



2017 Carbon Neutral Action Report

North Vancouver School District

Declaration Statement: This Carbon Neutral Action Report for the period January 1, 2017 to December 31, 2017 summarizes our emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2017 to reduce our greenhouse gas emissions, and our plans to continue reducing emissions in 2018 and beyond.

By June 30, 2018 **North Vancouver School District's** final *Carbon Neutral Action Report* will be posted to our website at www.sd44.ca

2017 Overview: Several key initiatives in 2017 contributed to our ongoing efforts to reduce GHG emissions.

- Montroyal Elementary and Dorothy Lynas Elementary underwent boiler plant upgrades that included the installation of new high efficiency condensing boilers and “smart” heating water distribution pumps.
- The School District hired a full-time Sustainability and Energy Manager, whose mandate includes the development and implementation of a district-wide greenhouse gas reduction strategy.
- The roofing and insulation system in the Ridegeway Elementary demountable classroom block was upgraded.
- Enhancements to the building control systems were made at the Cheakamus Environmental Learning Centre.
- LED lighting retrofits and controls upgrades were completed at 4 elementary schools: Westview, Dorothy Lynas, Canyon Heights, and Ross Road.
- We continued with the BC Hydro Continuous Optimization (C-Op) program to enhance the operation of building systems at five secondary schools: Sutherland, Windsor, Seycove, Carson Graham, and Arglye.

2018 Overview: A number of initiatives are underway, or have been planned for execution, in 2018:

- LED lighting retrofits and controls upgrades were completed at 6 elementary schools: Lynn Valley, Sherwood Park, Cleveland, Capilano, Braemar, and Cove Cliff.
- Braemar Elementary and Ross Road Elementary will undergo boiler plant upgrades.
- Building envelope upgrade projects will be initiated at Ross Road Elementary and Eastview Elementary.
- Low-carbon heating systems will be explored for the Handsworth Secondary school replacement project.
- Enhancements to the exiting building control systems will be made at the Education Services Centre.
- The BC Hydro Continuous Optimization (C-Op) program will conclude at Arglye Secondary.

Emissions and Offset Summary Table:

North Vancouver School District GHG Emissions and Offset for 2017 (tCO ₂ e)	
GHG Emissions created in Calendar Year 2017	
Total Emissions (tCO ₂ e)	4,270
Total Offsets (tCO ₂ e)	4,197
Adjustments to GHG Emissions Reported in Prior Years	
Total Emissions (tCO ₂ e)	0
Total Offsets (tCO ₂ e)	0
Grand Total Offsets for the 2017 Reporting Year	
Grand Total Offsets (tCO ₂ e)	4,197

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 2017 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
Georgia Allison	Secretary Treasurer
_____ Name (please print)	_____ Title

Part 1: CNAR Survey

1. General Information

Name: Luke Smeaton

Contact Email: lsmeaton@sd44.ca

Organization Name: School District 44 North Vancouver

Sector: School District

2. Stationary Sources (eg. Buildings, Power Generators): Fuel Combustion, Electricity use, Fugitive Emissions.

During 2017, did your organization take any of the following actions to support emissions reductions from buildings? (please select all that apply)

Conducted an energy audit/study of building(s) in the organization's portfolio.; Performed energy retrofits of the organization's building(s)

If you selected "*Performed energy retrofits of the organization's building(s)*":

How many buildings were retrofitted?: 8

If you selected "*Built, or are building new LEED Gold or other "Green" buildings*":

How many new "Green" buildings?:

Did your Organization perform any retrofits during 2017? Please describe briefly:

LED lighting retrofits at 4 schools

High efficiency boiler upgrades at 2 schools

2a. Stationary Sources (eg. Buildings, Power Generators): Fuel Combustion, Electricity use, Fugitive Emissions.

Please briefly describe your organization's plans to continue reducing emissions from its stationary sources:

a) Over the next 1-5 years

- Progressively replace end-of-life natural gas boilers with high efficiency condensing units
- Continuing to optimize HVAC controls for efficient operation
- Explore low-carbon electrification opportunities for heating plants in selected buildings
- Complete building envelope upgrades

b) Over the following 6-10 years

- Whole-building "deep" energy retrofits

3. Mobile Sources (Vehicles, Off-road/portable Equipment): Fuel Combustion:

During 2017, did your organization take any of the following actions to support emission reductions from its mobile sources? (please select all that apply)

Replaced existing vehicles with more fuel efficient vehicles (gas/diesel); Took steps to drive less than previous years

If you selected "*Replaced existing vehicles with more fuel efficient vehicles (gas/diesel)*":

How many vehicles?: 1

If you selected "*Replaced existing vehicles with hybrid or electric vehicles*":

How many vehicles?:

3a. Mobile Sources (Vehicles, Off-road/portable Equipment): Fuel Combustion:

Please briefly describe your organization's plans to continue reducing emissions from its mobile sources:

a) Over the next 1-5 years

Utilize computerized maintenance management system to optimize service vehicle routes and reduce trips back to maintenance shop

b) Over the following 6-10 years

Explore the potential for electrified fleet vehicles

4. Supplies (Paper): Indicate which actions your PSO took in 2017:

During 2017, did your organization take any of the following actions to support emissions reductions from paper supplies? (please select all the apply)

None of the above

If you selected "*Had a policy requiring the purchase of recycled content paper*":

State the required recycled content here (30%, 50%, 100%):

If you selected "*Had a policy requiring the purchase of alternate source paper (bamboo, hemp, wheat, etc)*", which type of alternate source paper did you use?

Please briefly describe your organization's plans to continue reducing emissions associated with its office paper use in future years.

Review paper consumption data from individual schools to understand the usage profiles. Run awareness campaign to reduce papers use.

5. Other Sustainability Actions

a) Business Travel

During 2017, did your organization take any of the following actions to support emissions reductions from business travel? (please select all that apply)

None of the above

b) Education/Awareness

During 2017, did your organization have any of the following programs or initiatives to support sustainability education and awareness? (please select all that apply)

A Green, Sustainability or Climate Action Team; Support for professional development on sustainability (e.g. workshops, conferences, training); Supported or provided education to staff about the science of climate change, conservation of water, energy and/or raw materials

c) Other Sustainability Actions

During 2017, did your organization have any of the following programs or initiatives to support sustainability? (please select all that apply)

An operations policy or program to facilitate the reduction and diversion of building occupant waste (e.g., composting, collection of plastics, batteries) from landfills or incineration facilities