

## Carbon Neutral Action Report School District No. 62 (Sooke)

### Executive Summary

The Sooke School District No. 62 (SD62) has undertaken many steps towards reaching carbon neutrality. In the past, SD62 and Honeywell entered into an ESCO agreement to lower SD62's energy consumption at each School site. As well, a number of years ago the entire School District converted all the previous T12's (older fluorescent lights) to current energy saving T8 or T5 light tubes and related ballasts.

In 2008 SD62 entered into a partnership with BC Hydro to provide SD62 funding for an Energy Manager. The role of the Energy Manager is to raise awareness, seek out, implement, and facilitate energy conservation projects. Currently SD62 has implemented Destination Conservation, a 3 year behaviour education program focused on conservation of energy, water, and waste. Destination Conservation, started in November 2008, is running in 16 out of 22 schools in the District.

SD62 has been participating with Canada's Green Building Council (CaGBC) to create standards for LEED for existing buildings. LEED for existing buildings designation is actively being sought for SD62's buildings. Funding to lower SD62's greenhouse gas emissions is sought after through the Public Sector Energy Conservation Agreement (PSECA), BC Hydro and other opportunities.

### Objectives

Financial responsibility – reducing operating costs through energy conservation and behaviour change

Social responsibility – as a School District it is important to demonstrate leadership in areas such as conservation and sustainability practices (practice what we teach)

Student engagement –

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

### Overview

As of Oct 22, 2008 the School District has hired an Energy Manager. The Energy Manager is responsible for coordinating the identification, implementation, and evaluation of energy conservation programs. This position reports to the Director of Facilities and assists in establishing utility usage reduction, energy cost-cutting, energy best practice, continuous improvement, and in creating awareness and training for all staff and students in the area of energy conservation and sustainability.

PSECA funding was sought for 11 projects to reduce GHG emissions.

Started in November of 2008, Destination Conservation (DC) is running in 16 out of 22 Potential schools in the District. The DC program is a 3 year plan with a focus on Energy, Water, & Waste reduction (behaviour) projects carried out by DC teams at each School. A lights out campaign has been started at nearly every Destination Conservation participating school. The campaign utilizes posters, stickers, incentives, and reporting to reach energy awareness throughout the school.

<b>1.1 Mobile Fuel Combustion</b>			
<b>Action</b>	<b>Action Taken</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>
Replaced # of TYPE OF VEHICLE with MORE EFFICIENT VEHICLE/Hybrid	In Progress	reduction in greenhouse gas emissions and diesel consumption	Received funding for replacing 3 school buses with newer, cleaner burning, diesel school buses.
<b>1.2 Stationary fuel combustion and electricity</b>			
<b>Action</b>	<b>Action Taken</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>
Installed multi-function devices (and removed stand-alone printers/faxes)	In Progress	Reduced paper usage and decreased storage space.	Several Multifunction printers were installed, possible education is required to utilize the devices effectively
Initiated corporate computer shut-down/wake-up for maintenance	In Progress	Reduction in electricity consumption.	Computer labs are now being installed with software that shuts off a PC after normal work hours.
Applied for LEED existing building rating	In Progress	Creating an energy efficient and green environment	SD62 participated in a program to set standards for SD's LEED for existing buildings
<b>1.3 Supplies</b>			
<b>Action</b>	<b>Action Taken</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>
Re-used non-confidential scrap paper	Completed	Reduced paper usage	Most people already do this.
<b>1.4 Employee Engagement</b>			
<b>Action</b>	<b>Action Taken</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>
Provided conservation education	In Progress	Increased awareness and conservation throughout the school district	Destination Conservation, a course designed to reduce energy, water and waste, started in November 2008. The course is run in 16 out of 22 potential Schools.
Developed Green Teams	In Progress	Increased awareness and conservation throughout the school district	As part of Destination Conservation, Green Teams were developed at each participating School (16/22 Schools).
Supported Green Teams (resources)	In Progress	Increased awareness and conservation throughout the school district	Energy Manager for the District is available as a resource for all green teams.
Supported professional development	In Progress	Increased conservation leadership in the school district	Facilities managers have participated in LEED workshops & BC Hydro Forums on Conservation
<b>1.5 Sustainability Actions (others)</b>			
<b>Action</b>	<b>Action Taken</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>
Took water conservation measures – low flow showers or toilets, fix leaks	Completed	reduced water consumption	Installed low flow toilets, sinks in a Middle School
Used green (low-e paints)	Completed	reduced toxic exposure	95% of all paints used are low-e paints, only special primers and paint for bare metals are not low-e
<b>Part 2: Plans to Continue Reducing Greenhouse Gas Emissions 2009 -- 2011</b>			
<b>Overview</b>	<p>SD62 is participating in a School Pilot project that will be setting the standards for LEED: EB. To achieve LEED: EB a specific list of items will need to be addressed for each site.</p> <p>At each School site we have a sign indicating that the School is an idle free zone</p> <p>SD62 is working to bring enhanced recycling programs to all School sites. The enhanced recycling measures would allow for pick-up of metals, glass, and plastics (organics/compost bins will be coming as well). Currently the only recycling measure that is supported by SD62 is paper/cardboard recycling.</p> <p>BC Hydro COP (Continuous Building Optimization Program) funding is preliminary secured for 2 sites, the work is expected to start in 2009.</p>		

