



**School District 5**  
**Southeast Kootenay**

**Climate Change Accountability Report for 2020**

**Emissions Reduction Report**

**Declaration statement**

This Climate Change Accountability Report (CCAR) for the period January 1, 2020 to December 31, 2020 summarizes our emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2020 to reduce our greenhouse gas emissions and our plans to continue reducing emissions in 2021 and beyond.

By June 30, 2021, School District No. 5 final CCAR Report will be posted to our website at [www.sd5.bc.ca](http://www.sd5.bc.ca)

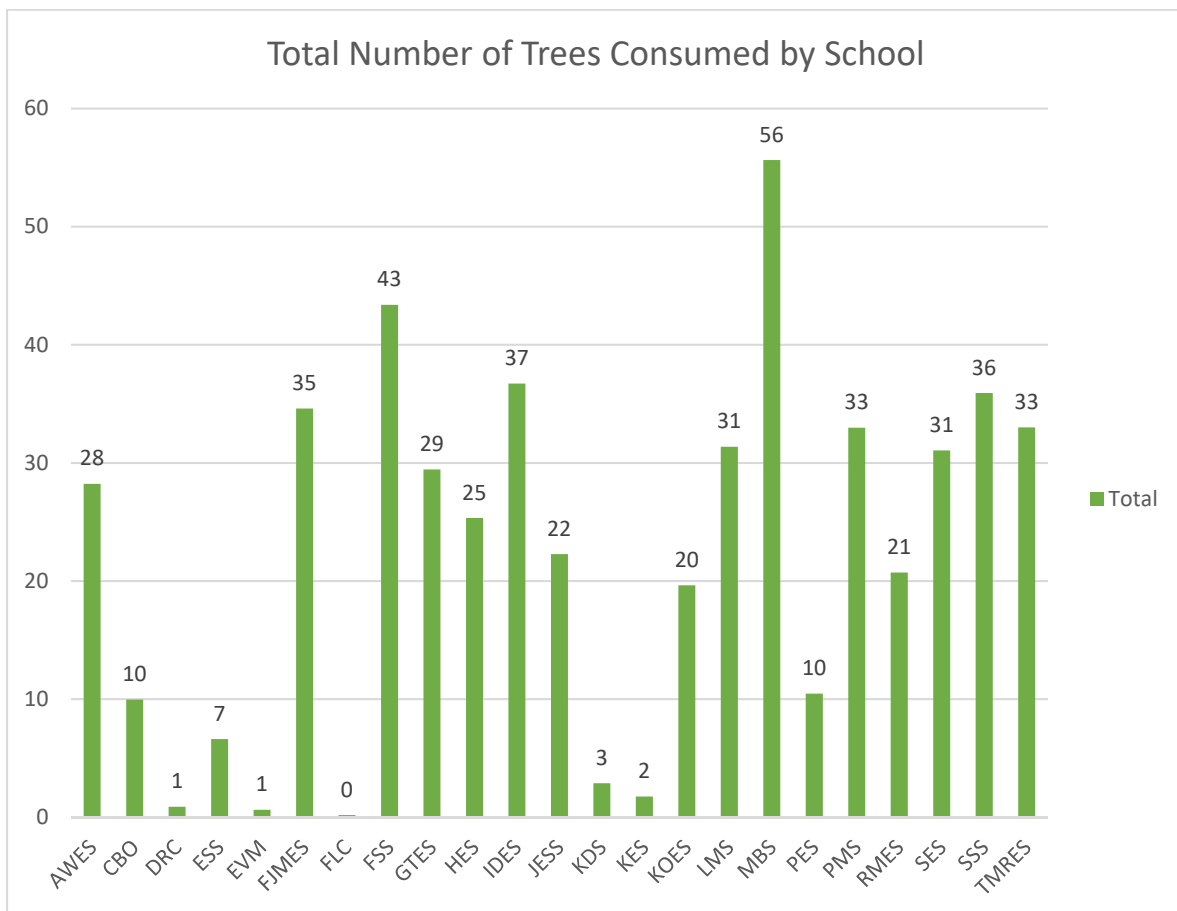
**Overview**

School District No. 5 has continued to work towards reducing emissions this year. As you will read, we have been working towards our goal of carbon neutrality.

