



# Final Report

2023-24



## Executive summary

During the 2023/24 school year, the City of Penticton provided generous support to the BC Sustainable Energy Association's (BCSEA) Cool It! Climate Leadership Training Program (The Cool It! Program) enabling the delivery of the program in up to 4 elementary classes in Penticton.

Ultimately, the Cool It! Program was delivered to **4 classes**, reaching **100 students** who collectively completed **552 actions** focused on climate change and sustainability.

Based on feedback collected in recent years from schools and teachers, The Cool It! Program continues to offer the option of both in-person or virtual workshop delivery. As in previous years, the decision on the most appropriate delivery method for each class was left in the hands of participating teachers.

The four-week Cool It! Climate Challenge encouraged students to choose from a variety of actions that would reduce theirs and their family's carbon and ecological footprints. It also provided opportunities for further investigation and reflection about issues related to climate change and sustainability as well as highlighting avenues for participation in local community action and programs.

Qualitative and quantitative data was collected from student actions prompted by their participation in the Cool It! Climate Challenge. Through energy conserving and emissions saving actions at home, along with research and inquiry activities, we expect City of Penticton student actions to result in an estimated annual saving of a total of **17.4 tonnes** of carbon dioxide emissions (CO<sub>2</sub>e) if they commit to maintain their actions for one year. Overall, students did a fantastic job, with strong participation and engagement in both the workshop and the climate challenge components of the program.



# The 2023-24 program curriculum

Participation in an interactive workshop and a four-week climate challenge comprise the main components of the program.

## Workshops

During the 2023-24 school year, BCSEA offered teachers the option of participating in an in-person or virtual workshop – depending on which mode of learning best suited their class. Each elementary class participated in a 60-minute workshop at the beginning of the program and a 30-minute wrap-up session after completing their four-week climate challenge.

In the workshops, all students learnt about the fundamentals of climate change science, debunked common climate myths and misconceptions, watched videos detailing the scientific processes of climate change, practiced evaluating the production and consumption life cycle of everyday items, 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, a wrap-up session was held with each class to share their successes and challenges, recap the key messages and learnings from the workshop and celebrate their collective results.

## Climate Challenge

After their initial workshop, students participated in the Cool It! Climate Challenge for the next four weeks.

Elementary students were given a Climate Challenge Card - an interactive PDF document containing 25 unique actions that could be used digitally or printed out and completed by hand. When an action is completed, students check-off the corresponding square on the card as well as enter additional answers and



information where required. A 15-page supplementary booklet was also provided, which offered additional information about each action, extra support to complete it, and opportunities to for optional further research and investigation alongside additional resources.

Traditionally, the Cool It! Program focuses on gathering quantitative data through the collation of completed actions and measuring outcomes (where possible) in carbon dioxide emissions savings. While some actions yielded a quantifiable emissions reduction, other actions yielded qualitative results through individual reflection, personal investigation, and research.











**The elementary Climate Challenge Card used in Penticton during 2023-24:**

Name:

Teacher:  Parent/Guardian signature:

