

# **2016 Carbon Neutral Action Report**

## **Nanaimo-Ladysmith Public Schools (School District 68)**

### **Declaration Statement**

This Carbon Neutral Action Report for the period January 1<sup>st</sup>, 2016 to December 31<sup>st</sup>, 2016 summarizes our emissions profile, the total offsets to reach net zero emissions, the actions we have taken in 2016 to reduce our greenhouse gas emissions and our plans to continue reducing emissions in 2017 and beyond.

By June 30, 2017, Nanaimo-Ladysmith Public Schools' (NLPS) final Carbon Neutral Action Report will be posted to our website at [www.sd68.bc.ca](http://www.sd68.bc.ca).

### **Overview**

In 2016, Nanaimo-Ladysmith Public Schools continued with our strategic plan to reduce energy consumption and our carbon foot print. In partnership with BC Hydro, the District was able to continue replacing outdoor lighting with LED technology and implementing interior occupancy sensors at seven sites. The District was also able to replace three aging and inefficient boiler plants with new high efficiency condensing units coupled with updated Direct Digital Controls to maximize efficiency with the assistance of our Annual Facilities Grant (AFG) and our Ministry's School Enhancement program (SEP) funding.

We also continued with our second year of our Energy Cup Challenge in partnership with BC Hydro and Fortis BC's Energy Wise Network, where we initiated campaigns encouraging Schools to compete to save energy and take on sustainability initiatives.

In 2017 we will continue our efforts in upgrading outdoor lighting with LED technology, implementing further occupancy sensors and pilot interior LED lighting at selected sites. We will also continue with our third year of our Energy Cup Challenge in partnership with the Energy Wise Network to further increase our behavioral programs.

Lastly, NLPS has an Elementary School which resides within 2 metres of the Regional Districts of Nanaimo's sewer outfall line. With the assistance of Carbon Neutral Capital Program (CNCP) and School Enhancement Program (SEP) funding, our District will be installing water source heat pumps to absorb consistent and reliable heat from the outfall line; reducing the sites carbon emissions by up to 78%.


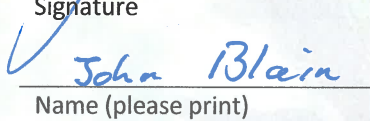
## Emissions and Offsets Summary Table:

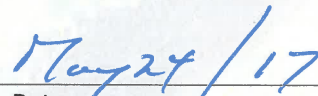
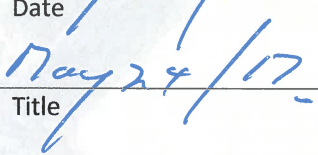
<b><i>Nanaimo-Ladysmith Public Schools</i></b>	
<b>GHG Emissions and Offsets for 2016 (TCO2E)</b>	
<b>GHG Emissions created in Calendar Year 2016</b>	
Total Emissions (TCO2E)	3,472
Total Offsets (TCO2E)	2,902
<b>Adjustments to GHG Emissions Reported in Prior Years</b>	
Total Emissions (TCO2E)	173
Total Offsets (TCO2E)	172
<b>Grand Total Offsets for the 2015 Reporting Year</b>	
Grand Total Offsets (TCO2E)	3,074