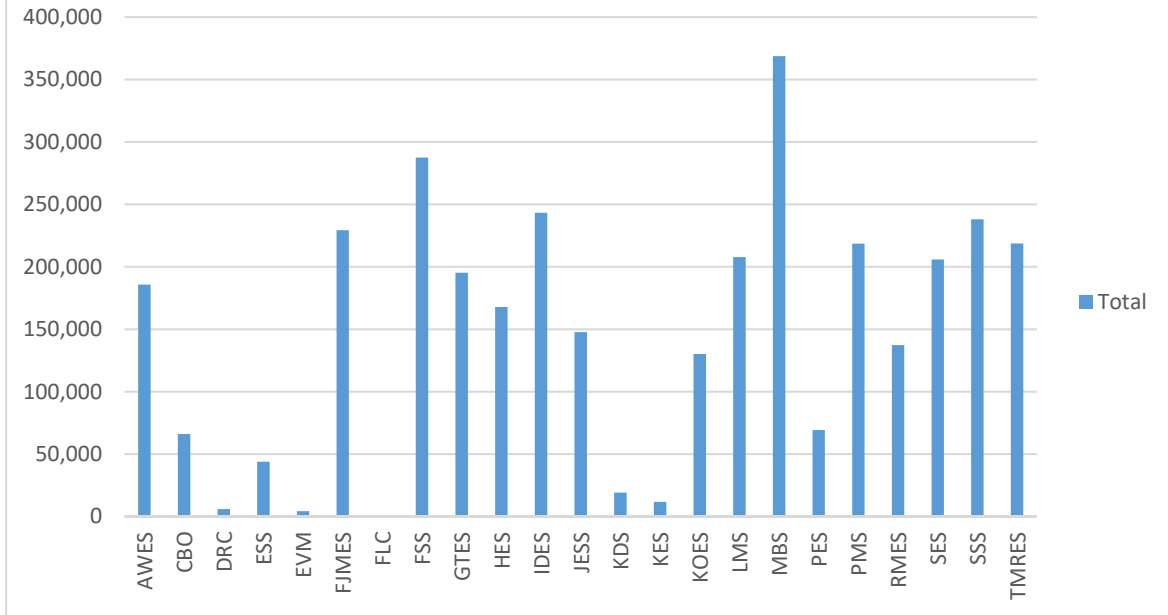
All of our departments continue to be in the mindset of reducing unnecessary emissions where they can. This is from removing inefficient printers to purchasing energy saving appliances. We believe our goal of working with staff and students to become more energy wise has paid off and will continue to pay off in the years to come.

**Technology:** We have now moved forward with our revised Five Year Tech Plan. Replacing older computers with new ones.

- Have invested in Paper Cut software to reduce the amount of printing and paper from all printers, and copiers in the district which helped with reduction of paper, ink and servicing of machines
- Following is a summary of the printer environmental impact:

