



Green Bricks Education Society Annual Report 2023-24





A Message from Co-Executive Directors

Diana Klein and Fiona Zawadzki

THANK YOU to our board, membership, clients and funders for supporting Green Bricks Education Society for the past 2023-24 school year. With your support we have been able to engage nearly 9000 grade K-12 students throughout B.C. in understanding the importance and benefits of environmental science through the lens of our built environment in their lives, schools, communities, and globally.



Since 2007, with our funding support, we have reached over 120,000 young people empowering them to make change and influence others for a sustainable future.



Green Bricks Programs

This school year **2023-24** we delivered to 292 classrooms reaching nearly 9000 students with our live, interactive programs. For all programs we developed pre and post activities to encourage critical thinking and actions for students beyond the program delivery. We reached students throughout B.C. including Lower Mainland (Anmore, Squamish, Burnaby, Tri-cities, Delta, Langley, Maple Ridge, New Westminster, Coquitlam, North Vancouver, Pitt Meadows, Richmond, Surrey, Vancouver, and West Vancouver), Abbotsford/Mission and the Fraser Valley.

We developed and delivered to B.C. classrooms the following workshops this year:

Green Bricks Secondary Blocks: Secondary

This interactive and curriculum-connected workshop addresses the issues around our access and relationship with water, transport and energy (both locally and globally) and further explores new and emerging careers in the green economy. We consider topics that include where our tap water comes from, how we filter and clean it, and ways to conserve water through innovative solutions in our built environment. We explore energy use and conservation considering renewable and non-renewable energy, choices on transportation and smart energy solutions for our future.

Exploring our Stuff: Elementary and Secondary

Our circular economy virtual workshop is an interactive program that engages students in looking at our 'stuff' in terms of what resources are used and wasted. Through engaging activities, we task students to consider our volume of clothes, games and equipment in their lives by exploring resources, energy, water, greenhouse gas emissions, and social impacts in our product life cycles. We discover circular economy design in both nutrient and technology cycles instead of products designed from cradle to grave using current examples like fast fashion and microplastics. We also explore our over consumption of food, food waste and the social inequities resulting here and in the global economy. This program is designed to challenge students through enquiry-based learning to consider changes we can all make.

Energize: Elementary

This workshop explores the significant impact energy conservation can have on our community, its citizens, and the environment, both locally and globally. Students learn about our community-wide climate action targets, sustainable transportation alternatives and building energy efficiency initiatives through interactive activities. This workshop further explores what is in the air we breathe, regional characteristics of our air sheds, and engages students in solutions that work for our community.

Science of Water: Elementary

Access to clean drinking water affects us all! Via a virtual presenter, this interactive online workshop engages students to understand the importance of water in our lives and how we can manage water sustainably into the future. We explore our local water sources; water conservation and the importance of water in our lives; global access to water; and how LUCKY we are to have the water coming out of our taps!



Air Quality and Biodiversity: Elementary



Clean air contributes to healthy people, productive crops, thriving ecosystems, and the essential biodiversity on our planet. Via our online workshop, students participate in engaging hands-on activities to understand the science behind human activity and air quality. We explore topics like how ground level ozone and particulate matter is produced, airsheds and how they affect the air quality, the effects of poor air quality on our health, flora and fauna, and the actions we can take to keep our air clean.

Celebrate Drinking Water Week (May 6-10): Elementary

During Drinking Water Week, Green Bricks and Abbotsford Mission Water and Sewer Services offer an interactive Water Week event to schools. Our facilitators took water week into the classroom, arriving with a kit of supplies like craft supplies, game pieces and outside fun items to use during this special event. The students had fun with all the water stations where they explored water in our community, understood how fortunate we are to have our amazing tap water, and went outside to play a water cycle game.

Aqualibrium Competition

This year we ran multiple locations of the Aqualibrium competition, in Abbotsford and Mission for water week. Students learned about water supply, what civil engineers do and the importance of protecting our water resources. The aim of the competition was to distribute three litres of water equally between three reservoirs (containers) placed randomly on a grid of 16 points. The students deliberated and calculated as they built their water systems, which were then tested to see which group had the best solution!



