



Riding the Waves of Change Annual Report 2021

Land Acknowledgment

GreenLearning's head office is located on Treaty 6 territory, the traditional meeting grounds, gathering place, and traveling route to the Cree, Saulteaux, Blackfoot, Dene and Nakota Sioux and home to the Métis Nation of Alberta, Region 4.

Letter from the Leadership

In the face of challenges GreenLearning has always sprung into action and demonstrated great strength by being a nimble and flexible organization, able to successfully ride the waves of change. In 2021, the global pandemic continued, leading to various school closures happening sporadically across the country, which required educators to adapt to teaching in unexpected ways and under unprecedented circumstances. All of this caused an increase in levels of stress and burnout amongst most educators as they continued adjusting to the changes.

With methods of instruction constantly changing in schools, GreenLearning continued to create new teaching materials that could fit into a variety of scenarios such as in-person, hybrid or distance learning. Using digital technology as a solution, we prioritized the needs of our educators, found ways to develop innovative programs, fostered strategic partnerships and diversified our marketing efforts, all of which have enabled us to ride the waves of change with our community.

GreenLearning has also experienced some waves of change in terms of leadership. At the time of reading, it is already 2022 and Mary McGrath, Executive Director stepped away from the organization to focus on her health and family in April. The Board and staff would like to thank Mary for her leadership since 2016 in establishing GreenLearning as one of Canada's leading national organizations in energy, climate change and green economy education. Having joined GreenLearning in April 2022 as the Executive Director, I am excited to bring my previous senior management experience and expertise in energy education to guide and lead into the future.

In all of this, we recognize that while riding the waves of change is all about resilience and moving forward, it is also about what one is moving towards. As we move in the direction of a new normal for both the environmental and education sector, we continue to set goals for equipping educators with the resources they need to enhance their teaching practice. We do this in the hopes of equally inspiring young learners to take climate action. We commit to revisiting our goals as we adapt to any recurring changes in the environmental education landscape. By doing so, we remain confident in our ability to ride the waves of change that will lead us to a sustainable future. And we invite you to join us!



Kathy Worobec Executive Director

Overview of the Organization

GreenLearning creates free education programs about energy, climate change and green economy that engage and empower students to create positive change for our evolving world. Our programs include both hands-on and critical thinking activities to equip teachers with the educational tools they need to help students understand complex environmental issues.

To create our programs, we combine input from national surveys and consultations with teachers and education professionals to inform our program development and delivery. All of our lessons are reviewed with teachers and school boards and revised based on their feedback before we make them available.

Mission: To develop innovative teaching tools and rich educational experiences that empower youth to affect positive social, economic and environmental change in their own lives, schools and communities.

Vision: A generation of youth who are informed and inspired to actively create a sustainable and just world.





Create Change

Students identify and research issues that matter to them, and then create solutions. By building connections with experts and the community, they put their solutions into practice and measure their resulting impact.

Our Philosophy



Inspire Educators

We have designed our materials to meet a broad range of curriculum expectations using an inquiry-driven approach and an emphasis on leveraging technologies to meet learning outcomes.



Engage Youth

Our model focuses on building global competencies that are essential for youth to successfully navigate the evolving demands of life, work and learning in a world that is shrinking as the need for local actions grows.



2021 Main Highlights

The Challenges

Young learners are key catalysts for a more sustainable future. Recognizing this, GreenLearning's annual challenges empower students to take climate action. By participating in a challenge, they can take their learning about the environment and apply it to tangible sustainability projects in their schools. These projects are not only practical and personally meaningful but also beneficial for the larger community. This year, we hosted a series of environmental learning challenges namely: Re-Energy, Energy Revealed (School Earth Hour and Home Energy Audit), Decoding Carbon, Flood:ED and Eco 360. You can learn more about each challenge by reading project stories from participants and browsing the pictures at our Challenge Submissions Showcase.

"I am so excited to participate in this program with my students. I am going to rearrange my climate change unit to base it on this program and look forward to completing all of the activities and finding out where my students can take it. My class participated in the Climate 150 program a few years ago and students ended up creating amazing community action projects that included hosting a community conversation forum. I am always impressed by GreenLearning's resources and can't wait!"

