



SCHOOL DISTRICT NO. 51 (BOUNDARY)

2015 CARBON NEUTRAL ACTION REPORT



Executive Summary

This is the 2015 Carbon Neutral Action Report for School District No. 51 (Boundary). This report summarizes our 2015 emissions profile, the amount of offsets purchased to reach net zero emissions, the actions we have taken in 2015 to reduce our greenhouse gas emissions and our plans to continue reducing emissions in 2016. By June 30, 2016, 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 we should all be lifelong learners, and as a District we try to cultivate as well as teach a respect for our environment that will follow our students into adulthood. We believe that the District and its schools have a unique opportunity to reinforce positive environmental concepts, that will enhance the relationship between living things and their natural and built surroundings.

In 2015 we were able to further reduce our carbon footprint. Following are some of the projects that allowed us to achieve this reduction.

- In June 2015 we installed software that initiates automatic computer shutdown. This installation reduced power used in computer labs as well as a reduction in HVAC usage by approximately 39.5 tons. This software has the capacity to report reductions in energy usage, costings as well as emissions.
- Installed a program called Paper-Cut which limits printing.
- Continued replacing lighting as needed with more energy efficient bulbs.
- Began the process of replacing the dust collection systems at both secondary schools.



Dust Collection System at Grand Forks Secondary

- Completed the boiler upgrades at Grand Forks Secondary School.
- All schools in School District No. 51 continued to educate students on environmental issues as well as model environmentally sound practices through recycling programs and/or green teams. Schools and staff members continued to run and improve school recycling programs and make improvements such as the addition of recycling bins for paper towels.
- Several teachers attended pro-d events and have taken on individual green initiatives in their classrooms.
- Schools incorporated walking to events and promoted events that support active lifestyles.
- Reduction in the amount of paper ordered and used.

Goals for 2016

In 2016, School District 51 plans to continue moving forward with energy saving upgrades. We plan to:

- continue replacing exterior doors, as well as weather stripping.
- continue HVAC upgrades and replacement throughout the District as necessary and financially feasible.
- continue to replace older light bulbs with more energy efficient ones.
- discuss reducing power usage by eliminating computer labs and replacing them with devices that use less power such as iPads.
- complete the dust collection system replacement in 2016. These systems will improve energy efficiency by using less energy to run and by recirculating the already warmed air back into the shops.
- encourage the schools in our District to use reminders to close blinds to reduce heating/cooling demands as well as to continue holding paperless meetings.
- support the schools as they continue to implement recycling programs, and the continuing or the forming of green teams, as well as providing recognition for green actions taken.
- continue to incorporate curriculum that enlightens and educates students.

As we are committed to being responsible environmentally, the District will continue to look for opportunities through a continuous improvement approach to energy management. Collectively these changes will continue to support us as we reduce our carbon footprint in 2016.

SUCCESS STORIES

THE RUNNING CLUB

We live in a small town of approximately 4000 people. There are two elementary schools in town, and our school, Perley Elementary, has 265 students. The running club was an opportunity for all students grade 4-7 to become active, and it especially appealed to those that are not generally involved in team sports. Most of the students that participated were grade 4 and 5 level.

We started by announcing that there would be a running club starting at our school right after Spring Break. Students signed up and their names were put on a big chart in the gym hallway. We kept track of the number of kilometres run by each student. Runs were after school two times a week, and we had different 2 – 3 kilometre routes. Some students ran and walked to complete the route and others ran the route more than once completing up to 10 kilometres per session. After the runs, there was a healthy snack provided for students.

The reason for starting a running club was that several students expressed interest and there has never been one at our school. On our last running day we invited another school in the District to join us. They also had a small running club. We had some games and a fun-run. It was a great way to finish off the season.

Several teachers helped by either running or riding bikes alongside students, and parents came to help with preparing snack each session. Students enjoyed participating and some became competitive by trying to run more kilometres each week. The running club brought parents, teachers and students together in a healthy environment. Students learned to push themselves physically and also learned that with conditioning their physical fitness improved. They were pleased with their improvements over time. Some students wanted to continue running into the summer and set goals for themselves to complete running events.

I was very pleased with the turnout of students, even though some of the participation dwindled after about 6 weeks. I believe that the social/snack part of the running club was key to keeping kids coming back. They enjoyed socializing and having a healthy snack after their efforts. Next time I would have students set individual goals for the distance they run each time, just to help give them a little push, and I would also incorporate more running games.

Sonia McKinlay, Teacher
Perley Elementary School

TOWER GARDENS

PART 1: Gathering Evidence

The students in our school were super curious about this activity and were really engaged in learning about growing their own tower garden. It was so rewarding observing the students educating their peers with their new found knowledge!

