



Langley
Schools

School District No.35
(Langley)

2015 Carbon Neutral Action Report

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Declaration Statement

This Carbon Neutral Action Report (CNAR) for the period from January 1 to December 31, 2015 summarizes our emissions profile, the amount of offsets purchased to achieve net zero emissions, the action we have taken in 2015 to reduce our greenhouse gas (GHG) emissions and our plans to continue reducing emissions in 2016 and into the future.

Overview

On behalf of School District No. 35 (Langley), we are pleased to submit our CNAR for 2015. The purpose of the CNAR is to demonstrate our District's ongoing commitment to the reduction of our greenhouse gas emissions. Our Board continues to work diligently to improve the learning environment for students and staff by demonstrating leadership in the reduction of our carbon footprint.

Energy savings and subsequent GHG emission reductions continue to be a priority in our ongoing commitment towards carbon neutrality. This is shown through the revision to our sustainability policy which assigns accountability and emphasizes energy and resource conservation.

In addition, ongoing upgrades of both our mechanical and electrical systems reduce our carbon footprint by providing increased efficiency and greater operational control. With the support of BC Hydro we have completed twelve lighting upgrades in 2015 resulting in over 500,000 kWh savings. In addition with the help of the Ministry of Education's Carbon Neutral Capital Program (CNCP) we were able to upgrade to a high efficiency boiler plant at one of the secondary schools.

In 2016, with the support of the School Enhancement Program, we will perform DDC upgrades at three elementary schools. This will improve operational control of mechanical equipment which will allow for opportunities to reduce carbon emissions. Currently we are planning to upgrade an additional boiler plant at one of our secondary schools. In addition we will be completing re-lamping projects at 3 elementary schools and audits have been completed for nine exterior lighting upgrades.

Our District is committed to GHG emission reduction and carbon neutrality through energy efficiencies. This is reflected in our Sustainable Energy Management Plan which shows a 3 year rolling investment in these efficiencies. We invest what we can and with the support of our external stakeholders are able to accomplish our goals.

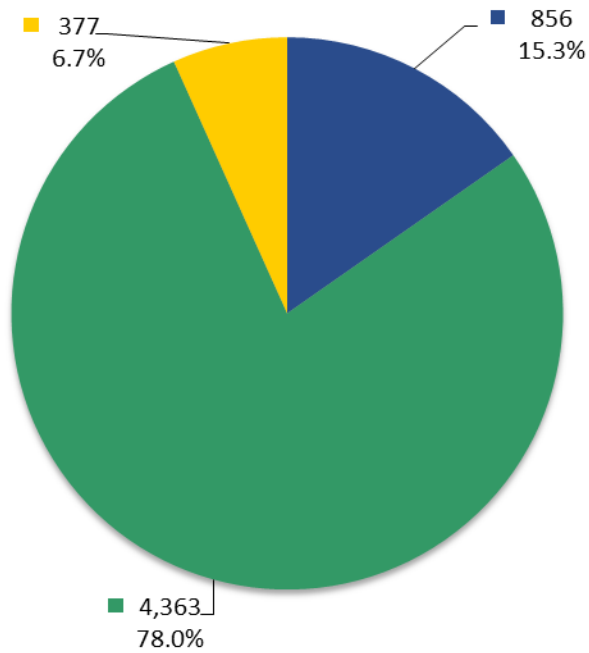


Gordon Stewart

Acting Superintendent

Greenhouse Gas Emissions

School District 35 - Langley Greenhouse Gas Emissions by Source for the 2015 Calendar Year (tCO₂e*)



Total Emissions: 5,596

- 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 2015 (Generated April 22, 2016 3:01 PM)

Total offsets required: **5,080**. Total offset investment: **\$127,000**. Emissions which do not require offsets: **516****

*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.

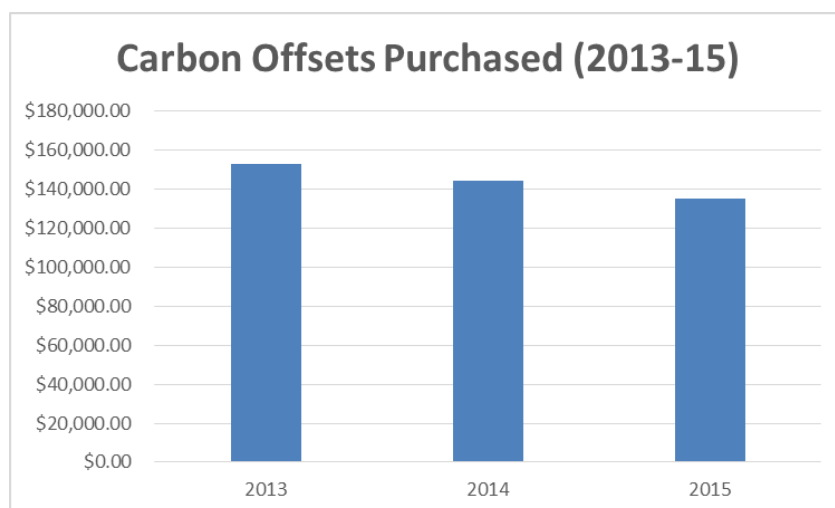
** Under the *Carbon Neutral Government Regulation* of the *Greenhouse Gas Reduction Targets Act*, all emissions from the sources listed above must be reported. As outlined in the regulation, some emissions do not require offsets.

