



**2019 Carbon Neutral Action Report**  
**SD40 New Westminster**



New  
Westminster  
Schools

## Contents

|   |          |
|---|----------|
| <b>Declaration Statement</b>              | <b>3</b> |
| <b>Overview</b>                           | <b>3</b> |
| <b>New Construction</b>                   | <b>4</b> |
| <b>Emission Action Plan</b>               |          |
| <b>Building</b>                           | <b>5</b> |
| <b>Fleet</b>                              | <b>6</b> |
| <b>Paper</b>                              | <b>7</b> |
| <b>Emissions and Offset Summary Table</b> | <b>8</b> |
| <b>Retirement of Offsets</b>              | <b>9</b> |

### Declaration Statement

This Carbon Neutral Action Report for the period of January 1<sup>st</sup>, 2019 to December 31<sup>st</sup>, 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<sup>th</sup>, 2020 New Westminster School District's final Carbon Neutral Action Report will be posted to our website at [newwestschools.ca](http://newwestschools.ca)

### Overview

The New Westminster School District is a diverse, growing district with eight elementary schools, three middle schools and one high school, along with our school board office.

7,500 students comprised of:

- 1026 English Language Learner (ELL) students;
- 993 French Immersion students;
- 524 students identifies with special needs;
- 298 Aboriginal students

Combined, these dynamic students make our district the multi-national, multi-faceted community that it is today *where students love to learn*.

On behalf of School District 40, we are pleased to present our Carbon Neutral Action Report for 2019. Our school district is committed to lower greenhouse gas emissions through leadership, developmental planning and educating our future generations of the importance of sustainability.

At the grass roots level of New Westminster School District, environment clubs at various schools engage in conservation goals including composting, recycling consumables, community gardening and, in the case of the high school, promoting environment stewardship awareness. At the district level, New Westminster School District continues to replace out-dated gas-fired air handlers with high efficiency air

handlers or AHUs at two to three sites per year as well as replacing old roofing and gutters as part of an on-going effort to achieve carbon neutrality.

In 2019:

- 12 out-dated gas-fired AHUs were replaced at Glenbrook Middle School with hot water AHUs;
- the boiler system at Herbert Spencer were replaced with high-efficiency condensing boilers for heating and domestic loops;
- lighting retrofitted to LED and motion sensors;
- roof membranes installed with insulation at two schools.

New Westminster School District anticipates the use of air source heat pumps (ASHP) to deliver heating to classrooms raising the efficiency of the high efficiency boilers from 70% to 90% efficiency with an estimated a reduction of roughly 56% GHG tonnes per site.

#### New Construction

Major capital funding has made it possible to replace the aging high school with a replacement school that will incorporate the latest sustainable energy management system. The replacement school will be complete in late 2020/early 2021 with a LEED Gold standard.



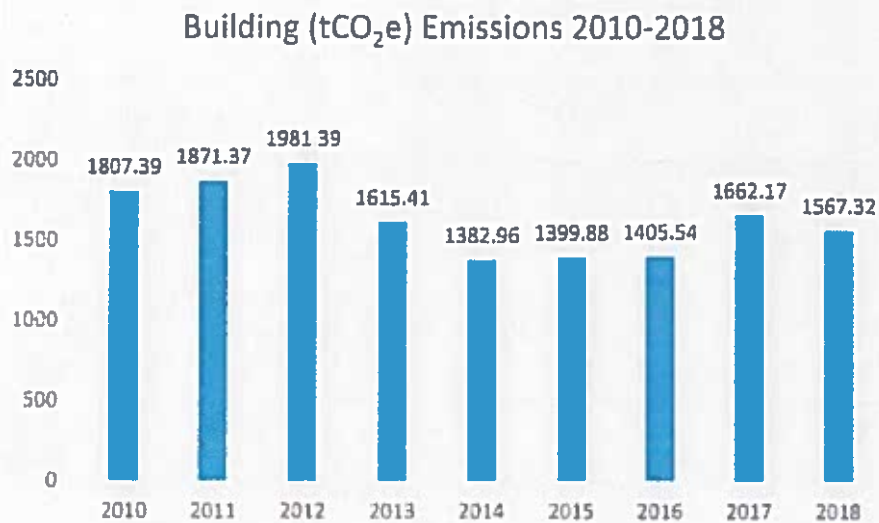
As well as the much anticipate opening of the replacement high school, 90 year old Richard McBride Elementary began its seismic upgrade that is expected to see completion in summer of 2021, providing students with a safe, modern school to learn and thrive in, plus meet today's standards for our carbon neutral goals.

2019 saw the completion of the seismic upgrade for Lord Tweedsmuir Elementary leaving only one school, Hume Park/Home Learners to be seismically upgraded.

