

2017 OIL SANDS EDUCATION PROGRAM

JUNE 1-3 2017
FORT MCMURRAY
AND AREA



Inside Education's Oil Sands Education Program was a three-day experiential learning opportunity to support teachers in bringing energy and natural resource education to their classrooms.

Experiential Education for Teachers

The Oil Sands Education Program was designed to increase awareness and develop understanding about the role of the oil sands in the environment, economy and natural resource sector of Alberta.

A variety of speakers shared their expertise with the teachers to help increase understanding of the various perspectives associated with oil sands development, community, innovations and environmental issues. Tours of communities in the region allowed for the 25 participants to gain an appreciation of the Fort McMurray area as more than just the oil sands by bringing in conversations about the community, environment and economy.

The multiple perspectives that participants were exposed to throughout the program were synthesized in the final education workshop, leaving teachers with ideas for how to bring oil sands and energy topics to their classrooms.

Table of Contents

Program Overview	2
Partnerships and Support	3
Program Participants	4
Program Impact	5
Summary and Futures	6
Appendix	7



Program Overview

The three-day program began in Fort McMurray before moving north of the city to Birch Mountain Lodge, Fort McKay, and the Syncrude Mildred Lake site. Participants had the opportunity to examine Alberta's Boreal region through presentations, tours, and discussions with locals about living and working in the region. The program was designed not only to explore the oil sands as a resource, but also to explore and understand the community in and around Fort McMurray.

As the program's ultimate aim is to help Alberta students become informed citizens and stewards, the final workshop identified opportunities to apply the program content to the classroom. A program overview can be found below; the detailed program is in the Appendix.



Thursday June 1	Friday June 2	Saturday June 3
<p>Introduction to the Oil Sands</p>	<p>Exploring the Oil Sands - First Nations and Industry Perspectives</p>	<p>Education and the Oil Sands</p>
<p>Teachers began with an exploration of the Oil Sands Discovery Centre where they also heard from experts on the following topics:</p> <ul style="list-style-type: none"> • Oil Sands and SAG-D basics • Innovations • Water and Air quality • Effects on Wildlife • Oil Sands Monitoring • Sustainability and First Nations • 2016 Horse River Fire. <p>The day ended with a tour through Beacon Hill and Abasands (communities greatly affected by the Horse River Fire) and a night at Birch Mountain Lodge to experience life at a work camp.</p>	<p>Educators started the day with a tour through Fort McKay First Nation to hear about the First Nation's perspective on living in the oil sands. The teachers were toured through the community and were able to witness education, recreation and the sense of community in Fort McKay.</p> <p>From Fort McKay, participants toured around the Syncrude Mildred Lake mine site to experience oil sands mining, reclamation, and futures firsthand.</p>	<p>Teachers visited Westwood High School to see what it is like to learn in the oil sands region, and then to take part in a comprehensive education workshop.</p> <p>Teachers synthesized the themes of the trip, discussed links to their curriculum, and brainstormed lesson ideas with their colleagues. Teachers were also provided with learning resources to take back to their classrooms to support them in their oil sands education.</p>

Partnerships and Support

Education opportunities like this would not be possible without the generous support of program partners. We would like to extend our gratitude to **Cenovus Energy, Suncor Energy Foundation, Devon Canada, Canadian Natural, Syncrude and Canadian Association of Petroleum Producers** for their commitment to high quality, meaningful teacher professional development. Inside Education also appreciates the in-kind support provided by all of the expert guests, speakers and tour hosts who dedicated their time and enthusiasm to the program.



Experts and Tours

Speakers

Phil Meagher, Councillor for Regional Municipality of Wood Buffalo

Shafak Sajid, Oil Sands Community Alliance

Emilie Briggs, Wood Buffalo Environmental Association

Jeff Hughes, Alberta Energy Regulator

Eber Araujo, Fort McKay Sustainability Department

Vicki Lightbown, Alberta Innovates

Amit Saxena, Devon Canada

Sean Sanders, University of Alberta

Jarret Whitbread and Paul St. John, Alberta Agriculture and Forestry, Wildfire

Tours

Oil Sands Discovery Centre

Birch Mountain Lodge

Fort McKay First Nation

Syncrude

Westwood High School



Program Participants

Participants represented schools from across Alberta and Manitoba, with the common goal of learning more about the oil sands. Participants were a mix of K-12 teachers, education students and those associated with post-secondary institutions.