## CLIMATE CHALLENGE

1. GETTING AROUND   2. FOOD CHOICES   3. HOME ENERGY   4. WASTE   5. WATER   6. NATURE   7. RESEARCH + REFLECTION

<p><b>2.1 TASTY LEFTOVERS</b> <input type="checkbox"/></p> <p>Re-use leftovers 3 times. I ate:</p> <p>1. <input type="text"/></p> <p>2. <input type="text"/></p> <p>3. <input type="text"/></p>	<p><b>1.1 CAR SMART</b> <input type="checkbox"/></p> <p>Learn about electric cars, cargo-bikes, and active transportation and complete two of the actions in the information page below.</p> 	<p><b>6.2 BEE FRIENDLY</b> <input type="checkbox"/></p> <p>Protect your local bee population by building a bee bath using the instructions in the information page below.</p> 	<p><b>7.1 GAMING FOR NATURE</b> <input type="checkbox"/></p> <p>Watch two videos or play two of the games and complete the actions in the information page below.</p> 	<p><b>7.2 LOCAL CLIMATE ACTION</b> <input type="checkbox"/></p> <p>Do some research and learn if your city has declared a climate emergency. My city has declared a climate emergency:</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p><b>7.4 COMMUNITY EXPLORATION</b> <input type="checkbox"/></p> <p>Map your community and think of ways to make it more sustainable using the instructions and actions in the information page below.</p>	<p><b>6.3 GO BIO</b> <input type="checkbox"/></p> <p>Make a biodegradable cleaning or bath product. I made:</p> <p><input type="text"/></p>	<p><b>2.2 LOCAL FOOD</b> <input type="checkbox"/></p> <p>Use locally sourced ingredients in meals. I used:</p> <p>1. <input type="text"/></p> <p>2. <input type="text"/></p>	<p><b>7.5 COMMUNITY ACTION</b> <input type="checkbox"/></p> <p>Explore your municipality's website and find out what kind of action they are taking on climate change.</p> 	<p><b>5.1 WATER WISE</b> <input type="checkbox"/></p> <p>Learn about water conservation and calculate your household's daily water consumption. My family consumes of water per day <input type="text"/> litres</p>
<p><b>2.4 GROW YOUR OWN</b> <input type="checkbox"/></p> <p>Plant garden veggies, balcony or windowsill plants. I planted:</p> <p><input type="text"/></p>	<p><b>1.3 LOCAL VACATION</b> <input type="checkbox"/></p> <p>Plan three local vacations with a small carbon footprint. Where could you and your family vacation locally?</p> <p><input type="text"/></p>	<p><b>4.1 MORE THAN RECYCLING</b> <input type="checkbox"/></p> <p>Reuse/swap/up-cycle instead of throwing stuff away or buying new. I did:</p> <p><input type="text"/></p> 	<p><b>6.1 NATIVE TREES &amp; PLANTS</b> <input type="checkbox"/></p> <p>Learn about native plants and, if can, plant some of your own. A native plant I planted or researched is:</p> <p><input type="text"/></p>	<p><b>3.1 EARTH HOUR</b> <input type="checkbox"/></p> <p>Have an Earth Hour at home, with friends or at school. Use the time to do some of the other challenge actions.</p> 
<p><b>7.6 CLIMATE REFLECTION</b> <input type="checkbox"/></p> <p>Write a short reflection on the future and complete the actions in the information page below.</p> 	<p><b>3.2 GET EFFICIENT</b> <input type="checkbox"/></p> <p>Use the resources in the information page below to learn how to be more energy efficient at home.</p> 	<p><b>5.2 ADOPT A STORM DRAIN</b> <input type="checkbox"/></p> <p>Clean up a storm drain in your neighborhood to prevent flooding after it rains or snows.</p> 	<p><b>1.2 TRAVEL SMART</b> <input type="checkbox"/></p> <p>Swap the car for public transit, walking or biking.</p> <p>I will go to: <input type="text"/></p> <p>by: <input type="text"/></p>	<p><b>2.3 LOVE VEGGIES</b> <input type="checkbox"/></p> <p>Have one meat-free day per week or give up eating beef and lamb for one week.</p> <p><input type="checkbox"/> meat-free days</p> <p><input type="checkbox"/> didn't eat beef/lamb</p> 
<p><b>5.3 EVERY DROP COUNTS</b> <input type="checkbox"/></p> <p>Aim for at least 4 showers of 4 minutes or less. My showers are <input type="text"/> minutes shorter now.</p>	<p><b>7.7 YOUR OWN IDEA</b> <input type="checkbox"/></p> <p>Come up with your own activity for reducing our environmental footprint. I did:</p> <p><input type="text"/></p>	<p><b>7.3 LIFE CYCLES</b> <input type="checkbox"/></p> <p>Sketch a life cycle of a household item and complete the actions in the information page below.</p> 	<p><b>4.2 HOME WASTE</b> <input type="checkbox"/></p> <p>Do an audit of your garbage bins at home and learn how you can start composting food waste at home.</p> 	<p><b>3.3 STAY SNUG/COOL</b> <input type="checkbox"/></p> <p>If it is cold outside: Turn down the heat in your house and shut your curtains four times each week.</p> <p>If it is hot outside: Only run your A/C on at night or during hot periods of the day</p>



# City of Penticton funded classes

## Program results

City of Penticton funding enabled BCSEA to work with 4 classes and 100 students during the 2023-24 school year (see tables on next page for additional information). Students' actions through their participation in the Cool It! Climate Challenge resulted in an estimated total reduction of 17.4 tonnes of greenhouse gas emissions (tCO<sub>2</sub>e).



