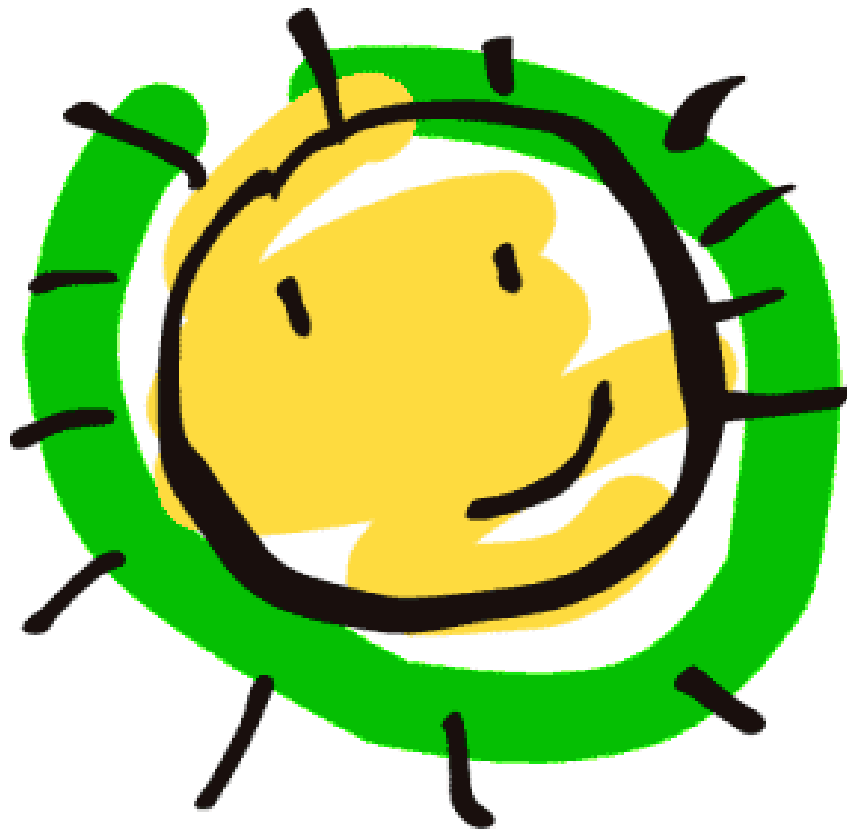


# CARBON NEUTRAL ACTION REPORT



**We care about ourselves, each other  
and  
this place**



# Table of Contents

Executive Summary .....	Pg. 3
Greenhouse Gas Emissions .....	Pg. 4
Offsets Applied to Become Carbon Neutral .....	Pg. 5
Changes to Greenhouse Gas Emissions and Offsets .....	Pg. 5
Emissions Reduction Activities .....	Pg. 6

# Executive Summary

On behalf of the Board of Education No. 61 (Greater Victoria) I am pleased to submit our Carbon Neutral Action Plan for 2012. This year's report, again demonstrates our District's ongoing commitment to the reduction of our greenhouse gas emissions. Our Board continues to work diligently, as we have for many years now, to improve the learning environment for students and staff by demonstrating leadership in the reduction of our carbon footprint.

The integration of environmentally sustainable considerations in all of our business decisions is guided by our Board approved Environmental Change Policy.

Energy savings and green house gas emission reductions continue to be a priority in our ongoing commitment towards carbon neutrality. With a focus on building improvements, through the installation of high efficiency condensing boilers, heating control upgrades, window replacement projects and ongoing waste reduction initiatives, we continue to demonstrate to students, staff and community the importance of environmental sustainability.

As part of our 2012 energy savings program we have replaced five more of our older inefficient heating systems. New heating controls, HVAC upgrades and window replacement projects were also carried out at a number of schools.

Next year, we plan to continue our energy savings plan with further boiler replacement and heating control projects. We have applied for additional funding, under the Ministry's new Carbon Neutral Capital Plan and will incorporate boiler replacement, heating controls and energy efficient windows into the seismic upgrade of an elementary school that is scheduled to start this summer. Work will also begin this summer on our new LEED Gold high school replacement project. These projects will provide opportunities to modernize our schools and further reduce our carbon footprint for 2013 and the future.

Our District, continues to, receive tremendous support from students, staff and parents for initiatives that embrace and model sustainability, social responsibility and reductions to our carbon footprint. With over 70% of our schools now on a full recycling program we are extremely proud of our achievements to date and look forward to further success in this area. Their passion for change and enthusiasm in reducing our impact on the environment is an inspiration to us all.

