

### School District No. 47 (Powell River)

Title: 2016 Carbon Neutral Action Report

**Organization Name:** School District 47 (Powell River)

### **Declaration Statement:**

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

### Overview:

In 2016, School District 47 again made progress towards the overall reduction of greenhouse gases. One of the largest contributions to our reduction of greenhouse gases was substantial completion of a building envelope upgrade at Kelly Creek Community School. This renovation included the replacement of all single paned windows throughout the building with new thermal double paned energy efficient windows and doors, as well included the replacement of the propane furnace servicing the gymnasium block of the school.

In 2016, we also completed the installation of an efficient high density boiler at Texada Elementary School as well rebuilt and upgraded one of the two boilers servicing the Secondary School. These improvements will each contribute to reduced energy costs in the years to come.

Also started in 2016 and expected to continue throughout 2017, were plumbing upgrades throughout the School District, these upgrades include the replacement of faucets wherever applicable with modern censor driven units. Also implemented in 2016 was the utilization of an energy management tool offered through PRISM engineering called PUMA, a monitoring tool for energy consumption at all of our facilities.

Planned for the summer of 2017 is the upgrade and rebuild of the second and final boiler at Brooks Secondary School, the replacement of two gas furnaces at James Thomson Elementary as well as the replacement of the remaining single pane windows at the same school and finally replacement of two roof top mechanical units at Texada elementary. These mechanical

upgrades and window replacements will bring to an end the multiyear district initiative to upgrade all windows and mechanical systems, an initiative started a number of years ago.

On the school level, School District 47 continues to take pride in educating the next generation to protect our future by continuing to fund various Sustainable School Initiatives. Part of the mandate of the Board of Education is to increase awareness of, and, positive action in regard to reducing our carbon footprint in practical ways. Schools have further incentive to participate, as some of the financial savings have been returned to the schools to fund future projects, such as gardening programs and eco-friendly playground equipment. Other examples, on a smaller scale, are school recycling programs, which allow schools to use monies "earned" from returning beverage containers for classroom supplies. The Outdoor Learning Centre (OLC), completed in 2012, continues to be a contributing factor to the education of students, in both its operation and programs offered. The OLC consists of several cabins and a main lodge, run largely on solar power and maintains other environmentally friendly operating practices. Each year, the OLC offers numerous educational programs to District students, instructing them in practices such as composting, and use of renewable energy sources in a hands-on way.

Evidence of our efforts can be found in the continued maintenance of lower greenhouse gas emissions. Our <u>Total GHG Emissions for 2016 were about 1,000</u>, with <u>932 in offsets</u> to make us Carbon Neutral.

We believe in the benefits of our continued efforts and look forward to seeing a further reduction in offsets over the next few years. Financially, we aim to put some of the savings directly back into our schools, funding materials that continue to educate and provide awareness of how to reduce our carbon footprint. Environmentally, we aim to make our small actions have a big impact, both in the present and in the future, as our students take what they've learned into their adult lives, into our community and far beyond. Socially, we aim to provide awareness and collaboration that our students would take what they've learned and share it with others. We are proud of our District, and continue to be amazed at the significant efforts from both staff and students in making positive changes that will better our world for years to come.

## **Emissions and Offsets Summary Table:**

### School District 47 (Powell River) GHG Emissions and Offsets for 2016

GHG Emissions created in Calendar Year 2016

Total Emissions (TCO2E) 1,111
Total Offsets (TCO2E) 889

Adjustments to GHG Emissions Reported in Prior Years

Total Emissions (TCO2E) 43 Total Offsets (TCO2E) 43

### **Grand Total Offsets for the 2016 Reporting Year**

Grand Total Offsets 932

Sincerely,

**Steve Hopkins** 

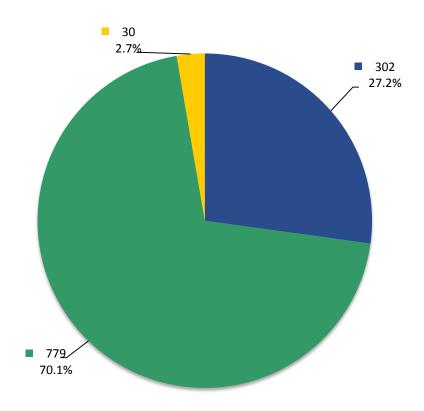
Secretary Treasurer

Jay Yule

Superintendent

May 31, 2017

# School District 47 - Powell River Greenhouse Gas Emissions by Source for the 2016 Calendar Year (tCO<sub>2</sub>e\*)



### **Total Emissions: 1,111**

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 2016 (Generated May 15, 2017 4:04 PM)

Total offsets required: 889. Total offset investment: \$22,225. Emissions which do not require offsets: 222 \*\*

<sup>\*</sup>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.

<sup>\*\*</sup> 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):
Steve Hopkins
Organization Name:
School District 47 (Powell River)
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
Performed energy retrofits of the organization's buildings.: Yes, New boiler for Texada School
Briefly describe your organization's plans to continue reducing emissions from its stationary sources in future years.
Continue with heating plant and window upgrades
During 2016, did your organization participate in utility-sponsored energy demand management program(s) (e.g. BC Hydro's Energy Management (Manager))?  No
If yes, please describe briefly:
(No response)
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

(No response)

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

Continue to purchase or lease more fuel efficient vehicles as existing ones come due on our replacement cycle

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## 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

• Policy requiring the purchase of recycled content paper.: Yes continue with the program implemented years ago regarding recycled paper content

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

Continue to do as we have with recycled paper and promotion of scanned documents rather than printed

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### 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)

## Other Sustainability Actions:

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

# Select all that apply

- A water conservation strategy which may include a plan or policy for replacing water fixtures with efficient models
- 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