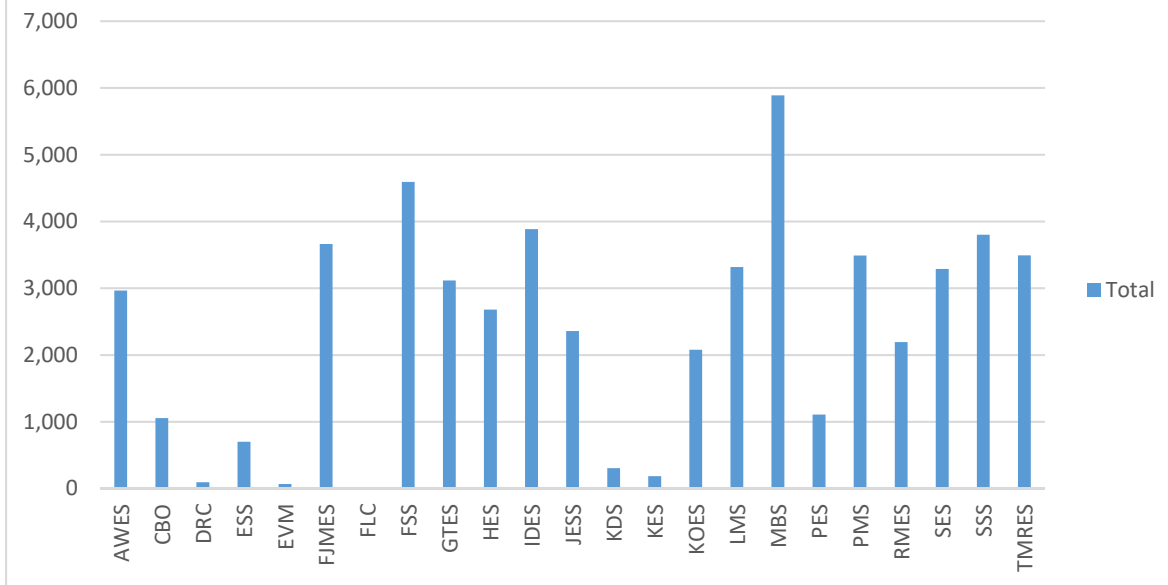


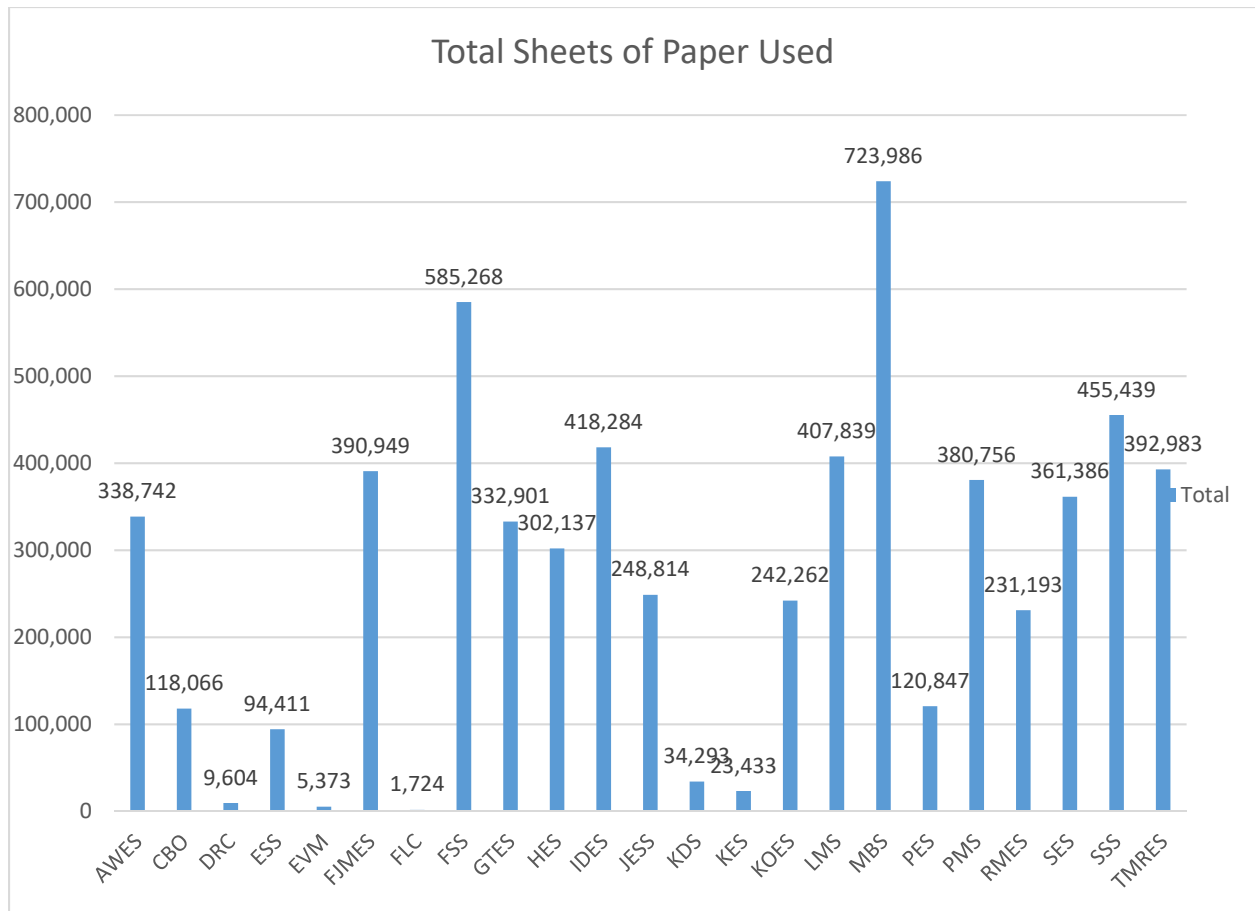
The manufacturing energy used to produce the paper, represented as the energy consumed by a standard light bulb in hours



### CO2 Produced

The amount of greenhouse gases released in the production of the paper





**Electrical:** Our district has been replacing older light fixtures with LED lights and kits where possible. This reduces the use of KWH by an average of 40 %.

