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City of Port Moody Report/Recommendation to Council

Date: November 5, 2021

Submitted by: Community Development Department – Policy Planning Division Subject: 2022 Cool It! Climate Leadership Program Funding Request

Purpose

To seek Council approval to continue the Cool It! Climate Leadership outreach program at Port Moody elementary schools and high schools in the 2022 school year.

Recommended Resolution(s)

THAT \$6,300 be approved to fund seven elementary and three high school Cool It! Climate Leadership Workshops for 2022 as recommended in the report dated November 5, 2021 from the Community Development Department – Policy Planning Division regarding 2022 Cool It! Climate Leadership Program Funding Request;

AND THAT the budget of \$6,300 be forwarded to the Finance Committee to identify a funding source.

Background

In 2017, Council supported a recommendation from the Environmental Protection Committee to partner with the BC Sustainable Energy Association (BCSEA) and approved a budget of \$2,500 for this initiative. At the February 13, 2018 Regular Council meeting, Council endorsed funding of \$3,250 to support sessions for five Port Moody elementary schools. At the September 10, 2019 Regular Council meeting, Council funded six Cool It! elementary workshops for a total cost of \$3,250. More recently, on January 26, 2021, Council passed the following resolution to fund eight Cool It! elementary workshops:

RC21/030

THAT \$4,500 be approved to fund eight Cool It! Climate Leadership workshops for 2021 as recommended in the report dated December 11, 2020 from the Community Development Department – Policy Planning Division regarding Cool it! Climate Leadership Workshop 2021 Funding;

AND THAT the budget of \$4,500 be forwarded to the Finance Committee to identify a funding source.

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Discussion

Overview of Cool It! Climate Leadership Program

Organized by the BCSEA, the Cool It! program brings Environmental Educators into classrooms to deliver a fun-filled, thought provoking, and empowering program that engages students on climate change and energy conservation.

During the workshops, grade four to seven and grade eight to 12 high school students and their teachers are engaged in discussions, animated videos and quizzes, skit activities, and games focussed on climate change and energy conservation. Their understanding of, concerns on, and current actions against climate change are discussed, followed by brainstorming ways to reduce their own impact. Afterward, students take home the Climate Leadership Challenge contest and work at home with their families to reduce their household greenhouse gas (GHG) emissions. The contest is a four-week, student-family challenge that supports students taking steps to set realistic and achievable goals, reflect on the outcomes, and share successes and challenges.

After the four-week Challenge, BCSEA's Environmental Educators return to each classroom to conduct a follow-up visit and collect Challenge forms. After the data from all Challenge forms is compiled, notifications for the winning class and winning students are sent out, and students, classes, and teachers are rewarded for their climate action efforts.

For the 2021/2022 school year BCEA is offering a high school program. Modelled on the success of the longstanding elementary program, the high school program has been developed over the past 24 months through a pilot project funded by Environment and Climate Change Canada. During this initial pilot program, BCSEA delivered 133 climate workshops to 54 classrooms across the province, working with more than 800 students. With the pilot phase of this program now concluded, BCSEA is seeking support from existing program partners such as Port Moody to begin delivering the high school program alongside the existing elementary program.

Continuation of the Cool It! workshops will complement ongoing outreach by DreamRider Productions, a local youth engagement charity that has been supported by the City and provided environmental-themed performances to Port Moody schools since 2010. These performances focus on climate change and raise general awareness among the entire school population. The classroom based Cool It! workshops educate students using a more direct and participatory approach that targets individual behavioural change. Having both outreach activities implemented at schools in Port Moody would reinforce messaging on climate change action for students and their families.

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COVID-19 Considerations

Beginning in early 2020 and continuing over the last 18 months, BCSEA has adapted the Cool It! Program in response to the ongoing COVID-19 pandemic. Workshop structure, activities and resources have all been updated to allow for online delivery through virtual conferencing technology and to ensure they remain as engaging as possible. These materials have been further refined based on feedback from students, teachers, and environmental educators. Environmental educators have received additional training and support to deliver workshops in a virtual setting. Several schools, including those in Port Moody in 2021 have received virtual workshops and general feedback has been positive.

