

2018 CARBON REPORT



May 2019

SCHOOL DISTRICT NO. 85

Vancouver Island North

EXECUTIVE SUMMARY

On behalf of the Vancouver Island North School District, I am pleased to submit the 2018 Carbon Neutral Action Report. This report provides an overview of the steps that Vancouver Island North School District has taken to reduce its greenhouse gas emissions as well as other environmental sustaining actions that have been undertaken in the 2018 calendar year.

Environmental sustainability is deeply important to the Vancouver Island North School District. Our Energy Management Committee is now celebrating its seventh year in existence. Our Board of Education continues to support effective practice in the Environmental Sustainability focus areas such as Curriculum, Energy Conservation, Community Gardening, Sustainable Purchasing, Sustainable Transportation, Water Conservation and Waste Management.

The Greenhouse Gas reduction initiatives in 2018 continued to be focused primarily on reducing emissions from buildings, which is our largest source. The main objective this year has been to replace dated fluorescent lighting with more energy efficient LED lighting; this will be an ongoing project which will continue into 2019.

We continue to engage both our students and our employees, leveraging their knowledge and enthusiasm as we strive for lower GHG emissions. Doing so has benefits beyond the environment as it generates both financial savings and social benefits. Our employees are more engaged in working towards sustainability and the students who create our future are becoming more passionate about caring for their communities and the world that surrounds them.



Ms. Carol Robertson
Superintendent of Schools

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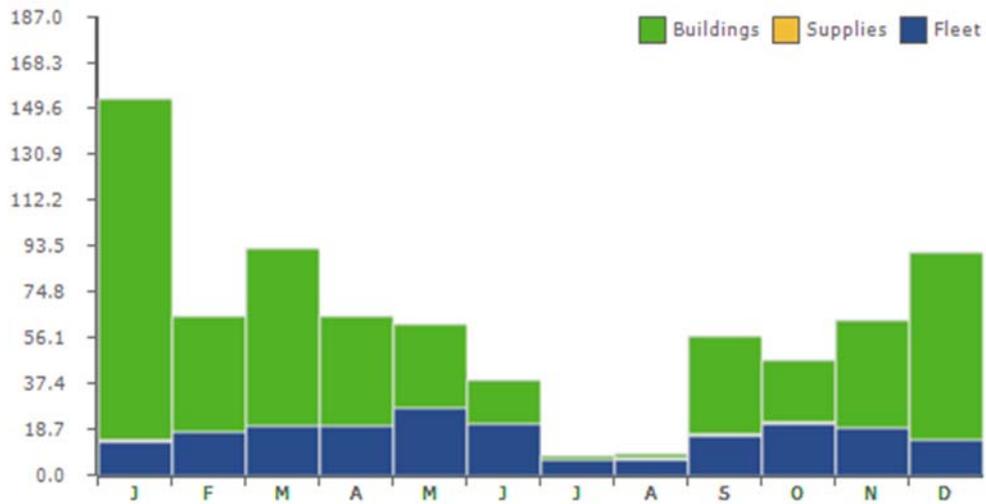
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GREENHOUSE GAS EMISSIONS

The total Greenhouse Gas Emissions for School District No. 85 (Vancouver Island North), for the 2018 calendar year were 771 tonnes CO₂e, which is a slight decrease from 803 tonnes in 2017. The graph below shows the district emissions by source.

Total Emissions Calendar Year 2018 School District 85 - Vancouver Island North

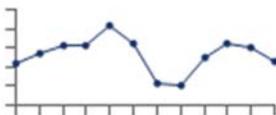
Metric tonnes
CO₂ equivalent (tCO₂e)



Click on the bars to view data for each month

Fleet

GHG Emissions
(Metric Tonnes CO₂e)



Buildings

GHG Emissions
(Metric Tonnes CO₂e)



Supplies

GHG Emissions
(Metric Tonnes CO₂e)



FUGITIVE EMISSIONS

Fugitive emissions are the unintentional emissions from the production, processing, transmission, storage and delivery of fossil fuels and the intentional combustion of fossil fuels not used to generate useful heat or electricity.

The following fugitive emissions are deemed by the British Columbia Provincial Government Carbon Neutral Government Regulation as out-of-scope for reporting:

- Gases used for research purposes (e.g.: science labs)
- Type R-22 coolant from stationary air conditioning and refrigeration units in schools
- Any emission sources that comprise less than 1% of the district's total GHG's

In scope, fugitive emissions (HFCs released to the environment as a result of leaks in cooling equipment) for School District 85, are well below the 1% threshold for reporting and are therefore not included.

TRAVEL RELATED EMISSIONS

Under the Carbon Neutral Public Sector commitment, only core government organizations that report through the Consolidated Revenue Fund (government ministries, tribunal employees, Crown Corporations) are required to track and report emissions from business travel of public officials. Vancouver Island North School District does not fall within "core government" and therefore does not track travel related emissions.

OFFSETS APPLIED TO BECOME CARBON NEUTRAL

In order to achieve carbon neutral status for 2018, the Board of Education of School District No. 85 (Vancouver Island North) purchased carbon offsets totaling 622 tonnes of CO₂e from Pacific Carbon Trust in May of 2019 at a cost of \$16,327.50.

ACTIONS TAKEN TO REDUCE GREENHOUSE GAS EMISSIONS IN 2018

In 2018, School District No. 85 continued in its efforts to replace existing lighting systems with LED lights being introduced in place of fluorescent. Motion sensor light switches have been installed in washrooms, offices and some classrooms to reduce hydro consumption and waste.

Meeting packages within the District are being sent out electronically in an effort to reduce paper waste. Documents are being stored on internal servers whenever possible and photocopying is set to double sided. All schools and offices within the District recycle whenever possible and garbage cans have been removed from low use areas in order to reduce the number of bags being wasted.

Three new water bottle refill stations have been installed in school facilities in place of regular fountains in an effort to reduce the number of plastic bottles being used in the schools. Water reducing toilets are being installed as replacements to older, high consumption models on an ongoing basis and aerator taps have been installed in numerous locations.

2018 saw the replacement of two aging school buses and one cube van with newer more energy efficient models.

Hydro is used in the School District for both lighting and heating purposes. The total electricity purchased from BC Hydro went from 3,550,762 kWh in 2017 to 3,503,027 kWh in 2018, an overall decrease of 47,735 kWh. This decrease may be attributed to lighting upgrades as well as overall awareness and attention to reducing energy consumption.

Eight of School District 85's properties are heated by propane. 2018 saw an overall decrease of 14,478 liters, from 315,881 liters in 2017 to 301,403 liters in 2018. This increase may be attributed to building envelope upgrades as well as heat pump replacement.

PLANS TO CONTINUE REDUCING GREENHOUSE GAS EMISSIONS IN 2019

In 2019, the plan is to continue upgrading heating and hot water systems with more energy efficient models. Sunset Elementary School and North Island Secondary School will both be receiving upgrades to their building envelopes. North Island Secondary School will also see the replacement of six aging heat pumps with newer more efficient units as the current units are beyond their useful life expectancy.

Lighting fixtures are continuously being upgraded to LED rather than fluorescent, which should see a long term cost savings.

Education is an ongoing commitment amongst staff and students in the district, as to how we can all do our part to reduce our environmental footprint. Purchasing recycled content products is encouraged and endorsed whenever possible.

All School District properties remain idle free; this is enforced through signage and verbal communications. Buses and maintenance vehicles are turned off when not being immediately used and ride sharing is encouraged whenever possible.

Our transportation department participates in an oil filter recycling program to minimize their environmental impact and regular maintenance on all fleet vehicles ensures they are running as efficiently as possible.