## Our Emissions Action Plan

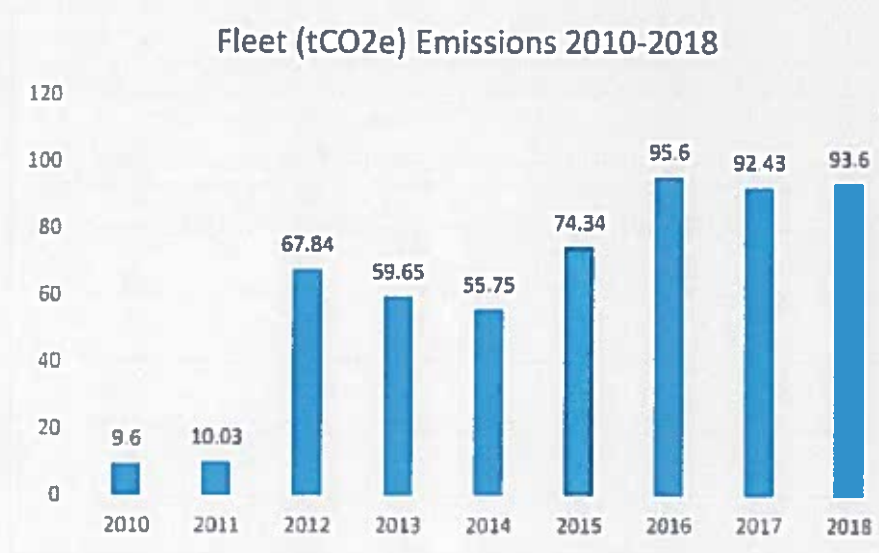
### Building

New Westminster School District has made significant changes to the energy efficient heating systems in the past two years to 80% of our schools and portables with the last 20 % completed in the summer of 2020. Old furnaces in portables were updated gas-fired boilers replaced with water AHUs and hot water on demand units through the funding of annual facilities grants. The number of portables in the school district has increased in the last two years (2017 & 2018) to 46 to accommodate new class composition/size and increase of student enrollment, reflecting the increased emissions from 84.92 % of total offsets in 2016 to 86.66 % of offsets in 2017 and 87.41 % (tCO<sub>2</sub>e) in 2018. New Westminster School District expects to decrease a minimum of 30% of total (tCO<sub>2</sub>e) by 2022.



## Fleet

Fuel consumption for New Westminster School District vehicles is at 5.22 % of total offsets for 2018, up slightly from 2017's 4.82 % as two additional vehicles were added to the fleet and 2016 was a heavy snow year. To reduce the emissions moving forward, hybrid or EV will be replace aging vehicles as part of our 5 year plan. Please note: The 2010 and 2011 years show a significant decrease in GHG emissions and fuel consumption that appears to be an aberration of data entry, so is misleading.

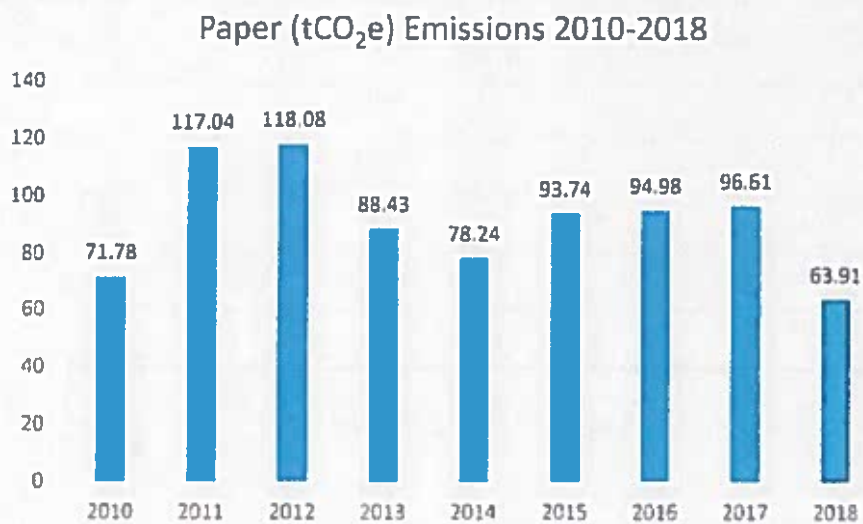


## Paper

New Westminster School District realised a decrease of paper emissions at 3.59% of the total offsets in 2018, while the district is pleased with that decrease, ways and means to continue to reduce the amount of paper consumed is on-going.

Purchasing options include a minimum of 30% recycled content for white only paper. Class sets of textbooks are purchased digitally, reports cards are electronic, all communications with student parents/guardians is sent via email and school offices are sending invoicing to the board office electronically.

As shown below, 2018 emissions for paper consumption is at a ten year low, the school district continues to explore avenues of conservation with our staff.



**Emissions and Offset Summary Table:**

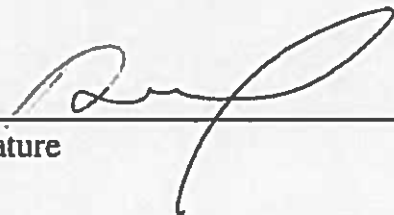
| <b>New Westminster School District GHG Emissions and Offsets for 2019 (tCO<sub>2</sub>e)</b> |                 |
|--|-----------------|
| <b>2018 GHG Emissions as a placeholder for the purposes of 2019 CNAR.</b>                    |                 |
| <b>Total Emissions (tCO<sub>2</sub>e)</b>  | <b>1,796</b>    |
| <b>Total BioCO<sub>2</sub></b>   | <b>2.99</b>     |
| <b>Total Offsets (tCO<sub>2</sub>e)</b>  | <b>1,793</b>    |
| <b>Adjustments to GHG Emissions Reported in Prior Years</b>                                  |                 |
| <b>Total Emissions (tCO<sub>2</sub>e)</b>  | <b>1</b>        |
| <b>Total Offsets (tCO<sub>2</sub>e)</b>  | <b>1</b>        |
| <b>Grand Total Offsets for 2019 Reporting Year</b>   |                 |
| <b>Grand Total Offsets Required (tCO<sub>2</sub>e)</b>                                       | <b>1794</b>     |
| <b>Offset Investment (\$25 per tCO<sub>2</sub>e)</b>   | <b>\$44,850</b> |



**Retirement of Offsets:**

In accordance with the requirements of the Climate Change Accountability Act and Carbon Neutral Government Regulation, School District 40 New Westminster 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.

**Executive sign-off:**

  
\_\_\_\_\_  
Signature

*May 29, 2020*  
\_\_\_\_\_  
Date

*MARION HAMILTON*  
\_\_\_\_\_  
Name (please print)

\_\_\_\_\_  
Superintendent of Schools