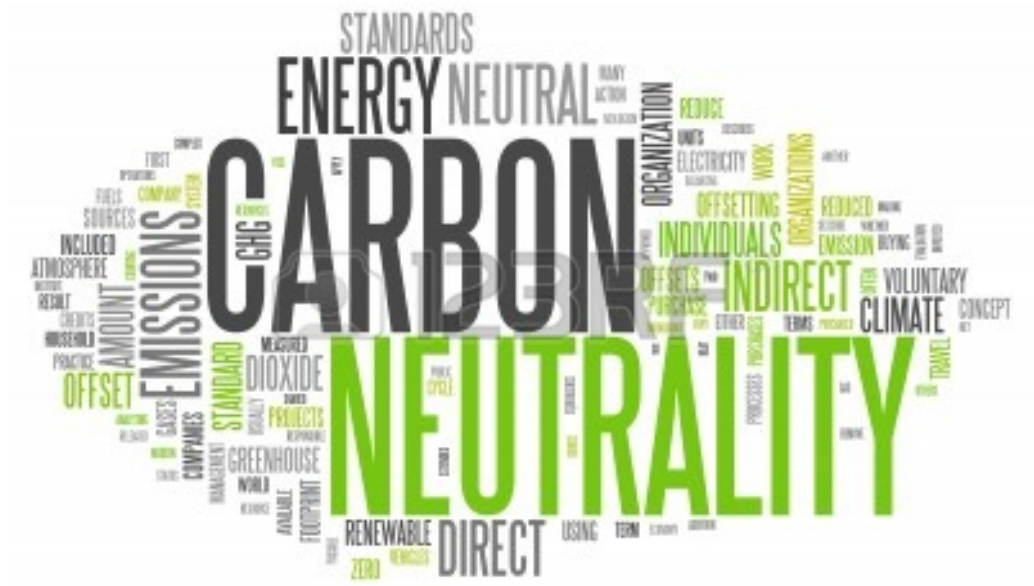


SCHOOL DISTRICT NO. 85



5/1/2015

2014 CARBON NEUTRAL ACTION
REPORT

School District NO. 85

2014 CARBON NEUTRAL ACTION REPORT

Executive Summary

On behalf of the Vancouver Island North School District, I am pleased to submit the 2014 Carbon Neutral Action Report. This report provides an over view of the steps that the Vancouver Island North School District has taken to reduce its greenhouse gas emissions as well as other environmental sustainable actions that have been undertaken in the 2014 calendar year.

Environmental sustainability is deeply important to the Vancouver Island North School District. Our Energy Management Committee is now celebrating its third year in existence. Our Board of Education continues to support effective practice in the Environmental Sustainability focus areas such as Curriculum, Energy Conservation, Community Gardening, Sustainable Purchasing, Sustainable Transportation, Water Conservation and Waste Management.

The Greenhouse Gas reduction initiatives in 2014 continued to be focused primarily on reducing emissions from buildings, which is our largest source. Lighting upgrades have been completed in four schools, our School Board Office and at our Maintenance/Transportation yard and new boilers installed at three locations have made these locations more energy efficient.

We engage both our students and our employees, leveraging their knowledge and enthusiasm as we strive to lower GHG emissions and continue to generate financial savings and improve social benefits. Our employees are more engaged in working towards sustainability, and the students who create our future are becoming more passionate about caring for their communities and the world that surrounds them.



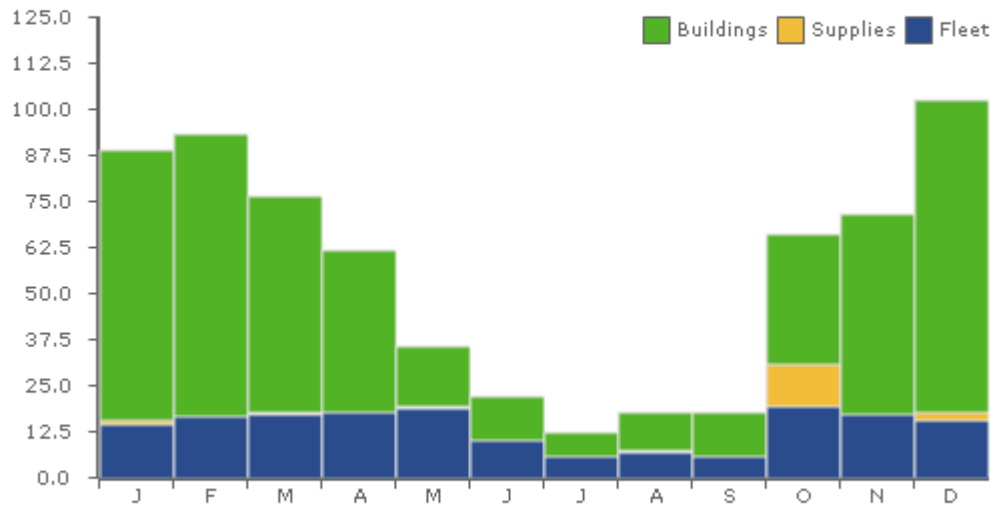
Dr. Scott Benwell
Superintendent of Schools
School District No. 85
Vancouver Island North

Greenhouse Gas Emissions

The total Greenhouse Gas Emissions for School District No. 85, Vancouver Island North for the 2014 calendar year were 680 tonnes CO₂e, which is down from 713 tonnes in 2013. The graph below shows the district emissions by source.

