

SCHOOL DISTRICT 60 (Qualicum)
2012 Carbon Neutral Action Report

Executive Summary:

With a new board in place, the district has embarked on a renewal of the Board's strategic plan in 2012/13. While currently in process, it is clear that the district continues to be committed to the priorities established in 2007/08:

- A coherent approach to planning and learning that engages all members of the school district community and enables us to act upon our shared responsibility for environmental sustainability.
- Consider projects and initiatives addressing energy conservation, greenhouse gas reduction and climate change for our facilities.

Energy conservation continues to be a goal for the district. Our Operations and Maintenance department has completed several projects that have implemented controls for heat and lights, retrofits for lighting and replacing plumbing fixtures with low flow units. These are all part of day to day operations. In addition the district looks to reduce its carbon footprint through conversion to propane busses and reduction of energy usage in unused space.

2012 Greenhouse Gas Emissions:

Total emissions for the calendar year 2012 were 2,669 tCO₂e, of which 772 tCO₂e were exempt leaving 1,897 tCO₂e for offsets.

Offsets Applied to Become Carbon Neutral in 2012:

The District paid \$43,212.75 for the purchase of carbon offsets in 2012. The District maintains a bus fleet for which offsets were not purchased. As required by section 5 of the Carbon Neutral Government Regulation, 772 tCO₂e of emissions resulting from the operation of school buses were reported as part of our greenhouse gas emissions for 2012. However, they were not offset as they are out of scope under section 4(2)(c) of the Carbon Neutral Government Regulation.

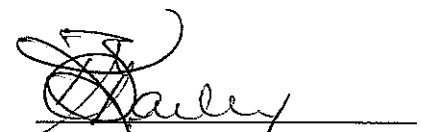
Total offsets in 2012 were 1,897 tCO₂e.

Emission Reduction Activities:

Aside from maintenance and ongoing work on existing projects, 2012 saw the completion of a LEED gold standard shared facility. This facility houses staff from the district as well as Vancouver Island Health Authority and Ministry of Child and Family Development. This demonstrates not only a commitment to carbon neutrality in our construction, but the effective use of space through shared facilities, reducing the energy usage of common areas such as reception, restroom facilities and meeting spaces.

As the board concludes renewal of its strategic plan it looks to projects, particularly in AFG, which will have ongoing impact in the reduction of energy consumption. As well, it looks to limiting the use of energy through shutting down unused spaces.

Finally, the board has been approved for a solar project at one site which is currently fully dependent on a fuel generator. This project is in the planning stages and will see further development in 2013.


Erica Bailey, Secretary-Treasurer

School District 69 Qualicum - 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	SmartFleet booklets available to staff	Recommended as professional development option	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	Reduced warm up time in the morning for busses, thereby reducing idling.	Continue with the reduce warm up time as introduced in 2012.	2012	2012
Encourage carpooling in fleet vehicles	Ongoing/In Progress	In 2012 two maintenance vehicles were taken off the road and only one replaced, thereby resulting in more car-pooling being required.	Continue sharing vehicles for travel to same sites.	2010	No End Date (Continuous)
Promote alternatives to fleet vehicle travel where possible (e.g., bicycles, public transit, walking)	Ongoing/In Progress	Where appropriate, employees are encouraged to use their personal vehicles and are recompensed through mileage claims. This results in smaller, more fuel efficient vehicles being used where maintenance vans are not necessary.	Continue evaluating where it is appropriate for personal vehicles to be used.	2012	No End Date (Continuous)
Vehicle fuel efficiency					
Replace vehicles with more fuel-efficient models	Ongoing/In Progress	Program is to replace existing buses with propane fueled busses. One Handi Bus was replaced in 2012.	In early 2013 we ordered replacement busses for the 2013-14 school year. This included a propane fueled bus.	2008	No End Date (Continuous)
Replace larger vehicles with smaller models according to fleet "right-sizing" principles	Ongoing/In Progress	Program is to replace existing buses with smaller units. No busses were purchased in 2012.	In 2013 2 of 4 busses purchased will result in a reduction to Class C busses.	2009	No End Date (Continuous)
Perform regular fleet maintenance to improve fuel-efficiency	Ongoing/In Progress	B service at 5,000 km., A service at 10,000 km, change oil and filters on all transmissions at 40,000 km., oil sent to be tested to estimate wear.	Continue maintenance program	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	Ongoing/In Progress	reminders at staff meetings	Continue Education	2008	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	Not Yet Evaluated				No End Date (Continuous)
Provide tips to staff on saving energy in the office while working outside of regular business hours	In Development	Discussions have ensued on how to balance energy conservation with accessibility to work after hours.	Continue discussions and develop plans to allow for better energy conservation.	2012	No End Date (Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress	Reminders at staff meetings. As well, lights automatically are turned off after office hours.	Continue education	2008	No End Date (Continuous)
Promote hot water conservation	Ongoing/In Progress	Continue to remind staff to conserve energy. In previous year, new fixtures provided for hot water conservation. Hot water usage is not a significant part of operations.	continue education	2008	No End Date (Continuous)
IT power management					
Install power management software which shuts down computers outside of regular business hours	Completed (in Reporting Year)	Installed power management software which shuts down computers outside of regular business hours, and after so many minutes of lack of use.		2010	2012
Implement server virtualization	Ongoing/In Progress	The district is in Year 2 of a server virtualization program.	Conclude server virtualization.	2010	2013
Apply auto-sleep settings on computer monitors and CPUs	Completed (in Reporting Year)	Computers have auto-sleep settings installed.		2010	2012

