

green 
learning.ca

2018

ANNUAL REPORT





Message from the Leadership



Dear Friends,

2018 was a remarkable year!

The number of people worried about climate change grew dramatically, with the US seeing a percentage increase from nine to 72 per cent. Meanwhile, Greta Thunberg set herself up outside the Swedish parliament in August 2018 to raise awareness about the need for climate action thus launching a global youth climate strike that only continues to grow.

Canada purchased a new billion dollar pipeline and launched a carbon pricing system while remarkably 45 per cent of the new demand for energy in the US was met by renewables as the costs of hardware and installation dropped dramatically. Although global meat consumption rose, so did the the demand for plant-based alternatives with some companies seeing record high profits. Around the world people demanded for the ban on single use plastics as scientists developed the world's first plastic eating enzyme.

GreenLearning's innovative work has reflected these aforementioned global trends and we continue to build education programs based on recent developments in the world.

We focused on creating more science based, bias-balanced environmental resources for educators - materials to help teachers deliver their existing curriculum through the lens of issues affecting our youth. We also placed an emphasis on using social media as a tool to engage educators, and engaging more youth than ever before. More importantly, we intensified our effort to better capture and communicate our impact, some of which is highlighted in this annual report.

Thank you for being part of our journey!

Mary McGrath
Executive Director

Jeff Reading
Chair, Board of Directors

EMPOWERING **TEACHERS AND STUDENTS TO** **SHAPE THE FUTURE**

GreenLearning is a leader in 21st century approaches to education and offers learning that shapes the future. Unlike other environmental organizations, GreenLearning sets itself apart by providing teachers with access to STEM-based educational resources in the areas of energy, climate change and green economy. Our resources equip young people to participate in understanding, imagining and shaping a sustainable future.

BACKGROUND

In 2010, with the support of the Pembina Institute, GreenLearning carved on its own as an independent charitable organization to provide a more focused, educator-driven, dedicated organization. Born at a time when environmental sustainability was an emerging issue for Canadians, GreenLearning has since been a catalyst for educating Canadian youth about mainstream energy, climate and green economy issues through innovative, inquiry based online learning programs that connects them to their communities and which leads to both understanding and action.

GreenLearning has always been an innovative and nimble organization that serves educators and learners with equal focus.



Since its inception, the board of directors and staff have led the organization through a period of sustained growth - researching audiences' needs by developing and testing modules for the market, and building relationships with school boards and stakeholders.

As a learning organization, GreenLearning continually reflects on its impact. One key objective is expanding the reach and scope of environmental education in schools across Canada while providing support to teachers; which is done through the type of professional development that encourages opportunities for recognition and mentorship.



OUR VISION

is a generation of young Canadians who are informed and inspired to actively create a sustainable world.

**Better Teaching.
Better Learning.
A Better Tomorrow.**

OUR MISSION

is to develop innovative teaching tools and rich educational experiences that empower young Canadians to effect positive social change in their own lives, schools and communities.



OUR MISSION IS ACHIEVED BY:

RESPONDING TO TEACHER NEEDS

with resources developed by teachers to accommodate students' varied learning styles.

ADDRESSING COMPLEX AND CONTROVERSIAL ISSUES

to provide students with opportunities to explore, test and participate in solutions.

WORKING WITH STAKEHOLDERS

through our open module development process for educational resources.

MULTIFACETED LEARNING TECHNIQUES

such as critical thinking, curiosity and collaboration that are integral to our activities.

BUILDING ACTION COMPONENTS IN OUR LESSONS

to give students an opportunity to make a difference.

ALIGNMENT WITH PROVINCIAL CURRICULA

for easy classroom integration.

ONLINE ACCESSIBILITY

which removes barriers to rich education experiences.

SUPPORTING TEACHERS

through professional development opportunities.

COLLABORATION

with related organizations and agencies.

INCREDIBLE TEAMS

that are small but effective with the experience, innovation and entrepreneurial skills required to grow GreenLearning in the future.