The BCSEA has taken this opportunity to refresh the take-home climate challenge to make it more flexible for students and teachers and to ensure it is relevant to the current situation in schools and the city more broadly. During the 2021/22 school year BCSEA is equipped to offer both in-person and virtual workshops to classes in Port Moody. In determining which method of delivery is most suitable during the current school year, BCSEA will monitor ongoing provincial public health guidelines and consult school districts and individual schools on their own COVID-19 safety plans. BCSEA will work with schools and teachers in Port Moody to deliver the curriculum in the most suitable way depending on their own unique classroom requirements and available technology.

Previous City Support for Cool It! Programming

The City of Port Moody financially supported and coordinated Cool It! Climate Leadership Training workshops from 2017 to 2021. The number of workshops has steadily increased to reflect the demand for the program and the City's expanding efforts in climate action outreach. The results from each year are summarized below:

<u> 2017</u>:

- four classes totalling 111 students;
- 1,520 energy saving actions taken; and
- a total estimated 65 tonnes of GHG emissions reduced.

2018/2019:

- five Cool It! workshops delivered to 120 grade four to seven students;
- 1,905 energy saving actions taken; and
- a total reduction of 80.128 tonnes of GHG emissions (equivalent to more than 17 passenger vehicles being taken off the road for a year).

2019/2020:

- six workshops reached 151 students at three schools in Port Moody; and
- students' actions would result in the reduction of 141.917 tonnes of carbon dioxide emissions (tCO₂e), if they continued their actions for one year (includes actions in every area in their life, from their food choices to their transport, home heating behaviours, and consumption and waste).

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2021:

- five workshops reaching 122 students so far in 2021;
- BCSEA is wrapping up the remaining 3 workshops in the fall of 2021; and
- so far completed more than 900 actions focused on climate change and sustainability resulting in 42.2tCO₂e reduced if actions are continued for one year.

The interim report for the 2021 workshops is included as **Attachment 1**. The final 2021 Cool It! report will be presented to Council in the fall of 2022.

With the recent offer of high school work shops alongside elementary workshops, staff recommend providing funding in 2022 for a mix of both programs to expand the reach of information and engagement in climate action to students of various ages.

Climate Action Plan Alignment

Continuing education and outreach, particularly with youth in the community, is consistent with several actions in the Climate Action Plan. Although not specifically named in the Climate Action Plan, the City's continued support of the Cool It! Climate Leadership workshops falls under the climate mitigation education and awareness initiatives under the Buildings, Transportation and Mobility, and Waste Reduction and Management focus areas of the Climate Action Plan. The Climate Leadership workshops provide a cost effective and high impact opportunity to engage with many youth and their families to mobilize climate action.

Port Moody's Climate Action Plan aligns well with the content of the Cool it! workshops, presenting a unique opportunity to align Climate Leadership workshop materials with local climate action priorities. BCSEA team members and staff will work together to customize one of the 25 actions in the Cool It! Climate Challenge based on local climate action priorities in the Climate Action Plan. Other municipalities have used this method to prompt further awareness of climate plans.

Other Option(s)

THAT a different number of Cool It! Climate Leadership Training Workshops be supported in the 2022 school year.

Financial Implications

Implementation of each elementary school Cool It! Climate Leadership Training classroom session costs \$550 and each high school classroom session costs \$650. A program management fee of \$500 is also required. A maximum of \$6,300 would be required to organize seven elementary school and three high school Cool It! Climate Leadership Training workshops in the 2022 school year (**Attachment 2**).

Communications and Civic Engagement Initiatives

The Port Moody elementary and high school Climate Leadership Challenge results can be shared with the community on the City website and social media channels.

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Council Strategic Plan Objectives

Partnering with external organizations to organize environmental workshops is consistent with the strategic outcomes in Environmental Leadership identified in the 2019-2022 Council Strategic Plan.

Attachment(s)

- 1. 2021 Cool It! Climate Leadership Workshop Interim Report.
- 2. 2022 Cool It! Climate Leadership Workshop Funding Proposal.

