

# School District #35 (Langley)

# Carbon Neutral Report

2013

An award winning year in Langley for Carbon Emission Reduction!

2013 Educators Awar

(Langlev)

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### **Declaration Statement**

This is the 2013 Carbon Neutral Action Report for School District #35. This report contains our 2013 emissions profile, offsets purchased, the actions we have taken in 2013 to reduce our GHG emissions and our plans to continue reducing emissions in 2014 and beyond.

By June 30 School District #35 final CNAR will be posted to our website at www.sd35.bc.ca.

#### **Overview**

On behalf of School District #35(Langley), we are pleased to submit our Carbon Neutral Action Plan for 2013. This year's report, again demonstrates our District's ongoing commitment to the reduction of our greenhouse gas emissions. Our Board continues to work diligently, as we have for many years now, to improve the learning environment for students and staff by demonstrating leadership in the reduction of our carbon footprint.

Energy savings and subsequent greenhouse gas emission reductions continue to be a priority in our ongoing commitment towards carbon neutrality. By building LEED Gold Schools in 2012 and 2013 we are reinforcing our dedication to sustainability within our District.

Ongoing upgrades of both our mechanical and electrical systems continue to reduce our carbon footprint by providing higher efficiency and greater operational control. With the support of the Ministry of Education's CNCP we have upgraded the boiler plant at one of our elementary schools to a high efficiency boiler plant. With the support of BC Hydro we have completed several lighting upgrades and power management software installations on our computers.

We are very proud of the Green Teams in our schools which have included redirection of organic waste as part of their mandate. Their efforts in this regard have contributed to the District receiving the Recycling Council of British Columbia Environmental Award for the Education Sector in 2013.

In 2013 the Board went paperless! In addition to the reduction in photocopying volume this also meant an elimination of couriers to send out weekly meeting agenda packages to trustees resulting in a reduction in vehicle emissions albeit not attributed to the District.

In 2014 we are again, with the support of CNCP, doing a boiler upgrade at one of our secondary schools. We will be completing lighting upgrades at three elementary schools and re-lamping to lower wattage at three secondary schools. In addition we will be undertaking continuous optimization programs at two of our secondary schools to find low cost efficiencies within the existing mechanical and electrical systems. In addition to all of this we will also be opening another new LEED Gold school. It will be a very busy year.

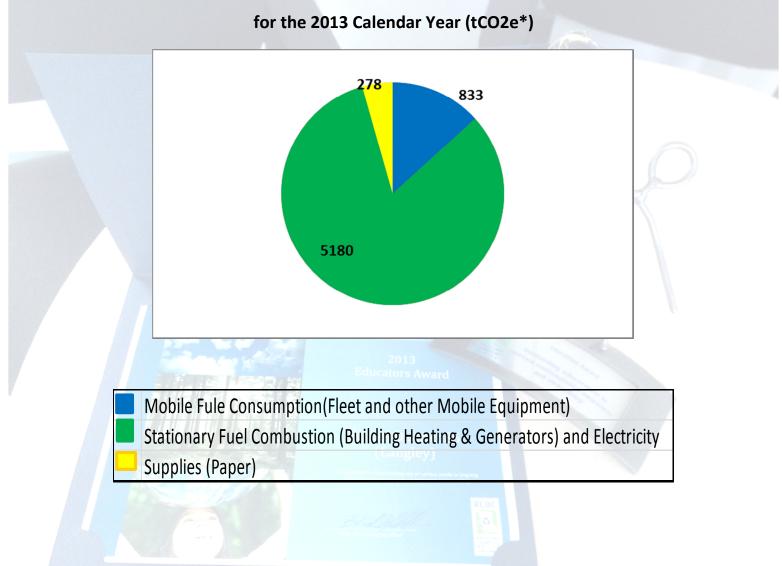
Our District is committed to greenhouse gas emission reduction and carbon neutrality through energy efficiencies. This is reflected in our Sustainable Energy Management Plan which shows a 3 year rolling investment in these efficiencies. We invest what we can and with the support of our external stakeholders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

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David Green Secretary Treasurer **Greenhouse Gas Emissions** 

### School District 35 Langley





\*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.

