

## Carbon Neutral Action Report School District No. 78 (Fraser Cascade)

### Executive Summary

School District No. 78 (Fraser Cascade) is proud of the work that they have done and are continuing to do in order to work toward the Provincial goal of Carbon Neutrality by 2010. There is an obvious relationship between conserving resources and saving dollars for the classroom which have lead the way to many of the District initiatives to date. The changes have been both at a facility level, but have also been building at the employee and student level. At the facility level, in the last ten years all of our schools have been upgraded with DDC systems for heating and air-conditioning. We have retro-fitted most of our schools lighting to newer T8 technology and we have switched to green cleaning products. Schools have always been involved in some green type initiatives with recycling paper, garbage and cans, as well as planting gardens and conserving water. With the media coverage and our Provinces carbon tax, the focus has been on behaviour change. To that end, we as a District signed on to Destination Conservation to help teach our students and staff how to make significant in-roads in what we do. Over the next year and in years to come our focus will be on refining how we do business with part of our mandate being to help ensure we preserve our environment.

*The School District - the Superintendent and Trustee went to a conference on climate change and reported back to the District that we would need to begin working toward a Carbon Neutral District. We began by hiring Pacific Resource Conservation Society (Destination Conservation) to provide a school-wide approach to conservation. To date we have all schools on board, other than Alternate schools. We have had one workshop and have two more planned. In addition we have had one lighting study done to try to take advantage of the PSECA funds. We were not successful, but will do the work either with our own funds or try for PSECA funds on the next round. We are also applying for a grant to develop a website on energy consciousness for students through Inuksuk.*

### Objectives

There is a strong link between carbon neutrality and the social and environmental consciousness that needs to be instilled in our students within the classroom setting. There is not only environmental education, but social study implications. Our students awareness is our key to how we conduct our lives both personally and commercially in the future. Students are also a good conduit to provide information to parents to help change habits and behaviours that have developed over a lifetime.

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

### Overview:

We have undertaken Destination Conservation. We have had one lighting study done and are planning on having a total District audit done on all of our facilities. Our grant writer is working on a proposal to retro-fit our propane furnace with newer technology. We are continuing with DC and have a professional development day planned in April for our custodial and maintenance staff with DC staff to get them on board. In the last year we have cut out one whole bus run and are planning out phasing out another bus to Boston Bar at the end of 2010. Our District Policy on the Environment has been updated and all our work is now being considered in view of carbon neutrality.

<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	Complete	For one staff member, their van was replaced by a small car. This is something we will be doing more as leases come up.	
Provided driver training to reduce fuel use	In progress	The Transportation Supervisor and mechanic attended train the trainer workshop. Working with Chilliwack on bus anti-idling issue	Will be providing information to drivers at the next professional development day
Initiated new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups)	In progress	All vehicles are maintained regularly in house. A more rigorous weekly inspection has been undertaken	
Established anti-idling behaviour change program (e.g. signs, stickers, messages)	In progress	In the process of ordering free signs. Have installed one sign at each school.	
Encouraged car pooling in fleet vehicles	In progress		This is not easily accomplished as we have a small number of staff and a large district geographically speaking. We are looking at purchasing 2 hybrid vehicles for educational staff to cut down on emissions and hopefully costs over time.
Encouraged use of public transit/active transportation	In progress		No public busses available in community
Encouraged alternatives to travel in fleet vehicles – bicycles, scooters, electric carts	In progress		
<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>
Replaced # computers with EnergyStar models	In progress		
Used air dry setting on dishwashers	Completed		
Turned off lights in unused rooms	In progress		All of the schools have a green team and are encouraging this behaviour
Replaced Refrigerators (EnergyStar rated appliance)	In progress		as new fridges need replacing
Installed multi-function devices (and removed stand-alone printers/faxes)	In progress		A number of our schools are networked to use one copier rather than different printers
Replaced standard bulbs with CFLs	In progress		
Undertaken lighting retrofit	In progress		
Implemented server virtualization	Completed		
Utilized desk-top power management settings on computer	Completed		
Initiated corporate computer shut-down/wake-up for maintenance	Completed	Completed on all labs in district	
Undertaken building energy audit at LOCATION(s)	In progress		We are working with BC Hydro to have a complete energy audit done for the District.
Initiated or completed a building energy retrofit	In progress	We have upgraded all of our heating and ventilation systems in the District other than Boston Bar and Yale Elementary to DDC systems.	We are reviewing the times that the heat comes on and goes off in the day.