This 2012 report includes an adjustment for 22 additional tonnes not captured in the 2011 reporting period.

For the 2012 reporting period the total emissions is 6387 + 22 for a total offset investment of \$159,050.

Through these on-going initiatives we are again pleased to report that our greenhouse gas emissions have been reduced by an additional 9% over last year's totals.

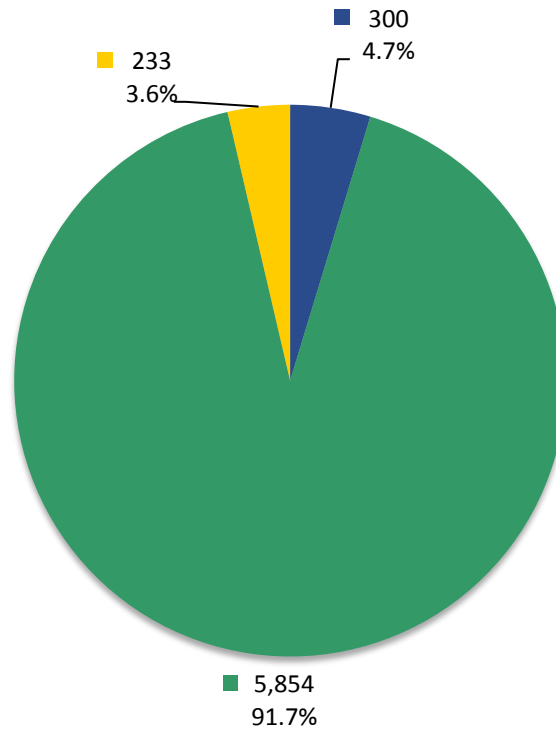
The Board of Education No. 61 (Greater Victoria) clearly recognizes its role as a leader in environmental stewardship and will continue to support initiatives that will reduce energy consumption and reduce our impact on the environment.

*Sherri Bell*

Sherri Bell  
Deputy Superintendent

# Greenhouse Gas Emissions

## School District 61 - Greater Victoria Greenhouse Gas Emissions by Source for the 2012 Calendar Year (tCO<sub>2</sub>e\*)



**Total Emissions: 6,387**

- 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 March 21, 2013 11:49 AM)

Total offsets required: **6,362**. Total offset investment: **\$159,050**. Emissions which do not require offsets:

\*Tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e) 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

# Offsets Applied to Become Carbon Neutral in 2012

Greater Victoria School District #61 offsets applied to become Carbon Neutral in 2012

Total offsets required: 6387 + 22 tonnes not captured in the 2011 reporting year

Total offset investment: **\$149,946.89 for 2012 plus \$550 from 2011 for a total of \$150,496.89**

Emissions which do not required offsets: 25

*\*\*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.*

## Changes to Greenhouse Gas Emissions and Offsets Reporting from Previous Years

Year	Totals	Emissions	Offsets Purchased
2010	6082	6096	\$152,050
2011	6950	6974	\$173,750
2012	6362 + 22	6387	\$159,050

# Emissions Reduction Activities

## Actions Taken to Reduce Greenhouse Gas Emissions in 2012

- ❖ Installation of 179 new Energy Star windows at Lansdowne Middle School
- ❖ Installation of high efficiency boilers at Doncaster Elementary, James Bay Elementary, McKenzie Elementary and Tolmie Administrative Building
- ❖ Installation of a HVAC upgrade at Cloverdale Traditional School
- ❖ Ongoing support for behavioural change program through staff and student education
- ❖ All Recycling is measured within the School District: 74% of the schools participate in full recycling program, 18% of the schools participate in partial recycling program

## Plans to Continue Reducing Greenhouse Gas Emissions 2013-2015

Continued commitment to energy savings through the upgrading and replacement of heating plants, heating control systems, window replacement and student and staff awareness and education training.

As a public sector organization our ability to continue to reduce greenhouse gas emissions is dependent of government funding. Our Board remains committed to support energy saving initiatives through Ministry of Education funding received for major capital improvements (5 year Capital Plan) and the Ministry of Education's Annual Facilities Grant (AFG) and the newly introduced Carbon Neutral Capital Plan (CNCP).