Leanne Topp, National Sport School, Calgary
Janice Ramsay, Mountain Park School, Calgary
Dawit Mussie, Mountain Park School, Calgary
Amanda Green, St Joseph, Calgary
Maza Alfazema, Micheal Stembitsky School, Edmonton
Penny Stone, St. Joseph, Calgary
Sheila Klotz, Vincent Massey School, Calgary
Sandra Norman, Stettler Elementary School, Stettler
Sonia Chopra, Calgary Board of Education, Calgary
John Laing, Medicine Hat High School, Medicine Hat
Gary De Leeuw, Louis Riel School, Calgary
Gillian Muirhead, Clarence Sansom School, Calgary
Kevin Van Lagen, Altario School, Altario
Chris McMechan, Henry Wise Wood High School, Calgary
Joan Erlandson, Maryview, Red Deer
Kevin Manias, Henry Wise Wood High School, Calgary
Chad Krayenhoff, Jasper Jr/Sr High School, Jasper
Jocelyn Porodo, Concordia University of Alberta, Edmonton
Meredith Allan, Northern Alberta Institute of Technology, Edmonton
Luke Nakonechny, Bonnyville Centralized High School, Bonnyville
Erica Rozema, Building Futures (WH Croxford), Airdrie
Marshall Mah, Alexis Sioux Nation School, Glenevis
Cathy Samson, Hughenden Public School, Hughenden
Amanda Grendowicz, Concordia University of Edmonton, Edmonton
Shelby Primmatt, Seven Oaks Adult Learning Centre, Winnipeg, MB

The education extends far beyond the program itself. These 25 educators have an annual estimated reach of **1400 students** collectively!



Program Impact

Inside Education is excited to share the feedback received from teachers following the 2017 Oil Sands Education Program. The results below reaffirm Inside Education’s approach to experiential professional development programs as an effective way to increase understanding of natural resource development in Alberta and support teachers in bringing multiple perspectives to the classroom.



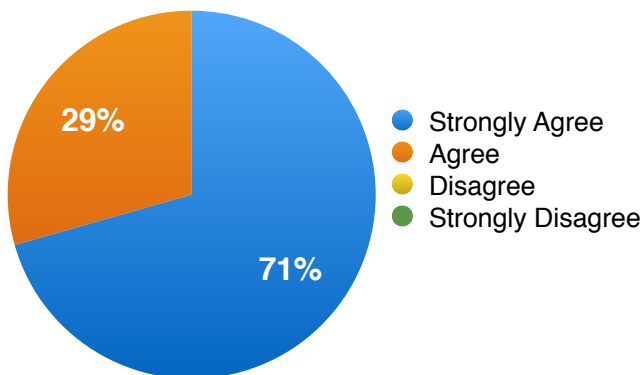
“I have already plugged the program with my entire science department and teacher friends in other schools as well. FANTASTIC JOB! Probably the most valuable/relevant PD I’ve had in 20 yrs of teaching.”
 - **John Laing**, Medicine Hat High School, Medicine Hat

ALL respondents to the survey would recommend **Inside Education PD Programs** to their colleagues!

