Title: 2021 PSO Climate Change Accountability Report

Organization: School District 72 (Campbell River)

# **PART 1. Legislative Reporting Requirements**

**Declaration statement:** This PSO Climate Change Accountability Report for the period January 1, 2021 to December 31, 2021 summarizes our greenhouse gas (GHG) emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2021 to reduce our GHG emissions, and our plans to continue reducing emissions in 2022 and beyond.

## **Emission Reductions: Actions & Plans**

The 2022 Strategic Energy Management Plan provides an overview of our school district's energy consumption and the impact on our organization's carbon footprint. This document is available for viewing at <a href="https://crsd72storage.blob.core.windows.net/media/Default/medialib/sd72-strategic-energy-management-plan-2022.44053d6275.pdf">https://crsd72storage.blob.core.windows.net/media/Default/medialib/sd72-strategic-energy-management-plan-2022.44053d6275.pdf</a>

## A. Stationary Sources (e.g. buildings, power generation)

Completed 2021 projects with the highest energy conservation impacts are summarized in the following table.

Location	Description	Cost	Funding Source(s)	Comments
Penfield Elementary	Life cycle replacement roof	\$975,000	Ministry of Education	Improved roof R-value and reflectivity in conjunction with roof replacements
Surge Narrows	Remove skylights	\$17,400	Annual Facilities Grant	Improved roof R-value
Carihi High	Life cycle replacement of boilers	\$250,800	Ministry of Education; Annual Facilities Grant	Conversion to high efficiency boilers in conjunction with life cycle replacement

Penfield Elementary	Life cycle replacement of 4 unit ventilators	\$161,400	Annual Facilities Grant	Life cycle replacement of ventilators and upgrade heating controls
Cedar Annex	Life Cycle replacement of four roof sections	\$238,900	Annual Facilities Grant	Improved roof R-value and reflectivity in conjunction with roof replacements

School District 72 has consistently achieved energy conservation and greenhouse gas reductions targets by taking full advantage of opportunity funding and external grants. Going forward, energy conservation initiatives will strive for an ongoing 2% reduction in energy consumption per year. To achieve this goal, the Annual Facilities Grant, Major Capital Program, Carbon Neutral Capital Program and School Enhancement Program will consider and incorporate energy conservation opportunities when developing school renewal projects.

Planned 2022 life-cycle replacement projects with the highest energy conservation opportunities are summarized in the following table.

Location	Description	Preliminary Budget	Funding Source(s)	Comments
Southgate Middle	Life Cycle replacement of three roof sections	\$615,000	Ministry of Education	Improved roof R-value and reflectivity in conjunction with roof replacements; includes safety improvements
Robron Centre	Replace Controls and valves	\$289,000	Ministry of Education	Improved controls for mechanical heating systems
Quadra School	Mechanical upgrade of west wing	\$349,000	Ministry of Education	Life cycle replacement of main air handling unit and controls upgrades

Ripple Rock Elementary	Life cycle replacement of boilers	\$133,000	Ministry of Education	Conversion to high efficiency boilers in conjunction with life cycle replacement
Quadra Elementary	Installation of Photovoltaic Panels	\$10,500	iCan Community Association	Demonstration project with educational opportunities

## B. Mobile Sources (e.g. fleet vehicles, off-road/portable equipment)

Four Type D (84 passenger) school buses were replaced in 2021 with comparable diesel vehicles. The replaced buses were experiencing significant maintenance issues and it is anticipated that reduced emissions will result from their retirement.

A charging station feasibility study was completed in 2021 and submitted for funding consideration to the Ministry of Education. With Type D school buses being introduced to the market in 2021, the scope of this project proposal will be expanded in 2022 to include additional locations.

As exemplified by the purchase of battery powered chainsaws in 2021, School District 72 is continually seeking cost-effective opportunities to reduce its carbon footprint. Proposals to replace aging white fleet and equipment will, when approved, contribute to lower emissions due to the modern technology found in newer vehicles and equipment.

## C. Paper Consumption

Paper consumption represents a very small portion of our organization's carbon footprint. Nevertheless, there is general awareness of alternative sources of paper (eg sugar cane – Penfield Elementary) and use of electronic correspondence is the norm throughout the school district.

## 2021 GHG Emissions and Offsets Summary Table:

School District 72 (Campbell River) 2021 GHG Emissions and Offsets Summary		
GHG Emissions created in Calendar Year 2021		
Total Emissions (tCO2e)	1930	
Total BioCO <sub>2</sub>	21	
Total Offsets (tCO2e)	1925	
Adjustments to Offset Required GHG Emissions Reported in Prior Years		
Total Offsets Adjustment (tCO <sub>2</sub> e)	14	
Grand Total Offsets for the 2021 Reporting Year		
Grand Total Offsets (tCO2e) to be Retired for 2021 Reporting Year	1939	
Offset Investment (\$25 per tCO₂e) [Grand Total Offsets to be Retired x \$25/tCO₂e]	\$48,475	

## **Retirement of Offsets:**

In accordance with the requirements of the *Climate Change Accountability Act* and Carbon Neutral Government Regulation, The Board of Education of School District 72 (Campbell River) **(the Organization)** is responsible for arranging for the retirement of the offsets obligation reported above for the 2021 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.

## PART 2. Public Sector Leadership

#### 2A. Climate Risk Management

Climate change adaptation is an ongoing consideration when conducting facility repairs or upgrades. Ongoing programs include the use of reflective roof coatings (mitigating the effects of urban heat sinks), upgrades to drainage systems (anticipating increased frequency of extreme weather events), and applying tinted film on exterior windows (reducing solar gain in classroom spaces). As exemplified during the 2021 heat wave, reactive measures include installation of portable air conditioners and fans.

#### **2B.** Other Sustainability Initiatives

Outdoor educational activities are found in all schools as a key support for raising environmental awareness and promoting sustainability. School gardens are found through the school district. Particularly noteworthy in 2021 was the a project to create a nature trail and guide on Read Island, in which students supported a community project by applying hands-on design skills, researched First Nations languages of the areas, and wrote an accompanying trail guide.

Operational Procedure 515 (Environmental Responsibility) reinforces the district's commitment to protecting and preserving the environment. An example of this commitment is the extensive recycling program found through the school district.

## **2C.** Success Stories

Strengthening and expanding community relations is important to Campbell River School District Strategic Plan. Environmental stewardship awards from the City of Campbell River, Union of BC Municipalities, and Campbell River Chamber of Commerce reflect our positive relationships with community partners. Additionally, School District 72 has received many awards from BC Hydro for energy conservation projects. In recognition of mechanical upgrades at three schools, FortisBC recognized School District 72 with the 2021 Efficiency in Action Award in the Medium Commercial category.

## **Executive Sign-off:**

Signature

Date

Dr. Jeremy Morrow Name (please print) Superintendent Title