- The Greater Victoria School District No. 61 has a link for Green Initiatives on the School District Website: <http://www.sd61.bc.ca/green/default.aspx>

## School District 61 Greater Victoria - 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
<b>Mobile Fuel Combustion (Fleet and other)</b>					
<b>Behaviour change program</b>					
Provide fleet driver training to reduce fuel use	Ongoing/In Progress	Awareness Training.	Continuation of program.	2009	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	Awareness updates and notifications.	Ongoing awareness updates/training.	2009	No End Date (Continuous)
Encourage carpooling in fleet vehicles	Ongoing/In Progress	Staff encouraged to "buddy up".	Ongoing awareness updates/training.	2009	No End Date (Continuous)
Promote alternatives to fleet vehicle travel where possible (e.g., bicycles, public transit, walking)	Ongoing/In Progress	Staff frequently carpool and awareness updates.	Provide support where possible for staff wishing to explore alternatives.	2009	No End Date (Continuous)
<b>Vehicle fuel efficiency</b>					
Replace vehicles with more fuel-efficient models	Ongoing/In Progress	No new vehicles.	Will upgrade with more efficient vehicles as funding permits.	2009	No End Date (Continuous)
Replace larger vehicles with smaller models according to fleet "right-sizing" principles	Ongoing/In Progress	No new vehicles.	Will upgrade with more efficient vehicles as funding permits.	2009	No End Date (Continuous)
Perform regular fleet maintenance to improve fuel-efficiency	Ongoing/In Progress	Regular routine maintenance carried out on all District owned vehicles.	Continuation of regular maintenance.	2008	No End Date (Continuous)
<b>Stationary Fuel Combustion, Electricity</b>					
<b>Behaviour change program</b>					
Help staff reduce personal energy use through ""workstation tune-ups""	Ongoing/In Progress	Occasional software re-imaging.	Continue current practice.	2010	2013
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Ongoing/In Progress	Awareness updates, messages.	Ongoing education.	2008	No End Date (Continuous)
Provide tips to staff on saving energy in the office while working outside of regular business hours	Ongoing/In Progress	Awareness updates through District website.	Ongoing education.	2008	No End Date (Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress	Awareness updates through messages, e-mails and stickers.	Ongoing education.	2008	No End Date (Continuous)
Promote hot water conservation	Ongoing/In Progress	Awareness updates.	Ongoing education.	2008	No End Date (Continuous)
<b>IT power management</b>					
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	Installed multi-function devices in every school.	Replaced fax machine with multi-function devices; discouraging use of stand-alone printers.	2011	2013
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	Much of the used equipment is ENERGY STAR compliant.	Continue current practice.	2010	2013
<b>Owned buildings</b>					
Establish energy performance baseline for owned buildings	Ongoing/In Progress	Working with BC Hydro to establish baselines for all schools.	Maintain program.	2011	No End Date (Continuous)

## School District 61 Greater Victoria - 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
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	Ongoing/In Progress	New high school being designed to LEED Gold.	Construction of new LEED Gold school.	2013	2014
Perform energy retrofits on existing, owned buildings	Ongoing/In Progress	Lansdowne Middle School 179 windows replaced, James Bay Elementary mechanical upgrade and fire sprinklers, Cloverdale Traditional School HVAC upgrade, Doncaster Elementary boiler replacement, McKenzie Elementary boiler replacement and Tolmie Administrative Building boiler replacement.	Further energy retrofits to be scheduled.	2012	No End Date (Continuous)
<b>Retrofit details for owned buildings</b>					
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	James Bay Elementary mechanical upgrade and fire sprinklers, Cloverdale Traditional School HVAC upgrade, Doncaster Elementary boiler replacement, McKenzie Elementary boiler replacement and Tolmie Administrative Building boiler replacement.	Submit to Ministry for additional funding.	2009	No End Date (Continuous)
Upgrade/adjust control systems during retrofits	Ongoing/In Progress	Upgraded controls at James Bay Elementary School and Cloverdale Traditional School.	Submit to Ministry for additional funding.	2009	No End Date (Continuous)
Improve building insulation (including windows) during retrofits	Ongoing/In Progress	179 windows replaced at Lansdowne Middle School.	Lake Hill Elementary and Victoria West Elementary planned window replacement in 2013. Ongoing as funding permits.	2008	No End Date (Continuous)
<b>Supplies (Paper)</b>					
<b>Behaviour change program</b>					
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	In Development	District has collaboration through SharePoint but only in its infancy. Will require much more work.	Further development as time permits.	2008	No End Date (Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress	Use of technology over paper.	Continue to encourage practice.	2008	No End Date (Continuous)
<b>Electronic media in place of paper</b>					
Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	In Development	In its infancy.	Requires more work - limited budget.	2008	2013
Use electronic document library for filing common documents	Completed (in Previous Year)				No End Date (Continuous)
Switch to an electronic payroll notification system in place of paper pay stubs	Ongoing/In Progress	Many of the School District employees are on electronic payroll notification. Those without access to a computer still have paper statements.	Process unchanged.	2008	No End Date (Continuous)
<b>Paper Type</b>					
Purchase 30% post-consumer recycled paper	Ongoing/In Progress	46% of the paper we purchased is 30% recycled.	Continue to monitor usage reports from paper supplier and remind non conforming schools of recycled content mandate.	2009	No End Date (Continuous)
Purchase 100% post-consumer recycled paper	Ongoing/In Progress	43% of the paper we purchased is 100% recycled.	Continue to monitor usage reports from paper supplier and remind non conforming schools of recycled content mandate.	2009	No End Date (Continuous)
<b>Printer/document settings</b>					
Switch networked printers and photocopiers to automatic double-sided	Completed (in Previous Year)				No End Date (Continuous)