Report Author

Laura Sampliner, BES, LEED GA Senior Sustainability and Energy Coordinator

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Report Approval Details

Document Title:	2022 Cool It! Climate Leadership Program Funding Request.docx
Attachments:	- Attachment 1 - 2021 Cool It! Climate Leadership Workshop Interim Report.pdf - Attachment 2 - 2022 Cool It! Climate Leadership Workshop Funding Proposal.pdf
Final Approval Date:	Nov 16, 2021

This report and all of its attachments were approved and signed as outlined below:

Mary De Paoli, Manager of Policy Planning - Nov 8, 2021 - 11:21 AM

Kate Zanon, General Manager of Community Development - Nov 9, 2021 - 9:25 AM

Tracey Takahashi for Dorothy Shermer, Corporate Officer - Nov 12, 2021 - 11:10 AM

Rosemary Lodge, Manager of Communications and Engagement - Nov 13, 2021 - 9:15 AM

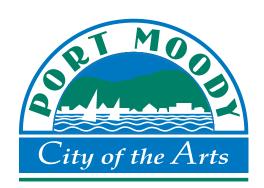
Paul Rockwood, General Manager of Finance and Technology - Nov 14, 2021 - 10:47 AM

Tim Savoie, City Manager - Nov 16, 2021 - 10:46 AM



City of Port Moody

Interim Report 2021





Executive summary

During the 2020/21 school year the City of Port Moody provided generous sponsorship to the BC Sustainable Energy Association's (BCSEA) Cool It! Climate Leadership Training Program (The Cool It! Program) supporting the delivery of the program in up to 8 classrooms in the city.

Ultimately, the Cool It! Program delivered workshops to 5 classes, reaching 122 students who collectively completed more than 900 actions focused on climate change and sustainability.

Disruptions to schools and individual class schedules in the City of Port Moody due to the ongoing COVID-19 pandemic impacted the ability to deliver programming – especially in the early months of 2021. BCSEA and the City of Port Moody agreed to deliver the remaining balance of 2020/21 funded programming (i.e. three additional classrooms) during the Fall 2021 semester. A final report covering the performance of all classes will be provided at the conclusion of the Fall 2021 semester.

In response to COVID-19, BCSEA redeveloped the Cool It! Program so that it could be delivered online through virtual conferencing technology. We also restructured our take-home climate so challenge to ensure it could be completed safely by students and their families. We developed a new Climate Challenge Card, which encouraged students to choose from a variety of actions that would reduce their carbon and ecological footprints while encouraging further investigation and reflection about climate change and sustainability.

The Climate Challenge Card gathered both qualitative and quantitative data on student actions. Through energy conserving and emissions saving actions at home, along with research and inquiry activities, we expect the City of Port Moody student actions to result in the estimated annual savings of a total of 42.2 tonnes of carbon dioxide emissions (CO₂e) if they commit to maintain their actions completed during the program for one year. Overall, students did a fantastic job, we had high participation in both workshops and the challenge despite teachers and students facing many barriers with a new mode of learning.

The revised Cool It! Climate Leadership Training Program

The workshops

Instead of in-class workshops, BCSEA delivered virtual workshops via videoconferencing platforms. Each participating class completed either one longer (60 minute) or two shorter (30-40 minute) workshops with one of our trained environmental educators. In the workshops students learnt about the fundamentals of climate change science, debunked common climate myths and misconceptions, watched videos on the scientific processes of climate change, practiced a life cycle analysis of an everyday item, explored the causes, impacts and solutions to climate change and learnt about taking climate action with their friends and families and in their local communities. After four weeks, our educator had a follow up session with students to share their successes and challenges and congratulate them on their results.

The challenge

During the 2020/21 school year we developed a version of our climate challenge that was appropriate for students and their families in light of the ongoing COVID-19 pandemic. We wanted our challenge to enable students to be self-sufficient in case their parents were juggling working from home; for the actions to be fun and informative; for the actions to have zero cost to account for additional household financial pressures during COVID-19; and for actions to be appropriate for social-distancing and isolation measures.

The Climate Challenge Card was provided to students as an interactive PDF document that could be used digitally or printed out and completed by hand. The card contained 25 actions. When completed, students checked off the corresponding square and entered answers where required. We provided a 15-page supplementary booklet which offered additional facts and information about each category and action, tips, and advice on how to complete the action and opportunities to for optional further research and investigation with additional resources and information.

Traditionally, the Cool It! Program focuses on gathering quantitative data through actions, measuring outcomes in carbon dioxide emissions savings. This version of the challenge also had a range of actions with an associated carbon factor, allowing us to measure estimated CO2e reductions. Other actions yielded qualitative results through individual reflection, personal investigation, and research.

