

2016 Carbon Neutral Action Report

School District No. 63 (Saanich)

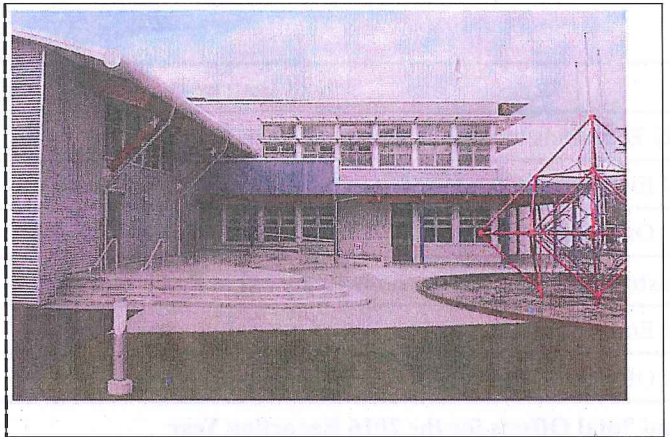
Overview

The Board of Education for School District No. 63 (Saanich) has committed to reducing greenhouse gas (GHG) emissions by 33% by 2020, relative to 2007 levels, and prepare our students to participate in an environmentally sustainable society. Although GHG emissions increased in 2016 this outcome was anticipated due to an exceptionally cold winter. Overall GHG emissions have been reduced by 15.7% to the end of 2016, approximately halfway towards the 33% reduction target.

The School District completed several energy retrofits in 2016, including conversion of existing fluorescent lighting to LED, lighting controls, heating controls to reduce energy

consumption during unoccupied hours and lighting redesign to reduce excessive illumination and corresponding energy consumption. The conversion to LED lighting has been a cost-effective project with a payback of approximately five years while simultaneously improving lighting quality for staff and students. Affected occupants immediately reported how much more pleasant the LED lighting was compared to the pre-existing fluorescent lights. A student-focused energy conservation campaign was initiated in 2016, with a sustained reduction in energy use of 7% at one elementary school solely due to behavioural actions.

A complete conversion of all remaining fluorescent lighting to LED will continue in 2017 and is expected to take three years. The results of the successful behavioural campaign will be rolled out to all schools in 2017. While the District has made progress and is halfway towards our GHG reduction target, a forecast of the actions required and necessary capital to meet the remaining half of our GHG commitment will be prepared in 2017.



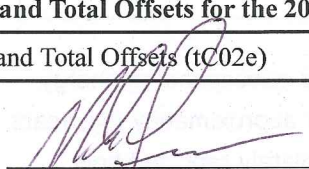
Declaration Statement:

This Carbon Neutral Action Report for the period January 1st, 2016 to December 31st, 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 School District No. 63's final Carbon Neutral Action Report will be posted to our website at www.sd63.bc.ca.

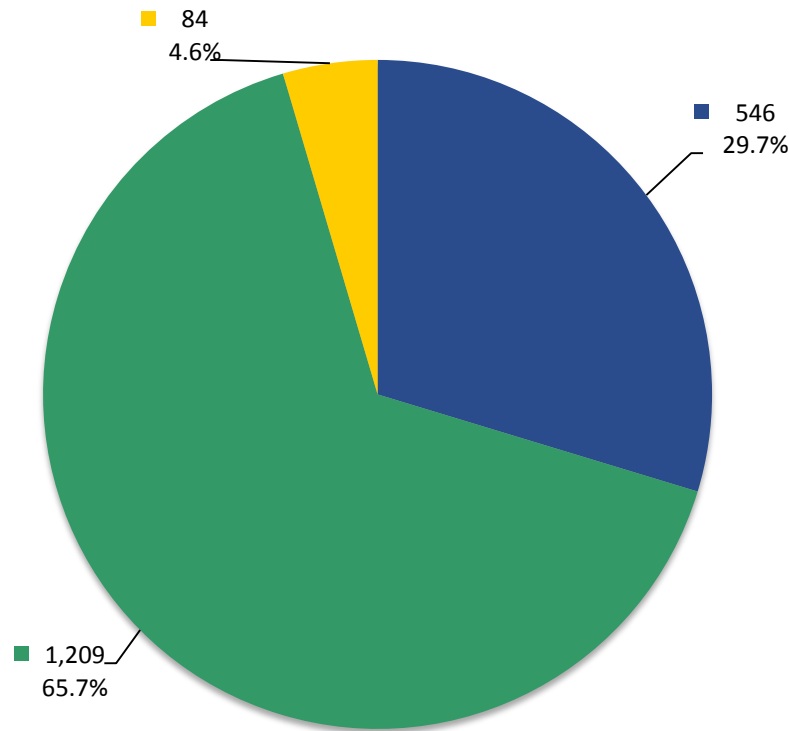
Emissions and Offsets Summary Table:

| School District No. 63 GHG Emissions and Offset for 2016 (tCO2e) | |
|--|-------------|
| GHG Emissions created in Calendar Year 2016 | |
| Total Emissions (tCO2e) | 1838 tonnes |
| Total Offsets (tCO2e) | 1434 tonnes |
| Adjustments to GHG Emissions Reported in Prior Years | |
| Total Emissions (tCO2e) | 0 tonnes |
| Total Offsets (tCO2e) | 0 tonnes |
| Grand Total Offsets for the 2016 Reporting Year | |
| Grand Total Offsets (tCO2e) | 1434 tonnes |


Mark Fraser
Assistant Superintendent


Date

**School District 63 - Saanich
Greenhouse Gas Emissions by Source
for the 2016 Calendar Year (tCO₂e*)**



Total Emissions: 1,838

- 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 3:56 PM)

Total offsets required: **1,434**. Total offset investment: **\$35,850**. Emissions which do not require offsets: **404** **

*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):

Trevor Billy

Organization Name:

School District #63 (Saanich)

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.: Fourteen schools had energy retrofit projects in 2016
- Other actions? Please describe briefly.: A student-focused behavioural energy conservation campaign was initiated in 2016

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

The District will continue to implement cost-effective energy conservation projects as capital budgets allow and expand the successful behavioural campaign to all schools in future years. A multi-year plan to forecast the actions required to achieve the 33% GHG emission reduction target by 2020 will be developed in 2017.

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:

The District has a BC Hydro sponsored Energy Manager and participates in BC Hydro's EnergyWise network, a behavioural based energy conservation program.

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).: Two new school buses replaced less-efficient buses in 2016
-
- Took steps to drive less than previous years.

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

Route optimization software will be evaluated in 2017 to identify potential savings on fleet consumption.

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.

An evaluation of potential GHG reduction from adopting a policy of all recycled paper will be done in 2017.

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

-
- Other, please describe briefly: A student-focused energy conservation campaign was launched in 2016
-

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
-