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Action	Status	Steps Taken	Steps Planned	Start Year	End Year
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices as part of a print management strategy	In Development	Plan to remove stand alone devices to reduce number of units has been updated. The revised plan is being recommended for the 2013-14 budget year.	To fit in the copier/printer consolidation plan during the 2013-14 budget.	2012	2013
Apply auto-sleep settings on printers, fax machines, and/or multi-function devices	In Development	no progress was made in 2012 on this initiative	To be reviewed and developed.	2011	No End Date (Continuous)
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	Continued practise of replacing older units with ENERGY STAR rated units	Continue with development. Funds have been proposed during the 2013-14 year to assist in the replacement of units with higher efficiency units.	2010	No End Date (Continuous)
Leased buildings					
Establish energy performance baseline for leased buildings	Not Yet Evaluated				No End Date (Continuous)
Lease space with operations and maintenance performance labelling/certification (e.g., LEED EB:O&M)	Not Yet Evaluated				No End Date (Continuous)
Lease space with commercial interiors performance labelling/certification (e.g., LEED CI)	Not Yet Evaluated				No End Date (Continuous)
Lease space in buildings with new construction performance labelling/certification (e.g., LEED NC)	Not Yet Evaluated				No End Date (Continuous)
Develop a green lease policy that requires green features to conserve energy be included in all lease negotiations	Not Yet Evaluated				No End Date (Continuous)
Owned buildings					
Establish energy performance baseline for owned buildings	Ongoing/In Progress	Working with BC Hydro to establish baseline data	Plan to conclude work in 2013.	2011	2013
Register for performance labelling/certification for operations and maintenance of owned buildings (e.g., LEED EB:O&M)	In Development	Upon completion of construction of a LEEDS gold facility, we are commencing operations and maintenance of the facility.	continue	2012	No End Date (Continuous)
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	Completed (in Reporting Year)	Obtained substantial completion on a multi-agency facility to LEEDS gold standard.		2011	2012
Perform energy retrofits on existing, owned buildings	Ongoing/In Progress	Continued planning for a solar energy project at one facility. Installation is planned for 2013. Continue retrofit plans of existing buildings as detailed below.	ongoing implementation	2011	2013
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)	Not Yet Evaluated				No End Date (Continuous)
Retrofit details for owned buildings					
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	Obtained funding for solar project at one facility and concluded planning.	Solar installation to occur in 2013.	2011	2013
Upgrade lighting systems during retrofits	Completed (in Reporting Year)	Completed all interior lighting upgrades in 2012.		2008	2012
Upgrade/adjust control systems during retrofits	Ongoing/In Progress	Continuing to upgrade and/or adjust control systems as retrofits are completed on facilities. In 2012 we completed an additional 10% of our control systems.	ongoing implementation	2008	No End Date (Continuous)
Improve building insulation (including windows) during retrofits	Not Yet Evaluated				No End Date (Continuous)
Supplies (Paper)					