**Retirement of Offsets:**

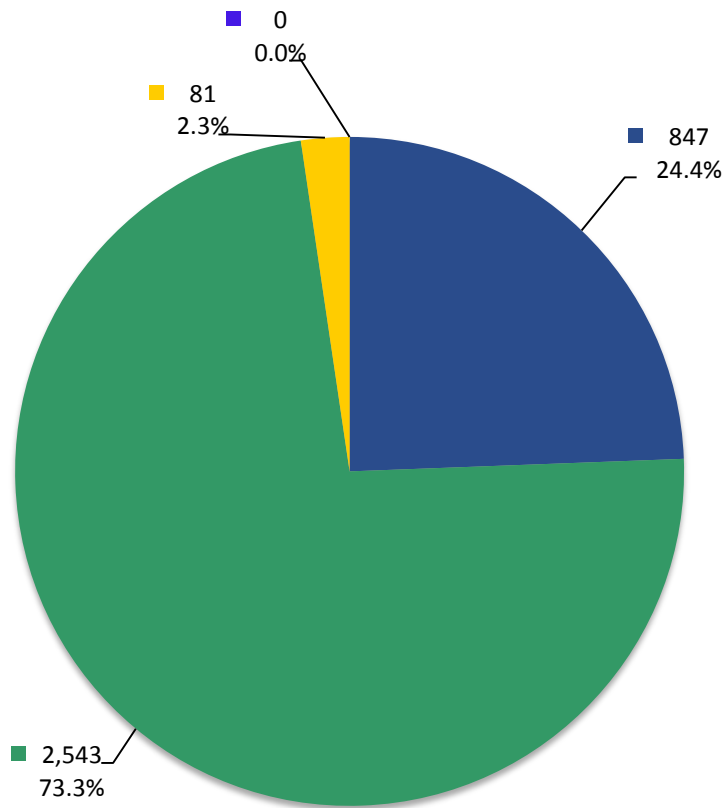
In accordance with the requirements of the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, Nanaimo-Ladysmith Public Schools (**the Organization**) is responsible for arranging for the retirement of the offsets obligation reported above for the 2016 calendar year, together 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 within 30 days, 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  
  
Name (please print)

  
Date  
  
Title

## School District 68 - Nanaimo-Ladysmith Greenhouse Gas Emissions by Source for the 2016 Calendar Year (tCO<sub>2</sub>e\*)



**Total Emissions: 3,472**

- Mobile Fuel Combustion (Fleet and other mobile equipment)
- Stationary Fuel Combustion (Building Heating and Generators) and Electricity
- Supplies (Paper)
- Fugitive Sources

### **Offsets Applied to Become Carbon Neutral in 2016 (Generated May 15, 2017 3:50 PM)**

Total offsets required: **2,902**. Total offset investment: **\$72,550**. Emissions which do not require offsets: **570** \*\*

\*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.

\*\* 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.

# 2016 Carbon Neutral Action Report Survey

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Part One (external)

Contact Name(s):

*Emil Bock*

Organization Name:

*Nanaimo Ladysmith Public Schools (School District 68)*

Please select your sector:

- School District

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

During 2016, did your organization take any of the following actions to support emissions reductions from buildings?

Select all that apply

- Conducted an energy audit/study of building(s) in the organization's portfolio
- Performed energy retrofits of the organization's buildings.: 10 Buildings
- Other actions? Please describe briefly.: Led behavioral programs in partnership with BC Hydro and Fortis BC

Briefly describe your organization's plans to continue reducing emissions from its stationary sources in future years.

- *Lighting/electrical savings upgrades*
- *Boiler & Mechanical upgrades*
- *Behavioral change programs*

During 2016, did your organization participate in utility-sponsored energy demand management program(s) (e.g. BC Hydro's Energy Management (Manager))?

*Yes*

If yes, please describe briefly:

*Our District has a BC Hydro sponsored Energy Manager and participates in most programs offered through BC Hydro and Fortis BC.*

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

During 2016, did your organization take any of the following actions to support emission reductions from its mobile sources?

Select all that apply

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

Briefly describe your organization's plans to continue reducing emissions from its mobile sources in future years.

*Our District will continue to update fleet as feasible and consider fuel efficient options available at time of procurement.*



3) Supplies (Paper):

During 2016, did your organization take any of the following actions to support emissions reductions from paper supplies?

Select all that apply

- 
- Other actions? Please describe briefly.: General awareness to reduce printing ie. internal publication has gone digital and not printed for distribution.
- 

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

*Encourage staff to consider not printing unless necessary.*

4) Other Sustainability Actions:

Business Travel:

During 2016, did your organization take any of the following actions to support emissions reductions from business travel?

Select all that apply

*(No response)*

Education Awareness:

During 2016, did your organization have any of the following programs or initiatives to support sustainability education and awareness?

Select all that apply

- 
- 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

Other Sustainability Actions:

During 2016, did your organization have any of the following programs or initiatives to support sustainability?

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
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