

2016

CARBON NEUTRAL ACTION REPORT



“Working Together for Student Success”



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Executive Summary

School District No. 67 (Okanagan Skaha) serves the communities of Penticton, Summerland, Naramata, and Kaleden in the south Okanagan region of British Columbia. School District No. 67 is signatory to and supports the Climate Action Charter in the province of British Columbia. The School District supports and practices sustainable initiatives to conserve energy and resources with the goal to reduce carbon emissions; reduce utility costs; and promote a cleaner environment for all students and staff.

District schools continue to practice the sustainable principles introduced through the Destination Conservation program.

Themes for the three years of the program are: energy in year one; water in year two; and waste avoidance in year three.



Overview

This is the 2016 Carbon Neutral Action Report (CNAR) for School District No. 67. This report contains our 2016 emissions profile, offsets purchased, the actions we have taken in 2016 to reduce our GHG emissions and our plans to continue reducing emissions in 2017 and beyond.

By June 30, 2017, School District No. 67's final CNAR will be posted to our website at www.sd67.bc.ca.

2016 Greenhouse Gas Emissions

In 2016, operations in School District No. 67 (Okanagan Skaha) produced a total of 1537 carbon dioxide equivalent tonnes (CO₂e) of emissions. The school bus fleet produced 89 tonnes of CO₂e; however, those emissions do not require offset, leaving a total of 1448 tonnes of CO₂e requiring purchase of offsets. The majority, 1233 tonnes of CO₂e, were derived from heating and lights for school buildings. The remaining balance was derived from vehicle fleet fuel (231 tonnes of CO₂e) and paper supplies (73 tonnes of CO₂e).

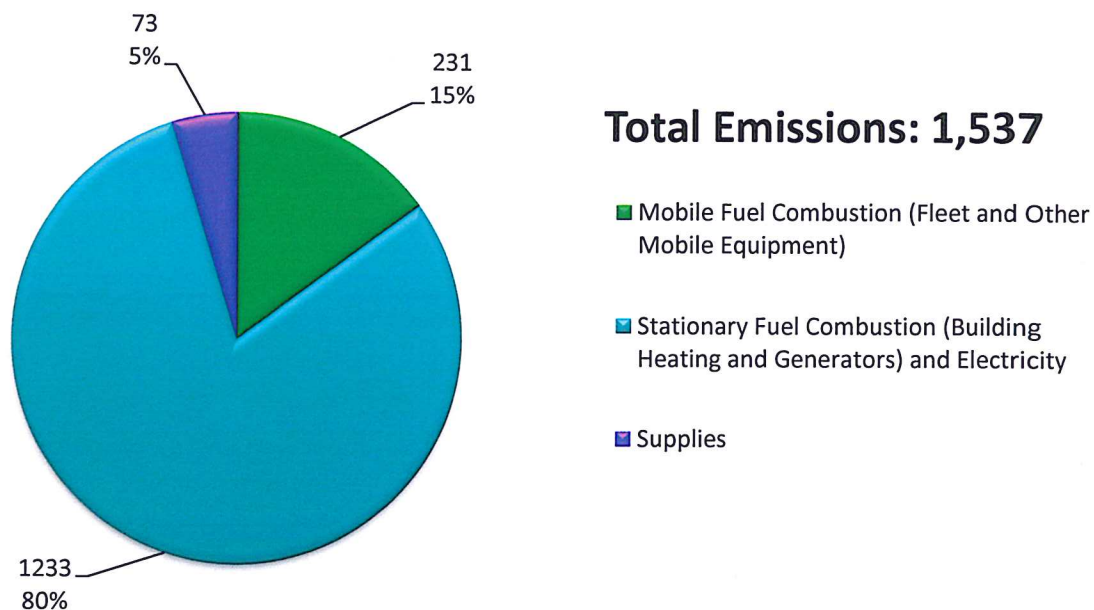
It was estimated that fugitive emissions from stationary cooling comprise less than 0.01% of School District No. 67 (Okanagan Skaha) total emissions. The ongoing effort to collect or estimate emissions from this source annually is disproportionately onerous, thus, for this reason, emissions from this source have been deemed out-of-scope and are not included in School District No. 67 (Okanagan Skaha) total greenhouse gas emissions profile or offset purchase.

Offsets Applied to Become Carbon Neutral in 2016

In order to become carbon neutral in 2016, School District No. 67 (Okanagan Skaha) was required to purchase a total of 1448 tonnes of CO₂e at a cost of \$25 per tonne of CO₂e. The total cost for purchase of these carbon offsets for 2016 was \$36,200.00 for School District No. 67 (Okanagan Skaha).