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The final Climate Challenge Card developed and used in 2020/21:

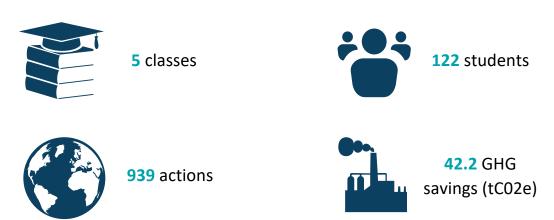
CLIMATE (CHALLENG	RANSPORT S. WATER	Parent/Guardian	signature:		
1. TASTY LEFTOVERS Re-use leftovers 3 times late: 1	4.1 CAR SMART Learn about cars and how to reduce your GHG's and complete one of the actions in the information page below.	6.1 GO BIO Make a biodegradable cleaning or bath product i made:	7.1 GAMING FOR NATURE Watch two videos or do two of the games and complete the actions in the information page below.	7.2 CLIMATE ACTION Research your city and the positive things happening to reduce climate change and complete one of the actions in the information page below.		
7.3 COMMUNITY EXPLORATION Map your community and think of ways to make it more sustainable and complete the actions in the information page below.	6.2 GREEN YARD CARE Reduce pollution by planting a tree or greening your yard I did:	3.1 REUSE AND REPAIR Réuse/swap/repair/upcycle instead of throwing stuff away or buying new I did:	7.4 LOCAL ACTION Our sponsors have chosen a special action for you, check 7.4 to see what it isl and complete one of the actions in the information page below.	5.1 COOL LAUNDRY Wash laundry In cold water at least once per week		
6,3 GROW YOUR OWN Plant garden veggies, balcony or windowstil plants I planted:	3.2 DIY CRAFTING Make home-made, upcycled gifts, decorations, cards, or toys I made: from:	7.5 FOOTPRINT Use an online carbon footprint calculators to see what GMG you produce daily My carbon footprint is:	1.2 MEATLESS MONDAYS Have two meat-free Mondays tor another day; I ate the following two meat free meals: 1. 2.	2.1 EARTH HOUR Have an Earth Hour at home and turn off all lights and electronics		
7.5 CLIMATE REFLECTION Write a short reflection on the future and complete the actions in the information page below.	2.2 COOL DRYER Hang-dry your laundry each week to save energy	2.3 STAY SNUG Turn down the heat in your house and shut your curtains four times each week	4.2 TRAVEL SMART Swap the car for public transit, walking or biking I will go to: by:	1.3 LOVE VEGGIES Give up eating beef and lamb or go vegetarian didn't eat beet/lamb		
5.2 SHORTER SHOWERS Aim for at least 4 showers of 4 minutes or less My showers are minutes shorter now.	7.7 YOUR OWN IDEA Come up with your own activity for reducing our environmental footprint I did:	7.8 LIFE CYCLES Sketch a life cycle of a household item and complete the actions in the information	3.3 HOME WASTE Do an audit of your garbage bins at home and complete the actions in the information page below.	2.4 ENERGY SOURCES Find out which energy you use at home and complete the actions in the information page below.		

City of Port Moody funded workshops

Program Results

The City of Port Moody enabled BCSEA to deliver 5 Cool It! workshops to 122 grade 4 to 7 students in the City of Port Moody during the 2020/21 school year (see table on next page for additional information). The 4-week challenge encouraged students to perform actions at home, resulting in an estimated total reduction of 42.2 tonnes of greenhouse gas emissions (tCO2e).

City of Port Moody workshop summary:



Overall, the classes did a fantastic job particularly given the challenges facing students and teachers through this school year as a result of COVID-19. Overall engagement with the Climate Challenge was strong – with all five classes participating the Climate Challenge component of the program. Three classes recorded over 200 actions each – with the winning class recording more than 300. These performances are well above the program-wide engagement levels with the Climate Challenge and a sign of really strong commitment to the program from classes in Port Moody.

Feedback from teachers and environmental educators was generally very positive and all classes reported high engagement and satisfaction with the workshop component of the program. Collectively students in Port Moody classes completed 939 actions related to climate change, sustainability or further research and independent investigation. A breakdown of class performance on the next page.

