

2015 Carbon Neutral Action Report - North Vancouver School District

Declaration statement: This Carbon Neutral Action Report for the period January 1, 2015 to December 31, 2015 summarizes our emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2015 to reduce our greenhouse gas emissions and our plans to continue reducing emissions in 2016 and beyond.

By June 30, 2016 **North Vancouver School District's** final *Carbon Neutral Action Report* will be posted to our website at www.sd44.ca

Overview: Several key initiatives in 2015 contributed to our on-going commitment to reduce GHG emissions. A retrofit project at Upper Lynn Elementary included the installation of four new high efficiency condensing boilers and smart pumps, which replaced a single inefficient boiler and hot water circulation system. Boundary Elementary also went through a significant heating and ventilation retrofit project that eliminated numerous individual gas fired unit ventilators located throughout the school and replaced them with two new high efficiency condensing boilers and smart pumps coupled to a new displacement air ventilation system. Heat recovery ventilators (HRV's) were also incorporated into the exhaust air stream at Boundary Elementary as a further energy conservation measure. In addition to these large retrofit projects, we engaged in a continuous optimization program (COP) of the existing building systems at four secondary schools: Handsworth, Sutherland, Windsor and Seycove.

A number of projects have been planned for execution in 2016/17. Cleveland Elementary will undergo a complete window retrofit, which will replace all single pane glazing with insulated double pane low-e glazing. The roofing and insulation system at Cove Cliff Elementary will be replaced. Eastview Elementary will undergo a boiler plant replacement that includes the installation of new high efficiency boilers and smart pumps. The COP program will continue at Carson Graham and then move onto Argyle Secondary. Enhancements to the building control systems will be undertaken at four elementary schools: Canyon Heights, Dorothy Lynas, Ross Road and Westview.

Emissions and Offset Summary Table:

North Vancouver School District GHG Emissions and Offset for 2015 (TCO ₂ E)	
GHG Emissions created in Calendar Year 2015:	
Total Emissions (tCO ₂ e)	3514
Total Offsets (tCO ₂ e)	3459
Adjustments to GHG Emissions Reported in Prior Years :	
Total Emissions (tCO ₂ e)	72
Total Offsets (tCO ₂ e)	72
Grand Total Offsets for the 2015 Reporting Year:	
Grand Total Offsets (tCO ₂ e)	3531

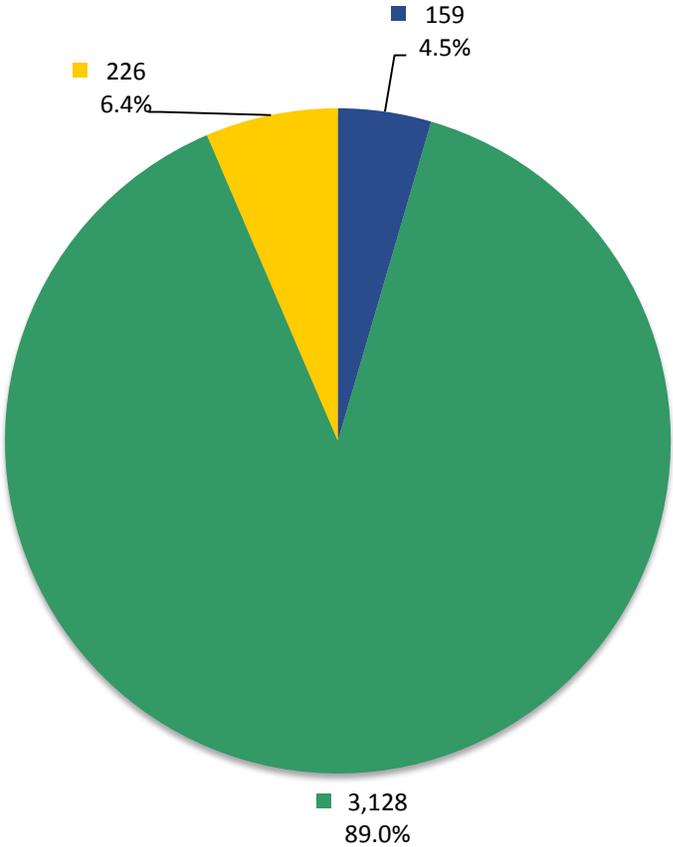
Retirement of Offsets:

In accordance with the requirements of the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, **North Vancouver School District** is responsible for arranging for the retirement of the offsets obligation reported above for the 2015 calendar year, together with any adjustments reported for past calendar years. The Organization hereby agrees that, in exchange for the Ministry of Environment ensuring that these offsets are retired on the Organization's behalf, the Organization will pay the associated invoice to be issued by the Ministry in an amount equal to \$25 per tonne of offsets retired on its behalf plus GST.