6,246

**educators used
programs &
resources**



18

**schools piloted
Energy Revealed in
AB & ON**



64%

**Canadian educators
14% US &
22% other countries**



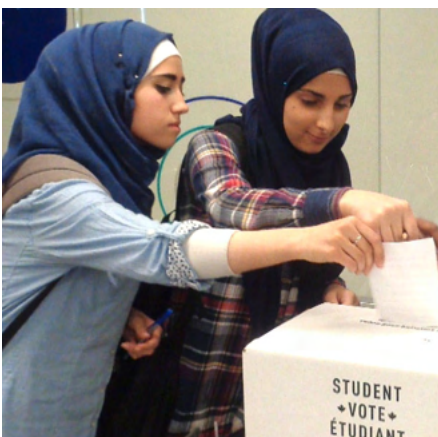
3

**new programs
on climate change**



13,579

**educators visited
Re-Energy.ca**



2

**new team
members joined**



PROGRAMS: AT A GLANCE

CLIMATE ACTION 150

An extension of our Climate Change Where I Live program, Climate Action 150 is a national youth dialogue on climate change in which young Canadians investigated the challenges and opportunities of climate change in their communities and launched over 50 action projects.



COME ALIVE

Every year in the Spring as plants start to grow and flowers begin to bloom, students will have an opportunity to get their hands into soil, clay and a range of learning activities to make the vital topic of water and climate change come alive in the the classroom.



RE-ENERGY

The Re-Energy program inspires and engages youth as the innovators and architects of a green energy future. The program is a suite of four modules, each one focused on harnessing a different kind of renewable energy – solar, wind, water and biogas.



ENERGY REVEALED

In this program, youth across Canada explore what it takes for their schools and communities to become more energy efficient. By gathering baseline data on real-time energy consumption at school using innovative technologies, students undertake key actions to achieve energy savings.



FLOOD:ED

Flooding is the most common natural disaster in Canada. Using interactive tools to assess and share their school's flood preparedness, Flood:Ed helps students understand the impact of flooding and invites them to explore ways they can prepare against a flood event at home and school.



LENDING A HAND

Students are introduced to the world of green economics as they engage in critical thinking and collaboration while learning about microfinance. Students connect to experts and become lenders as they select borrowers from around the world and witness the impact of their lending activities.



MAKE A SPLASH!

Everything from water quality and water levels in the lakes to the length of the outdoor skating season is changing. Using the Spiral Inquiry Method, students not only explore how climate change is affecting freshwater recreation but they also brainstorm the solutions and take action.



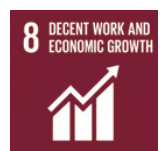
NEWSPARKS

The aim of Newsparks is to improve media literacy amongst youth by distilling the news into a format that easily enables classroom discussion. With each topic, students engage more fully with current affairs and become critical and perceptive consumers of media.



OIL SANDS EDUCATION DIALOGUE (OSED)

OSED teaches students about the oil sands from a variety of perspectives. They learn about oil production processes, how oil prices are set, and examine the environmental, social and economic impacts of an oil sands project through a simulated hearing and consultation.



STUDENTS AS SOLAR ENGINEERS



design. In terms of the winners, it was a close call with two schools almost coming to a tie at first place but Scott Central P.S. in Sandford, Ontario emerged as the winner overall and was awarded a grand prize of \$500. In second and third place came David Lloyd George in Vancouver, British Columbia and Chedabucto Education Centre/ Guysborough Academy in Guysborough, Nova Scotia respectively who were both awarded prizes of \$250 each.

SOLAR OVEN CHALLENGE WEBINAR AND SCIENCE LITERACY WEEK

Re-Energy featured a series of webinars as part of Science Literacy Week, which is a week-long celebration of science and space activities in Canada. From September 17 to 21, 2018, GreenLearning's very own professional engineer and a culinary team consisting of mainly youth, hosted a Solar Oven Bake Off to teach Canadians from coast to coast about how they could build, test and cook with a solar oven.

The 2018 school year featured another successful edition of the Re-Energy Solar Oven Challenge - a science competition with delectable results designed to teach youth about renewable energy technologies. A total of 13,579 users visited re-energy.ca in 2018 to download the lesson plans, activities and construction plans.