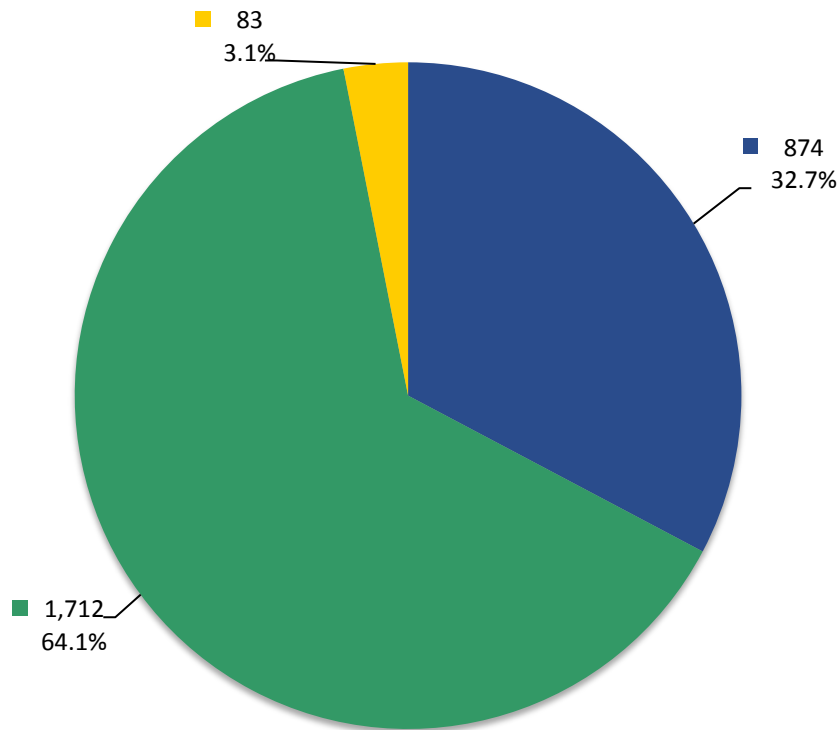
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Action	Status	Steps Taken	Steps Planned	Start Year	End Year
Behaviour change program					
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Completed (in Reporting Year)	Most staff have received training. We are now in the maintenance, train new staff as they come on board phase.		2009	2012
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	In Development	Staff continue to do this on an adhoc basis. More board documentation is being made available electronically on the website as opposed to handing out information.	Continue to look for reasonable opportunities to go paperless.	2010	No End Date (Continuous)
Electronic media in place of paper					
Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	In Development	Sharepoint installed, implementation continues providing for increased use of Sharepoint.	Conclusion of the plan in 2013.	2008	2013
Use electronic document library for filing common documents	In Development	Continuing to encourage staff to use electronic documents, scanning features of copiers, etc. Progress is on hold given age of current copier machines. Implementation of the photocopier/printer consolidation plan would allow for greater use of electronic documents.	Reintroduce the copier/printer consolidation plan which would allow for upgrading equipment leading to increased availability of electronic documents.	2010	2014
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	Promote use of recycled paper - 9% of paper usage is 30% recycled.	continue to promote use of recycled paper	2010	No End Date (Continuous)
Purchase 40% post-consumer recycled paper	Ongoing/In Progress	Continue to promote the use of recycled paper. About 1% of paper is 40% recycled.	Continue to promote the use of recycled paper	2010	No End Date (Continuous)
Purchase 100% post-consumer recycled paper	Ongoing/In Progress	Continue to promote the use of recycled paper - 90% of paper is 100% recycled	Continue to promote use of recycled paper	2010	No End Date (Continuous)
Printer/document settings					
Switch networked printers and photocopiers to automatic double-sided	In Development	Study completed, however not yet implemented due to budget constraints which don't allow for the upgrading of photocopiers with this feature.	Bring forward proposal during 2013-14 budget deliberations.	2011	2014

**School District 69 - Qualicum
Greenhouse Gas Emissions by Source
for the 2012 Calendar Year (tCO₂e*)**



Total Emissions: 2,669

- 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 12:04 PM)

Total offsets required: **1,897**. Total offset investment: **\$47,425**. Emissions which do not require offsets: **772** **

*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.