Executive sign-off:

Signature 	Date JUNE 7, 2016
Name (please print) Georgia Allison	Title SECRETARY TREASURER

**School District 44 - North Vancouver
Greenhouse Gas Emissions by Source
for the 2015 Calendar Year (tCO₂e*)**



Total Emissions: 3,514

- 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 2015 (Generated May 26, 2016 9:09 AM)

Total offsets required: **3,459**. Total offset investment: **\$86,475**. Emissions which do not require offsets: **55** **

*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.

2015 Carbon Neutral Action Report Survey

Organization Name:

North Vancouver School District

Please select your sector:

- School District

1) Stationary Sources (Buildings, Power Generators, Ext. Lighting) Fuel Combustion, Electricity use, Fugitive Emissions:

Please indicate which actions your PSO took in 2015:

Have developed an overall strategy/plan to reduce energy use in your organization's buildings inventory:

Yes

If Yes, please describe:

We have a Strategic Energy Management Plan (SEMP) and contracted Energy Manager. We have identified several energy project for 2016/17 that will be funded from our annual facilities grant

Undertook evaluations of building energy use:

Yes

Performed energy retrofits on existing buildings:

Yes

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

Yes

Please list any other actions, programs or initiatives that your organization has introduced that support emissions reductions from buildings:

We have recently hired a number of skilled trades roles (electricians, DDC Tech, Maintenance Tech) that will allow for a more proactive approach to maintenance which will allow for optimum asset performance. In the process of procuring a new Computerized Maintenance Management System (CMMS) that will more effectively allow staff to identify issues and for timely corrective action. We have an active, broad based, Environmental Leadership Team that continues to find energy savings opportunities.

2) Mobile Sources (Fleet, Off-road/Portable Equipment) Fuel Combustion:

Indicate which actions your PSO took in 2015:

Have put in place an operations policy/program to support systematic reductions in fleet related emissions:

(e.g., program to convert fleet to renewable fuels)

No

If Yes, please describe:

(No response)

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

Yes

Replaced existing vehicles with hybrid or electric vehicles:

No

Took steps to drive less than previous years:

Yes

Please list any other actions, programs or initiatives that your organization has introduced that support emissions reductions from fleet combustion:

(No response)

3) Supplies (Paper):

Indicate which actions your PSO took in 2015:

Have put in place an operations policy/program to facilitate a systematic reduction in paper-related emissions:

(e.g., policy to purchase 100% Recycled Content; default to double-sided printing)

Yes

If yes, please describe:

Our copiers require FOB access and default to double sided

Have put in place an operations policy/program to facilitate behavioural changes from paper use:

(e.g. awareness campaign to reduce paper use):

Yes

If yes, please describe:

Commentary on paper reduction as well as recycling are a recurring theme through various communications initiatives

Used only 100% recycled paper:

No

Used some recycled paper:

Yes

Used alternate source paper:

(e.g., bamboo, hemp, wheat etc.)

No

Please list any other actions, programs or initiatives that your organization has introduced that support emissions reductions from paper supplies:

(No response)

4) Other Sustainability Actions:

Please note that this section is optional

Business Travel

Created a low-carbon travel policy or travel reduction goal:

(low-carbon = lowest emission of greenhouse gas per kilometer per passenger)

No

Encouraged alternative travel for business:

(e.g. bicycles, public transit, walking)

Yes

Encouraged or allow telework/working from home:

No

Other:

(No response)

Education Awareness

Have a Green/Sustainability/Climate Action Team:

Yes

Supported green professional development:

(e.g. workshops, conferences, training)

Yes

Supported or provided education to staff about the science of climate change, conservation of water, energy and/or raw materials:

Yes

Other:

(No response)

Adaptation Planning for Climate Risks

Have assessed whether increased frequency of extreme weather events and/or long term changes in climate will affect your organization's infrastructure, its employees and/or its clients:

Yes

Have incorporated these anticipated changes in climate into your organization's planning and decision making:

Yes

Other:

(No response)

Other Sustainability Actions

Established a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models:

Yes

Have put in place an operations policy/program to facilitate the reduction and diversion of building occupant waste stream from landfills or incineration facilities:

(e.g., composting, collection of plastics, batteries)

Yes

Established green standards for goods that are replaced infrequently and/or may require capital funds to purchase:

(e.g., office furniture, carpeting, etc.)

Yes

Incorporated lifecycle costing into new construction or renovations:

Yes

Please list any other sustainability actions your organization has taken not listed above:

(No response)