As required by section 5 of the Carbon Neutral Government Regulation, 89 tonnes of CO₂e emissions resulted from the operation of school buses and were reported as part of our greenhouse gas emissions profile in 2016. However, they were not offset as they are determined to be out-of-scope under section 4(2)(c) of the Carbon Neutral Government Regulations.

2016 Emissions Source Report (tCO₂e)



Offsets Applied to Become Carbon Neutral in 2016

Total offsets required: **1,448**. Total offset investment: **\$36,200**. Emissions which do not require offsets: **89****

*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.

Emissions and Offsets Summary

School District 67 GHG Emissions and Offsets for 2016 (tCO ₂ e)	
GHG Emissions created in calendar year	
Total Emissions	1537
Total Emissions for Offsets	1448
Adjustments to GHG Emissions Reported in Previous Years	
Total Emissions	0
Total Emissions for Offsets	0
Credit owing from PCT at end of 2015 reporting year (if applicable – from May 15 Invoice):	
Credit Owing	\$0.00
Total Emissions for Offsets for the 2016 Reporting Year:	\$36,200.00

Actions Taken to Reduce Greenhouse Gas Emissions in 2016

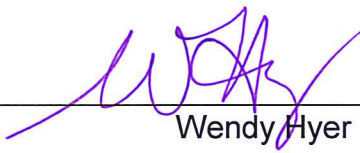
In 2016 we started the installation of our first solar photo voltaic system. The system is expected to deliver up to 100KW of power and reduce our electrical consumption by \$11,000.00 per year. We are also using the solar PV system as a learning experience for grade 9 students as they complete learning objectives around electrical power and distribution in science class.



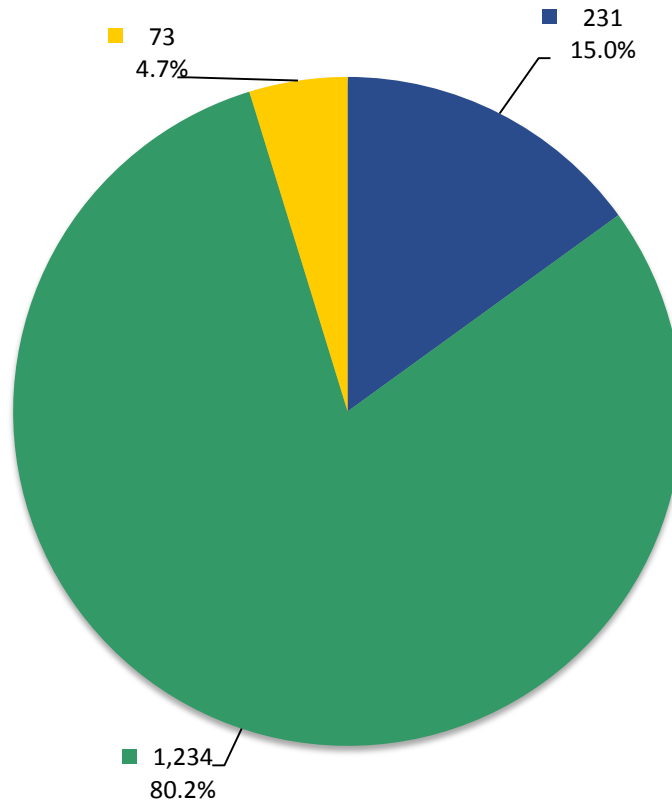
We also undertook a mechanical upgrade at Uplands Elementary school to increase comfort levels for students and staff in addition to substantially reducing the carbon intensity of the building. The new mechanical system will be controlled by a new building management system to ensure the system is operating at peak efficiency.

Looking into the future, we have started the engineering on Summerland Secondary school geo-exchange project. This project will incorporate a vertical bore geo-exchange system with an upgraded mechanical system to reduce our overall carbon consumption. Once this project is completed it will be the largest single reduction project we have taken on and will get us closer to our overall reduction targets.


Bonnie Roller-Routley
Secretary-Treasurer


Wendy Hyer
Superintendent of Schools

School District 67 - Okanagan Skaha (Penticton)
Greenhouse Gas Emissions by Source
for the 2016 Calendar Year (tCO₂e*)



Total Emissions: 1,538

- 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 26, 2017 8:59 AM)

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2016 Carbon Neutral Action Report Survey

Part One (external)

Contact Name(s):

Doug Gorcak

Organization Name:

School District # 67 (Okanagan Skaha)

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.: 1

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

We are looking at our highest consumers of Carbon and making plans to modify the buildings to reduce carbon intensity.

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.

(No response)

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

(No response)

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

We are retendering our photo copier contract. Within the tender we are looking at software programs like Papercut to give employees a better awareness of paper consumption.

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

(No response)

Other Sustainability Actions:

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

Select all that apply

(No response)