## School District 61 Greater Victoria - 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
<b>Business Travel</b>					
<b>Behaviour change program</b>					
Train staff in web-conferencing	Ongoing/In Progress	Staff continue to take advantage of web-conferencing.	Encourage and expand practice.	2008	No End Date (Continuous)
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress	Continue to encourage staff.	Continue to encourage staff.	2008	No End Date (Continuous)
Encourage carpooling to meetings	Ongoing/In Progress	All staff encouraged to carpool to meetings.	Continue to encourage carpooling.	2009	No End Date (Continuous)
Encourage alternative travel to meetings (e.g., bicycles, public transit, walking)	Ongoing/In Progress	Some staff take alternative travel to meetings other than cars.	Ongoing encouragement.	2008	No End Date (Continuous)
<b>Virtual meeting technology</b>					
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	Not Yet Evaluated				No End Date (Continuous)
Make desktop web-cameras available to staff	Not Yet Evaluated				No End Date (Continuous)
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	Not Yet Evaluated				No End Date (Continuous)
<b>Education, Awareness, and Engagement</b>					
<b>Awards/Recognition</b>					
Establish a sustainability/green awards or recognition program	Ongoing/In Progress	Community Awards, recognition and applications for grants: BC Green Games (Reynolds Secondary won \$1000.00 four times), Encorp Pacific Recycling Contest (Colquitz, Glanford, View Royal and Rogers have won \$750.00) and Colquitz, Shoreline won grants to purchase salad bars. Reynolds Secondary School received 2 Waste Watchers Recycling Stations for being a recycling pilot school.	Continued support.	2010	No End Date (Continuous)
<b>Staff Professional Development</b>					
Support green professional development (e.g., workshops, conferences, training)	Ongoing/In Progress	Access through the School District website and links to following sites: Destination Conservation, BC Hydro Power Smart, HASTE, Capital Regional District, Sustainable High Schools, Sustainable High Schools Kit, Green Information, Simply Going Green, EcoKids, LiveSmart BC, Green Schools, Energy Conservation Resources for Teaching Staff, Sustainability Course Content/Curriculum Framework, Sustainable Schools Best Practices Guide and Green Schools Newsletter.	Tentative plans to implement a "Think Tank" with Middle and Secondary Schools to brainstorm ideas to make the recycling program even more sustainable. Also, eventually would like to have 100% of the schools on the full recycling program.	2008	No End Date (Continuous)
Include green options in employee performance measurement system	Ongoing/In Progress	All recycling is measured withing the School District: 74% of the schools participate in full recycling program, 18% of the schools participate in partial recycling program and 8% not yet participating (as of 2012).	100% participation.	2008	No End Date (Continuous)
<b>Staff awareness/education</b>					
Provide education to staff about the science of climate change	Ongoing/In Progress	Access through the School District Website to a Web Link: "Environmental Learning and Experience: An Interdisciplinary Guide and Video Clips for Teachers" by the Ministry of Education.	Continued support.	2009	No End Date (Continuous)
Provide education to staff about the conservation of water, energy, and raw materials	Ongoing/In Progress	Green PEA (Positive Environmental Action) Newsletter is sent to all Green Team adult leaders and on the School District website.	Provide ongoing support.	2009	No End Date (Continuous)