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City of Port Moody workshop details:

School name	Teacher name	Grade	Class size	# Cards returned	Return Rate (%)	Total squares completed	Actions completed (%)	GHG totals per class
Mountain Meadows Elementary	Lyndsay Abdou	4	26	18	69%	235	36%	11.0
Pleasantside Elementary	Holly Steinson	3/4	22	6	27%	77	14%	3.4
École Moody Middle School of the Arts	Dora Turje	6/7	23	8	35%	66	11%	3.6
Heritage Mountain Elementary	Wendy Pollock	4/5	26	24	92%	245	38%	10.9
Mountain Meadows Elementary	Corianne Lange	4/5	25	19	76%	316	51%	13.4
Totals				75	60%	939	30%	42.2

A summary of student actions

1.1 Tasty Leftovers	70	1.2 Meat Free	55	1.3 Love Veggies	49	2.1 Earth Hour	45	2.2 Cool Dryer	43
2.3 Stay Snug	46	2.4 Energy Sources	23	3.1 Reuse and Repair	47	3.2 DIY Crafting	50	3.3 Home waste	30
4.1 Car Smart	23	4.2 Travel Smart	56	5.1 Cool Laundry	59	5.2 Short Showers	59	6.1 Go Bio	32
6.2 Green Yard Care	47	6.3 Grow Your Own	53	7.1 Gaming for Nature	24	7.2 Climate Action	21	7.3 Community exploration	15
7.4 Local Action	23	7.5 Carbon Footprint	17	7.6 Climate Reflection	13	7.7 Your Own Idea	25	7.8 Life Cycles	13

Total actions 939

Student climate action ideas (Individual / City of Port Moody)

- Make electric cars cheaper
- Build more public transit
- Make meals from scratch
- Build more clean energy sources
- Separate garbage
- Started shopping at only local stores
- Encourage all students to bike to school
- Eat less meat
- Use LED lights
- Install bulletin boards with climate news

- Consult with Indigenous people and listen to their ideas
- Walk to things within 1km of my house
- Protect trees and plant as many as you can
- Make a garden
- Install solar energy
- Collect rainwater and preserve water
- Ask school about solar panels
- Try not to use power and upcycle lot

Student and Teacher Recognition and Rewards

BCSEA rewarded the hard work and dedication of students and teachers who did their best to complete the 4-week program. We rewarded top performing students and classes with e-gift cards and other small gifts such as seedling packets donated from West Coast seeds. We also offered random prize draws to encourage students to submit their cards no matter how many activities they completed. We are also sending personal thank you notes to all teachers who achieved over 75% return rate, or who filled in our teacher survey.

Acknowledgement of the City of Port Moody's sponsorship and support

BCSEA is grateful for the continued support from funders like the City of Port Moody who have made climate change education programming possible in their community. The City of Port Moody was acknowledged for their support of the Cool It! Program in the following ways:

- The City of Port Moody logo was featured on the Climate Change Card
- The City of Port Moody logo is featured on the sponsor section of the Cool It! webpage http://www.bcsea.org/cool-it
- Presenters acknowledged the support of the City of Port Moody during workshops and during the follow-up sessions
- Emails to teachers and schools in the region acknowledging the City of Port Moody's support

The BCSEA would like to thank the City of Port Moody for its partnership in achieving the shared goals of increasing awareness of climate change and energy conservation, and for making real behaviour change possible for BC students and their families to conserve and reduce their climate impacts. Thank you for sticking with us through a unique and challenging school year!

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1631 Oakland Ave. Victoria, BC V8T 2L3 Phone: 604-332-0025 Inquiries: info@bcsea.org

27 September 2021

Laura Sampliner Sustainability & Energy Coordinator Planning Division City of Port Moody

Dear Laura,

Thank you for your ongoing support of BC Sustainable Energy Association's (BCSEA) Cool It! Climate Leadership Training program (the Cool It! Program). Detailed in this proposal is a plan for program delivery to both elementary (grades 4-7) and high school (grades 8-12) classes in the City of Port Moody during the 2021/22 school year.

Throughout the 2020/21 school year, the Cool It! Program reached 3,500 elementary students and 400 high school students across the province through more than 200 workshops. Students' energy conserving and emissions saving actions at home resulted in the projected savings of almost 1,000 tonnes of carbon dioxide (CO2e) if they continued their actions for one year.

Beginning in early 2020 and continuing over the last 18 months, BCSEA has adapted the Cool It! Program in response to the ongoing COVID-19 pandemic. Workshop structure, activities and resources have all been updated to allow for online delivery through virtual conferencing technology and to ensure they remain as engaging as possible. These materials have been further refined based on feedback from students, teachers, and our own environmental educators. Environmental educators have received additional training and support to deliver workshops in a virtual setting.