\*\* Under the Carbon Neutral Government Regulation of the Greenhouse Gas Reduction Targets Act, all emissions

### Langley School District offsets applied to become Carbon Neutral in 2013

Greenhouse Gas Emissions in calendar year 2013:		
Total Emissions	6291	
Total Emissions for Offsets	5820	A
Adjustments to GHG Emissions Reported in Previou	is Years:	A COLORING
Total Emissions	23	NACT NO
Total Emissions for Offsets	23	
Credit owing from PCT at end of 2012 reporting year	ar:	
Credit Owing	226	
Total Emissions for Offsets for the 2013 Reporting Year: (column D of Invoice)	5617	

\*\*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.

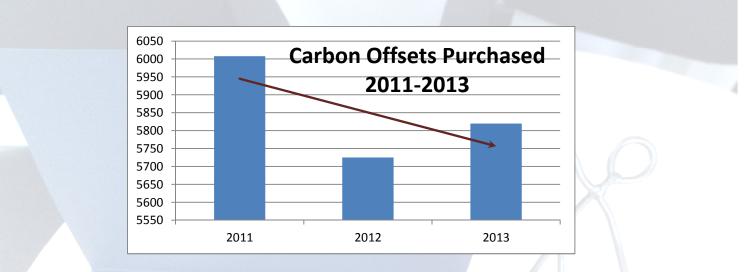


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#### Carbon Neutral Action Plan 2013

### **Charges to Greenhouse Gas Emissions and Offsets for Previous Years**

			Offsets
Year	Totals	Exempt	Purchased
2011	6557	549	\$168,224.00
2012	6222	497	\$150,281.25
2013	6291	471	\$152,775.00



Langley School District is proud to say that even though we have added on two new schools in 2012 and 2013 we are still maintaining lower levels of emissions over 2011. We face an even greater challenge in 2014 with the addition of our new Middle School.

#### Actions Taken to Reduce Greenhouse Gas Emmissions

- New Schools built and opened in 2013 LEED Gold
- New High Efficiency Boilers installed at our West Langley Elementary School
- Lighting upgrades done at 3 schools;
  - Lociel/U-Connect
  - o Noel Booth
  - Wix Brown
- Relamping at 2 of 3 High Schools completed in 2013
- Power Management Software installed at multiple sites
- Green Teams developed and Organic Waste redirection introduced
- Board of Education has gone paperless



### **Operational Changes in 2013**

New Construction is the common term utilized within our District these days. The building of our Lynn Fripps Elementary in 2012 and now Richard Bulpitt opening in 2013 has created both challenges and opportunities within our District. The challenge is to show consistent reduction in emissions. The opportunities are with the introduction of new emission reducing technologies. Our schools have the advantage of better construction design to reduce energy consumption while sustaining a healthy educational environment. Some of the features to boast about are our solar walls, High efficient boilers and electric car stations in our parking lots.

Increasing student population is continuing to impact our District and 2014 will host another school starting in the fall. We will again be ensuring this meets the LEED Gold standard for our students and environment. These 3 new schools will have a significant impact on our energy intensity levels district wide and a new baseline will be created.

### Actions to Reduce Provincial Emissions

Our District is working to reduce Provincial emissions and show others how to support sustainability. In the past year we introduced a new stream to our waste distribution with the redirection of Organics. This one step has shown reductions of over 50% within our schools. We are not eligible to claim this reduction but it does support our community in the drive for reduction.

A joint presentation between the District and Township of Langley presented at the SWANA-Solid Waste Association of North America, BCASBO- British Columbia Association of School Business Officials and Metro Vancouver to provide them with details of our success and challenges along the way. Langley School District also received the Recycling Bureau of BC Education Sector Award for our work in this field.

