

# School District 93 2012 Carbon Neutral Action Report

# **Executive Summary**

The Conseil scolaire francophone recognizes the importance that all environmental learning aims to integrate environmental thinking and ideas into students' everyday lives. As part of its overall long-term Strategic Plan, it is hoped that students will begin to realize how they can take personal responsibility and leadership in creating a more environmentally sustainable way of life. We must also turn to ourselves, as an educational institution and as individuals, to make changes and develop a new ethic – a responsible attitude toward caring for the Earth. Working to integrate environmental learning within all subject areas promotes this change in attitude by providing students with opportunities to experience and investigate the relationships linking individuals, societies, and natural surroundings. Schools continue to expand environmental learning into the curriculum. Reducing, Reusing and Recycling, and composting programs continue to be implemented in the schools with increased student and teacher participation.

Through its Capital Program, the CSF practices environmental sustainability by requiring LEEDS certification that is demonstrated by the LEEDS Silver designation granted to École Victor Brodeur and École Jules Verne. Both Campbell River and Comox schools were finalized in the fall of 2011 and both of them received the LEEDS Gold certification. The CSF is in the



process of establishing a Green Team Committee that will be mandated to coordinate and support all aspects of helping students and the community to learn about how they are connected to environment through natural direct experience in both natural and human designed systems like their school buildings. Although the CSF may not meet Energy Retrofit minimum funding criteria, it continues to focus on energy efficient



renovations as part of its Annual Facilities Grant Program. Removal of single pane glazing for the windows, installation of energy efficient lighting systems and modern and energy efficient HVAC systems in our schools are examples of existing short and long-term retrofit programs that form part of the CSF AFG Plan. Discussions with representatives from Terasen Gas, VFA and other companies are resulting in further investigation into programs that either utility can offer to the CSF to assist in its quest for carbon neutrality.

Sylvain Allison Secretary-Treasurer

#### **2012 Greenhouse Gas Emissions**

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The 2012 greenhouse gas emissions for the School District 93 comes to a total of 2043 tonnes of  $CO_{7}e$ .

# Offsets Applied to become Carbon Neutral in 2012

The total emission offsets have been applied to become carbon neutral for 2012.

#### **Emissions Reduction Activities**

**Actions Taken to Reduce Greenhouse Gas Emissions in 2012** 

In 2012 our Maintenance Department put an emphasis on energy retrofits in many of its schools. École Rose-des-Vents benefitted from this upgrade including the installation of occupancy sensors and lighting upgrade throughout the school. École Anne-Hébert, École Jules-Verne and École des Voyageurs also benefitted from a small lighting retrofit upgrade in their gymnasiums. The furnaces in the gymnasium at École du Bois-Joli and École Rose-des-Vents have been replaced with high-energy efficient ones. The latter schools are part of several HVAC upgrades in an attempt to increase efficiency and reduce energy costs. Since 2011, we have replaced a few rooftop units, we did major repairs and set-ups for the heating systems in many schools to increase efficiency.

Also, both schools built in Comox and Campbell River use a « green » geothermal heating system, and they received the Leed Gold Certification.

The school district has started to incorporate DDC control systems in École Victor-Brodeur, École Franco-Nord, École Deux-Rives and École Gabrielle-Roy. Monitoring and measuring the efficiency of our centrally controlled heating and ventilation systems continues to be a focus for us in an attempt to reduce the consumption of natural gas and to provide balanced systems in a variety of structures and school buildings across the District.

148 bus routes operate each day providing transportation services to 80% of francophone students attending regional school throughout the province of British Columbia. Over the past two years, the CSF embarked on restructuring its transportation system that includes a rewrite of its transportation policy and the purchase of an extensive transportation mapping software. The goal is to develop a system that provides reasonable service levels while reducing the overall environmental impact of such a complex bussing system.

Reports were provided to schools to in regards to photo copying and paper consumption. Schools are expected to manage consumption at the school level through administrative vigilance. The majority of schools have moved away from paper newsletters and chose to publish newsletters only on their school websites. Also, we developed virtual classrooms and and discussion boards, to reduce our paper consumption.