- NICOLE LORUSSO, TEACHER AT QUEEN MARGARET'S SCHOOL IN DUNCAN, BRITISH COLUMBIA



View the Challenge Submissions Showcase: https://programs.greenlearning.ca/submission-showcase

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CHALLENGE IMPACT

From September 2020 - June 2021





107 Educators in schools across Canada







\$6,000 Awarded in school prizes





Workshops (and Presentations)

Life-long learning continues all year round at GreenLearning with our range of insightful webinars, workshops and presentations led by industry experts, education leaders and environmental professionals. This year, we invited educators to discover a variety of learning and professional development opportunities to enhance their knowledge and better prepare themselves for teaching about the environment. Our workshops and presentations delivered in-house and at external conferences covered topics such as *Leveraging Digital Tools for Climate Change Education, Building Flood Resilience, a Toolkit for Energy Education* and much more!

"I am going to highly recommend GreenLearning for next year's workshops at our school. I love the fact that your workshop was really hands-on."

- TEACHER

"During your presentation, the display of a watt meter with light bulbs and other objects sparked student's interest and helped them understand the concept. The students also learned how they can make better choices to save energy. "



- TEACHER



From September 2020 -June 2021



Workshop and presentation opportunities webinars, student events, exhibitions and conferences



3,411 Teacher and student participants

Eco 360: Transitioning to a Circular Economy

This year, we launched the Eco 360 program that enables youth to imagine a world without waste by closing the loop of a product's life cycle and creating a circular economy. Learners explore the origin of plastics, their use in our daily lives, how they end up in the environment as waste and how we can ensure that plastics are cycled back into the economy after their use and out of the environment to realize their full potential, while protecting our planet. The program challenges learners to actively engage in creating a circular economy by exploring



Take the Eco 360 Challenge

problem of plastic waste in our environment. Immerse yourself in hands-on learning by proposing a feasible innovation plan that incorporates a circular economic model, eliminating plastic waste from our environment. The grand prize for the winning class is \$1,000, the second prize is \$500 and the third prize is \$250. Registration for the 202e-2023 challenge will open in September.

LEARN MORE 🕤

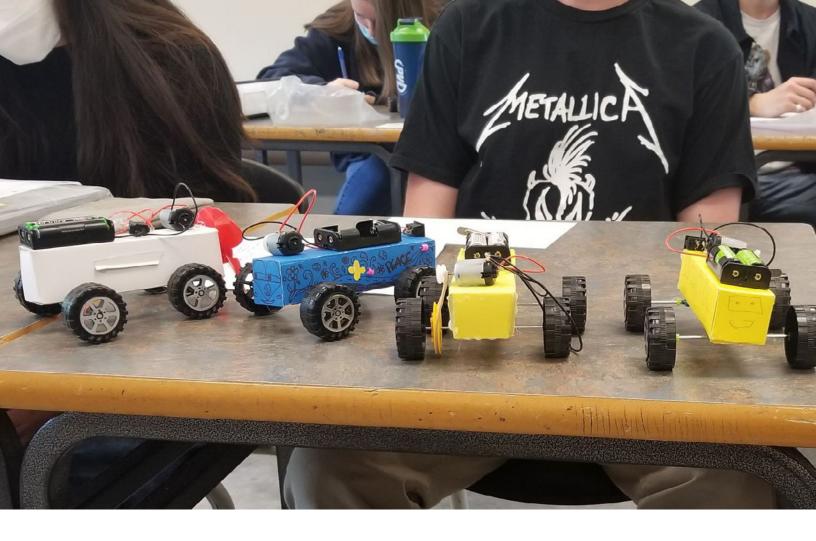
innovative solutions for reducing, reusing, and recycling plastic waste. Thanks to our program funders, Dow Canada, the Eco 360 program challenges students to create an innovation plan on circular economy for plastic waste. The program will soon be expanded to grades 4-8.

Waves of Change

Ocean Wise, TakingITGlobal, GreenLearning, and the Centre for Global Education began the codevelopment of the Waves of Change project and were a successful coalition of applicants to the Environment and Climate Change Canada ("ECCC") Environmental Damages Fund to fund the program. Waves of Change is a national bilingual project that engages youth through a continuum of educational opportunities in every province and territory, in both urban and rural communities. It blends physical events, digital engagement and a climate action tracking tool to further climate action across Canada.

The purpose of Waves of Change is to provide learning opportunities to Canadian K-12 youth over five years that make clear connections between climate change, ocean health, and daily actions that can reduce greenhouse gasses, and to inspire their peers and broader communities to take climate change action. As part of this project GreenLearning created a program called the Ripple Effect that focuses on blue economy and ocean policy, which will expand in each year of the Waves of Change collaboration. Additionally we will be revitalizing eCards, a much loved program where learners research a climate change topic and then send a digital eCard to a decision maker.





