

SCHOOL DISTRICT NO. 69 (Qualicum)
2016 Carbon Neutral Action Report

This is the 2016 Carbon Neutral Action Report for School District No. 69 (Qualicum). This report contains our 2016 emissions profile, offsets purchased, the actions we have taken in 2016 to reduce our GHG emissions and our plan to continue reducing emissions in 2017 and beyond.

By June 30 School District No. 69 (Qualicum)'s final CNAR will be posted to our website at www.sd69.bc.ca

Executive Summary:

The district concluded the creation of a Board wide Strategic Plan in 2013. This plan included the following items which are applicable to emission reduction:

- Under values: "Social responsibility and environmental sustainability" and "Innovation as a means of ensuring that we respond and adapt to a changing world and new understandings".
- As a Guiding Principle: "Stewardship of the public investment in education in our community is crucial – this requires an unwavering commitment to fiscal responsibility and allocation of resources based on identified needs and strategic priorities." We see this guiding principle as including environmental stewardship as part of fiscal responsibility.

In 2014 the district concluded with a Framework for Action which included specific items the district embarked upon to meet the goals of the strategic plan.

Energy conservation is part of our ongoing work. Efforts to conserve energy are included throughout our 5 year capital plan and our Annual Facility Grant projects. In 2016, the district completed the following projects which will directly reduce carbon emissions:

- Through the replacement of end of life buses, the district chose to replace one with a propane bus. The district plans to continue evaluating every bus replacement and consider whether to purchase propane over diesel buses. We also continue to review the size of buses required in order to conserve energy.
- Engineering studies for a boiler replacement was performed on one site, with the plan of replacing the unit in the summer of 2017.
- During summer 2016 the District did a replacement of the old boilers at Kwalikum Secondary, and Nanoose Bay Elementary and a boiler and air source heat pump at Bowser Elementary and installed high efficiency ones. Bowser had previously run on propane so we should now see a considerable reduction of our consumption.
- The district is continuing to make significant improvements to False Bay Elementary, one of our isolated sites, by finding ways to use less energy and alternate energy. This site was reliant on energy produced by a diesel generator but by replacing the systems batteries and converter with new ones we increased the efficiency of the system overall, i.e. reducing the amount of energy lost. The district had also recently installed solar panels which decrease our dependence on the usage of diesel generator power. During the summer of 2016, the exterior was stripped down and new windows, insulation and cladding were added to reduce heat loss and reduce energy. We also continue to work with local groups to investigate alternative energy solutions which may further reduce or eliminate the use of a diesel generator in the future.

Energy conservation continues to be a goal for the district. Our Operations and Maintenance department has completed several projects that have implemented controls for heat and lights, retrofits for lighting and replacing plumbing fixtures

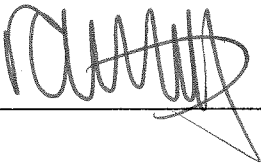
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with low flow units. These are all part of the day to day operations as well as project based when Ministry funding permits.

Emissions and Offsets Summary:

School District No. 69 (Qualicum) Emissions and Offsets (tCO₂e)			
GHG Emissions created in calendar year:	2016	2015	2014
Total Emissions	1,850	1,876	1,953
Total Offsets for the Reporting Year	1,376	1,403	1,487
Prior Year Adjustments (tCO ₂ e)	0		
Net 2016 Offset Requirements (tCO ₂ e)	1,376		

In 2016, School District No.69 (Qualicum) paid \$35,713 to purchase offset credits. The District maintains a bus fleet for which offsets were not purchased. As required by section 5 of the Carbon Neutral Government Regulation, 551.12 tCO₂e of emissions resulting from the operation of school buses were reported as part of our greenhouse gas emissions for 2016. However, they were not offset as they are out of scope under section 4(2)(c) of the Carbon Neutral Government Regulation.



