



SCHOOL DISTRICT NO. 51 (BOUNDARY)

2014 Carbon Neutral Action Report



Executive Summary

This is the 2014 Carbon Neutral Action Report for School District No. 51 (Boundary). This report summarizes our 2014 emissions profile, the amount of offsets purchased to reach net zero emissions, the actions we have taken in 2014 to reduce our greenhouse gas emissions and our plans to continue reducing emissions in 2015 and beyond.

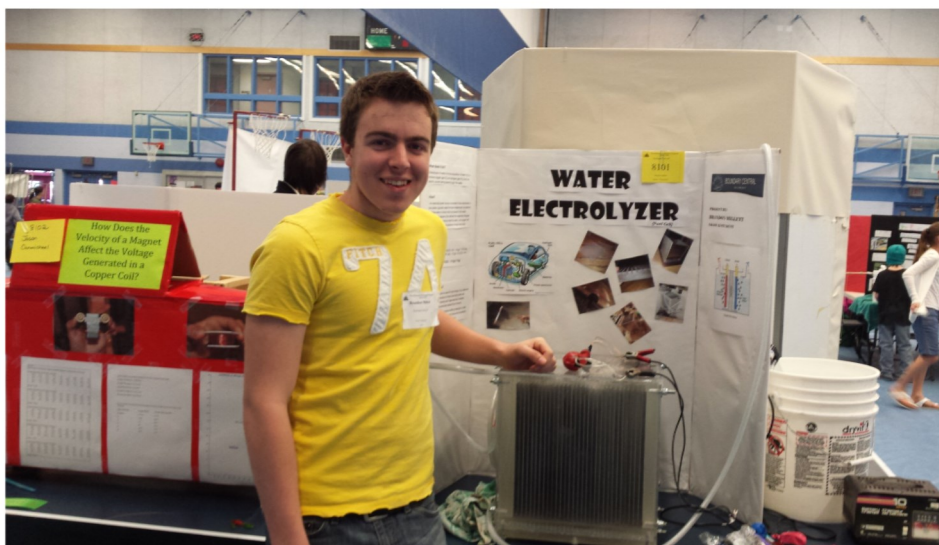
By June 30, 2015, School District No. 51's final CNAR will be posted to our website at www.sd51.bc.ca.

This year's report once again demonstrates our commitment to reducing our greenhouse gas emissions. School District No. 51 (Boundary) Board of Education believes that the maintenance of our environment is necessary to the quality of our lives. Further, we believe that the District and its schools have the responsibility of fostering and reinforcing positive environmental concepts that will enhance the relationship between living things and their natural and built surroundings.

The introduction of these concepts must begin early in the



Teacher David Reimer and a class from Grand Forks Secondary pursuing fitness as one of their passions during passion week.



Brandon Millet, 2014 BCSS grade 12 student

Here is a picture from a Boundary Central Secondary School grade 12 science fair student, Brandon Millet. He entered the K.A.S.T. science fair in Nelson that was held on Saturday April 12th, 2014. His entry involved making an Electrolytic cell.

He received a silver award and a nomination for a \$2000.00 BC Hydro scholarship..



May 2014—Solar Car Competition

Solar Cars

Handmade solar cars are created as part of environmental education in science classes. In 2014 the grade 6/7 students at Christina Lake (CLES), Perley and Hutton took up the challenge to build the most beautiful, the fastest and most original solar vehicles. This is the fourth year the schools have done this event. This year two students from CLES built the very first solar boat, students from Perley built an elevator and a plane, while at Hutton students even created a solar shoe.

life of each child in order to develop a responsible environment ethic which will be sustained throughout life.

Some of the highlights of 2014 included:

- Successfully reducing our carbon footprint in 2014
- An energy audit at John A. Hutton Elementary, West Boundary Elementary and Grand Forks Secondary Schools
- Boiler upgrades at John A. Hutton Elementary and West Boundary Elementary Schools
- All schools in School District No. 51 continued to educate students on environmental issues as well as model environmentally sound practices through recycling programs.

Some examples of this include:

- At Christina Lake Elementary (CLES) the grade 6/7 teacher attended project-based learning on Kettle River conservation. The grade 6/7 students also ran the composting and recycling program with weekly responsibilities.
- At BCSS the Special Education department recycled paper and the senior French class recycled bottles and cans for ongoing fundraisers.
- At John A. Hutton Elementary they removed their juice machine and replaced their gym water fountain with infrared and refill options. The fountain counts the number of water bottles being filled up, and to date they are at over 12,000 bottles. They continue to count and celebrate these savings.

In 2015, we plan to continue moving forward with energy saving upgrades. We plan to replace exterior doors in all schools as well as replacing the boiler at Grand Forks Secondary School. HVAC upgrades and replacement will continue throughout the District as necessary and financially feasible, along with weather stripping. Some of the goals that schools in our District intend to pursue are:

Boundary Central Secondary—they will continue to send out paperless newsletters and weekly memos. The Sustainable Resource class will be composting biodegrade-able waste around the school.

Christina Lake Elementary — They plan to focus on reducing heating/cooling demands and to continue to educate on compost/recycling and sustainable dishes for hot lunch. They also plan to focus on reducing the use of consumables such as paper.

Hutton Elementary -- Some students are doing a Global Citizenship Project with their class which encompasses an environmental awareness and sustainability efforts. (for example some students are cleaning up Christina Lake) Another group of students will be visiting classrooms to help improve recycling and composting efforts.

Perley Elementary -- They will continue to have their green team and expand the efforts to recycle and compost, as well as remind staff and students to turn off lights and projectors.