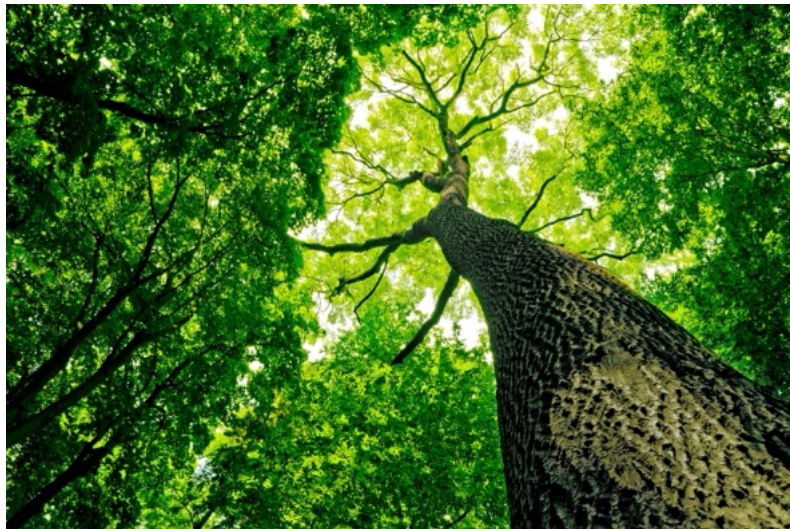
Radon Education

In addition to our program delivery, we have been working with Health Canada to develop an interactive and self-guided toolkit that teachers can use to educate their classrooms on radon gas. Radon is a naturally occurring gas that is colourless, odourless, and radioactive. It is formed as uranium breaks down in soil and rocks. When radon gas is released from the ground into outdoor air, it quickly dilutes, and is not harmful. In indoor settings, radon can accumulate to high levels and become a health concern. Radon levels vary by location and building design. Every home and workplace are different and the only way to know if you are at risk from radon, is by testing.



Testimonials ...from the teachers

- *Students really liked it. Their feedback was that it was engaging throughout the entire presentation.*
- *Building the solar cars was great. Having them draw what she was talking about at the beginning was also a great strategy.*
- *Students were very engaged, lots of hands-on learning, they loved it!*
- *It was very well run. It was hands on, allowed students to participate while learning and gave them an opportunity to build a solar vehicle.*
- *The knowledge and teaching ability Jessica had. The solar cars that the children got to make and the interactive activities :)*
- *Loved the hands-on testing and the multiple choice questions.*
- *I enjoyed how the presenter made it personal to our community and the students' own lives.*
- *Absolutely loved this workshop. It was wonderful. Will definitely do this again!*





Green Collar Futures

What do YOU want to BE when you finish school?

Our 11th Annual Green Collar Career Conference called Futures this year was held online and was offered free to students in grades 9-12 throughout B.C. giving them this exciting opportunity to connect with career mentors in sustainably related careers.

We had over 150 students register for this event and one of the benefits of the virtual platform was that we had students from all over B.C. attend. It was an inspiring day for both students and the career mentors and we have had great feedback from students who learned about possibilities in green careers and a chance to combine their passion with their future work.

Here are a few student comments (from a post event evaluation).

- I liked how everyone had a passion for their jobs and helped out highschoolers to find out their callings
- I liked how organised it was, the amount of different careers and such. I overall enjoyed the system.
- That it was fun and it taught a lot about different areas for careers
- Breadth and diversity of mentors, their interaction with audiences
- I really enjoyed the Guest speakers, learning about all the incredible careers and what their typical work day is like, and it was just amazing to hear their advice and it was very motivating.
- I like how I got to hear from many different people from many different perspectives, and some perspectives that I wouldn't get to hear otherwise. Even if I didn't like the profession that someone is in, hearing about their life and their journey was helpful by itself. Seeing the questions of other students in the stream was very helpful if I hadn't thought about those questions myself.
- The freedom to choose which mentor sessions we wanted to attend.
- I liked lots of colorful slides for the presentations that brought my attention and interest. Also, I liked that mentors were able to answer our questions.
- This conference taught me about some different interesting jobs I never knew of.
- I really liked how organized the conference was. Everything was on time and nothing was delayed and also everything was really smooth I liked that a lot. Another thing I liked was how there was multiple careers to learn about .
- The speakers were engaging and informative.



THANK YOU to all our sponsors

With your support we were able to reach nearly 9,000 students...



BC Community Gaming "We acknowledge the financial assistance of the Province of British Columbia"

Health Canada

Our Futures Conference 2024 donors:



Keynote and Scholarship Sponsors

Hamber Foundation, Retread Solutions, Kane Consulting, Rocky Point Engineering, BTY Group, Prism Engineering, GBL Architects, Iredale Architecture, & Cassels Brock.

Mentor Roundtable Sponsors

BC Building Science, GeoPacific Engineering Ltd., Chesterman Properties, Dillon Consulting, AME Group, John Holland, & Green Bricks members