



SCHOOL DISTRICT NO. 40

NEW WESTMINSTER

2013

Carbon Neutral Action Report

Executive Summary

On behalf of School District #40, New Westminster, I am pleased to submit the 2013 Carbon Neutral Action Report. New Westminster School District continues to actively work towards carbon neutrality. The School District believes that all stakeholders play a key role individually and collectively in this endeavour. The Board believes district staff has a responsibility to ensure that every effort is made to conserve energy and natural resources while exercising sound financial management. We believe each employee, student and school volunteer, should be encouraged to actively participate in district sustainability programs to the point that acting in a sustainable manner will be "second nature" for everyone. Reducing energy use and GHG emissions will benefit the district by a reduction in expenses, provide a less environmental impact on the surrounding area and be a positive example within the community by demonstrating that our district is leading the way.

School District No.40 is proud of our continued work towards achieving carbon neutrality with conscious and committed effort to support energy and natural resource conservation.



Al, Balanuik
Secretary Treasurer

Greenhouse Gas Emissions

- 2013 Greenhouse Gas (GHG) Emissions: 1829 tonnes of CO₂e

	Emissions Reported in 2012 CNAR	Emissions Reported in 2013
Total Emissions	2285	1829
Emissions for offsets	2283	1827

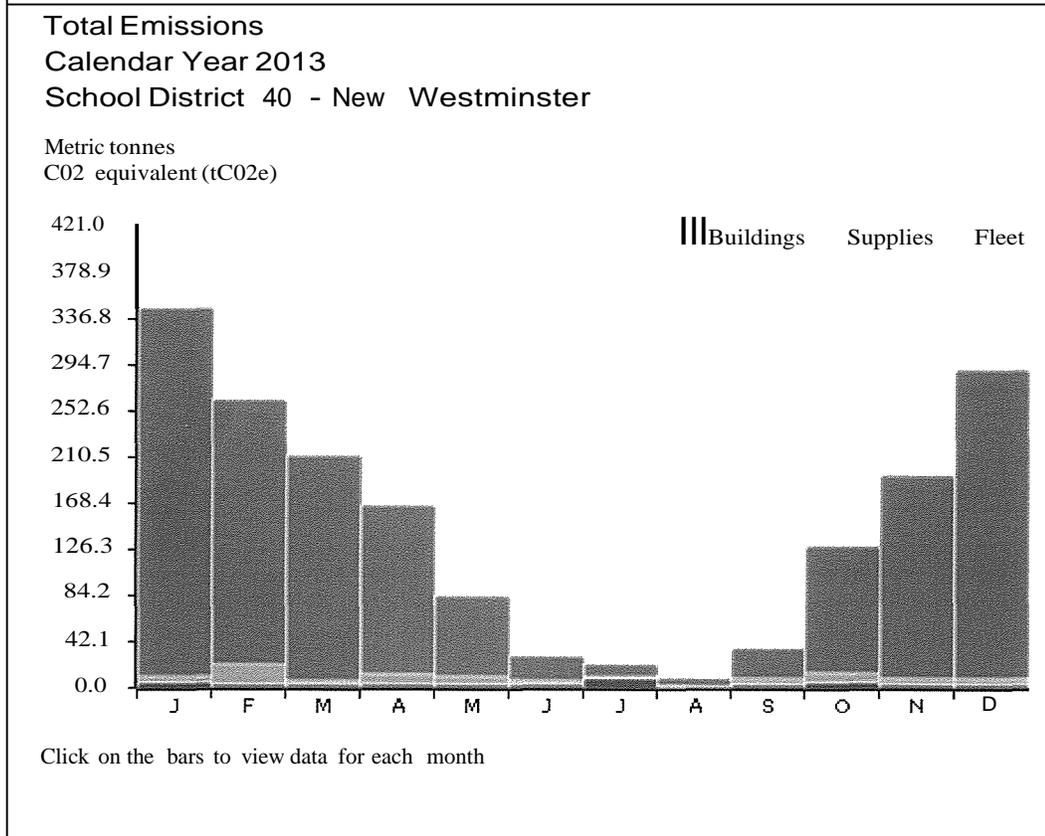
Offsets Applied to Become Carbon Neutral in 2013

In order to become carbon neutral for 2013, the Board of Education of School District #40 (New Westminster) purchased carbon offsets for 1827 tonnes of CO₂e from the Pacific Carbon Trust on May 1, 2014. As required by section 5 of the Carbon Neutral Government Regulation, 49 tonnes CO₂e of emissions resulting from the operation of heavy duty Maintenance vehicles were reported as part of our greenhouse gas emissions profile in 2013. However, they were not offset as they are out-of-scope under section 4(2)© of the Carbon Neutral Government Regulation.