PART 2: Focus and Plan, New Learning

Problem solving was something we all had the opportunity to work on initially as a team. We followed directions as closely as possible and:

- Assembled the tree and lights
- Planted vegetables and then transferred them to the tree once established
- Set timers
- Added appropriate amounts of nutrients as needed and balanced the PH in the water tank

We focused on educating the students around the benefits of sustainability and growing their own food.

PART 3: Taking Action

- Child and youth counselors went into classrooms and talked about nutrition and healthy snacks.
- Students were educated about the importance of vegetables in their daily diet.
- Students received information from a nutritionist, a DVD on sustainable living was watched and growth charts were made.
- Students learned to be empathetic in terms of the students caring for living things.

PART 4: Reflect & Evaluate

The students were extremely proud of the results of all their effort and were excited to share the tower garden with their family and community. The student's excitement was contagious.

I believe the next round with our tower garden in the fall will be even more successful as the staff who were present to witness our activity will also be more likely to engage in the project! We are super excited!

Sabrina Rougeau, Child & Youth Counsellor
Perley Elementary School



School District No. 51 (Boundary)

GHG Emissions and Offsets for 2015 (TCO₂E)

GHG Emissions created in calendar year 2015

Total Emissions (TCO ₂ E)	873
Total Offsets (TCO ₂ E)	626

Adjustments to GHG Emissions Reported in Previous Years

Total Emissions (TCO ₂ E)	-99
Total Offsets (TCO ₂ E)	-99

Total Emissions for Offset for the 2015 Reporting Year

Total Offsets (TCO ₂ E)	527
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Signature

Date

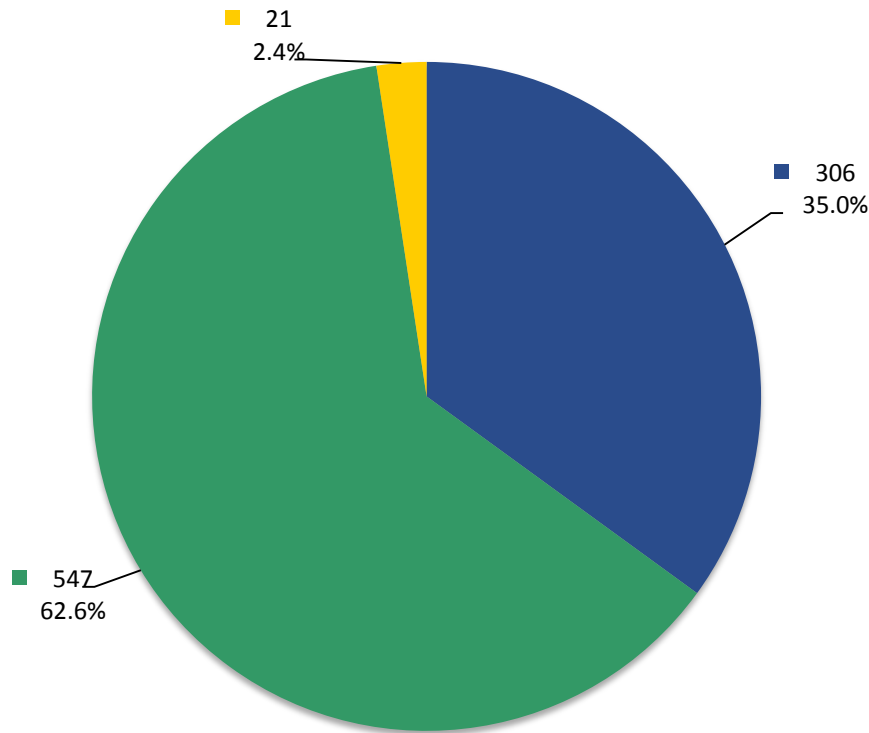
Kevin Argue

Superintendent

Name (Please Print)

Title

**School District 51 - Boundary
Greenhouse Gas Emissions by Source
for the 2015 Calendar Year (tCO₂e*)**



Total Emissions: 874

- 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 May 25, 2016 10:09 AM)

Total offsets required: **626**. Total offset investment: **\$15,650**. Emissions which do not require offsets: **247** **

*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.

2015 Carbon Neutral Action Report Survey

Organization Name:

School District No. 51 (Boundary)

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:

No

If Yes, please describe:

(No response)

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:

No

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

Installed a power savings application to computers in the District, with an energy saving of approximate 39.5 tons to date.

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)

No

If Yes, please describe:

(No response)

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

No

Replaced existing vehicles with hybrid or electric vehicles:

No

Took steps to drive less than previous years:

No

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)

No

If yes, please describe:

(No response)

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

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

No

If yes, please describe:

(No response)

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:

As a District, we have reduced our paper use. Installed a program called "PaperCut" which limits the amount of student printing.

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:

No

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:

No

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

No

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)

No

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

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

No

Incorporated lifecycle costing into new construction or renovations:

No

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

CSI buys Apple devices to reuse which diverts these from the landfill