In this year's Solar Oven Challenge, each school approached the challenge from a unique point of view choosing to use recycled materials, complex engineering and creative

You can watch the Solar Oven Challenge bake-off here:
<https://www.facebook.com/greenlearning.canada.foundation/videos/1752885324750424/>

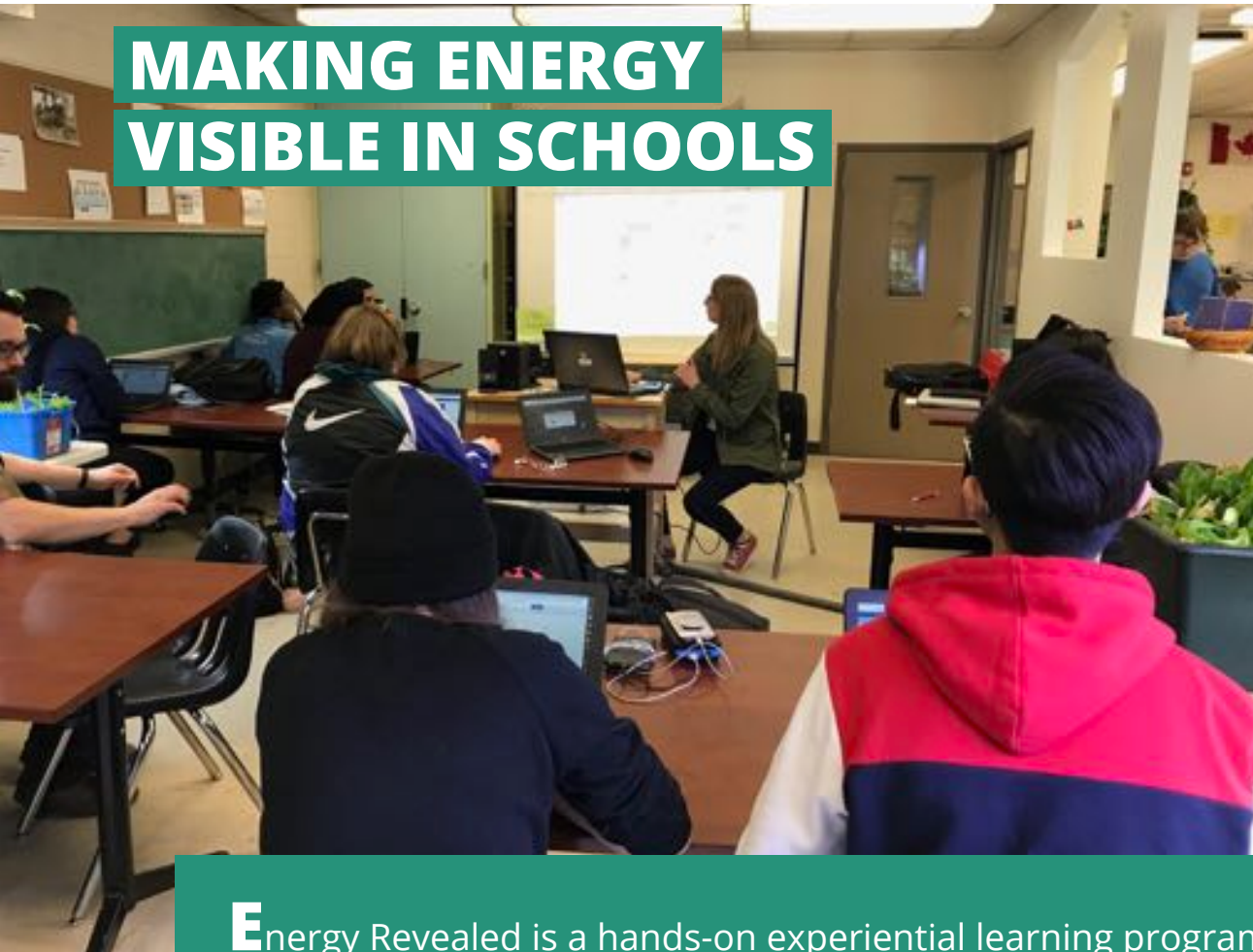
TESTIMONIAL



"We are very grateful that we had the opportunity to do this solar oven challenge in our grade 9 science class. It has helped change our perspective on how we can live and how we can save energy and use recycled goods to cook the food we eat. We would also like to use the solar oven for a bake sale to raise money for environmental causes in our community and for our school green team."

**- Victoria Grady and Kaleigh Mudge
Students at Chedabucto Education Centre/Guysborough Academy
Guysborough, Nova Scotia**

MAKING ENERGY VISIBLE IN SCHOOLS



Energy Revealed is a hands-on experiential learning program that leverages innovative new energy monitoring technologies, which are being adopted by school boards and schools across Canada in their goal to save money and become more energy efficient.