!Reports **3**
 Help
 February 14, 2014

Report Unit:
 School District 40- New Westminster | Calendar Year 2013 **3** Show Report



Totals Calendar Year 2013, School District 40- New Westminster

Greenhouse Gases in Tonnes

	Measure	Quantity	CO2	BioCO2	CH4	N2O	tCO2e ¹
Scope 1 (Direct) Emissions							
Mobile Combustion (Fleet)	Litres	23,779.00	54.30	1.93	0.00	0.01	59.77
Stationary Combustion, Estimated ²	GigaJoules	154.04	7.65	0.00	0.00	0.00	7.70
Stationary Combustion, Reported ³	GigaJoules	32,216.24	1,605.48	0.00	0.03	0.03	1,615.65
Scope 2 (Indirect) Emissions							
Purchased Energy, Reported ³	GigaJoules	14,249.52	57.00	0.00	0.00	0.00	57.00
Scope 3 (Business Travel and Office Paper) Emissions							
Office Paper	Packages	14,409.00	88.43	0.00	0.00	0.00	88.43

Total Emissions, Calendar Year 2013	1,812.87	1.93	0.04	0.04	1,829
Carbon Neutral or Offset Exempt	0.00	1.93	0.00	0.00	2
Total for Offsets⁴	1,812.87	0.00	0.04	0.04	1,827

Each greenhouse gas has been converted to a standard measurement (tCO₂e) by multiplying its emissions by its global warming potential (GWP). The GWP of carbon dioxide (CO₂) from both anthropogenic and biogenic sources is 1; methane (CH₄) is 21, and nitrous oxide (N₂O) is 310. The Totals for tCO₂e are shown here rounded to the nearest whole metric tonne as only whole tonnes of tCO₂e can be purchased for offsets.

2. Estimated data has been calculated based on the methods described in the Methodology Document.
3. Reported data refers to consumption which has been directly billed to the organization.
4. Report the tCO₂e value from the "Total for Offsets" line, to the Pacific Carbon Trust.

Changes to Greenhouse Gas Emissions and offsets Reporting from previous years

Following the public release of School District No. 40, New Westminster's 2011 Carbon Neutral Action Report it was determined that the total emissions for the 2010/2011 calendar year were over reported by 74 tonnes CO₂e and offsets required to become carbon neutral in 2011 were over reported by 74 tonnes CO₂e. The surplus of offsets purchased in 2011 has been applied against our 2012 emissions.

Total Emissions for the Calendar year 2013 is 1829 and the Total Emissions for Offsets is 1827. The adjustment for Emissions Reported in previous year is 2 tonnes CO₂e.

Emissions Reduction Activities

We continue to manage energy management software on computers and to manage default duplex printing on print devices. We have increased scanning access on all photocopiers and our school sites are using re-cycled newsprint. Our employees will be reminded of energy conservation by stickers placed at their site reminding them to turn off the lights. The district has initiated an energy management program district wide.

The District has implemented fuel combustion and electrical reductions on two schools following our five year capital plan. Electrical upgrades with motion detectors and retrofitted lighting. DDC upgrades, condensing boilers and automated control upgrades.

Our District plan is to have a total reduction of 20% in energy consumption in the next 5 years.

Plans to Continue Reducting Greenhouse Gas Emissions 2014-2015

School District #40, New Westminster will grow by 1600 sq. meters this year and with this in mind we are looking to reduce our greenhouse emissions in the next three years as follows:

We are entering an Energy Management Program and plan to reduce gas emissions by introducing a DDC program and installing HVAC equipment upgrades. We plan to recommission our mechanical systems at all schools on our five year school renewal plan. The school district is implementing a vehicle replacement program that will replace current vehicles with smaller more efficient models. With regards to paper emissions, the district is encouraging the staff to use electronic messages and to use re-cycled paper.

We continue to encourage New Westminster students and employees to commit their efforts to support our energy efficient plans.

2013 Carbon Neutral Action Report (CNAR) - Part 2 ACTIONS

Created Wednesday, February 05, 2014

Updated Thursday, March 13, 2014

<https://fluidsurveys.com/surveys/cas-z/2013-cnar-form-bps-actions/0cdd392c0e1002bdab5945316c6c3372/>

Page 1

Please complete the following sections of the 2013 Carbon Neutral Action Report form. Save your work frequently to prevent it from being lost. You can also save a copy for your own use as either a WORD or PDF file using the buttons at the bottom of each page.

This is Part 2 of the Carbon Neutral Action Report form. This section reports on actions taken to reduce emissions during the 2013 calendar year. This information will be included in your final Carbon Neutral Action Report posted on the Ministry of Environment website.

