

**Carbon Neutral Action Report  
School District No. 42 ( Maple Ridge-Pitt Meadows)**

**Executive Summary**

SD 42 has been working with BC Hydro and Terasen Gas to reduce energy consumption and carbon emission. The district has completed an Energy Management Assessment in order to undertake a strategic review of our operations with the purpose of helping us establish a structured energy management program that will deliver sustainable savings into the future. Part of this process has determined the need for an Energy Manager, which we are in the process of establishing a job description to advertise for an individual. We have also completed negotiations with Terrasen on the definition of a Utility which will see them own and operate Geothermal technology at no cost with the payment being achieved through energy savings.

We are also in the process of conducting individual energy studies for each of our facilities. This has started with Two of our Secondary schools and will progress through the entire district.

Where possible and practical we have worked with BC Hydro on lighting upgrades. We have through our AFG funding undertaken many controls upgrades and this will continue.

In have installed 2 artificial field at 2 of our secondary schools and are planning a third eliminating grass cutting and water use.

**Objectives**

Work with Staff and students to highlight initiatives and programs to reduce greenhouse gases. Instil within the entire organization the need to reduce not only our carbon foot print but our ecological foot print. Encourage the development of green project that enhance the environment such as grades and tree plantings. The use of environmentally safe products for all uses. Engage the community and the parents in increased walking and cycling.

**Part 1: Actions Taken to Reduce Greenhouse Gas Emissions in 2008**

**Overview**

Replacement of HVAC control systems at Eric Langton Elementary to optimized usage and control of system. Replacement of HVAC control system at Glenwood Elementary to optimized usage and control of system. Plans to include energy efficient lighting and HVAC control on Garibaldi Secondary Addition and Renovation Project. Reduction of exterior lighting at Maple Ridge Secondary. Establishment of gardens at Blue Mountain Elementary and Glenwood. Planting of trees. Conversion to environmentally friendly cleaning products.

**1.1 Mobile Fuel Combustion**

We have reduced our fleet by 3 vehicles and are pursuing a conversion to natural gas

## 1.2 Stationary fuel combustion and electricity

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Asked staff to close blinds daily	Complete		Instructed Custodians to make sure blinds have been closed
Turned off lights in unused rooms	Complete		Automated systems and instructed custodial in this procedure for manual systems
Replaced Refrigerators (EnergyStar rated appliance)	In progress		
Replaced standard bulbs with CFLs	In progress		
Undertaken lighting retrofit	In progress		
Undertaken building energy audit at LOCATION(s)	In Progress		Thomas Haney Secondary and Garibaldi Secondary
Initiated or completed a building energy retrofit	Complete		New control systems in 2 elementary schools

## 1.3 Supplies

			Posting reports electronically on shared server rather than printing and distributing
Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Committed to use 30% recycled paper	Complete		Purchasing only buying 30% recycled paper
Committed to hold paperless meetings	In progress		Board meeting are now electronic
Used collaborative software to edit on-line	In Progress		
Re-used non-confidential scrap paper	In Progress		Maintenance using scrap paper for dept notes
<b>Actions on non-paper related supplies:</b>			
Encouraged re-use of furniture and equipment	In Progress		Website section for surplus equipment available to other facilities
Other	In progress	Reduction in paper use	98% of all schools online to our work order system for request reducing paper work request

## 1.4 Travel

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Trained staff in the use of Live Meeting (or other desktop collaborative software)	In progress	Reduce in travel and gas consumption	Use of webinars and conference calling

## 1.5 Employee Engagement

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Provided climate change education	In progress		Plan program to educate students and staff
Provided conservation education	In progress		Plan program to educate students and staff

## 1.6 Sustainability Actions (others)

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Improved recycling measures	In progress	reduction in paper waste going to landfill	All facilities set up on recycling pickup program
Supported composting	In progress	reduced organic waste	Engage students in school programs
Purchased green cleaning products	Complete		

## Part 2: Plans to Continue Reducing Greenhouse Gas Emissions 2009 -- 2011

### Overview

Complete energy audits on all facilities in the District  
 Work on the conversion of boiler units to geothermal systems  
 Work with BC Hydro and Power smart to do lighting upgrades  
 Hire a Building Envelope Technician to inspect and repair building envelope issue i.e. weather stripping and window caulking

## 2.1 Mobile Fuel Combustion

Look into NG conversion of fleet vehicles

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Provide driver training to reduce fuel use	Planning			2009
Initiate new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups)	Planning			2009
Establish anti-idling behaviour change program (e.g. signs, stickers, messages)	Planning			2009
Other	Complete	Reduction in water use and gas fro grass cutting	installed 2 artificial filed at 2 high school to eliminate watering and grass cutting	
	In progress	Reduction in water use and gas fro grass cutting	Planning to installed an artificial filed at PMSS high school to eliminate watering and grass cutting	

## 2.2 Stationary Fuel Combustion (including electricity)

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Undertake workstation tune-ups to help staff understand what they can do to reduce personal energy use	Planning		Work with Senior team to develop program to challenge all staff in personal energy use reduction	fall 2009
Initiate corporate computer shut-down/wake-up for maintenance	Planned	Reduction of energy	Install computer software to shutdown computers that aren't being used	2009