Re-Energy: Electrifying the Future of Transportation

This project focuses on helping school automotive programs prepare students for the electric vehicle future. The idea was sparked in conversation with Crescent Heights High School in Calgary and the concept became a reality after we submitted an application to Natural Resources Canada (NRCan) to work with the school in converting an internal combustion vehicle (ICE) into an electric vehicle. With a contribution from NRCan, we also hope to install charging stations at the school. Several other partner organizations were included in this application including Southern Alberta Institute of Technology (SAIT), ChargePoint and The University of Calgary's Relectric. With additional funders and collaborators having joined the project, work began in early 2022.



Projects and Partnerships

Sila and the Land at the Outdoor Learning Store

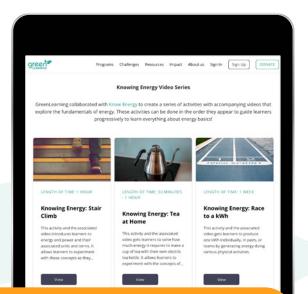
As part of our Climate Action 150 project, a beautiful children's book about an Inuit girl named Sila was authored by three young Indigenous women. The book aims to help share perspectives on the land that are common across First Nations, Métis and Inuit communities, which includes a shared respect for the earth and an understanding of our responsibilities to protect it for future generations. In 2021, we partnered with the Outdoor Learning Store (OLS) to offer this book and share it with a wider audience. We also created a number of learning activities to compliment the book which can be found on our website.



View Sila and the Land learning activities: https://programs.greenlearning.ca/sila-and-the-land Purchase a copy of Sila and the Land: https://outdoorlearningstore.com/product/sila-and-the-land/

Energy Revealed - Know Energy Series

Adam and Stephen Dixon from Know Energy usually spend their days training Energy Managers. And this year, they helped us develop a series of Energy Management learning activities for Energy Revealed, complete with videos for teachers to help their students understand energy management. The learning activities include different learning levels to make them suitable for grades 3 to 12.



 Watch the Know Energy Series intro video: https://vimeo.com/user114630620

 View the Know Energy Series' learning activities:

 https://programs.greenlearning.ca/energy-revealed-juniors

Amplifying Indigenous Voices

GreenLearning is committed to a systemic approach to Indigenous Reconciliation within our organization which will aim for transformational change in our own professional development, staffing, our content and writing of educational materials including engagement with educators.

We are always seeking new ways of learning and knowing to deepen our knowledge of land stewardship and of living in harmony with nature. We aim to share this practice with future generations of youth, equipping them with a diverse set of tools with which to become the green leaders of our future.

In the spirit of truth and reconciliation, GreenLearning is also committed to amplifying the voices of Indigenous professionals and communities across Canada when addressing climate change, transitioning to a green economy and conserving the environment.



Decoding Carbon - Spark Climate Conversations

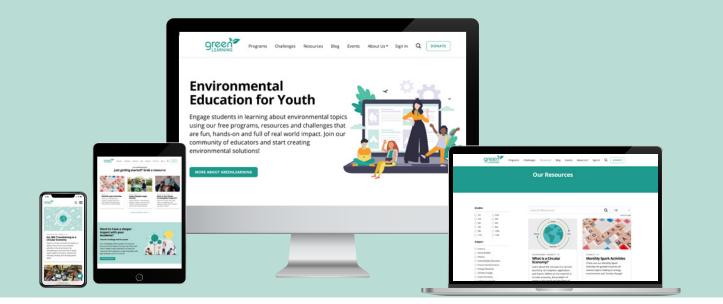
For the Decoding Carbon program, we collaborated with Mihskakwan James Harper, an Indigenous youth and energy professional of Nehiyaw (Cree) descent from Sturgeon Lake Cree Nation, located in Treaty 8 territory (Northern Alberta). He used GreenLearning's spiral inquiry to create a Spark Climate Conversation Deck about how Inuit communities are affected by climate change. This interactive, inquirydriven activity hopes to bring knowledge and understanding of the environmental issues Inuit communities face. It will also reinforce the importance of recognizing the role that climate justice has to play when studying the impacts of climate change.