**4** classes



**100** students



**552** actions



**17.4** GHG savings (tCO<sub>2</sub>e)

Student engagement in Penticton was very strong this year. Encouragingly, we observed improvements in all our key measure of engagement with students - including climate challenge return rates and actions taken per student. Similarly, our local educators reported high levels of participation and feedback during workshops.

The Climate Challenge return rate among elementary students (the proportion of students who returned a completed climate challenge form) was 70% - well-above our program-wide average of ~60% and three participating classes completed over 100 cumulative actions each.



## Elementary class details

School name	Teacher name	Grade	Class size	# Cards returned	Return Rate (%)*	Total actions completed	GHG totals per class
Wiltse Elementary	Laura McConnell	3	25	19	76%	173	6.2
Wiltse Elementary	Evan Miller	3	25	14	56%	90	2.4
Wiltse Elementary	Robyn Service	4/5	24	18	75%	165	5.5
Columbia Elementary	Meagan Rand	4	26	19	73%	124	3.3
<b>Totals</b>			<b>100</b>	<b>70</b>	<b>70%</b>	<b>552</b>	<b>17.4</b>

\* % of students who returned a completed Climate Challenge Card

## Summary of elementary student actions

<b>1.1 Car Smart</b>	<b>1.2 Travel Smart</b>	<b>1.3 Local Vacation</b>	<b>2.1 Tasty Leftovers</b>	<b>2.2 Local Food</b>
<b>25</b>	<b>27</b>	<b>25</b>	<b>28</b>	<b>36</b>
<b>2.3 Love Veggies</b>	<b>2.4 Grow Your Own</b>	<b>3.1 Earth Hour</b>	<b>3.2 Get Efficient</b>	<b>3.3 Stay Snug</b>
<b>25</b>	<b>29</b>	<b>23</b>	<b>26</b>	<b>25</b>
<b>4.1 More than Recycling</b>	<b>4.2 Home Waste</b>	<b>5.1 Water Wise</b>	<b>5.2 Adopt a Storm Drain</b>	<b>5.3 Every Drop Counts</b>
<b>21</b>	<b>15</b>	<b>30</b>	<b>22</b>	<b>34</b>
<b>6.1 Native Trees and Plants</b>	<b>6.2 Bee Friendly</b>	<b>6.3 Go Bio</b>	<b>7.1 Gaming for Nature</b>	<b>7.2 Local Climate Action</b>
<b>24</b>	<b>25</b>	<b>24</b>	<b>14</b>	<b>14</b>
<b>7.3 Life Cycles</b>	<b>7.4 Community Exploration</b>	<b>7.5 Community Action</b>	<b>7.6 Climate Reflections</b>	<b>7.7 Climate Reflections</b>
<b>11</b>	<b>10</b>	<b>12</b>	<b>15</b>	<b>12</b>
<b>TOTAL ACTIONS</b>				<b>552</b>

1. Getting Around    2. Food Choices    3. Home Energy    4. Waste    5. Water    6. Go Green    7. Research + Reflection



## Student and Teacher Recognition and Rewards

BCSEA rewarded the hard work and dedication of students and teachers who did their best to complete the four-week program. We rewarded top performing students and classes with e-gift cards. 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 Penticton's sponsorship and support

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

- The City of Penticton logo was featured on the Climate Change Card.
- City of Penticton suggested actions were incorporated into the Climate Challenge Card – including links to specific City materials and resources.
- The City of Penticton 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 Penticton during workshops and wrap-up sessions.
- Outreach emails to teachers and schools acknowledged the City of Penticton's support.

The BCSEA would like to thank the City of Penticton for its ongoing support and partnership in achieving our shared goals of promoting of climate change science, increasing awareness of local climate action and community support, and empowering students and their families to make tangible behaviour changes towards more sustainable lifestyles.

From our entire team, thank you for your continued support!