<b>2.1 Mobile Fuel Combustion</b>				
<b>Action</b>	<b>Action Planned</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>	<b>Timeframe</b>
Replace # of TYPE OF VEHICLE with MORE EFFICIENT VEHICLE/Hybrid	In Progress	Reduction in diesel consumption and carbon emissions	replacing 3 school buses with newer, cleaner burning, diesel school buses	
Provide driver training to reduce fuel use	Planned	Monitor Gas Consumption and Mileage, then looking for a % reduction in the same routes by Bus fleet. Incentives will be used for the highest % reduction.	All drivers will be educated in FleetSmart Program starting in 2009 School year	Start Sept 2009
Establish anti-idling behaviour change program (e.g. signs, stickers, messages)	Planned	Spot checks to determine the number of idling vehicles in the parking lots at the end of the school day.	As part of Destination Conservation, many Schools are taking an interest in increasing awareness of Anti-Idling signs. FleetSmart program will educate this for the District's drivers as well.	Start April 2009
Other:	In Progress	Reduction in diesel consumption and carbon emissions	At the start of the 2009/2010 school year, all the district school buses will operate on a minimum of 5% bio-diesel.	
<b>2.2. Stationary Fuel Combustion (including electricity):</b>				
<b>Action</b>	<b>Action Planned</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>	<b>Timeframe</b>
Undertaken Monitor turn-off challenge	Planned	Random spot checks throughout the office to see who is turning off their monitors, incentives will be used	Part of Green Tips feature in the Districts new Newsletter focus on Energy	2009-2010
Ask staff to close blinds daily	Planned	Increased awareness and conservation measures throughout the school district	Part of Green Tips feature in the Districts new Newsletter focus on Energy	
Turn off lights in unused rooms	In Progress	Increased awareness and conservation measures throughout the school district	Part of Green Tips feature in the Districts new Newsletter focus on Energy	
Install motion activated lights	Planned	Increased awareness and conservation measures throughout the school district	Motion Sensors are being investigated for use in storage rooms, classrooms, etc..	
Undertake lighting retrofit	Planned	Increased awareness and conservation measures throughout the school district	Exterior Lighting options are being investigated to reduce electrical consumption	
Utilize desk-top power management settings on computer	Planned			
Apply for LEED existing building rating	Planned	Increased awareness and conservation measures throughout the school district		
Undertake building energy audit at LOCATION(s)	Planned	Increased awareness and conservation measures throughout the school district	Participating in BC Hydro's Continuous Improvement Opportunity at 2 School Sites	
<b>2.3. Travel</b>				
<b>Action</b>	<b>Action Planned</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>	<b>Timeframe</b>
Other (Please enter any items not included in the above list)	Planned	Reduced number of vehicles used for commuting to and from work	SD62 Facilities and Board Office will participate in Bike to Work Week May 11-17, 2009	May-09
<b>2.4. Employee Engagement</b>				
<b>Action</b>	<b>Action Planned</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>	<b>Timeframe</b>
Provide conservation education	In Progress	Increased awareness and conservation measures throughout the school district	Destination Conservation Programs	
Develop Green Teams	In Progress	Increased awareness and conservation measures throughout the school district	Destination Conservation Programs	
Support Green Teams (resources)	In Progress	Increased awareness and conservation measures throughout the school district	Energy Manager duties to support Destination Conservation Teams	
Provide green tips	In Progress	Increased awareness and conservation measures throughout the school district	Green Tips are featured in the Districts new Newsletter focus on Energy	
Support professional development	In Progress	Increased conservation leadership in the school district	Energy Manager training through BC Hydro and related conservation programs	

**2.5. Sustainability Actions (others)**

<b>Action</b>	<b>Action Planned</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>	<b>Timeframe</b>
Improve recycling measures	In Progress	Increased waste awareness and conservation measures throughout the school district	The District is investigating adding metals, glass and plastic to the recycling stream.	Sep-09
Support composting	In Progress	Increased waste awareness and conservation measures throughout the school district	some sites have added compost bins to enhance their recycling measures	
Purchase green cleaning products	In Progress		Custodial supplies will be ECOLOGO certified	