<b>1.3 Supplies</b>			
<b>Action</b>	<b>Action Taken</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>
Committed to use 30% recycled paper	In progress		Not in all schools yet
Initiated automatic double sided printing	In progress		Done at Board office and more schools are using copiers rather than printers so this is more common
Committed to hold paperless meetings	In progress	Board has passed a motion to insist Board meetings are completely paperless by next October.	Board meetings are paperless- Board is encouraged to use computers issued to them
Used collaborative software to edit on-line	In progress		
Re-used non-confidential scrap paper	completed		
Used laptops/tablets	In progress		
Restructured a process to use less paper	In progress		Always looking at reduction in this area
<b>Actions on non-paper related supplies:</b>			
Encouraged re-use of furniture and equipment	In progress		District has always recycled and reused furniture and equipment
<b>1.4 Travel</b>			
<b>Action</b>	<b>Action Taken</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>
Trained staff in the use of Live Meeting (or other desktop collaborative software)	In progress	Board would like to suggest that Provincial Council meetings be held in this manner	more and more meetings are held in this manner.
Installed Video Conferencing facilities	Completed		At our student services building- now being used by UFV
<b>1.5 Employee Engagement</b>			
<b>Action</b>	<b>Action Taken</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>
Provided climate change education	In progress		Through Destination Conservation and providing at next year Pro- D
Provided conservation education	In progress		
Held contests to change behaviour/make pledges	In progress	Being done at the school level.	
Developed Green Teams	In progress		Destination Conservation
Supported Green Teams (resources)	In progress		Destination Conservation
Provided green tips	In progress		Would like to develop our own website for this
Supported professional development	In progress		

<b>1.6 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	In progress	As fixtures are replaced, low flow fixtures are purchased	
Ran dishwasher only when full	completed		
Improved recycling measures	In progress		
Supported composting	In progress		In some schools - this is not easy as there are smell and mould issues
Used re-usable dishes	In progress	District set of dishes purchased. Paper and	
Purchased green cleaning products	completed		

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

### **Overview**

We have a three year commitment with Destination Conservation to raise awareness and help our schools become carbon neutral. We are going to have a full energy audit for all of our schools so that we have a template upon which to move forward including the application for PSECA funds. We would like the MOE support in helping BC Hydro support energy managers for small districts. We could use this expertise and do not have the expertise in-house to provide the level of support needed.

## **2.1 Mobile Fuel Combustion**

<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	Planned		Two vans are on lease. One is to be replaced with a car and the other with one smaller van	6 months
Provide driver training to reduce fuel use	Planned	100% bus driver staff	bus driver training	6 months
Initiate new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups)	In progress			
Establish anti-idling behaviour change program (e.g. signs, stickers, messages)	In progress		Signs at all facility locations & buses monitored for idling	6 months
Encourage car pooling in fleet vehicles	In progress		Will look at curricular scheduling opportunities	12 months
Encourage use of public transit/active transportation			No public transportation in area. Greyhound provides service that they are cutting back from Boston Bar to Hope as they don't have ridership	
Encourage alternatives to travel in fleet vehicles – bicycles, scooters, electric carts	Planned			
Establish travel reduction goals	Planned		will take to policy committee	6 months

## 2.2 Stationary Fuel Combustion (including electricity)

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Encourage staff to use stairs			no elevators in District	
Replace Refrigerators (EnergyStar rated appliance)	Planned		when appliance require replacing energy efficient models will be purchased	3-5 yrs
Replace other appliances (with EnergyStar rated appliance)	Planned			
Install multi-function devices (and remove stand-alone printers/faxes)	In progress			
Replace standard bulbs with CFLs	In progress			
Install motion activated lights	Planned		will start with one school and lighting audit recommendations	next year
Undertake lighting retrofit	Planned		will start with one school and lighting audit recommendations	one year
	Planned		earlier in day and during summer	next year

## 2.4 Travel

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Set a X% Travel reduction goal	Planned			next year
Train staff in the use of Live Meeting (or other desktop collaborative software)			would like to see for principal meetings	
Initiate Travel Policy	Planned			next year

## 2.5 Employee Engagement

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Support professional development	Planned		Have head start scheduled for next Jan district pro-d	Jan-10

## 2.6 Sustainability Actions (others)

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Improve recycling measures	Planned			on-going
Support sustainable procurement practices	Planned			