Energy Revealed is a national initiative that brings real-world energy monitoring and management directly into the hands of students, teachers and facility managers.

This multi-subject, multi-grade initiative empowers students - as the main occupants of the buildings - to play leadership roles in delivering energy efficiency and practical cost-saving, emission-reduction measures.

It is based on breakthrough technology, powerful software and cloud-based data analytics that make energy use and efficiency measures visual and understandable.

TESTIMONIAL



ENERGY REVEALED IN ALBERTA

In 2018, GreenLearning kicked off the pilot year for the Energy Revealed program and worked with the Alberta Council for Environmental Education to deliver the program. We worked with 15 Alberta schools ranging from urban and rural and from elementary to secondary, including an indigenous school (Kanai High School) as well as a French school.

"We at Kanai are very honoured to be a part of such an amazing project. As we know, protecting mother Earth is very important as a First Nations school and a part of the Blackfoot Confederacy. Our way of life will continue to guide us, to protect mother Earth and to be appreciative of what we have. We are very grateful and thankful for this opportunity."

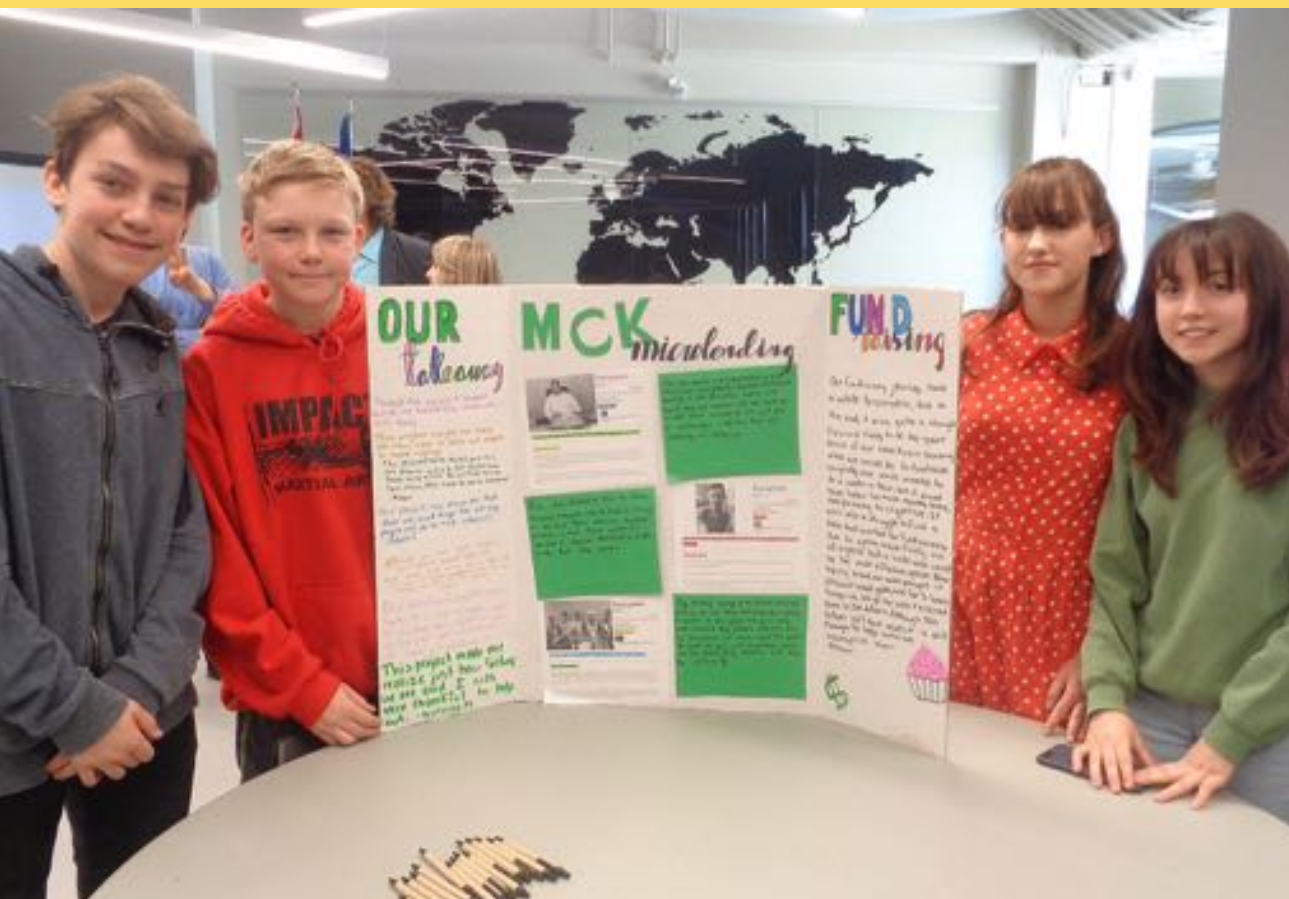
**- Assistant Principal Charlton Weasel Head
Kanai High School Cardston, Alberta**