Total Emissions Calendar Year 2014 School District 85 - Vancouver Island North

Metric tonnes
CO₂ equivalent (tCO₂e)



Click on the bars to view data for each month

Buildings

GHG Emissions
(Metric Tonnes CO₂e)



Supplies

GHG Emissions
(Metric Tonnes CO₂e)



Fleet

GHG Emissions
(Metric Tonnes CO₂e)



Buildings

The Greenhouse Gas emissions from buildings are the result of the burning of fossil fuels which are used to provide heating, cooling, ventilation and electricity. These account for 66.9% of total emissions within the district.

Fleet

Fleet emissions are emissions from fossil fuels (gas, diesel and propane), which are used to power the district's maintenance and transportation vehicles. The fleet emissions account for 25.4% of School District No. 85's total emissions.

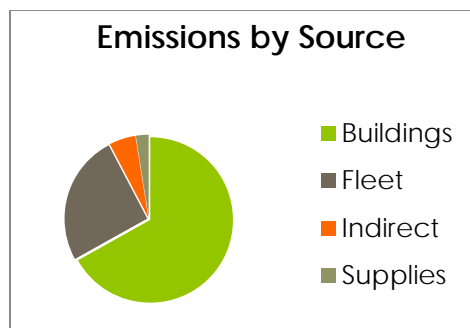
As required by section 5 of the Carbon Neutral Government Regulation, emissions resulting from the operation of school buses were reported as part of the greenhouse gas emissions profile in 2014. These emissions account for the majority of our fleet emissions and are not offset as they are out-of-scope under section 4(2) (c) of the Carbon Neutral Government Regulation.

Indirect Emissions

Indirect emissions is the data which refers to the consumption of purchased electricity, heat or steam that has been directly billed to the organization and which constitutes 5.2% of the overall emissions.

Supplies




Office paper purchased for use in the district is categorized as direct emissions and accounts for 2.5% of the total emissions in School District No. 85



Fugitive Emissions

Fugitive emissions are the unintentional emissions from the production, processing, transmission, storage and delivery of fossil fuels; as well as the intentional combustion of fossil fuels not used to generate useful heat or electricity.

The following fugitive emissions are deemed by the British Columbia Provincial Government Carbon Neutral Government Regulation as out-of-scope for reporting:

-  Gases used for research purposes (eg: science labs)
-  Type R-22 coolant from stationary air conditioning and refrigeration units in schools
-  Any emission sources that comprise less than 1% of the district's total GHGs

In-scope fugitive emissions (HFCs released to the environment as a result of leaks in cooling equipment) for School District 85 are well below the 1% threshold for reporting and are therefore not included.

Travel Related Emissions

Under the Carbon Neutral Public Sector commitment, only core government organizations that report through the Consolidated Revenue Fund (government ministries, tribunal employees, Crown Corporations) are required to track and report emissions from business travel of public officials. Vancouver Island North School District does not fall within 'core government' and therefore does not track travel related emissions.

Carbon Neutral in 2014

Offsets Applied to Become Carbon Neutral

In order to achieve carbon neutral status for 2014, the Board of Education of School District No. 85 (Vancouver Island North) purchased carbon offsets totaling 564 tonnes of CO₂e from the Pacific Carbon Trust in May of 2015 at a cost of \$14,805.00

Actions Taken to Reduce Greenhouse Gas Emissions in 2014

In 2014 School District No. 85 remained focused on replacing aging equipment and fixtures with newer, more energy efficient models.

The lighting systems at four school buildings were upgraded to more energy efficient T-8 fixtures which should provide a cost savings of approximately \$2000 per year.

A HVAC upgrade at North Island Secondary School was brought to completion. The new system saw the replacement of 19 electric baseboard classroom heaters with Max Air water source heat pump and condensing boiler driven units. This new system allows School District No. 85 to work in partnership with the Regional District of Mount Waddington; excess heat generated by the Regional District's arena complex is diverted to the school and purchased for heating purposes. This arrangement is expected to provide a long term energy savings for the School District as a result of lower electricity and propane demand, especially during the colder winter months.

Three older vans and one bus in our fleet were disposed of and replaced with one newer van as well as 2 - 76 passenger school buses, one being wheel chair accessible.

Hydro is used in the School District for both lighting and heating purposes. The total electricity purchased from BC Hydro went from 3,811,287 in 2013 to 3,361,546.01 in 2014, an overall decrease of 449,740.99kwh.

Eight of the School District 85's properties are heated by propane. 2014 saw an overall decrease of 8,896 litres, from 289,545 litres in 2013 to 280,648 in 2014.