MAY 23, 2017

Signature

Date

ROLLIE KOOP

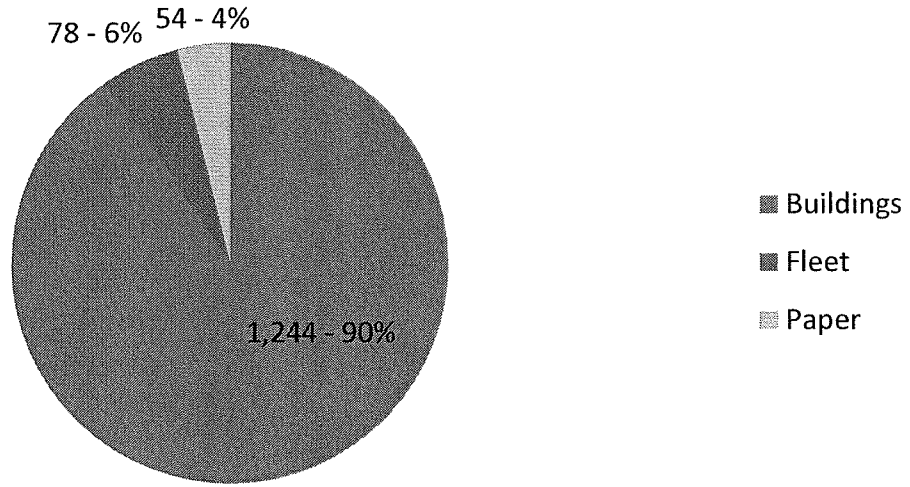
SUPERINTENDENT OF SCHOOLS

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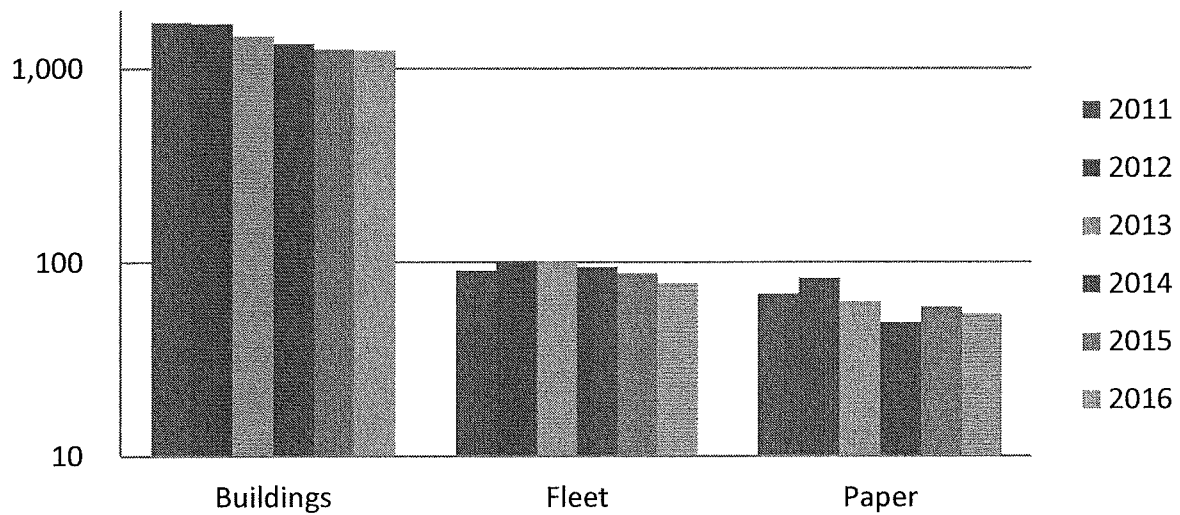
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Attached: Charts of GHG Emissions by Source

2016 - GHG Emissions by Source (tCO2e)

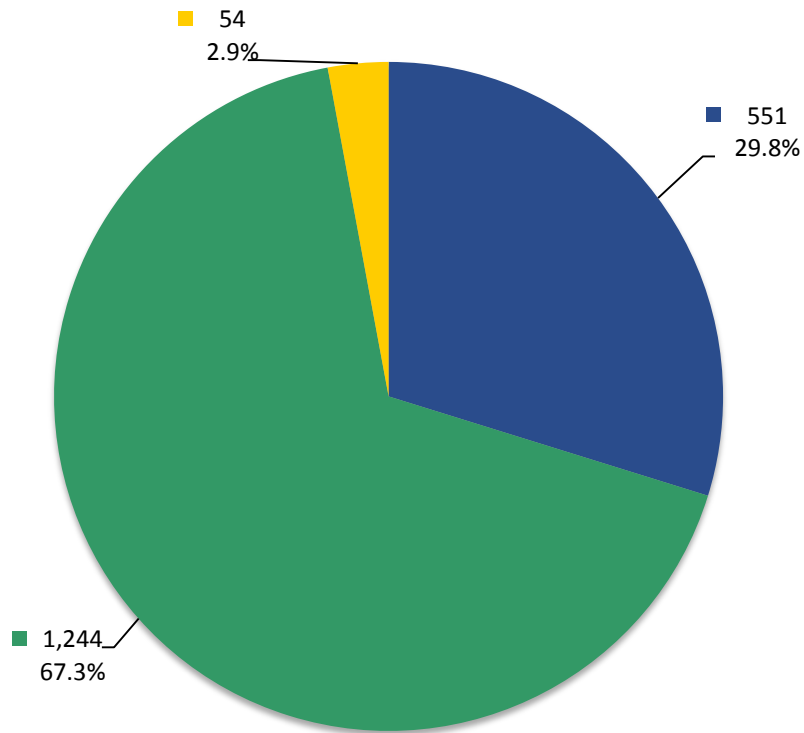


Annual GHG Emissions by Source



from 2016 BC Climate Action Secretariate SMARTTool Datasets

**School District 69 - Qualicum
Greenhouse Gas Emissions by Source
for the 2016 Calendar Year (tCO₂e*)**



Total Emissions: 1,850

- 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 3:49 PM)

Total offsets required: **1,376**. Total offset investment: **\$34,400**. Emissions which do not require offsets: **473** **

*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.

2016 Carbon Neutral Action Report Survey

Part One (external)

Contact Name(s):

Ron Amos

Organization Name:

School District No. 69 (Qualicum)

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.: 3 boilers replaced
- Other actions? Please describe briefly.: lighting upgrades

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

boiler and lighting 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

-
- Other actions? Please describe briefly.: replacing buses with more efficient units
-

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

continue to replace units with more efficient ones

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.: managing copier/printer fleet to reduce use
-

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

manage copier/printer use

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
 - 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

-
- 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