During the 2021/22 school year BCSEA is equipped to offer both in-person and virtual workshops to classes in Port Moody. In determining which method of delivery is most suitable during the current school year, BCSEA will monitor ongoing provincial public health guidelines and consult school districts and individual schools on their own COVID-19 safety plans. We will work with schools and teachers in Port Moody to deliver our curriculum in the most suitable way depending on their own unique classroom requirements and available technology.

For the 2021/22 school we are also pleased to offer our high school program for your consideration and support. Modelled on the success of our longstanding elementary program, our high school program has been developed over the past 24 months via a pilot project funded by Environment and Climate Change Canada. During this initial pilot program, we delivered 133 climate workshops to 54 classrooms across the province, working with over 800 students. With the pilot phase of this program now concluded, we are seeking support from our existing program partners to begin delivering the high school program alongside our existing elementary offering.

Additional information on the contents, structure of costing of both programs in included on the following page.

Below is a quotation for sponsorship of classes in 2021/22:

Elementary Program		High School program		Tota	l Program	Projected Results**		
Classes	Cost per class*	Classes	Cost per class*	Sub- total	Mgmt fee	Total Cost	# of student s	GHG savings (tonnes)
4	\$550	2	\$650	\$3,500	\$500	\$4,000	132	31
7	\$550	3	\$650	\$5,800	\$500	\$6,300	220	52
10	\$550	4	\$650	\$8,100	\$500	\$8,600	308	73

^{*} Costs provided are for the delivery of in-person workshops. Per-class cost for virtual workshop delivery is \$500 for elementary classes and \$600 for high school classes. This reduced material and travel costs associated with virtual delivery.

Sponsorship per elementary class includes:

- 60-minute workshop (in-person or virtual) facilitated by an experienced local BCSEA environmental educator
- Resources and support for teachers to conduct pre- and post-workshop activities and to manage climate challenge portion of the program
- Class participation in the 4-week climate challenge which involves taking a series of actions to reduce families' carbon footprints, and support during this time
- 45-minute wrap up session to review challenge results with class, celebrate student's performance and review learnings from initial workshop

Sponsorship per high school class includes:

- Two 60-minute workshop (in-person or virtual) facilitated by an experienced local BCSEA Environmental Educator
 - Module 1 focuses on climate science fundamentals, local impacts, solutions, and collective action
 - Module 2 focuses on climate and social justice, local and global consumption and production trends, and lifecycle analysis
 - Wrap up session reviews concepts from Modules 1 and 2, draws reflections from climate challenge and offers connections to local environment and climate focused organizations and career options
- Resources and support for teachers to conduct pre- and post-workshop activities and to manage climate challenge portion of the program
- Class participation in the 4-week climate challenge on our web platform <u>climatecool.org</u> which
 involves taking a series of actions to reduce families' carbon footprints, and support during this
 time
- Wrap up session reviews concepts from Modules 1 and 2, draws out student reflections from climate challenge and offers connections to local environment and climate focused organizations and future green career options

^{**} Estimations are based on averages from 2020/21 program delivery.

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Additionally, included in both programs:

- Calculation of GHG reductions per class, school, municipality using BCSEA's specially developed GHG reduction calculator
- Certificates, prizes, and celebration for the winning class and a thank you to the teachers
- Final report detailing the workshop and outcomes, including GHG savings completed by students for the municipality's carbon reduction, environmental, and sustainability plans and reporting
- Program management and promotion

Acknowledgement of the City of Port Moody's support would be seen through recognition on BCSEA's website, on workshop materials, and through BCSEA's social media outlets. BCSEA would provide a report summarizing the program activities and outcomes, including the GHG reductions resulting from the Cool It! Challenge.

Sponsoring workshops in schools in the City of Port Moody will help to engage local youth in sustainability actions, increase their awareness of climate change and provide opportunities to learn and engage with the City's response. Workshops encourage the development of young sustainability champions in the City of Port Moody community, and involvement in the program can also contribute to the City of Port Moody's environmental and carbon reduction programs.

Please let me know if you have any questions, and I look forward to working together to make Cool It! even better in Port Moody in 2021.

Kind regards,

Fergus Kinnaird

Program Manager – Cool It! Climate Leadership Training

fergus.kinnaird@bcsea.org / (778) 915-6773

FergusKinnaird

Port Moody, British Columbia