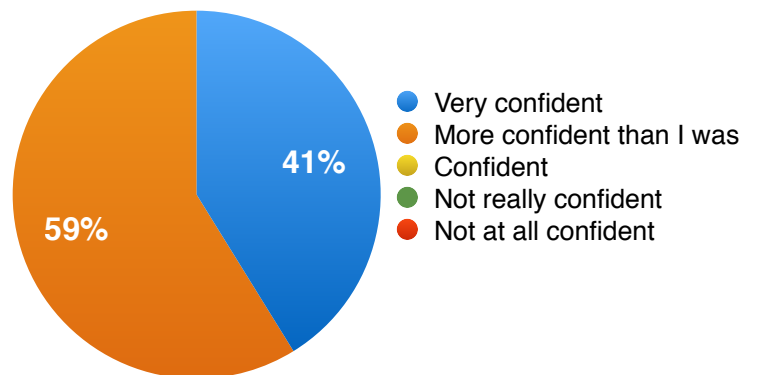
“I really appreciate the learning sessions (presenters) and the tours - it is a good balance of information and experiences.”
 - **Sheila Klotz**, Vincent Massey School, Calgary

“This is an awesome opportunity. It’s one thing to read stuff in a text book, but you can never really ask the questions and get answers. This allowed for that, and it is in that respect that opportunities like this are invaluable. By opening up the opportunity to ask and get answers, the program helped to clarify things that I had wrong, and to reinforce some of the things I had correct. Awesome is the only way to describe it!”
 - **Kevin Manias**, Henry Wise Wood, Calgary

This program has enhanced my teaching and will help me to provide informative, accurate, and high-quality learning experiences for my students.



After participating in the program, how confident are you in bringing energy related topics in your classroom?



Summary and Futures

Inside Education is very proud to have provided teachers the opportunity to experience the oil sands and learn more about the multiple perspectives surrounding this natural resource on the 2017 Oil Sands Education Program.

There is a growing demand for accessible, topical, and experiential professional development opportunities surrounding Alberta's natural resources, which has been demonstrated by the interest of educators, partners, and presenters alike. Thus, Inside Education will continue to support energy and natural resource education in Alberta with programs such as:

Navigate 2018: Youth Water and Environmental Leadership Summit

E3, C3, and S3: Energy, climate change, and sustainability summits in Edmonton, Calgary and the Regional Municipality of Wood Buffalo

Teacher Professional Development Programs on **Water and Climate Technology Careers** and **Traditional Knowledge**.

Along with multiple classroom and forest field programs, as well as no-cost learning resources.

Inside Education will follow up with teachers in the 2017/2018 school year to evaluate the long-term impacts of Teacher Professional Development Programming. Through long-term evaluation, Inside Education can continue to develop resources and programming that will ensure teachers are supported and students are inspired in natural resource education across Alberta.



*Supporting teachers and
inspiring students.*



www.insideeducation.ca

For further information, please contact:

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Oil Sands Education Program June 1-3, 2017

Wednesday May 31

Participants gather in Fort McMurray. Flights arriving throughout afternoon and evening

7:30 Shuttle from Airport to Quality Inn

For participants arriving in Fort McMurray on WS3139 from Calgary at 6:45pm, WS255 from Edmonton at 7:07pm and AC8388 from Edmonton at 7:10pm. Inside Education will meet participants in the entrance hall of the airport to get on a shuttle to the hotel.

Thursday June 1 - Welcome to the Oil Sands

Themes of the Day – Getting to Know the Oil Sands; Environment; Innovations; Wildfire

7:00-8:00 am Continental Breakfast

8:20 am Bus to Oil Sands Discovery Centre

Program Registration upon arrival at Oil Sands Discovery Centre

Program Start 8:30am

Welcome to the Oil Sands Region

What is it like to live and work in the oil sands region? This welcome from a Fort McMurray resident and councilor will introduce the community and the connections it has with the oil sands.

Speaker: **Phil Meagher**, Councilor for Regional Municipality of Wood Buffalo

Oil Sands in the Canadian Context

Why are oil sands so important to Alberta, Canada and the rest of the world? This session will introduce the users and uses of oil sands and highlight the role this resource plays in both our economy and society.

Speaker: **Shafak Sajid**, Oil Sands Community Alliance.

SAG-D 101

Steam assisted gravity drainage (SAG-D) is an in situ form of oil extraction from the Earth. In this session, teachers will learn about the basics of how SAG-D works and some of the key issues surrounding the process.