Plans to Continue Reducing Greenhouse Gas Emissions in 2015-2016

In 2015 the plan is to continue upgrading heating and lighting fixtures with more energy efficient models. A new make-up air unit is being installed at Port Hardy Secondary and electrical upgrades are being carried out at both secondary schools in the district this summer.

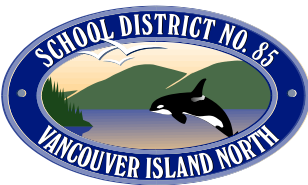
Education is ongoing amongst staff and students in the district as to how we can all do our part to reduce our environmental footprint. Purchasing recycled content products is endorsed and encouraged.

All school district properties are idle free and this is enforced through signage and verbal communications. Buses and maintenance vehicles are turned off when not being immediately used and ride sharing is encouraged whenever possible.

Our transportation department participates in an oil and filter recycling program to minimize their environmental impact and regular maintenance on all fleet vehicles ensures that they are running as efficiently as possible.



John Martin, Secretary-Treasurer



2014 Carbon Neutral Action Report (CNAR) - Part 2 ACTIONS

Organization Name

School District 85 - Vancouver Island North

Actions Taken to Reduce Emissions

1) Stationary Fuel Combustion, Electricity (Buildings): Indicate which actions were taken in 2014:

Performed energy retrofits on existing buildings

Yes

Built or are building new LEED Gold or other "Green" buildings.

No

Undertook an evaluation of overall building energy use.

Yes

Please list any other actions taken to reduce emissions from Buildings:

(No response)

2) Mobile Fleet Combustion (Fleet and other vehicles): Indicate which actions were taken in 2014:

Do you have a fleet?

Yes

Replaced existing vehicles with more fuel efficient vehicles (gas/diesel)

Yes

Replaced existing vehicles with hybrid or electric vehicles

No

Reduced the overall number of fleet vehicles

No

Took steps to drive less than last year

No

Please list any other actions taken to reduce emission from fleet:

(No response)

3) Supplies (Paper):Indicate which actions were taken in 2014:

Used less paper than previous year

No

Used only 100% recycled paper

No

Used some recycled paper

Yes

Used alternate source paper (Bamboo, hemp, etc.)

No

Please list any other actions taken to reduce emissions from paper use:

(No response)

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Actions Taken to Reduce Emissions - continued

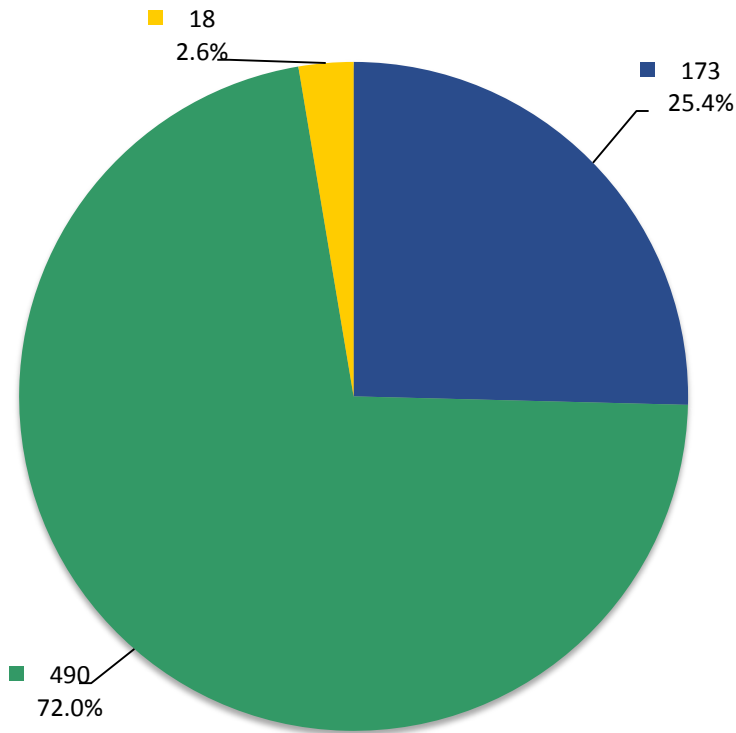
Explain how you plan to continue minimizing emissions in 2015 and future years:

Monitor consumption, educate staff and continue with energy efficient upgrades.

If you wish to list any other "sustainability actions" outside of buildings, fleet, paper and travel check "yes". This reporting is optional.

No

**School District 85 - Vancouver Island North
Greenhouse Gas Emissions by Source
for the 2014 Calendar Year (tCO₂e*)**



Total Emissions: 680

- 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 2014 (Generated June 23, 2015 3:48 PM)

Total offsets required: **564**. Total offset investment: **\$14,100**. Emissions which do not require offsets: **116** **

*Tonnes of carbon dioxide equivalent (tCO₂e) 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 from the sources listed above must be reported. As outlined in the regulation, some emissions do not require offsets.