

A+ for Energy

TEACHER PROFESSIONAL DEVELOPMENT PROGRAM

August 26-27, 2024 Calgary, Alberta



A two-day hands-on workshop for A+ for Energy grant recipients to learn about Alberta's energy landscape, network, collaborate, and celebrate the implementation of their energy education projects over the 2024-25 school year.

Introduction

Inside Education planned the A+ for Energy Teacher's Workshop to give teachers who received an A+ For Energy grant for the 2024/2025 school year a chance to network, celebrate, and learn together. The program was held in Calgary and was attended by teachers from 23 schools across Alberta that will be implementing innovative energy education projects this school year. Participants had the chance to learn more about Alberta's energy landscape and gain strategies to implement their projects through guest speakers, tours, workshops and learning resources. The program celebrated teachers' commitment to energy education and provided a well-balanced perspective on Alberta's energy landscape.

In the upcoming 2024/2025 school year, the A+ for Energy projects led by this group of teachers will impact thousands of students across Alberta, and the professional development program proved to be a fantastic way to kick off the year!

We are excited to share the outcomes and impacts from this engaging professional development program through this report. The demand for A+ for Energy grants as well as the overwhelmingly positive feedback from participants indicates a strong desire for the continuation of the A+ for Energy program, as well as other future energy education initiatives throughout Alberta.





The Program

Through this dynamic program, 31 educators:

- NETWORKED with like-minded educators from across the province
- COLLABORATED with peers to discuss project plans, strategies and tips for success in implementing their A+ for Energy projects
- CELEBRATED their successful grant application with peers, project partners, and Inside Education staff
- CONNECTED with energy education organizations that could help augment their projects
- EXPERIENCED Alberta's energy landscape and energy transition from industry experts

PROGRAM AT A GLANCE

Monday, August 26

Introduction & Welcome

Tours

TC Energy Saddlebrook Solar Farm

University of Calgary - Engineering, research, and sustainable infrastructure

Tuesday, August 27

Energy Expert Talks

Bryan Helfenbaum (Alberta Innovates)

John Drinkwater (BP)

Tour

ENMAX Shepard Energy Centre

Energy Education Workshop

Green Learning, Alberta Tomorrow, Energy Ecosystem Foundation, Microbial Fuel Cell Olympics, Inside Education, and teacher suggested resources.

Project Kickoff

A+ Next Steps

A+ for Energy Celebration Dinner









The Participants

The A+ for Energy Professional Development Program brought together 31 teachers from the 23 schools that will be implementing innovative energy education projects throughout the 2024/2025 school year. Teachers attended the event with some successful grant recipient teachers unable to participate due to school calendar scheduling. As always, a wonderful benefit of A+ for Energy grant, the group included teachers teaching a range of subjects from Kindergarten through Grade 12.







Caroline Miller | Ecole St. Paul, St. Paul Zac Coupland | St. Joseph School, Coaldale Nadine Guenther | St. Benedict School, Edmonton Katrina Patel | St. Benedict School, Edmonton Florin Panaitescu | North Haven, Calgary Steven Schultz | Lacombe Composite High School, Lacombe Julia Brotea | Lacombe Composite High School, Lacombe **Shaun Donald** | E.S. Laird Middle School, Lloydminster Jennifer Vermillion | Bonnyville Centralized High School, Bonnyville Debbie Harris | Hythe Regional School, Hythe Hayley McKay | Visions West Outreach School, Rocky Mountain House Denise Croteau | Visions West Outreach School, Rocky Mountain House Shelly Sutcliffe | St. Theresa Catholic School, Sherwood Park David Stephens | St. Theresa Catholic School, Sherwood Park Janice Jensen | Griffin Park School, Brooks Jarrett Graff | Griffin Park School, Brooks Evelyn Chan | G. H. Dawe School, Red Deer Amanda Green | Ecole Champs Vallee School, Beaumont Tracy New | Ecole Greenfield School, Edmonton Mark Iwaasa | Stirling School, Stirling Mike Fletcher | Stirling School, Stirling Matthew Vavrek | Peace Wapiti School, Grande Prairie Andrew Fernandes | Notre Dame School, Leduc Collin Kupchenko | Two Hills School, Two Hills April Huppertz | Innisfree Delnorte School, Innisfree Cameron Wolsey | H.W. Pickup School, Drayton Valley Petra Hynes | H.W. Pickup School, Drayton Valley Julie Arsenault | Michael Strembitsky, Edmonton

Ashley Lepage | Northcott Prairie School, Airdrie Makayla Widmer | Northcott Prairie School, Airdrie Luke Kamineski | Nellie Carlson School, Edmonton



The PD was well thought out, balancing different perspectives on the topic of energy.