# Plans to Continue Reducing Greenhouse Gas Emissions 2011–2014

Plans for future reduction of Greenhouse Gas Emissions will continue to focus on

the moral and economic imperatives. We will continue with energy retrofit of lighting in at least two schools per year. We will start the retrofit of the HVAC systems at École Anne-Hébert. We are aiming to implement DDC control systems, to monitor energy consumption, in all our schools within the next three years. Our future Green



Team Committee is working to establish a program to educate our students, staff and parents. The environmental education and sustainable behaviour change will continue to be one of our main goals over the next three years. We will continue encouraging schools to support behavioural changes related to sustainability by linking curriculum to school district practice.

The Maintenance Department will prioritize the HVAC, windows and lighting upgrades that contribute to more energy efficient systems.

Sylvain Allison

Secretary-Treasurer

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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	Steps Taken	Steps Planned	Start Year	End Year
Mobile Fuel Combustion (Fleet and other)					
Behaviour change program					
Provide fleet driver training to reduce fuel use	Not Yet				No End Date
· ·	Evaluated				(Continuous)
Introduce anti-idling policy and/or raise anti-idling awareness for fleet	Ongoing/In	We maintained the existing "anti-idling" signage and added new	We'll continue the same procedure like in the past.	2008	No End Date
drivers (e.g., signs, stickers, messages)	Progress	ones for the new schools.			(Continuous)
Encourage carpooling in fleet vehicles	Ongoing/In	We're encouraging our staff to carpool when possible.	We'll continue the same procedure.	2008	No End Date
	Progress				(Continuous)
Vehicle fuel efficiency					
Replace vehicles with more fuel-efficient models	Ongoing/In	We maintained our policy in having a hybrid car fleet. We didn't do	If we'll plan in buying new cars, we'll choose the most energy efficient	2008	No End Date
	Progress	any new purchases.	ones.		(Continuous)
Perform regular fleet maintenance to improve fuel-efficiency	Ongoing/In	All our fleet is well maintained, according to the manufacturer's	We'll continue the same procedure like in the past.	2008	No End Date
	Progress	recommendations.			(Continuous)
Stationary Fuel Combustion, Electricity					
Behaviour change program					
Help staff reduce personal energy use through ""workstation tune-ups""	Not Yet				No End Date
	Evaluated				(Continuous)
Ask staff to unplug electrical equipment or switch off power bars when	Not Yet				No End Date
not in use	Evaluated				(Continuous)
Ask staff to unplug electrical equipment or switch off power bars when	Not Yet				No End Date
not in use	Evaluated				(Continuous)
Ask staff to close blinds at end of work day to reduce heating/cooling	Ongoing/In	In the summer we encourage our staff to keep the blinds closed to	To continue the same practice.	2008	No End Date
demands	Progress	reduce the need for A/C.			(Continuous)
Encourage staff to use air dry setting on dishwashers	Ongoing/In	We use energy start machines and encourage the staff to use the air	We will continue to encourage the staff to be environmentally	2008	No End Date
	Progress	dry setting.	conscious.		(Continuous)
Encourage use of stairs instead of elevators	Ongoing/In	The use of elevators is only designated for special use.	The same practice will be applicable in 2013-2014.	2008	No End Date
	Progress				(Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Completed (in				No End Date
	Previous Year)				(Continuous)
Promote hot water conservation	Completed (in				No End Date
	Previous Year)				(Continuous)
IT power management					
Install power management software which shuts down computers	Completed (in				No End Date
outside of regular business hours	Previous Year)				(Continuous)
Implement server virtualization  Apply auto-sleep settings on computer monitors and CPUs	Ongoing/In	Virtualization of servers is an ongoing process in our school district	This will be an ongoing practice and process.	2008	No End Date
	Progress	and we are using the process to its full capacity.			(Continuous)
	Completed (in				No End Date
	Previous Year)				(Continuous)
Remove stand-alone printers, copiers, and/or fax machines and install	Ongoing/In	We have equipped most schools with main photocopiers that can	We will attempt to remove more stand alone machines.	2008	No End Date
multi-function devices as part of a print management strategy	Progress	multi-function. We are in the process to remove all stand-alone			(Continuous)
Annh anta dana attiona an ortotana farrana di anno 19	0	printers fax machines			N- F- ID:
Apply auto-sleep settings on printers, fax machines, and/or multi-	Completed (in				No End Date
function devices	Previous Year)				(Continuous)
Replace computers with ENERGY STAR models during regular	Completed (in				No End Date
computer upgrades	Previous Year)				(Continuous)

