



2019 CARBON NEUTRAL ACTION REPORT

MAPLE RIDGE - PITT MEADOWS SCHOOL DISTRICT NO.42

EXECUTIVE SUMMARY

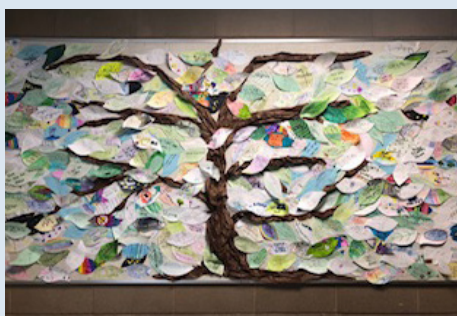


This Carbon Neutral Action Report for the period January 1, 2019 to December 31, 2019 summarizes our emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2019 to reduce our greenhouse gas emissions, and our plans to continue reducing emissions in 2020 and beyond. By June 30, 2020, the final Carbon Neutral Action Report for Maple Ridge - Pitt Meadows School District No. 42 will be posted to the district website at www.sd42.ca/sustainability.

On March 25, 2015, the Maple Ridge - Pitt Meadows Board of Education approved the *Energy Management Plan*. This plan includes the implementation of lighting as well as heating, ventilation and air-conditioning (HVAC) upgrade opportunities in all 34 school district facilities. The associated greenhouse gas emission reduction resulting from this plan are 758 tonnes of CO₂ emissions.

Through implementing these projects, establishing supporting administrative regulations and creating behaviour change initiatives through outreach and education, this plan will continue to serve as a framework for achieving ongoing improvement of energy performance in support of long-term energy and cost reduction goals.

Sylvia Russell, Superintendent of Schools
May 13, 2020



2019 GREENHOUSE GAS EMISSIONS

In an effort to support organizations through the COVID-19 pandemic, the Ministry of Environment issued a Directive on March 31, 2020, that enabled each public sector organization (PSO) to use their 2018 GHG Emissions as a placeholder for the purposes of their 2019 Carbon Neutral Report.

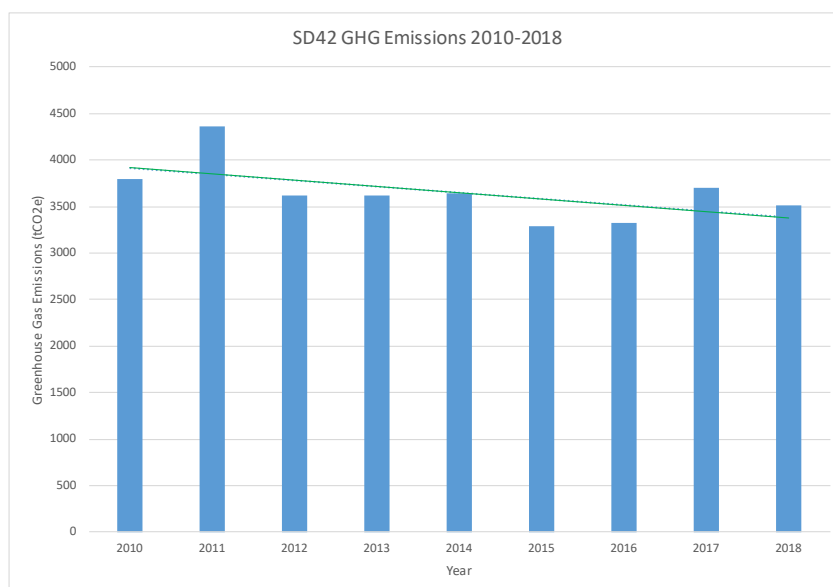
SCHOOL DISTRICT NO. 42 GHG EMISSIONS AND OFFSETS FOR 2018 (TCO2E) GHG Emissions Created in Calendar Year 2018	
TOTAL EMISSIONS	3,374.2
TOTAL BIOCO ₂	5.57
TOTAL OFFSETS	3,379.77
Offset Investment (\$25 per tCO ₂ e)	
TOTAL	\$84,494.25

RETIREMENT OF OFFSETS:

In accordance with the requirements of the Climate Change Accountability Act and Carbon Neutral Government Regulation, Maple Ridge - Pitt Meadows School District (SD42) (the Organization) is responsible for arranging for the retirement of the offsets obligation reported above for the 2019 calendar year, together with any adjustments reported for past calendar years (if applicable). The Organization hereby agrees that, in exchange for the Ministry of Environment and Climate Change Strategy (the Ministry) ensuring that these offsets are retired on the Organization's behalf, the Organization will pay within 30 days, the associated invoice to be issued by the Ministry in an amount equal to \$25 per tonne of offsets retired on its behalf plus GST.

EMISSIONS TRENDS

Since 2010, the Maple Ridge - Pitt Meadows School District has seen a 8% reduction in emissions. 2019 actual emissions will be released in September 2020.





