



SCHOOL DISTRICT 69 (Qualicum)
2011 Carbon Neutral Action Report

Executive Summary:

In 2007/08, the Board engaged on an appreciative inquiry process to develop the Board's vision, mission statement and strategic plan. The process involved members from both within and outside of our education community. One of the key priorities, one that was strongly promoted by our students, was environmental sustainability. In support of that priority, the Board has committed to

- 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 has been a goal for the district for many years. Our operations and maintenance department has made that a priority in implementing controls for heat and light, retrofits for lighting, replacing plumbing fixtures with low flow units. Such actions are imbedded in the day to day operation of our District.

2010 Greenhouse Gas Emissions:

Total emissions for the calendar year 2011 were 2,520 CO₂e.

Offsets Applied to Become Carbon Neutral in 2011:

The District has paid \$46,568.47 for the purchase of carbon offsets in 2011. The District maintains a bus fleet for which offsets were not purchased. As required by section 5 of the Carbon Neutral Government Regulation, 617.64 tonnes CO₂e of emissions resulting from the operation of school buses were reported as part of our greenhouse gas emissions for 2010. 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 2011 were 1,897 tonnes.

Changes to Greenhouse Gas Emissions & Offsets Reporting from Previous Years:

It should be noted that in 2010, the School District overpaid for 1 tonne of emissions.

Emissions Reduction Activities:

The year 2011 was mainly a year for maintenance. We continued to replace existing units with more environmentally responsible units. This includes lighting replacement, plumbing replacement with low flow units, purchase of propane fuelled buses and vehicles as opposed to diesel, exploration of use of solar for heating and power.

The plan had been to focus on behavior change in 2011. However, staff changes and job action had interfered with our ability to fully engage staff in the process and we hope to see better progress in 2012.

Jim Ansell, Superintendent

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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 (as of 12/31/11)	Performance to Date (as of 12/31/11)	Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Mobile Fuel Combustion (Fleet and other mobile equipment)						
Vehicle fuel efficiency						
Replace vehicles with more fuel-efficient models	Ongoing/In Progress	11 % of vehicles are fuel- efficient models	Program is to replace existing buses with propane-filled buses. No purchases made this year.	Continue replacement policy	2005	No End Date (Continuous)
Replace larger vehicles with smaller models according to fleet "right-sizing" principles	Ongoing/In Progress	0 % of vehicles down-sized since start year indicated	Program is to replace existing buses with smaller units. No purchases made this year.	Continue replacement policy	2009	No End Date (Continuous)
Perform regular fleet maintenance specifically to improve fuel-efficiency	Ongoing/In Progress	100 % of vehicles are subject to regular maintenance for fuel efficiency	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	Started before 1995	No End Date (Continuous)
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)
Encourage carpooling in fleet vehicles	Ongoing/In Progress		Co-ordination of custodial crew for single vehicle use	Continue sharing	2010	No End Date (Continuous)
Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)						
Owned buildings						
Establish energy performance baseline for owned buildings	Ongoing/In Progress		Commenced working with BC Hydro to establish baseline	Continuing	2011	2013
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	Ongoing/In Progress		Currently constructing multi-agency facility to LEEDS gold	Completion of facility	2011	2012
Retrofitting owned buildings						
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress		Solar project planned for 2011 has been delayed	Continue with project	2011	2013
Upgrade lighting systems during retrofits	Ongoing/In Progress	25 % of retrofits since start year indicated had lighting systems upgrades	Continuing practice	ongoing implementation	2008	No End Date (Continuous)
Upgrade/adjust control systems during retrofits	In Development	10 % of retrofits since start year indicated had control system upgrades or adjustments	Continuing practice	ongoing implementation	2007	No End Date (Continuous)
IT power management						
Install power management software which shuts down computers outside of regular business hours	In Development			implentation for all computer to shut down outside of regular business hours	2010	No End Date (Continuous)
Implement server virtualization	In Development			Review of needs	2010	No End Date (Continuous)