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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
Leased buildings					
Establish energy performance baseline for leased buildings	Not Yet				No End Date
	Evaluated				(Continuous)
Lease space with operations and maintenance performance	Not Yet				No End Date
labelling/certification (e.g., LEED EB:O&M)	Evaluated				(Continuous)
Lease space with commercial interiors performance labelling/certification	Not Yet				No End Date
(e.g., LEED CI)	Evaluated				(Continuous)
Lease space in buildings with new construction performance	Not Yet				No End Date
labelling/certification (e.g., LEED NC)	Evaluated				(Continuous)
Develop a green lease policy that requires green features to conserve	Not Yet				No End Date
energy be included in all lease negotiations	Evaluated				(Continuous)
Owned buildings					
Establish energy performance baseline for owned buildings	Ongoing/In	We purchased again only Energy Star appliances. We encourage	We will continue to encourage the same procedures.	2008	No End Date
3, p. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Progress	the staff to bring lunches in reusable containers. We encourage the	σ σ σ σ σ σ σ σ σ σ σ σ σ σ σ σ σ σ σ		(Continuous)
		staff to turn off all lights when classrooms are not in use.			(55.1
Register for performance labelling/certification for operations and	Ongoing/In	We built two new schools in Comox and Campbell River and both	We will continue the same procedures.	2008	No End Date
maintenance of owned buildings (e.g., LEED EB:O&M)	Progress	are LEED Gold certified.	Tro Will delitation the dame production.	2000	(Continuous)
Register for performance labelling/certification for commercial interiors of	Ongoing/In	Please see certified operations module above.	We will continue the same.	2008	No End Date
owned buildings (e.g., LEED CI)	Progress	Ticase see certified operations module above.	We will continue the same.	2000	(Continuous)
Achieve LEED NC Gold certification at a minimum for new construction	Ongoing/In	Please see the certify operations module above.	We will continue the same.	2008	No End Date
or major renovations	Progress	r lease see the certify operations module above.	We will continue the same.	2000	(Continuous)
Perform energy retrofits on existing, owned buildings	Ongoing/In	We started retrofitting the old T12 lights in one of our schools in	We will continue to retrofit the lights and install DDC controls in four	2012	No End Date
Tollow onergy reactine on executing, emiled bulliange	Progress	Vancouver by switching to T8. We installed at the same time occupancy sensors in this school. We started retrofitting lights in a few different schools. We have started to monitor and control the	other schools.	2012	(Continuous)
		HVAC systems in one more of our schools through a DDC system.			
Planning/management					
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle Controls)	Completed (in Reporting Year)	We installed a water meter at École du Bois Joli in Tsawwassen.		2012	2012
Retrofit details for owned buildings					
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	We replaced a few old hot water tanks and two roof top units.	We will replace part of the heating system at $\tilde{A}f \hat{A}f \tilde{A}$ , $\hat{A}$ %cole Anne-H $\tilde{A}f \hat{A}f \tilde{A}$ , $\hat{A}$ ©bert this summer 2013. We will continue to replace old hot water tanks, roof top units and furnaces in other schools.	2012	No End Date (Continuous)
Upgrade lighting systems during retrofits	Ongoing/In Progress	We upgraded the lighting system in $\tilde{A}f$ $\hat{A}$ %cole Rose des Vents. We switched from T12 to T8 and we installed occupancy sensors throughout the school.	We will upgrade the lighting system at Ãf ‰cole Deux-Rives, Franco-Nord, Bois-Joli, and Gabrielle-Roy.	2012	No End Date (Continuous)
Upgrade/adjust control systems during retrofits	Ongoing/In Progress	We connected $\tilde{A}f$ $\hat{A}$ %cole Franco-Nord to the DDC system and started monitoring it 24/7.	We will connect three other schools to a DDC system.	2008	No End Date (Continuous)
Improve building insulation (including windows) during retrofits	Not Yet Evaluated	-			No End Date (Continuous)
Supplies (Paper)					
Behaviour change program					
Train staff to use collaborative software for electronic editing (e.g.	Completed (in				No End Date
SharePoint, Groove, etc.)	Previous Year)				(Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no	Completed (in				No End Date
	Completed (III				Lina Bate