- Florin Panaitescu, North Haven School



It is always great when we get the opportunity to be the learner rather than the teacher. Every time I attend the A+ For Energy PD sessions, I come away with valuable resources to use in the classroom.

- Shelly Sutcliffe, St. Theresa School





I appreciate Inside Education and their partners' willingness to invest in teachers who are willing to step up and take action around Energy issues by providing these teachers with PD, funds and support. Our students and schools are better prepared to deal with current problems in the energy field.

- Steven Schultz, Lacombe Composite High School



Having the opportunity to share ideas with my peers and support each other on our energy education journey was by far the best part.

- Amanda Green, Ecole Champs Vallee School



The Projects

After the professional development program, the teachers returned to their communities to begin implementing their A+ For Energy projects.

30 projects will be implemented in 24 different communities across Alberta and will have an impact on thousands of students.



2024/2025 A+ FOR ENERGY **GRANT RECIPIENTS**



A.E. Cross School, Calgary
HOMES FOR THE FUTURE | \$4,309

Bonnyville Centralized High School, Bonnyville

COOKING WITH THE SUN | \$3,500

École Champs Vallée School, Beaumont

SUSTAINABLE SANCTUARY: Advancing Energy Efficiency in Outdoor Education | \$5,000

École Greenfield School, Edmonton

HOW TO BE CLIMATE OPTIMISTS: Exploring Renewable Energy Sources and Putting Sustainable Practices into Action with Spike Robotics | \$4,950

École Notre Dame School, Leduc

DISCOVERING ENERGY BY USING NUMERACY, LITERACY,

AND PLAY | \$1,050

École St. Paul School, Fort McMurray

HYDRODRIVE: ADVANCING RENEWABLE ENERGY WITH HYDROGEN-POWERED VEHICLES | \$4,620

Eugene Coste School, Calgary

ENVISIONING ALBERTA'S ENERGY IN 2050 | \$2,500

G.H. Dawe School, Red Deer

ENERGY TOOLKIT CLASS SET FOR G.H. DAWE SCHOOL | \$2,500

Griffin Park School, Brooks

ROCKIN' ALBERTA: RESOURCES, RIFFS, AND PSA SHIFTS! | \$5,000

Harry Ainlay High School, Edmonton

ENERGY DETECTIVE: Unveiling Efficiency Secrets in Homes and Schools | \$4,470

Hilltop High School, Whitecourt

BUILDING A SOLAR OVEN | \$2,376

H.W. Pickup School, Drayton Valley

THE H.W. CHARGING HUB | \$4.544

Hythe Regional School, Hythe

BUILDING THE FUTURE: One 'Light' Step at a Time | \$5,000

 ${\bf Innisfree\ Delnor te\ School}, {\it Innisfree}$

SUNRISE GARDENS: SOLAR HEAT FOR GREEN GROWTH | \$5,000

Jasper Jr/Sr High School, Jasper

SEEDING STEM SUCCESS: Cultivating Energy Literacy with FarmBot at Jasper Sr/Jr High School | \$5,000

Lacombe Composite High School, Lacombe

SOLAR MONITORING | \$5,000

Lloydminster Comprehensive High School, Lloydminster

H2 HERE WE GO | \$5,000

North Haven School, Calgary

SOLAR ENERGY FOR SUSTAINABLE FUTURE! | \$5,000

Northcott Prairie School , Airdrie

SPARKS OF INNOVATION: Empowering Students through Energy Exploration | \$3,052

Energy Exploration | \$3,032

Our Lady of the Angels Catholic School, Fort Saskatchewan

COMPOST CHAMPIONS: Turning Lunch Leftovers into Soil Superheroes at OLA | \$1,457