All schools will continue to implement their very successful recycle programs. They will continue to incorporate curriculum that enlightens and educates our future citizens, as they are committed to being environmentally responsible. All these changes will aide us as we continue to reduce our carbon footprint in 2015 .

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School District No. 51 (Boundary)

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GHG Emissions and Offsets for 2014 (TCO2E)

GHG Emissions created in calendar year 2014

Total Emissions (TCO2E)

1,009

Total Offsets (TCO2E)

800

Adjustments to GHG Emissions Reported in Previous Years

Total Emissions (TCO2E)

-1

Total Offsets (TCO2E)

0

Total Emissions for Offset for the 2014 Reporting Year

Total Offsets (TCO2E)

800

Signature

Date

Name (Please Print)

Title



2014 Carbon Neutral Action Report (CNAR)

- Part 2 ACTIONS

Organization Name

School District No. 51 (Boundary)

Actions Taken to Reduce Emissions

1) Stationary Fuel Combustion, Electricity (Buildings): Indicate which actions were taken in 2014:

Performed energy retrofits on existing buildings

Yes

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

No

Undertook an evaluation of overall building energy use.

Yes

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

- Had an energy audit at John A. Hutton Elementary, West Boundary Elementary and Grand Forks Secondary Schools.
- Boiler upgrades at West Boundary Elementary and John A. Hutton Elementary Schools.

2) Mobile Fleet Combustion (Fleet and other vehicles): Indicate which actions were taken in 2014:

Do you have a fleet?

Yes

Replaced existing vehicles with more fuel efficient 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:

Maintenance jobs were evaluated and organized as to ensure that more is accomplished in an area with less travel back and forth. Computers were networked and less windshield time required for maintenance of computer labs. Carpooling and/or busing supplied for pro-d events to encourage less individual vehicle travel.

3) Supplies (Paper):Indicate which actions were taken in 2014:

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:

School District No. 51 continued to reduce emissions from paper this year by:

- creating electronic files for contracts and letters to staff.
- Boundary Central Secondary circulated newsletters and weekly memos electronically
- more meetings were run via smart boards with electronic agendas throughout the district
- Ipads and laptops were present at meetings and usually the agenda/information projected or on a smart board at Christina Lake Elementary staff meetings
- Hutton Elementary held paperless meetings/and or presentations
- Dr. D. A. Perley also held paperless staff meetings and corresponded electronically as much as possible.

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Actions Taken to Reduce Emissions - continued

Explain how you plan to continue minimizing emissions in 2015 and future years:

SD 51 will continue to minimize emissions by:

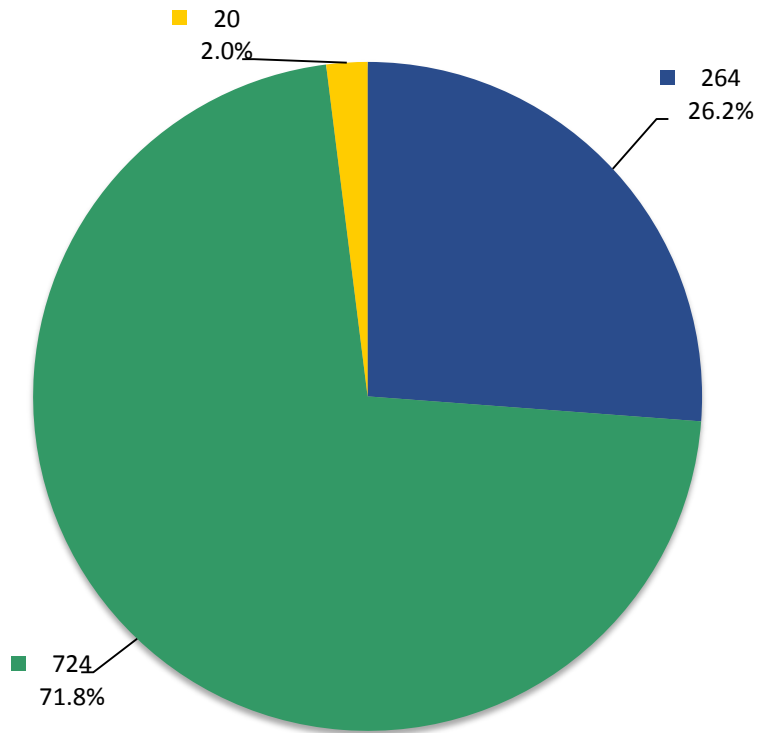
- Replacing exterior doors in all schools
- Replacing boilers at Grand Forks Secondary School
- at Boundary Central Secondary they will continue to send out paperless newsletters and weekly memos. The Sustainable Resource class will be composting biodegradable waste around the school.
- Christina Lake Elementary plans to focus on reducing heating/cooling demands and to continue to educate on compost/recycling and sustainable dishes for hot lunch. They also plan to focus on reducing the use of consumables such as paper.
- John A. Hutton Elementary students are doing a Global Citizenship Project in 2015 which encompasses an environmental awareness and sustainability efforts. Some students are cleaning up Christina Lake for example. Another group of students will be visiting classrooms in hopes to improve their recycling and composting efforts as well.
- Dr. D. A. Perley Elementary will continue to have their green team and expand the efforts to

recycle and compost, as well as reminding staff to turn off lights, projectors, etc.

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

No

**School District 51 - Boundary
Greenhouse Gas Emissions by Source
for the 2014 Calendar Year (tCO₂e*)**



Total Emissions: 1,009

- 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 2014 (Generated June 23, 2015 2:50 PM)

Total offsets required: **800**. Total offset investment: **\$20,000**. Emissions which do not require offsets: **209** **

*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.