- We have completed one (1) lighting upgrades this year. (MBSS)
- Changing to LED technology from older fluorescent lighting. With this change, we put in dimming switches in all the classrooms allowing the teachers to lower the light levels as needed.
- The response we received from the staff has been very positive as well as lowering our overall costs of energy.

**Mount Baker Secondary School** completed from old lighting to LED in the whole school as shown in pictures below:



















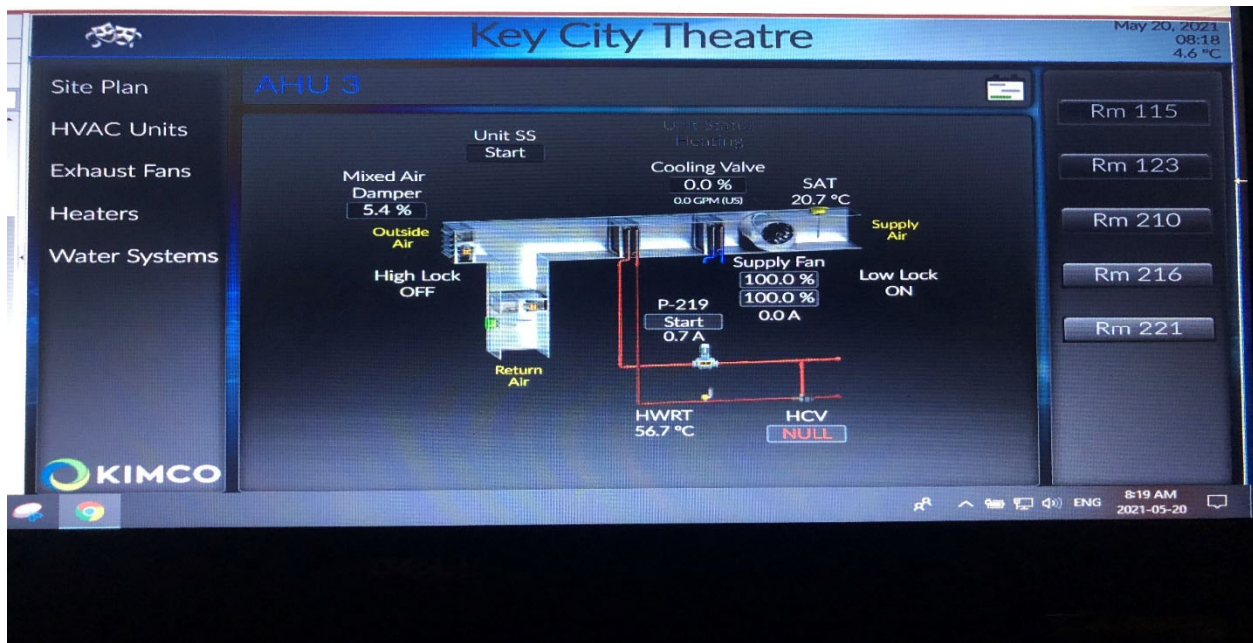


- The new lighting brightened up the rooms as well as the hallways.
- The staff tell us that not only does the lighting in the hallways allow the staff to see what is going on better but also seems that the students are better behaved.



## HVAC:

**Mount Baker Secondary School:** We finished up a HVAC upgrade at the Key City Theatre, where we removed aging HVAC air handling unit and replaced it with a more efficient hydraulic makeup air unit. We also replaced all the Honeywell zone valves with more efficient DDC control bellimo actuator. We also moved all thermostat and controls to central DDC system.







With the upgrade of the HVAC and Direct Digital Control have has improved the system with the following savings and reduction at the Key City Theatre project.

- Allowed us to put the building on schedule to increase efficiency;
- Energy 6209 KwHr saved per year;
- 0.007 Tco2 gashouse reduction.

## Transportation:

Our School District was one of the 14 school districts to receive the CE Electric School Bus as part of the British Columbia's mandate of a 40% greenhouse gas reduction for public fleets by 2030. For the electric bus, we installed a charging station at our bus shop.





## **Five Year Plan**

Our 5-year plan will include more energy efficient boilers for schools with older systems. We will be continuing with replacing older light fixtures with LED lights and kits in other schools and offices.

This coming year we will be upgrading Mount Baker Secondary School gym with similar IBC boilers and will be expecting similar results that we are now seeing at Rocky Mountain Elementary School and Fernie Secondary School.

We have hired an energy monitoring company to watch over the use of our energy systems. Prism Engineering gives us an overview for year-to-date performance immediately through a customizable dashboard. This can clearly identify utility spending and savings among multiple sites.





