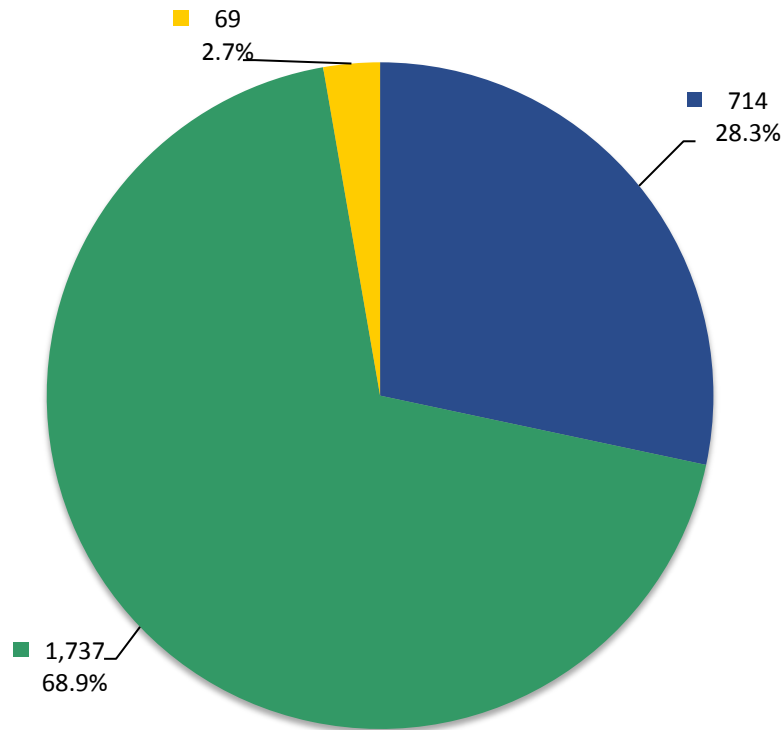
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Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Apply auto-sleep settings on computer monitors and CPUs	Ongoing/In Progress	90	% of computers have auto-sleep settings applied	Ongoing implementation	Continue with project	2010	No End Date (Continuous)
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	In Development			Engaged consultant for analysis of use in District	Implement as budget allows	2012	No End Date (Continuous)
Apply auto-sleep settings on printers, copiers, fax machines, and/or multi-function devices	In Development				to be reviewed and developed	2011	No End Date (Continuous)
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	60	% of computers are ENERGY STAR rated	Ongoing practise	Continue with replacement	2010	No End Date (Continuous)
Appliances and electronic devices							
Replace refrigerators with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress			to continue to replace all with energy star compliant	to continue implementation	2009	No End Date (Continuous)
Replace other appliances or electronic devices with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress			to continue to replace all with energy star compliant	to continue implementation	2011	No End Date (Continuous)
Replace desk lamp incandescent bulbs with compact fluorescent (CFL) bulbs or source more efficient desk lamps for future purchases	Ongoing/In Progress			to continue to replace with CFL	to continue implementation	2009	No End Date (Continuous)
Behaviour change program							
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)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress			reminders at staff meetings	Continue education	2004	No End Date (Continuous)
Promote hot water conservation	Ongoing/In Progress			installation of new fixtures / and remind staff to conserve	Continue education	2004	No End Date (Continuous)
Supplies (Paper)							
Paper Type							
Purchase 30% post-consumer recycled paper	Ongoing/In Progress	9	% of total paper purchased contains 30% recycled content	Promote use of recycled paper	Continue to promote use of recycled paper	2010	No End Date (Continuous)
Purchase 40% post-consumer recycled paper	Ongoing/In Progress	1	% of total paper purchased contains 40% recycled content	Promote use of recycled paper	Continue to promote use of recycled paper	2010	No End Date (Continuous)
Purchase 100% post-consumer recycled paper	Ongoing/In Progress	90	% of total paper purchased contains 100% recycled content	Promote use of recycled paper	Continue to promote use of recycled paper	2010	No End Date (Continuous)
Printer/document settings							
Switch networked printers and photocopiers to automatic double-sided	Ongoing/In Progress	20	% of network printers or photocopiers are set to automatic double-sided	Print study completed but unable to implement due to budgets	Plan funding for print study goals	2012	2014

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Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Apply "print and hold" settings to networked printers to eliminate unclaimed print jobs	In Development	10	% of network printers have 'print and hold' settings applied	Print study completed but unable to implement due to budgets. Plan is to replace copiers with multi-function devices	Plan funding for print study goals; staff training	2010	No End Date (Continuous)
Reduce default margin size in standard document templates (e.g., letters, briefing notes, forms, etc.)	Ongoing/In Progress	40	% of computers with Office 2007	Installed as funds available	Continue to install	2009	2013
Electronic media in place of paper							
Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress			Sharepoint installed	Updates planned	2007	2013
Use electronic document library for filing common documents	Ongoing/In Progress			some forms and internal documents available only on Sharepoint	Continue to use Sharepoint	2008	No End Date (Continuous)
Post materials online that were previously printed	Ongoing/In Progress			Greater use of district portal, website and Sharepoint for communication	Continue to expand use of electronic distribution of information	2009	No End Date (Continuous)
Switch to an electronic payroll notification system in place of paper pay stubs	Completed in 2011			All payslips now delivered electronically		2011	2011
Behaviour change program							
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	80	% of staff currently have received collaborative software training	Training	Continue training	2009	2012
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	In Development			Use is on an ad hoc basis	Evaluate feasibility of implementing paperless meetings	2010	2013
Encourage re-use of scrap paper	Ongoing/In Progress			Scrap paper readily available in copier room	Continue	2008	No End Date (Continuous)

**School District 69 - Qualicum
Greenhouse Gas Emissions by Source
for the 2011 Calendar Year (tCO₂e*)**



Total Emissions: 2,520

- 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 2011 (Generated May 18, 2012 12:29 PM)

Total offsets required: **1,897**. Total offset investment: **\$47,425**. Emissions which do not require offsets: **623** **

*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.