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Action	Status	Steps Taken	Steps Planned	Start Year	End Year
handouts)	Previous Year)				(Continuous)
Electronic media in place of paper					
Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	In Development	Installation of Web DAV share for users and group was completed and still in deployment phase. Gradual and ongoing staff training will begin.	Deployment in process.	2010	No End Date (Continuous)
Use electronic document library for filing common documents	In Development	A document management and archiving has been chosen and not yet implemented.	Implementation of this solution is still in progress.	2012	No End Date (Continuous)
Switch to an electronic payroll notification system in place of paper pay	Completed (in				No End Date
stubs	Previous Year)				(Continuous)
Paper Type					A
Purchase 30% post-consumer recycled paper	Completed (in Reporting Year)	We switched all paper supplies to 30% recycled.		2011	2012
Printer/document settings					
Switch networked printers and photocopiers to automatic double-sided	Ongoing/In Progress	We are encouraging double sided printing to reduce paper.	We will encourage double sided printing.	2011	No End Date (Continuous)

## **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

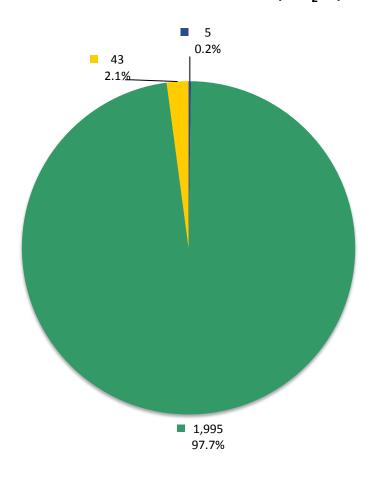
Action	Status	Steps Taken	Steps Planned	Start Year	End Year
Business Travel					
Behaviour change program					
Train staff in web-conferencing	Completed (in Reporting Year)	We use Elluminate Web conference.		2009	2012
Encourage staff to consider virtual attendance/presentation at events where possible	Completed (in Previous Year)				No End Date (Continuous)
Policy and budgeting					
Create a low-carbon travel policy or travel reduction goal	Completed (in Reporting Year)	Meetings and training are held online.		2010	2014
Virtual meeting technology					
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	Completed (in Reporting Year)	We use Elluminate web-conference.		2009	2012
Make desktop web-cameras available to staff	Completed (in Reporting Year)	All desktops are equipped with web-cameras.		2008	2012
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	Not Yet Evaluated				No End Date (Continuous)
Education, Awareness, and Engagement					
Awards/Recognition					
Establish a sustainability/green awards or recognition program	Not Yet Evaluated				No End Date (Continuous)
Staff Professional Development					` ′
Support green professional development (e.g., workshops, conferences, training)	In Development	We will consider staff training.	We will consider staff training.	2013	No End Date (Continuous)
Include green options in employee performance measurement system	Not Yet Evaluated				No End Date (Continuous)
Staff awareness/education					
Provide education to staff about the science of climate change	Not Yet Evaluated				No End Date (Continuous)
Provide education to staff about the conservation of water, energy, and raw materials	In Development	The staff is aware and careful of conservation of the environment.	To continue the same practice and make it better. We will consider staff training.	2013	No End Date (Continuous)
Provide green tips on staff website or in newsletters	Ongoing/In Progress	Schools, head office and community Newsletters often offer tips on how to conserve energy - for employees, parents and students.	To continue and encourage this initiative.	2008	No End Date (Continuous)
Provide sustainability education during new staff orientation	In Development	We make it part of our staff orientation to educate new staff members of our strive to sustainability during orientation.	To continue this good practice.	2012	No End Date (Continuous)
Team-building					
Create Green, Sustainability, Energy Conservation, or Climate Action Teams with executive endorsement	Not Yet Evaluated				No End Date (Continuous)
Provide resources and/or dedicated staff to support teams	Not Yet Evaluated				No End Date (Continuous)
Providing behaviour change education/training to teams (e.g., community-based social marketing)	Not Yet Evaluated				No End Date (Continuous)
Other Sustainability Actions	•				- '
Adaptation to Climate Change					
Assessed whether extreme weather events and/or long term changes in	Not Yet				No End Date