We are investing more in technology as well:































- Investing in School Messenger for increased digital newsletters and digital field trip forms, etc. This will help reduce paper, copying and time in delivery to parents;
- More video conferencing via Zoom and Teams helping to decrease mileage and travel cost throughout the District.
- Share-Ed Remote Resources will increase remote learning resources helping to decrease the need for paper based resources and transportation of physical resources.


































We are also looking into Geo-fields at Mount Baker Secondary School and at Kootenay Orchard Elementary School.






































## Our Schools












<b>Amy Woodland Elementary</b>	Scott Holt	 Recycling bins in the school hallways, classrooms and common spaces.  Grade 6 leadership group does all of the recycling  Maximize the number of students on school bus trips.  Walk to swimming pool and skating rink {weather permitting)
<b>Elkford Secondary</b>	Michael Kelly	 Recycling bins in the school hallways, classrooms and common spaces  Maximize the number of students on school bus trips  Students ride bikes daily  Earth Day – students participated in garbage clean up  Filtered water fountains to encourage students to bring their own bottles  Motion activated lights  Idle Free Zones  Scrap paper re-use programs
<b>Fernie Secondary</b>	Erin Hay	 Ongoing Environmental awareness campaign by student council  Staff usually does Ride your Bike to Work Week- May 28th- June 1st  Students ride bikes daily  Resource room students collect recyclable bottles on a daily basis. Bins are placed in hallway (limited options during COVID)  Earth Day – Community Clean Up, school awareness and recognition, classroom resources provided.  Cafeteria uses all biodegradable one-use containers (will be exploring options in future)  Lights in Traynor Hall and gym have been changed to LED  Motion activated lights and heat  Disposed old, inefficient refrigerators  Filtered water fountains encourage students to bring their own bottles  Paper recycling  Pencil/pen recycling program (Staples)  Walking field trips all over the community  Gardening and food security program  Hydroponics systems for Science and foods using LED lights  Environmental Science Education for Grade 11

<b>FJ Mitchell Elementary</b>	Jennifer Adams	 Paper/cardboard recycling program  Foods to Farm program – each class puts food scraps in after lunch. Buckets are collected and sent off to a local farm to feed the animals  Filtered water fountains  Motion activated lights  Ride your bike to school initiative  Walk vs bus to swimming and skating (weather permitting)  Marker recycling program  Promotion of garbage free lunches  Participation in Community clean-up
<b>Gordon Terrace Elementary</b>	David Martin	 A recycling and composting program that the classes run  Walking field trips as much as possible  When busses are needed for field trips, we only book when we need and can fill them
<b>Highlands Elementary</b>	Bill Johnson	 Recycling program for both refundable and non-refundable materials  A garden, traditional and worm composting program.  Waste-less Wednesday with challenges for classes to bring no garbage (only reusable containers) for lunches and snacks.  Motion activated room lights  Filtered water fountain (reduced use of plastic water bottles)  Idle-free zones  Encourage students and staff to walk or bike to school  LED lighting installed
<b>Isabella Dicken Elementary</b>	Janet Kuijt	 Yearlong Recycling Program - Gr 6's  Yearlong Composting Program - Gr 4's  Earth Day "Remote" Clean Up's - promoted by teachers for interested families  School yard Clean Up - April (and yearlong with various classes)  Water Walker Protectors Project- Ms. Murray's Gr 2 class  Filtered water fountain stations  Encouraging personal water bottles vs single use in all classes (has created a significant reduction in bottle recycling according to Gr 6 classes!)  Many grades walk to outings (swimming pool, skating, library, arts station)  Garden Boxes made from school recycled stairs wood & grew pumpkins (that were ready last fall!!)  Many classes grow plants from seeds for family gifts