ENERGY CHALLENGE: ACTION ON SUSTAINABILITY

SD42's fourth annual Energy Challenge inspired and empowered teachers and students to think about sustainability and energy savings in their schools. In 2019, 15 schools signed up for the challenge and 10 schools participated by completing over 424 energy-saving activities in the month of February. Schools shared their activities via social media with over 82 posts. SD42 saved 43,624 kWh of electricity & 169 GJ of natural gas in the month of February.

The winner of the 2019 Energy Challenge is Alexander Robinson Elementary. Energy Challenge 2019 highlights include: beautiful sustainability pledge trees, art projects using upcycled materials, Glove Your Neighbourhood recycle clothing drive, Instagram photo contests, Energy Tip video series featuring Imperial Galactic Stormtrooper called TC-1588, garden reclamation projects, lights out lunches, building a piezoelectric floor and even a dramatic re-enactment of the Exxon Valdez spill.

Adam Stanley, Principal, Alexander Robinson Elementary said about the 2019 Challenge: "We want the Energy Challenge to exist not as an event in February, but rather as a catalyst for a discussion and mindset that will last all year."



IN THE NEWS

MAY 7, 2019

ENERGY CHALLENGE EDUCATES AND EMPOWERS STUDENTS

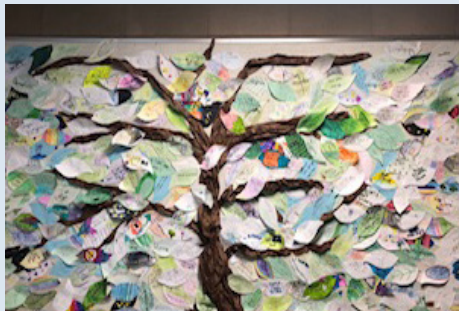
Maple Ridge – Pitt Meadows School District No. 42 students and staff were up to the challenge. During the month of February, 10 schools participated in the fourth annual SD42 Energy Challenge and completed over 424 energy-saving activities. This year's highlights included sustainability pledge trees, art projects using upcycled materials, recycled clothing drives, social media contests, energy tip videos, garden reclamation projects, lights out lunches, and much more.



APRIL 25, 2019

GSS CELEBRATES EARTH DAY

Garibaldi secondary students participated in fun, environmentally focused activities last week to celebrate Earth Day. The Garibaldi Green Group organized the April 16 event, which included rock painting, planting seeds, a plant sale, face-painting and temporary tattoos, snacks, board games and screening of the enviro-themed movie *Over the Hedge*. "It was a successful event," said teacher Moein Ferdosian, who sponsors the Green Group along with teacher Helen Carelse. "The Green Team organizes activities to educate and encourage staff and students to make greener choices."



FEBRUARY 7, 2019

GLENWOOD ELEMENTARY WINS SD42 HOLIDAY SHUTDOWN

Before staff at Glenwood Elementary left for winter break, they made sure to switch off lights, unplug appliances and turn down the heat. In total, they turned off or shut down 285 items, which earned the school energy cost savings over the holidays.



JANUARY 31, 2019

STUDENT LEADERS READY TO TAKE ACTION ON SUSTAINABILITY

Elementary and secondary Student Voice leaders from across the Maple Ridge – Pitt Meadows School District are ready to be the change. Last week the students attended an event hosted at Westview Secondary that included a keynote presentation by Maureen Jack-LaCroix of Be the Change Earth Alliance.





Pictured above from left to right: Tammy Lumbis, Jennifer Fitzpatrick and Jennifer Beveridge.

HOLIDAY SHUTDOWN: TEACHERS AND STUDENTS SAVE ENERGY OVER WINTER BREAK

With the valuable support of the Environmental Sustainability Committee, the second annual holiday shutdown campaign at SD42 was a success. Staff at eight schools, including over 4,000 students, staff and environmental champions participated. Through consulting with teachers and principals it was established that the key elements to ensuring high participation in this campaign were: ease of use, short time commitment and flexibility for reporting results.

“Glenwood staff were excited to work together to minimize our ecological footprint over the holidays,” said vice-principal Jennifer Beveridge. “End of day before the Christmas break we were all eagerly unplugging.”

Eight schools participated in the holiday shutdown and together, Maple Ridge – Pitt Meadows School District unplugged over 500 appliances.



PLANS TO CONTINUE REDUCING GREENHOUSE GAS EMISSIONS IN 2020

- Continuously improve and review our operational policies in an effort to reduce utility consumption.
- Boiler upgrades aimed at replacing end of life equipment and increasing energy efficiency.
- Heating, ventilation and air-conditioning (HVAC) upgrade opportunities in school district facilities: direct digital control (DDC) upgrades, scheduling and security integration, occupancy sensor controls, heating plant optimization and supply air pressure (SAP) reset.
- Proactively deliver regular energy intensity reports to departmental personnel for use in raising general awareness and examining variances from established targets. Prepare energy conservation initiatives to ensure students and staff have an active role in reducing our energy consumption.
- Improve communication of the energy conservation initiative to the broader organization to raise energy awareness.
- Continue meeting with and expanding the staff Environmental Sustainability Committee.



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