STUDENTS ENGAGED IN SUSTAINABLE DEVELOPMENT

Our innovative Lending a Hand program has engaged hundreds of Alberta students over more than four years as part of the Education for a Green Economy Initiative. We partnered with Servus Credit Union and the Centre for Global Education to continue bringing the Lending a Hand program to Alberta Schools. This long-running program improves financial literacy and educates youth about how credit unions and micro-lending can help contribute to sustainable development in countries all over the world.

An exciting component of the 2018 Lending a Hand program was the interactive webinar hosted by GreenLearning and facilitated by the Centre for Global Education, featuring guest appearances from Kennedy Yeboah of Ramseyer Credit Union in Accra, Ghana and Debbie Neddow of Servus Credit Union.

Lending a Hand engaged over 150 youth in schools across Alberta in 2018. As part of the annual Lending a Hand Challenge, these students raised over \$2,000 which was matched by Servus Credit Union - totalling over \$4,000 that they were able to distribute in small, life changing loans of around \$50 - \$100 to entrepreneurs in developing countries around the world.





"The opportunity to help others using the microloan financing model, is an eye opener for many of my Natural Science students. In one tangible step, students are able to see the effects of their fundraising and subsequent loan, on the lives of others and the success of a diversity of development projects in different parts of the world. This project has legacy written all over it."

**- Warren Lake: Robert Thirsk High School
Biology and Natural Science Teacher**

TEACHING YOUTH ABOUT CLIMATE CHANGE

A significant part of GreenLearning's 2018 season was the production and launch of three online and interactive climate change programs. In this content, GreenLearning assisted educators in teaching different ways that climate change is impacting our water resources in Canada, and how it relates to their students' lives by linking it to recreation, agriculture and flooding.

CREATING THE STORMWATER CHALLENGE

The three-year Stormwater Challenge program extends directly from the success of our climate change series - especially Flood:Ed and Make a Splash! Supported by Intact Foundation and NSERC, and running through 2019 - 2021, the key objective of the Stormwater Challenge is to support teachers and students to not only understand the implications of climate change on storms and rainfall patterns but to also comprehend the different types of stormwater infrastructure servicing their school and community. This program has a strong action focus and engages participating students with prizes. The program also rewards them for creating stormwater action plans, identifying opportunities to prevent flooding and stormwater pollution - and acting on them.

Make a Splash! employs our Spiral Inquiry Method to have groups of students investigate their choice of topic related to climate change and freshwater recreation. Everything from water levels and water quality in lakes to the length of outdoor skating season is changing. The program involves researching what this means to students where they live and engages them in sharing ideas for positive change.

Come Alive explores how water is an essential part of life on earth and especially important to farmers. Seven hands-on activities in the Come Alive program helped educators to teach about how climate change influences the water cycle, farmers and the food they grow.

Flood:Ed investigates how climate change is driving extreme weather events such as larger, more intense storms and flooding. Basements are swamped, whole neighbourhoods near rivers are under water for days while farms and businesses can lose millions of dollars due to flooding. Flood:Ed helps students understand the impact of these events and encourages them to take action on the issues in their school and community. This program is the first in a larger series on Extreme Weather.