		 Lots of staff bike & walk to school (especially during Bike to Work Week... this year is a bit different but lots of "Green" commuting to work)  Bike Road-rodeo & biking activities (ex: to tennis courts for Gr 6's)  Planting more trees in the playground
<b>Jaffray Elementary Secondary</b>	Erin Boehm	 School wide recycling program  Composting grade 3/4  Boxed garden project  Earth Day - school yard and community cleanup  Recycling bins in the school hallways, classrooms and common spaces  Grade 5 Eco Team – various projects  Grade 6 – Beyond Recycling  Concession – no single use plastics  Motion activated room lights
<b>Laurie Middle</b>	Aaron Thorn	 Recycling - early stages of greater buy in  Cardboard, paper and plastics refundable -sold to support an African school project (Kimmi Toyota)  Composting - started last year -beginning stages of promoting awareness  Battery recycling  Stewardship grade 7 class – promoting reduction, social awareness, whole school buy in  Garden boxes - herbs & flowers  LED low lighting pilot project  Band class Community Garbage Clean-Up in conjunction with Tim Hortons – garbage trucks are called in to deal with the waste from this neighbourhood clean up  Compass Class  Increasing classroom recycling
<b>Mount Baker Secondary</b>	Dave Hill	 Earth Day - cleaning garbage around the community.  Bee garden in our courtyard to encourage bees.  Ride your Bike to Work week.  Idle-free zones.  Leadership students are doing a reusable straw campaign  Green Alliance Club  Mason Bees and our indigenous pollinator garden
<b>Pinewood Elementary</b>	David Standing	 Recycling program  Filtered water fountains encourage bring your own bottle  Idle-free zones  School yard and community clean up – Earth Day

<b>Rocky Mountain Elementary</b>	Lois Ehman	 Paper recycling program  Milk and juice container recycling program  encourage bring your own bottle-do not sell juice boxes for events  Filtered water fountains  Motion activated lights  Walking field trips as much as we can  When busses are needed for field trips, we only book when we need and can fill them (with cohorts)  Greenhouse  Earth Day school yard clean up days  Idle free zones  Many classes grow plants  Many staff and students ride bikes or walk when possible
<b>Sparwood Secondary</b>	Jaslene Atwal	 Earth Day - school yard cleanup  Refundable and non-refundable recycling  Computer recycling - students use the old computers for parts and create new desktop computers to donate back to those in need in the community  Video game console recycling - refurbish and give to students in need  Hydroponics - science students grow food for the foods classes  Outdoor gardening  Motion light sensors in classrooms.  Walking to the swimming pool and skating rink  Worm Composting  Battery recycling  Bring your own water bottle  Bus sharing for trips with Elkford and Fernie  Idle-free zones
<b>Steeple Elementary</b>	Chris Catherall	 "Keepers of the Earth" (on-going school grounds clean-up)  Battery recycling  Photocopier supplies recycling  Walking to fieldtrips/events whenever possible  Recycling program for both refundable and non-refundable items  Courtyard garden  Worm composting  Motion-activated, LED lighting  Filtered water fountain  Non-food/drink product recycling bins in classrooms and common spaces



<b>TM Roberts Elementary</b>	Michelle Sartorel	<ul style="list-style-type: none"> <li> Library teacher re-uses photocopy paper that has one side blank for her libraryclub</li> <li> Cardboard and Paper Recycling</li> <li> Garden beds for food</li> <li> Composting</li> <li> Garden Club, to teach students how to grow their own</li> <li> Many teachers teach students to plant food</li> <li> Students encouraged to fill water bottles</li> <li> Students discouraged from bringing juice boxes and sugary drinks</li> <li> Kindergarten learning about different ways to grow food</li> <li> Pen Recycling</li> <li> Battery Recycling</li> </ul>
------------------------------	-------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## Conclusion

School District No. 5 is working to reduce our use of energy and save resources where possible. In the future, we will become more energy efficient to reduce our consumption even more.

### SD5 2020 GHG Emissions and Offset Summary Table

<i>School District No.5 GHG Emissions and Offset for 2020 (tCO<sub>2</sub>e)</i>	
<b>GHG Emissions created in Calendar Year 2020:</b>	
Total Emissions (tCO <sub>2</sub> e)	2,853
Total BioCO <sub>2</sub>	12.05
Total Offsets (tCO <sub>2</sub> e)	2,581
<b>Adjustments to GHG Emissions Reported in Prior Years:</b>	
Total Emissions (tCO <sub>2</sub> e)	N/A
Total Offsets (tCO <sub>2</sub> e)	38
<b>Grand Total Offsets for the 2020 Reporting Year:</b>	
Grand Total Offsets (tCO <sub>2</sub> e)	2,619

### Retirement of Offsets

In accordance with the requirements of the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, School District No. 5 (Southeast Kootenay) is responsible for arranging for the retirement of the offsets obligation reported above for the 2020 calendar year, together with any adjustments reported for past calendar years.

The Organization hereby agrees that, in exchange for the Ministry of Environment 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



May 27, 2021

---

Signature

Date

Alan Rice

Secretary Treasurer

---

Name: Alan Rice

Title: Secretary Treasurer