## School District 61 Greater Victoria - 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
Provide green tips on staff website or in newsletters	Ongoing/In Progress	Green PEA (Positive Environmental Action) Newsletter is sent to all Green Team adult leaders and on the School District website: <a href="http://www.sd61.bc.ca/green/">www.sd61.bc.ca/green/</a>	Provide ongoing support.	2009	No End Date (Continuous)
Provide sustainability education during new staff orientation	Ongoing/In Progress	Staff can access green initiatives on Website: <a href="http://www.sd61.bc.ca/green/">www.sd61.bc.ca/green/</a>	Provide ongoing support.	2009	No End Date (Continuous)
<b>Team-building</b>					
Create Green, Sustainability, Energy Conservation, or Climate Action Teams with executive endorsement	Ongoing/In Progress	School Based Recycling Teams, District Policy #4216.22 Energy, Environment & Climate Change.	Ongoing support.	2009	No End Date (Continuous)
Provide resources and/or dedicated staff to support teams	Ongoing/In Progress	Healthy, Safe & Caring Schools (HSCS) Coordinator, Green PEA (Positive Environmental Action) Newsletter to all Green Team Leaders and resources on District Website: <a href="http://www.sd61.bc.ca/GreenInitiatives">www.sd61.bc.ca Green Initiatives</a> .	Ongoing support.	2009	No End Date (Continuous)
Providing behaviour change education/training to teams (e.g., community-based social marketing)	Ongoing/In Progress	Campaigns promoted to schools: BC Green Games, International Walk to School Week, Waste Reduction Week, World Day for Water, Lights Out Earth Hour, Earth Day Canada, Save the Frogs Day, Bike to School Week, Canadian Environment Week, Clean Air Day Canada, World Environment Day, World Oceans Day.	Continued support.	2011	No End Date (Continuous)
<b>Other Sustainability Actions</b>					
<b>Building construction, renovation</b>					
Establish a policy to reuse materials where possible and divert construction and demolition debris from landfills and incineration facilities	Ongoing/In Progress	Major seismic upgrade planned that will include recycling procedures.	Recycling procedures to be followed that supports the diversion of waste.	2009	No End Date (Continuous)
Incorporate lifecycle costing into new construction or renovations	Ongoing/In Progress	Following established practice.	Ongoing commitment.	2009	No End Date (Continuous)
<b>Commuting to and from home</b>					
Offer staff a compressed work week	Ongoing/In Progress	Flex time offered where possible.	Continue to look at options to expand.	2009	No End Date (Continuous)
Encourage commuting by foot, bicycle, carpool or public transit	Ongoing/In Progress	Many staff and students commute by bicycle or on foot. Encouragement for healthy choices.	Ongoing encouragement.	2008	No End Date (Continuous)
Provide shower or locker facilities for staff/students who commute by foot or by bicycle	Ongoing/In Progress	When renovating, shower facilities are included. Provision made at renovated schools.	Continue to expand program.	2009	No End Date (Continuous)
Provide secure bicycle storage	Ongoing/In Progress	Bike racks at majority of schools. District has worked with schools to provide additional storage.	Continued support for schools. Covered bike storage planned for new school.	2009	No End Date (Continuous)
<b>Procurement (non-paper supplies)</b>					
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	Ongoing/In Progress	Program currently in place to order Eco Logo products for cleaning supplies in all of our buildings.	Ongoing commitment to program.	2009	No End Date (Continuous)
<b>Waste reduction/diversion</b>					
Put in place an operations policy to facilitate the reduction and diversion of building occupant waste from landfills or incineration facilities	Ongoing/In Progress	74% of schools on Recycling Program.	100% participation.	2008	No End Date (Continuous)
Implement a hazardous waste reduction and disposal strategy	Ongoing/In Progress	Batteries are recycled at the school level, computers and monitors are taken to a specified company for recycling, fluorescent bulbs currently disposed of by a certified company.	Continued commitment to hazardous waste recycling and proper disposal.	2008	No End Date (Continuous)
<b>Water conservation</b>					
Establish a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models	Ongoing/In Progress	No change.	As funding permits.	2008	No End Date (Continuous)
Put in place a potable water management strategy to reduce potable	Ongoing/In Progress	No change.	As funding permits.	2008	No End Date

## School District 61 Greater Victoria - 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
water demand of building-level uses such as cooling tower equipment, toilet fixtures, etc. and landscape features	Progress				(Continuous)
Introduce a stormwater management landscape strategy (e.g., vegetated roofs, permeable paving, rain gardens, bioswales)	Ongoing/In Progress	No change.	Incorporate into design of new school.	2008	No End Date (Continuous)