View this resource: https:// programs.greenlearning.ca/ course/climate-justice-in-thecanadian-arctic

Employee Engagement - CBEEN Every Child Matters Challenge

Recognizing that the first National Day for Truth and Reconciliation in Canada is only the first step towards reconciliation with Indigenous Peoples, GreenLearning joined over 100 organizations in taking on the Every Child Matters Year-long Learning Challenge hosted by the Columbia Basin Environmental Education Network (CBEEN). This challenge has allowed our staff to deepen our knowledge of local Indigenous cultures, participate in shared learning opportunities and reflect on our organizational priorities and commitments to reconciliation. The shared learning has come to life in our weekly staff meetings and expanded the team's understanding of Indigenous values, which will help inform our environmental work.



Supporting Educators with Renewed Digital Solutions for Teaching

GreenLearning has always been a leader in providing engaging and interactive online learning. With COVID leading to an increase in virtual and online learning, we utilized this opportunity to update and design a new framework for our learning materials. Over the past two years, we spent much time doing market research and collecting feedback from our community of educators and youth, while engaging with experts to inform the design of this new framework. During the process, we deepened and enhanced our understanding of teachers' need for a unique digital experience that equipped them with innovative tools to enhance their teaching practice.

With help from our user experience and product designer, we consulted with Lesley Warren Design Group on branding and visuals and held meetings with an inbound and digital marketing expert at GrowFox while relying on technical and web development expertise from The Well Creative Consultants. In April 2021, we finally unveiled the brand new and innovative digital user experience.

On the front end, the new website has a fresh and exciting brand personality, with informative pages highlighted at the top menu bar and a seamless scroll downward, which also ensures a consistent, logical, flow of information from the moment a user lands on the website up until the moment they exit. The website was built to feature new tools such as a seamless search function that makes it easy to find programs, resources and a chatbox so users can chat with GreenLearning staff in real-time to get answers to their questions.

Other program information on the site is housed within a learning management system (LMS) called LearnWorlds which serves as a library of content for all the learning materials. By integrating the website with HubSpot - an inbound marketing software, we are better able to capture more leads on our website and build an engaged community of educators empowering youth to affect positive social, economic and environmental change in their own lives, schools and communities.

View the new website: <u>https://greenlearning.ca/</u>



Discovering new ressources this morning with Sidney from @GreenLearning. Some great lesson plans and challenges to engage students in place-based environmental education! greenlearning.ca #science #proD



greenlearning.ca

Home | GreenLearning

vatch?

7:56 PM - Jun 18, 2021 - Twitter Web App

WR Community Energy

in schools with youth.

in their schools.

₽

reenLearning Earth Hour Challenge! We we able to

reduce our energy use by 24%. That translates to 4

bags or trash or charging 12,000 phones! Check it out:

How can we develop energy literacy in our community? Support learning about #energy efficiency and utilities

Here's a resource. The Energy Revealed program from

ning.ca

programs.greenle Energy Revealed

11:50 AM - May 25, 2021 - Twitter Web App

rning helps students learn about energy use

@ChpsMilton @EcoSchoolsCAN @EcoSchoolsHDSB

Engage students in environmental education using our free programs, resources and challenges that are fun, hands-on and full of real-world impact.



@earthhour

h enge

Peel EcoSchools

The @PDSB_eco Team & @GreenLearning invite @PeelSchools teachers to join us during Earth Week, April 27th, 4:00-5:pm, for an interactive session.

Learn about your school's energy consumption & GreenLearning's Energy Revealed Program.

Registration: forms.gle/z1cvHVWmksOC5C.



The Outdoor Learning Store

Monsoon June is here. Watch @GreenLearning 's awesome workshop from @eecom_info to support educators understand types of flooding and changes due to Climate Change.



10:02 AM - Jun 22, 2021 - Hootsuite Inc.

From the Social Sphere

Conversations from Twitter! Tag us in your posts: @GreenLearning



AYLEE GABYouth4EE

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GABYouth4EE

Congrats to all the winners! Amazing to see so many classes taking on <u>#enviroed</u> and creating some seriously cool projects, plans, and policies ()

GreenLearning @GreenLearning: -Jun 10, 2021 Today is the day! War as excluded to annowe the winners for our 2020/2021 challengias! War received many imprevalve submissions, and we cannot wait for next year's challengias! Check out our blog post featuring the winners here: ovy/Jud/567/PMT and Boulf Without Section 2020.