## **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
climate will affect the organization's business areas	Evaluated				(Continuous)
Integrated considerations of extreme weather events and/or long term	Not Yet				No End Date
changes in climate into the organization's decision making.	Evaluated				(Continuous)
Building construction, renovation					
Incorporate lifecycle costing into new construction or renovations	Not Yet				No End Date
	Evaluated				(Continuous)
Commuting to and from home					
Encourage commuting by foot, bicycle, carpool or public transit	Ongoing/In	We are encouraging staff to commute by bicycle, carpool and public	We will continue to encourage them.	2012	No End Date
Describe a server bis selections	Progress	transit.	Management to the best of the decreased by	0000	(Continuous)
Provide secure bicycle storage	Ongoing/In	Bike racks are installed in schools.	More racks can be installed as the demand increases.	2008	No End Date
D	Progress				(Continuous)
Procurement (non-paper supplies) Incorporate minimum recycled content standards into procurement	In Dovolonment	Cinco we are siming to reduce our paper consumption, we are no	To continue and improve this practice	2011	No End Date
policy for consumable, non-paper supplies (e.g., writing instruments,	In Development	Since we are aiming to reduce our paper consumption - we are no longer needing the use of so many office furniture's such as binders	To continue and improve this practice.	2011	(Continuous)
binders, toner cartridges, etc.)		and file folders which in return makes for less printing, hence the use			(Continuous)
biliders, torier cartridges, etc.)		of less toner.			
Establish green standards for goods that are replaced infrequently	Not Yet	or least torrer.			No End Date
and/or may require capital funds to purchase (e.g., office furniture,	Evaluated				(Continuous)
carpeting, etc.)					,
Implement sustainable purchasing program for cleaning products,	Ongoing/In	We have established a policy for green cleaning products.	We will continue to use the same practice and improve it.	2011	No End Date
disposable paper products and trash bags	Progress				(Continuous)
Waste reduction/diversion					
Put in place an operations policy to facilitate the reduction and diversion	Ongoing/In	All schools and offices are equipped with recycle bins and garbage	To continue and improve the same practice.	2008	No End Date
of building occupant waste from landfills or incineration facilities	Progress	bins. Everyone is encouraged to separate their drink boxes or paper			(Continuous)
		and garbage.			
		Schools are encouraging reusable sandwich and snack containers			
		and reusable water/drink bottles. Also, offices are encouraging no			
		bottled water policy.			
Water conservation	Not Vot				No End Date
Establish a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models	Not Yet Evaluated				(Continuous)
Put in place a potable water management strategy to reduce potable	Not Yet				No End Date
water demand of building-level uses such as cooling tower equipment,	Evaluated				(Continuous)
toilet fixtures, etc. and landscape features	Lvaluated				(Continuous)

# School District 93 - Conseil Francophone Greenhouse Gas Emissions by Source for the 2012 Calendar Year (tCO<sub>2</sub>e\*)



#### **Total Emissions: 2,044**

- 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 May 31, 2013 12:16 PM)

Total offsets required: 2,043. Total offset investment: \$51,075. Emissions which do not require offsets: 0 \*\*

<sup>\*</sup>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.

<sup>\*\*</sup> 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.