The drive for reduction was also taken on by the Board of Education in Langley. Board meetings are now paperless! Each Board meeting meant lots of reports distributed to each Board member and each had to be couriered prior to the official meeting. This one move reduced our paper waste as well as emissions created by the courier service.

### Link to Other Publicly-Available Sustainability Information From Your Organization

BC Hydro has worked with Langley School District for many years now in partial funding of our Energy Management 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 <u>www.sd35.b.ca</u> look under District and go to the energy & environment webpage.

# 2013 Carbon Neutral Action Report (CNAR) - Part 2 ACTIONS

Created Monday, June 09, 2014 Updated Tuesday, June 17, 2014 https://fluidsurveys.com/surveys/cas-z/2013-cnar-form-bps-actions/ba0cbb57b9a21b0295ce8e39f8ed72d6/

### Page 1

Please complete the following sections of the 2013 Carbon Neutral Action Report form. Save your work frequently to prevent it from being lost. You can also save a copy for your own use as either a WORD or PDF file using the buttons at the bottom of each page.

This is Part 2 of the Carbon Neutral Action Report form. This section reports on actions taken to reduce emissions during the 2013 calendar year. This information will be included in your final Carbon Neutral Action Report posted on the Ministry of Environment website.

When the form is complete press the submit button on the last page to automatically submit the information to the Climate Action Secretariat (CAS). Do not press submit before you are ready – this may result in a loss of work.

In addition to completing this survey (Part 1 2), you are required to submit your completed Overview (Executive Summary) and Self-Certification Checklist. The 2013 Overview template was included in the email sent and can also be found on the LiveSmart leaders Community.

Please ensure you meet the following reporting deadlines:

A DRAFT 2013 CNAR is due to CAS by March 31, 2014. The draft is comprised of the Overview ONLY (no excutive sign-off required).

The FINAL 2013 CNAR is due to CAS by May 30, 2014. The final 2013 CNAR includes Part 1 Part 2 survey form and Overview.

The Self-Certification Checklist is due to CAS by May 15, 2014. For more information about the Carbon Neutral Government process, please refer to *Becoming Carbon Neutral 2013*, or should you have any questions please contact climateactionsecretariat@gov.bc.ca.

### Page 2

Organization Name

School District #35

### **Actions Taken to Reduce Emissions**

1) Stationary Fuel Combustion, Electricity (Buildings):

Indicate which actions were taken in 2013:

Performed energy retrofits on existing buildings

Yes

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

Yes

Undertook an evaluation of overall building energy use.

Yes

Please list any other actions taken to reduce emissions from Buildings:

Green Teams within Schools BC Hydro sponsored education K-12

2) Mobile Fleet Combustion (Fleet and other vehicles):

Indicate which actions were taken in 2013:

Do you have a fleet?

Yes

Replaced existing vehicles with more fuel efficent vehicles (gas/diesel)

Yes

### Replaced existing vehicles with hybrid or electric vehicles

No Reduced the overall number of fleet vehicles No Took steps to drive less than last year Yes Please list any other actions taken to reduce emission from fleet: (No response) 3) Supplies (Paper): Indicate which actions were taken in 2013: Used less paper than previous year Yes Used only 100% recycled paper No Used some recycled paper Yes

Used alternate source paper (Bamboo, hemp, etc.)

No

Please list any other actions taken to reduce emissions from paper use:

### Actions Taken to Reduce Emissions - continued

### Explain how you plan to continue minimizing emissions in 2014 and future years:

The Strategic Energy Management Plan of this district provides clarity on direction to eliminate old, inefficient equipment with new high efficiency technologies. We will continue to follow this plan to reduce our fossil fuel consumption and enhance the learning environment for our students.

We will encourage our Green Teams to come up with new, innovative ways to reduce waste and recognize the needs of sustainability.