Stephanie Buchan

Thank you @GreenLearning for providing such amazing ways for students to authentically engage in the curriculum through meaningful tasks! #WeAreCBE

GreenLearning @GreenLearning - Jun 25, 2021 Congratal Ma. Buchan's students from @CreecentCowboys won 2nd place in our Decoding Carbon Challengel They created a series of climate policies for Canadal Read more:ow/ly/adf/SDF7yum Thanks to @TrottlerFdn @lakSlawfdn



2nd place: Ms. Buchan (Grade 10) Crescent Heights High Schoo Caleary, Alberta

The students' extremely comprehensive policies focuse primarily on mitigation measures for limiting the cause of offmate scheme

In the News

This year, our organization and some of our teacher and student participants were profiled in the news. We are thrilled to have been featured in media publications for our work and everything that we've accomplished during the school year. Click on the links below to read the stories!

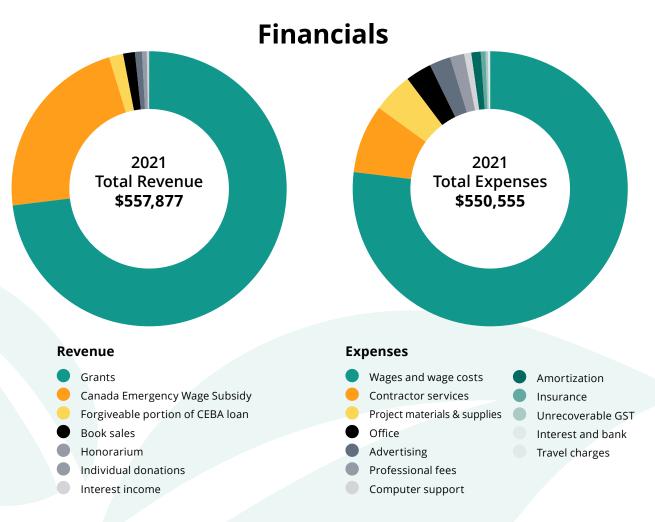
October 23, 2021: Opinion: Alberta's Draft Curriculum Needs to Equip Students for Climate Change

December 23, 2021: Featured in North Winnipeg's 2021 Year In Review

July 12, 2021: Student's Study on Flooding Earns First Place

July 10, 2021: New Myrnam School Gets Top Prize in GreenLearning Challenge

May 14, 2021: <u>Kelowna Secondary School Newsletter - Fun with Margett's</u> <u>Science 10 EVs (Page 3)</u>



Thank You to Our Supporters and Collaborators

We would like to say a big and heartfelt THANK YOU to all our supporters and collaborators! We could not have achieved everything we did this year without your help and support. We appreciate you for supporting our projects with your time, effort and resources.

Challenge Judges

- Cheryl Evans
- Eryn Stewart
- J.P. Jepp
- Kelvin Tan
- Lisa Morrison
- Maureen Kolla
- Nick Kendrick
- Paula McGarrigle
- Riley Smith
- Sean Hanson
- Vicki Gagnon

Workshop Hosts

- Alberta Council for Environmental Education (ACEE)
- Central Alberta Teachers
 Convention Association
 (CATCA)
- Digital Learning Symposium (Can-E-Learn)
- Endless Skies Teacher

- Convention Association (ESTCA)
- eSTEM: Virtual EDI and Digital Strategies (Science North in partnership with the Science Teachers Association of Ontario)
- Learning For a Sustainable Future
- Ontario Association of School Business Officials (OASBO)
- Outdoor Learning Store
- Peel District School Board
- Surrey Teacher Association Convention
- The Canadian Network for Environmental Education and Communication (EECOM)
- Toronto Catholic District School Board
- Waterloo Region District School Board
- York Region District School
 Board

Funding Partners

- Alberta Ecotrust Foundation
- Dow Chemical Canada
- EcoCanada
- Environment and Climate Change Canada through our partnership with Oceanwise
- Genalta Power Inc.
- Government of Canada -Canada Summer Jobs
- Indigenous Clean Energy
- Laidlaw Foundation
- McConnell Foundation -Innoweave
- Natural Resources Canada
- RBC Foundation

- Suncor Energy Foundation
- TD Friends of the Environment
- Trottier Family Foundation



















McConnell

TD Friends of the Environment Foundation

Foundation





Donate to Support Environmental Education!

As a registered non-profit organization, GreenLearning depends on the support from donors and sponsors like you to help us reach educators and young learners across Canada and the globe. With the current global climate crisis at hand, there has never been a better time to support young people in taking action to secure a sustainable future. If you believe in empowering youth with critical thinking skills for an evolving world, please consider making a contribution.



Donate link: <u>https://greenlearning.ca/donate</u>