Paul Rowe Jr/Sr High School, Manning
PAUL ROWE REDUCES, REUSES, AND RECYCLES | \$1,500

Peace Wapiti Academy, Grande Prairie

PWA BIKE PROGRAM | \$1,500

STEM Innovation Academy, Calgary

2025 MINI MFC OLYMPICS AND 2025 MFC COACHING | \$5,000

Stirling School, Stirling

THE PEDAL PEOPLE BIKE SHOP | \$1,500

St. Benedict Elemetary School, Edmonton

UTILIZING OUR HUMAN ENERGY FOR ENERGY CONSERVATION | \$5,000

St. Joseph Coaldale. Coaldale

SUNFLOWERS OR SOLAR TRACKERS | \$5,000

St. Theresa Catholic Middle School, Sherwood Park

REACH FOR THE STAR! | \$5,000

Tom Baines School, Calgary

HYDROGEN CAR DESIGN CHALLENGE! | \$4,508

Two Hills School, Two Hills

STUDENT ACTION PLAN DEVELOPED BY STUDENTS FOR STUDENTS | \$5,000

Visions West Outreach School, Rocky Mountain House

CULTIVATING SUCCESS: A Study on Plant Growth in Various Mediums | \$5,000



Partners and **Expert Guests**

Thank you to our program partners for supporting the 2024/25 A+ for **Energy Program and Professional** Development workshop. The teachers were grateful for the opportunity to network with peers, tour energy-related sites, learn from energy industry experts, and get excited for their projects.

Participants also voiced their gratitude for the full scholarship that allowed them to attend the workshop at no cost!



THANK YOU TO THE INSPIRING SPEAKERS/HOSTS; THEIR COMMITMENT TO ADVANCING ENERGY EDUCATION IS **GREATLY APPRECIATED.**

Bryan Helfenbaum | Alberta Innovates John Drinkwater | BP Andreana Salouk & Meghan Owen | Green Learning Sue Arlidge | Alberta Tomorrow Justin & Aaron Tan | Microbial Fuel Cell Olympics Yvanna Ireland | Energy Ecosystem Foundation **Libby Bell** | *University of Calgary* Michael Edwards & Erin Ablett | TC Energy Kray Price & Dakota Graham | ENMAX

THANK YOU TO OUR JUDGES WHO ANONYMOUSLY SCORED APPLICATIONS BASED ON A+ FOR ENERGY PROJECT CRITERIA.

Renee Shevalier-Lavin | Annunciation World IB School Brayden Ursaki | St. Mary's Elementary School Lisa Corbett | Rundle College Jr. Sr. High Helen Colbourne Valley Creek School Neil Korotash | St. Albert High School Ian Doktor | Jasper Place High School Miriam Mahaffy | Edmonton Forest School Forrest Battjes | Work Wild John Drinkwater | BP Amy Pilling | BP Peter Exall | BP Anna Moore | BP Andy Taylor | Cenovus **Venkata Mannem** | Cenovus Kartik Rao | Cenovus Chelsy Hoy | Pembina Gas Infrastructure Neil Guay | Pembina Pipeline Simon Geoghegan | Pembina Pipeline Olga Kalinchuk | Pembina Pipeline Vinayaraj Ozhukil Kollath | Pembina Pipeline













Summary and Futures

Over 5,000 students will benefit from A+ for Energy projects this school year!

The 2024 A+ For Energy Professional Development Program was a great success and is viewed by teachers as an important component of the entire A+ for Energy project. The feedback received from participants was overwhelmingly positive and we look forward to supporting them as they carry out their projects throughout the year. We expect the demand for energy education programs to continue to increase steadily, especially with recent changes to the Alberta Program of Studies.

Inside Education remains committed to providing high quality professional development programs for teachers and supporting energy education in schools across Alberta. As Alberta's energy landscape continues to transform, it is essential that the teachers and young people of Alberta become informed decision makers and stewards. There is no doubt that the A+ for Energy program will continue to support this positive future!

For More Information Contact: Inside Education Society of Alberta www.InsideEducation.ca

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