Emissions and Offsets Summary Table

School District #35 (Langley) GHG Emissions and Offsets for 2015 (tCO₂e)	
GHG Emissions created in Calendar Year 2015	
Total Emissions (tCO ₂ e)	5,596
Total Offsets (tCO ₂ e)	5,080
Adjustments to GHG Emissions Reported in Prior Years	
Total Emissions (tCO ₂ e)	78
Total Offsets (tCO ₂ e)	78
Total Emissions for Offset for the 2015 Reporting	
Total Offsets (tCO ₂ e)	5,158

Greenhouse Gas Emissions and Offsets for Previous Years

Year	Total GHG Emissions (tCO ₂ e)	Exempt GHG Emissions (tCO ₂ e)	Offsets Purchased (\$)
2013	6,291	471	\$152,775.00
2014	5,956	451	\$144,348.75
2015	5,674	516	\$ 135,397.50



The School District of Langley is proud that even with the addition three new schools since 2012 we are still maintaining relatively stable levels of emissions. The 2015 carbon emissions were lower than previous years due to warmer weather experienced.

Actions Taken to Reduce Greenhouse Gas Emissions

- New High Efficiency Boilers installed at Walnut Grove Secondary School
- Complete lighting upgrade at Langley Fine Arts
- Interior relamping at HD Stafford Middle
- Ten exterior lighting upgrades completed
 - Brookwood Secondary
 - Walnut Grove Secondary
 - Aldergrove Secondary
 - DW Poppy Secondary
 - RE Mountain Secondary
 - Maintenance Facility
 - Simonds Elementary
 - RC Garnet Elementary
 - HD Stafford Middle
 - Betty Gilbert Elementary

- Pilot paperless program at several schools
- Pilot behavioral programs to reduce energy consumption at several schools
- Paperless attendance sheets at the maintenance facility
- Feasibility study for retrofitting external lighting to LEDs
- Green teams to promote sustainability
- Organic waste redirection

Link to Other Publicly-Available Sustainability Information from Your Organization

BC Hydro has worked with the Langley School District for many years now with partial funding of our Energy Manager position and incenting many of our energy initiatives. They have assisted us in the creation of our Sustainable Energy Management Plan and work closely with us in achievement of our goals. Link to the BC Hydro Power Smart website can be found in our webpage at www.sd35.bc.ca look under District and go to the energy & environment webpage.

2015 Carbon Neutral Action Report Survey

Organization Name:

School District No. 35 (Langley)

Please select your sector:

- School District

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

Please indicate which actions your PSO took in 2015:

Have developed an overall strategy/plan to reduce energy use in your organization's buildings inventory:

Yes

If Yes, please describe:

3 year Strategic Energy Management Plan which addresses how we will be reducing energy consumption through mechanical and electrical upgrades.

Undertook evaluations of building energy use:

Yes

Performed energy retrofits on existing buildings:

Yes

Built or are building new LEED Gold or other "Green" buildings:

Yes

Please list any other actions, programs or initiatives that your organization has introduced that support emissions reductions from buildings:

Green Teams at schools which increase environmental awareness and run events such as lights out lunches and sweater days.

Waste diversion was established in the District since 2013.

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

Indicate which actions your PSO took in 2015:

Have put in place an operations policy/program to support systematic reductions in fleet related emissions:

(e.g., program to convert fleet to renewable fuels)

Yes

If Yes, please describe:

Maintenance staff crew zoning and work order grouping that resulted in less driving

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

Yes

Replaced existing vehicles with hybrid or electric vehicles:

No

Took steps to drive less than previous years:

Yes

Please list any other actions, programs or initiatives that your organization has introduced that support emissions reductions from fleet combustion:

(No response)

3) Supplies (Paper):

Indicate which actions your PSO took in 2015:

Have put in place an operations policy/program to facilitate a systematic reduction in paper-related emissions:

(e.g., policy to purchase 100% Recycled Content; default to double-sided printing)

Yes

If yes, please describe:

Purchasing regulations state "Give consideration to Sustainability with respect to economic, environmental and social development both locally and internationally."

Have put in place an operations policy/program to facilitate behavioural changes from paper use:

(e.g. awareness campaign to reduce paper use):

Yes

If yes, please describe:

Posters at copiers to increase awareness

Used only 100% recycled paper:

No

Used some recycled paper:

Yes

Used alternate source paper:

(e.g., bamboo, hemp, wheat etc.)

No

Please list any other actions, programs or initiatives that your organization has introduced that support emissions reductions from paper supplies:

*Paperless attendance sheets at maintenance facility
Pilot paperless programs at schools*

4) Other Sustainability Actions:

Please note that this section is optional

Business Travel

Created a low-carbon travel policy or travel reduction goal:

(low-carbon = lowest emission of greenhouse gas per kilometer per passenger)

No

Encouraged alternative travel for business:

(e.g. bicycles, public transit, walking)

No

Encouraged or allow telework/working from home:

Yes

Other:

(No response)

Education Awareness

Have a Green/Sustainability/Climate Action Team:

Yes

Supported green professional development:

(e.g. workshops, conferences, training)

Yes

Supported or provided education to staff about the science of climate change, conservation of water, energy and/or raw materials:

Yes

Other:

(No response)

Adaptation Planning for Climate Risks

Have assessed whether increased frequency of extreme weather events and/or long term changes in climate will affect your organization's infrastructure, its employees and/or its clients:

Yes

Have incorporated these anticipated changes in climate into your organization's planning and decision making:

Yes

Other:

(No response)

Other Sustainability Actions

Established a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models:

Yes

Have put in place an operations policy/program to facilitate the reduction and diversion of building occupant waste stream from landfills or incineration facilities:

(e.g., composting, collection of plastics, batteries)

Yes

Established green standards for goods that are replaced infrequently and/or may require capital funds to purchase:

(e.g., office furniture, carpeting, etc.)

Yes

Incorporated lifecycle costing into new construction or renovations:

Yes

Please list any other sustainability actions your organization has taken not listed above:

(No response)