoing replacement when retrofitting building space	2008	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)
Perform energy retrofits on existing, owned buildings	Ongoing/In Progress	None	We will continue to complete energy retrofits as funding becomes available. Projects selected include Correllieu Secondary, Maintenance Shop, Barlow Creek Elementary, Dragon Lake Elementary, Red Bluff Elementary and Voyageur Elementary. These facilities will all receive lighting upgrades to reduce energy usage.	2008	No End Date (Continuous)
Incorporate a refrigerant management strategy into regular building management/maintenance to reduce fugitive emissions	Ongoing/In Progress	None	We will continue to incorporate a refrigerant management strategy into regular building management/maintenance to reduce fugitive emissions.	2009	No End Date (Continuous)
Planning/management					
Reduce office space (square meters) per employee	Not Yet Evaluated				No End Date (Continuous)
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle Controls)	Ongoing/In Progress	None	We will consider replacing one additional system as dollars permit	2008	No End Date (Continuous)
Retrofit details for owned buildings					
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	None	We will continue to request Capital funding to upgrade Maple Drive Junior School and Correllieu Senior Secondary School.	2008	No End Date (Continuous)
Upgrade lighting systems during retrofits	Ongoing/In Progress	None	Install LED lights in Dragon Lake, Riverview, Barlow Creek and Voyageur Elementary Schools, as well as, Correllieu Senior Secondary and the Maintenance Shop.	2008	2013
Upgrade/adjust control systems during retrofits	Ongoing/In Progress	None.	Continue as funding allows.	2008	No End Date (Continuous)
Improve building insulation (including windows) during retrofits	Ongoing/In Progress	Roofing insulation upgraded as roofing replacement occurs throughout the District.	Continue to upgrade insulation as roofing replacement occurs.	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	Staff are trained in the use of shared folders, Board of Education uses paperless meetings for In-camera, Public, Finance, Human Resources, Education and District Health and Safety meetings.	Make shared folders available in new network.	2008	No End Date (Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress	Increased the numbers of Smartboards and Projectors that are available in schools and departments.	Continued use of projectors for meetings.	2008	No End Date (Continuous)
Electronic media in place of paper					
Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	Continue the use of Groupwise, web site and mailing lists.	Continue to encourage users to move away from paper.	2009	2014
Use electronic document library for filing common documents	Ongoing/In Progress	We are using file servers and web site for this purpose.	Continue to encourage users to use electronic documents.	2009	2014

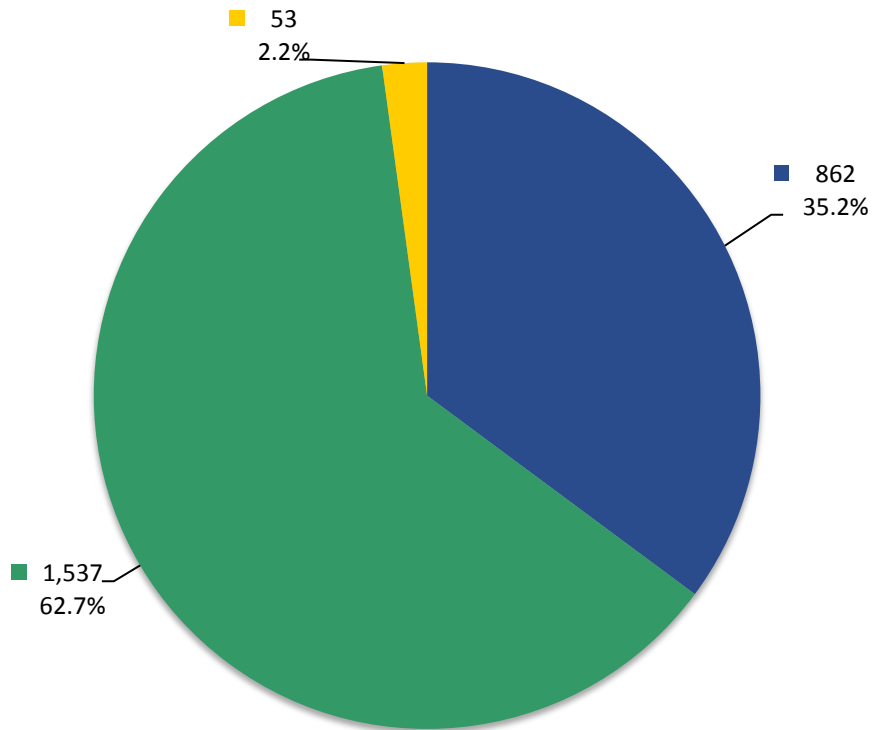
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Action	Status	Steps Taken	Steps Planned	Start Year	End Year
Switch to an electronic payroll notification system in place of paper pay stubs	Completed (In Previous Year)				No End Date (Continuous)
Paper Type					
Purchase 30% post-consumer recycled paper	Ongoing/In Progress	We continued our practice of purchasing truckloads of 30% recycled content standard letter size paper.	Continue to purchase truckloads of 30% recycled content letter sized paper and explore expanding to incorporate legal size paper.	2010	No End Date (Continuous)
Purchase 40% post-consumer recycled paper	In Development	None.	We will look for additional suppliers of 40% recycled content paper.	2011	No End Date (Continuous)
Purchase 100% post-consumer recycled paper	Not Yet Evaluated				No End Date (Continuous)
Printer/document settings					
Switch networked printers and photocopiers to automatic double-sided	Ongoing/In Progress	Purchased only duplexing printers and set all to default to double sided printing.	Continue to purchase only duplexing printers.	2009	2013

**School District 28 - Quesnel School
Greenhouse Gas Emissions by Source
for the 2012 Calendar Year (tCO₂e*)**



Total Emissions: 2,453

- 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 28, 2013 3:39 PM)

Total offsets required: **1,727**. Total offset investment: **\$43,175**. Emissions which do not require offsets: **726** **

*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.