SOCIAL MEDIA IMPACT: @GREENLEARNING



1,745+ followers

Promoted Tweets resulted in:

80,000 impressions in May

120,000 impressions in September



965+ users like

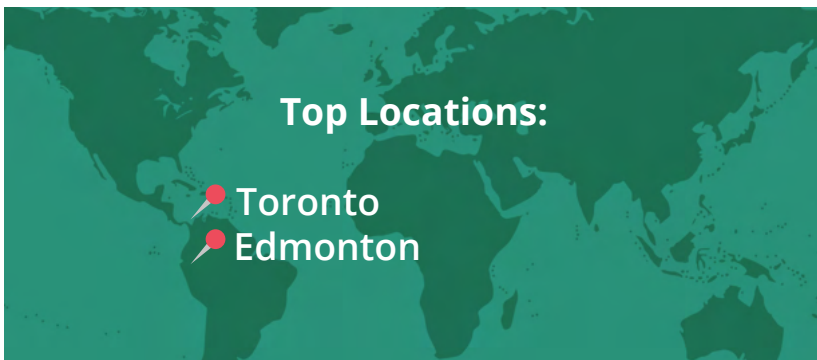
19% growth

538 impressions for average engagement reach

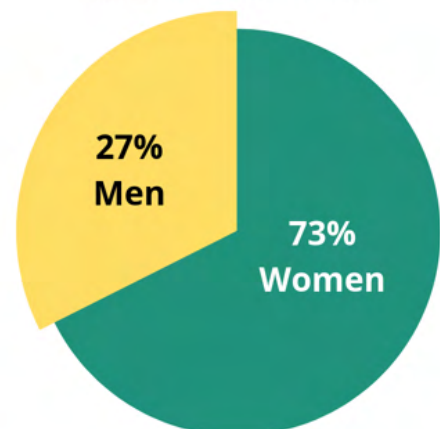
Over 80,000+ video views



Over 485+ followers



Instagram audience reach of:



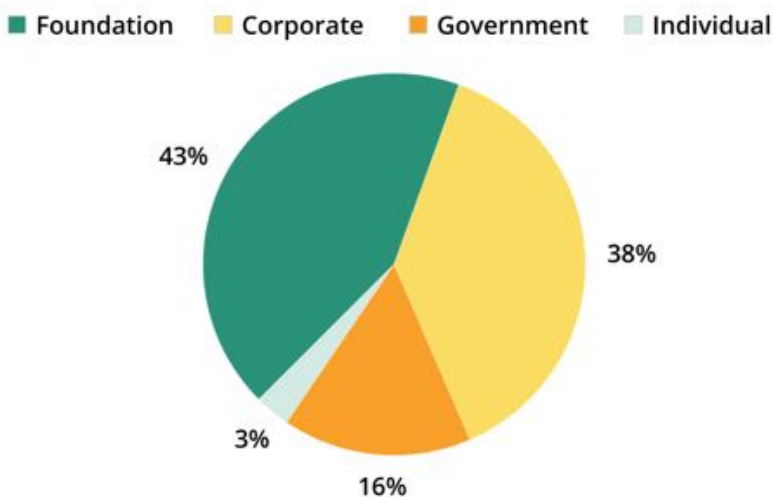
GREENLEARNING'S STATEMENT OF FINANCIAL POSITION

YEAR ENDING DECEMBER 31, 2018 WITH COMPARATIVE FIGURES FOR 2017

REVENUE	2018	2017
Grants	331,269	332,707
Individual Donations	15,290	5,460
Other	1,293	20
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Total	\$347,852	\$338,187

EXPENSES	2018	2017
Personnel Costs	278,192	256,947
Program Delivery	51,406	37,519
Marketing + Advertising	10,106	1,245
Rent + Administration	17,448	17,461
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Total	\$357,152	\$323,872
Excess/Deficiency	(9,300)	14,315

Revenue Sources



THANK YOU TO GREENLEARNING'S SUPPORTERS!

GreenLearning would like to thank the numerous organizations and individuals that have made our online programs for youth possible through in-kind donations and other types of support.

SUPPORTERS

- Cenovus
- EnMax
- Scovan
- Servus
- Suncor
- ConocoPhillips
- RBC Foundation
- Intact Foundation
- Gilgan Foundation
- Energy Efficiency Alberta
- Ontario Trillium Foundation
- Chisholm Thomson Foundation
- Underwriters' Laboratories Inc. (UL)
- Canada Green Corps - United Nations Association of Canada
- Community Environmental Action Grant - Government of Alberta
- National Science and Engineering Research Council - Government of Canada
- Greenplanet Energy Analytics





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