

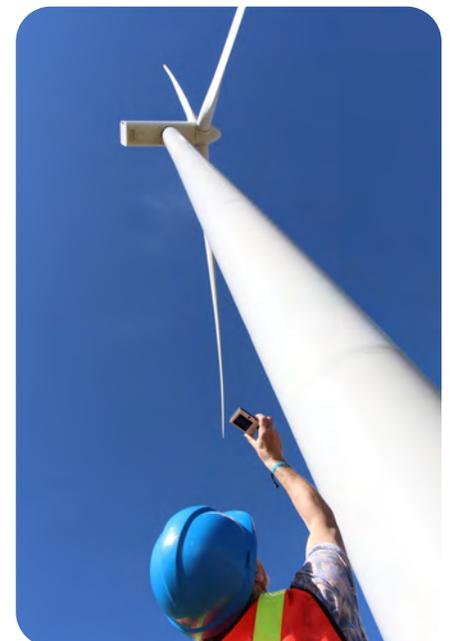
2015 Alternative and Renewable Energy Education Program



TEACHER PROFESSIONAL DEVELOPMENT

24 Teachers explored alternative & renewable energy in Alberta and discovered how to bring the topic to life in their classrooms

The 2015 Alternative and Renewable Energy Education Program provided teachers the information and inspiration they need to bring balanced, locally relevant energy content to their students. From May 21-23, 2015 teachers from across Alberta joined Inside Education as we travelled from Calgary to Medicine Hat meeting with experts, touring innovative energy developments and discussing how to engage students in meaningful energy education.



THE PROGRAM



Program Goals

- Increase understanding about alternative and renewable energy in Alberta
- Enhance energy education using a multiple perspectives approach
- Support teachers through experiential education program
- Highlight current Alberta-based learning materials



The program was designed to emphasize the current status of alternatives and renewable energy in Alberta while featuring community based initiatives. Energy efficiency was a overarching theme as participants met with experts and toured facilities that are utilizing alternative technologies for the generation of heat and electricity. We discussed the potential of wind, solar and cogeneration in Alberta and explored how natural gas is quickly meeting the growing demand for electricity. With this knowledge and experience we turned our attention to the classroom exploring how multiple perspectives and critical thinking can empower our students - today's stewards and tomorrow's decisions makers.

MAY 21

Content & Context

Teachers met with experts that provided the foundation of understanding for the program including:

- Opportunities and challenges of Alberta's energy resources;
- Generation and transmission of electricity and Alberta's electricity mix
- Energy efficiency and LEED building

MAY 22

Experiencing Energy

This full day of tours showcased ideas and innovation in action.

- ENMAX District Energy Centre
- HatSmart Project
 - Concentrating Solar Project
 - Co-generation Power Plant
 - Box Springs Wind Farm

MAY 23

Classroom Connections

A comprehensive workshop that highlighted how to bring it back to the classroom. Teachers participated in a solar lantern building project, examined learning materials, heard from Medicine Hat High School's eco-club, received the newly updated *Electricity Poster Kit* and collaborated on lesson ideas.

Participants & Evaluation

The 24 participating teachers represented a diverse group from schools across Alberta. They encompassed teaching assignments from grades 3-12 including everything from science, math, social studies and construction. Inside Education applauds these teachers for contributing their limited time and professional development resources to advancing energy education in Alberta. It is evident from the feedback we received following the program that the 2015 Alternative and Renewable Energy Education Program offered a high-quality, worthwhile and enriching experience from which they can build meaningful lessons for their students.



"This PD was hands-down the best and most useful I've had in my 8 years of teaching. I learned so much and I'm inspired to learn more"- *Amanda Ocampo, Colonel Macleod School*

"Thank you for doing PD properly. I leave filled with knowledge, experience and ideas. I feel like a better citizen as well as a better teacher" - *Laura Roberston, St. Michael's School*

"Being able to see what is being done in this province will make it much easier to engage students in the important conversations that surround energy in Alberta" - *Bill Van Der Weide, Calvin Christian School*

"This tour has provided me with a much stronger base of knowledge about all the perspectives. There is such a benefit from getting up close and personal and seeing first hand how things work. I can't wait to take this back to my classes!" - *Anne Duguay Queen Elizabeth High School*

100% AGREE THEY HAVE A BETTER UNDERSTANDING AND ARE MORE CONFIDENT TEACHING ABOUT ALTERNATIVE AND RENEWABLE ENERGY

100% WOULD RECOMMEND AN INSIDE EDUCATION PROGRAM TO COLLEAGUES

THE PARTICIPANTS INDICATED AN EXPECTED REACH OF 2000+ STUDENTS

PROGRAM PARTNERS

Thank you to our partners who contributed to the success of the program.



SUNCOR
ENERGY
FOUNDATION



Checking out
the ENMAX
District Energy
Centre

A special thank you to the following groups for providing tours and expertise

- The Centre for Environment-Economy Learning
- ENMAX
- Alberta Electric System Operators
- University of Calgary
- City of Medicine Hat
- Medicine Hat High School YES club

Summary and Futures

Inside Education strives to be a leader in environmental and natural resources education and the 2015 Alternative and Renewable Energy Education Program exemplifies the work we do.

The program provided a wealth of knowledge, insightful discussions, networking opportunities and one-of-a-kind experiences to participants. We are confident that this learning will extend beyond the program itself as teachers share the information and ideas with their students and colleagues.

The interest, keen participation, and feedback from participants, partners, and expert guests speak to the many successes and value of this program. The

enthusiasm highlights the ongoing need for high quality, accessible teacher professional development programs to contribute to energy education in Alberta.



With this, Inside Education is excited to begin preparations for our fall programs including:

The Boreal Education Program

The Oil Sands Careers Education Program

Along with our suite of learning materials, youth summits and student classroom and field programs.

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