If you wish to list any other "sustainability actions" outside of buildings, fleet, paper and travel check "yes". This reporting is optional.

Yes

### Page 4

Actions to Promote Sustainability and Conservation - Optional

The following are actions that fall outside the scope of the *Carbon Neutral Government Regulation*, but which many organizations still undertake and may wish to report on. This section is optional for reporting.

**Business Travel** 

Created a low-carbon travel policy or travel reduction goal (Low-carbon: Lowest emission of greenhouse gases per kilometre per passenger)

No

Virtual Meeting Technology

Installed web-conferencing software (e.g., Live Meeting, Elluminate, etc.)

No

Made desktop web-cameras available to staff

Yes

Encourage alternative travel to meetings (e.g., bicycles, public transit, walking)

No

Encourage carpooling to meetings

Yes

Education and Awareness

Have created Green, Sustainability, Energy Conservation, or Climate Action Teams.

Yes

Provided resources and/or dedicated staff to support these teams

Yes

Provided behaviour change education/training for these teams (e.g., community-based social marketing)

Yes

Established a sustainability/green awards or recognition program

Yes

Yes

### Planning for Cimate Change

Have assessed whether extreme weather events and/or long term changes in climate will affect our organization's business areas

No

Long term changes in climate have been incorporated into our organization's decision making.

No

## Page 5

Actions to Promote Sustainability and Conservation - Optional (continued)
Staff Awareness and Education
Provided education to staff about the science of climate change
Yes
Provided education to staff about the conservation of water, energy, and raw materials
No
Provided green tips on staff website or in newsletters
Yes
Alternate Work/Commuting Options
Allow for telework/working from home
No
Staff have the option of a compressed work week
Yes
Commuting by foot, bicycle, carpool or public transit is encouraged
No
Shower or locker facilities are provided for staff/students who commute by foot or by bicycle
Yes
Secure bicycle storage is provided
Yes
Other Sustainability Actions
Establish a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models
No

Put in place a potable water management strategy to reduce potable water demand of building-level uses such as cooling tower equipment, toilet fixtures, etc. and landscape features

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

No

Have implemented a hazardous waste reduction and disposal strategy (Hazardous Waste: E.g., electronics including computer parts and monitors, batteries, paints, fluorescent bulbs)

Yes

Have incorporated minimum recycled content standards into procurement policy for consumable, non-paper supplies (e.g., writing instruments, binders, toner cartridges, etc.)

No

Established green standards for goods that are replaced infrequently and/or may require capital funds to purchase (e.g., office furniture, carpeting, etc.)

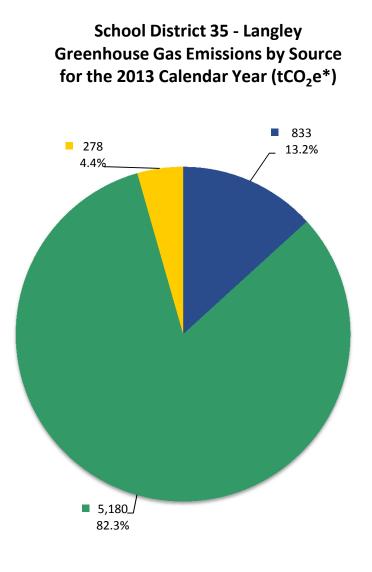
Yes

Incorporated lifecycle costing into new construction or renovations

No

Please list and other sustainability actions you wish to report not included in the previous list.

As mentioned in our report our redirection of Organic Waste district wide in partnership with our Township has gained recognition from the Recycling Councilof BC and won us the Education Sector award.



**Total Emissions: 6,291** 

- 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 2013 (Generated May 21, 2014 3:33 PM)

Total offsets required: 5,820. Total offset investment: \$145,500. Emissions which do not require offsets: 471 \*\*

\*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.

\*\* 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.