Speaker: Steve McIsaac, **Inside Education**

Oil Sands and Public Education

Teachers will immerse themselves in oil sands education with an interpretive visit to the world-famous *Oil Sands Discovery Centre*. Teachers will be introduced to the programming delivered at the discovery Centre and will have time for self-exploration.

Hosts: **Oil Sands Discovery Centre**

12:00-1:00 Lunch



Introduction to Multiple Perspectives in the Oil Sands

There are many perspectives to consider in the oil sands region – some of these perspectives are more obvious than others, but all are equally important. Teachers will participate in an activity that will encourage discussion and thought about the groups who use the oil sands region.

Speaker: **Inside Education**

Environmental Perspectives of the Oil Sands

The environmental perspective is one of the many perspectives to cover when speaking about the oil sands. During this session, teachers will hear about how water, air, traditional land and the environment in general are considered when oil sands projects are planned.

Speakers: **Emilie Briggs**, Wood Buffalo Environmental Association, **Jeff Hughes**, Alberta Energy Regulator, **Eber Araujo**, Fort McKay Sustainability Department

Oil Sands Innovations

Innovation is key to successful development of natural resources in Alberta. During this session the group will hear about new and innovative ways that problems surrounding water, wildlife and fossil fuel transportation are being solved.

Speakers: **Vicki Lightbown**, Alberta Innovates, **Amit Saxena**, Devon Canada, **Sean Sanders**, University of Alberta

Effect of Wildfire in the Oil Sands

The oil sands surrounding Fort McMurray are nestled amongst a vast expanse of boreal forest. One of the key ecological drivers in boreal forests is wildfire. The group will hear about the importance of fire, considerations in oil sands development and operations, and about the interactions between human communities and this natural disturbance.

Speaker: **Jarret Whitbread and Paul St. John**, Government of Alberta, Wildfire

Bus to Birch Mountain Lodge

6:00 pm *Supper at Birch Mountain Lodge*

Teachers will have the opportunity to explore life in an oil sands region camp through an orientation and free time in the facilities.

Friday June 2 – Oil Sands On-The-Ground

Themes of the Day – Exploring the Oil Sands; Oil Sands Mining; Indigenous Peoples and the Oil Sands

Breakfast served starting at 5am; and pack lunch for the day

8:30 am *Bus to Fort McKay*

Indigenous Peoples and the Oil Sands

Teachers will hear about the Fort McKay perspective of living in the oil sands region through a guided tour around the community. The group will have the opportunity to speak with members of the community and visit the places they live and work.

Hosts: **Fort McKay First Nation**

Travel to Syncrude site



12:00-1:00 Lunch

Oil Sands Mining Tour

Participants will travel to Syncrude's Mildred Lake oil sands mine site. Included in the tour will be a tour of the active mining operation, upgrader, reclamation and bison area. Included in the discussion will be an overview of the mining process, as well as an opportunity to visit with a variety of individuals working at the mine site.

Hosts: **Syncrude Canada**

Return to Quality Hotel and Conference Centre, Fort McMurray

6:30pm Supper at Table 63

Saturday June 3 – Education and the Oil Sands

Themes of the Day – Oil Sands and Education

7:00-8:30 am Breakfast

8:45 am Bus to Westwood Community High School

Visit to Westwood Community High School

What is it like to live and learn in the oil sands region? Teachers will visit with fellow educators from the region to hear about how oil sands development and energy conversations have been incorporated into their lessons. The group will tour Westwood Community High School to explore the energy projects the school has implemented and to inspire ideas for incorporating environmental education at their school.

Speakers: **Johnny Dulku**, Westwood Community High School, **Green Scene**

Oil Sands and Energy Literacy Workshop

What can teachers do on Monday morning to share what they've learned with their students? Through a hands-on and collaborative workshop, teachers will begin synthesizing the vast information gained over the past 2 days, and discussing how energy (specifically oil sands) topics could be implemented in the class.

Workshop Host: **Inside Education**

Evaluation and Program Wrap-Up

Program End Time: 12:00pm

Travel to Airport

Inside Education would like to thank all of the speakers and tour hosts as well as the program partners who make this experience possible for teachers.