When the form is complete press the submit button on the last page to automatically submit the information to the Climate Action Secretariat (CAS). Do not press submit before you are ready – this may result in a loss of work.

In addition to completing this survey (Part 1 2), you are required to submit your completed Overview (Executive Summary) and Self-Certification Checklist. The 2013 Overview template was included in the email sent and can also be found on the LiveSmart leaders Community.

Please ensure you meet the following reporting deadlines:

A DRAFT 2013 CNAR is due to CAS by March 31, 2014. The draft is comprised of the Overview ONLY (no executive sign-off required).

The FINAL 2013 CNAR is due to CAS by May 30, 2014. The final 2013 CNAR includes Part 1 Part 2 survey form and Overview.

The Self-Certification Checklist is due to CAS by May 15, 2014.

For more information about the Carbon Neutral Government process, please refer to *Becoming Carbon Neutral 2013*, or should you have any questions please contact climateactionsecretariat@gov.bc.ca.

Organization Name

SD40

Actions Taken to Reduce Emissions

1) Stationary Fuel Combustion, Electricity (Buildings):

Indicate which actions were taken in 2013:

Performed energy retrofits on existing buildings

Yes

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

Yes

Undertook an evaluation of overall building energy use.

Yes

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

*The District implemented reductions in fuel combustion and electrical on existing buildings as follows:
Electrical upgrades, motion detectors, DDC upgrades, condensing boilers and automated controls.*

2) Mobile Fleet Combustion (Fleet and other vehicles):

Indicate which actions were taken in 2013:

Do you have a fleet?

Yes

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

No

Replaced existing vehicles with hybrid or electric vehicles

No

Reduced the overall number of fleet vehicles

Yes

Took steps to drive less than last year

No

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

The District scheduled less projects thereby reducing emissions from the fleet.

3) Supplies (Paper):

Indicate which actions were taken in 2013:

Used less paper than previous year

Yes

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:

*Reduced emissions from paper use as follows:
- photocopiers switched to automatic double sided*

- *purchased white and coloured paper @ 30% re-cycled, for all sites*
- *increased scanning access on all photocopiers*
- *8 district sites are using re-cycled newsprint*

Actions Taken to Reduce Emissions - continued

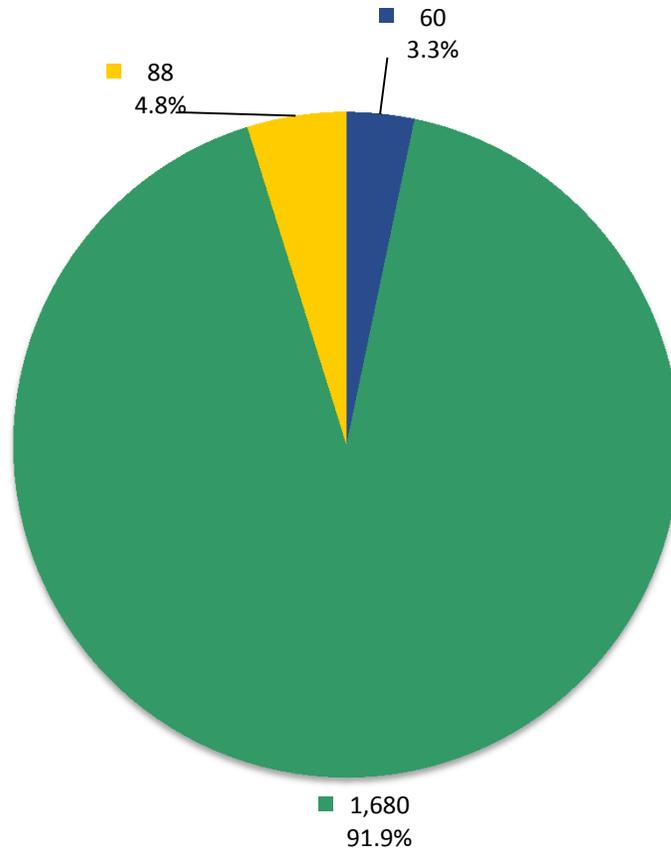
Explain how you plan to continue minimizing emissions in 2014 and future years:

The District plans to investigate and discover alternate energy sources that would reduce or eliminate emissions.

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 40 - New Westminster Greenhouse Gas Emissions by Source for the 2013 Calendar Year (tCO₂e*)



Total Emissions: 1,828

- 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 2013 (Generated June 05, 2014 1:44 PM)

Total offsets required: **1,827**. Total offset investment: **\$45,675**. Emissions which do not require offsets: **2** **

*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.