Energize Youth Energy Symposium

Summary Report

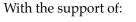
April 15-16, 2014 · Edmonton



Project Partners:











Program Overview

Energize Youth Energy Symposium - also known as "EYES on the Capital Region" was a twoday learning experience for high school students and teachers in Edmonton and surrounding area. It provided insights into the Capital Region's energy future - notably related to alternative and renewable energy, and provided an opportunity for young people to participate in a world-class climate change conference - Zero2014. During the Energize Symposium, four schools from the City of Edmonton were joined by Leduc Composite High School in a series of presentations, tours, hands-on and interactive sessions that helped formulate ideas towards implementation of an action plan once students returned to school and beyond.

Program Participants



Schools from across the Capital Region were invited to attend - sending a team of up to 10 students and one teacher to represent their school. We were delighted with the enthusiastic interest on behalf of Edmonton Public Schools and the City of Leduc.

| ME LaZerte High School | Queen Elizabeth High School | Leduc Composit |
|------------------------|-----------------------------|-------------------|
| Vivian K. | Ben L. | Harrison C. |
| Jeffrey T. | Jordan T. | Julianne S. |
| Jeremy T. | Tammy T. | Rebecca B. |
| Nathan F. | Nabila A. | Jessica M. |
| Thomas C. | Ms. Bernice Pui | Ms. Candace Acc |
| Zeinab J. | Harry Ainlay High School | J. Percy Page Hig |
| Alex M. | Christine R. | Sherry G. |
| Simon C. | Neha R. | Yvonne R. |
| Jessica G. | Dhari G. | Lee L. |
| Amanda C. | Rowayna S. | Asif S. |
| Mrs. Shelly Kofluk | Guanting L. | Jaylean G. |
| | Yiding Z. | Aditi P. |
| | Mr. Kevin Falcone | Mr. Keir Jenkins |

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Highlights - In Pictures

Energize (EYES) saw major learning experiences during formal presentations, tours of the NAIT Alternative Energy Lab, Landmark Homes NetZero house, hands-on solar lantern building and participation in the Zero2014 Conference.



Students touring NAIT with Dr. Jim Sandercock



Students in group activity on Taking Action



Students building solar lanterns to be sent to Africa



Students @ ZERO2014 Conference meeting Mayor Iveson

Program Plans

In follow up to the learning experiences over the two-day program, each school was asked to formulate a strategy to share what they had learned and affect change in their school, community, even City. The following is a summary of each school's commitment:

J. Percy Page High School

- Encourage teachers to use ETS instead of yellow buses for field trips;
- Ensure that all recycling material is disposed of properly involve custodians, teachers and fellow students
- Grow and diversify activities of "Page EcoManiacs"

Leduc Composite High School

- Build a living wall in our school like the one we saw at the Net Zero House
- Engage fellow students in a 'boycott' of single use plastic water bottles (even though they are recyclable)

Harry Ainlay High School

- Work with school administration on the installation of tap 'buttons' rather than sensor taps;
- Develop a 'Flash Mob' about water & energy;
- Apply for a BP A+ for Energy Grant in the hopes of installing solar panels on school roof.

Queen Elizabeth High School

- Focus on water efficiency in the school;
- Keep track of what happens to paper recycling in individual classrooms;
- Nominate our 'SLICE' group for an Emerald Award;
- Work with Centre for Global Education in video conferences on water and energy issues with schools across Alberta, Canada and North America

ME Lazerte High School

- Convert toilets in teacher's staff room to low flow, multiple-button toilets;
- Install solar panels on school;
- Develop a garden program for school;
- *Food for Foods* work with our Foods classes to grow food that will supply their class ingredients (no need for transportation energy consumption)















Taking Action

Students were also asked to provide advice to their community as to how they can take action - how to make change TODAY in the sustainability of Edmonton and Leduc.

Taking Action in My Community Ideas

- Don't litter & encourage others to do the same
- Use power bars and LED lighting whenever practical
- Educating ourselves, parents, friends about the environment
- Action NOW rather than later
- Develop and take care of community gardens
- Get involved in sustainability careers engineer, scientists
- Involve Community Leagues and leaders to promote sustainability
- City to provide rain barrels and composters to citizens

My Thoughts about Sustainable Transportation **Ideas**

- 'Car to Go' in Edmonton!!
- More widespread use of efficient/green trains (like Calgary C-Train). Bullet train to YYC?
- Electric cars are a nice idea, but in Alberta almost all our electricity comes from fossil fuels
 need additional alternatives
- Increase bicycle-friendly lanes (safer ones!)
- Urban design needs to better consider transportation why so many suburbs?
- How can we bring infrastructure and culture of using more mass transit to Alberta? Get people out of their cars & gas-guzzlers

Taking Action in My School Ideas

- Promote car pooling dedicated parking spots @ school
- Landscaping projects organizing schoolyard clean-up events to coincide
- Encourage the use of natural lighting
- Install motion detector lighting
- Spread awareness amongst students environment camps?
- Use real plates and cutlery instead of styrofoam or other disposables
- No plastic water bottles (ban from classrooms!)
- Install water bottle refill station
- Use compact fluorescent, or other energy efficient lighting

My Thoughts about Green Building **Ideas**

- Expensive but worth it in the long run
- Should become the standard so it's not seen as 'extra'
- Industries must work for higher standards and exceeding the building codes
- Create a system that makes it easier to change existing homes (rebates, etc.)
- Live close to work = greener lifestyle no matter what home; especially in-fill housing
- Should promote efficient interior design and architecture to reduce heat & water loss
- Why can't our homes be powerplants? (Net Zero or better?!)
- Incorporate living walls, roof gardens, etc.

My Thoughts about Renewable Energy

Ideas

- It's the future! The source is free and free from harm to planet
- Less GHG produced (except in building turbines/panels, etc.)
- Types: solar PV and thermal, wind, hydro, biomass (poop!), geothermal, tidal
- Expensive to build, less expensive maintain & cost per Watt is decreasing
- Need to present viable renewable alternatives to investors needs to be economic driver too!
- Storage of electricity a problem; geographical issues eg. how to get electricity from windy places to consumers?

Symposium Feedback

Thank you for creating the opportunity to attend EYES. I brought a group of four students and was impressed with the program you assembled. Right from the start my students felt like they were special and their ideas were valued. You created opportunities for students to apply their classroom learning to real-world scenarios.

Comments from my students included:

- "I feel more informed."
- "I feel like renewable energy is more accessible."

I look forward to being involved with future events. Many thanks! *Candace Acorn, Teacher, Leduc Composite High School*

I have had a wonderful conference these past two days, and I had the opportunity to see things and technology that I otherwise wouldn't have on my own. Before this symposium, I never paid any mind to net zero homes as using sustainable resources as power. But coming out of this conference, I realize that achieving a green future isn't as impossible as I thought and is probably very likely in my lifetime! Thanks again!

Ekran, J. Percy Page High School

I think that gathering the youth in Edmonton and Leduc and informing them/us on the impact of our current living style and how we are affecting the future and how to build a sustainable future is a good idea and I appreciate the effort you put in to have this symposium! *And we missed class!* I really enjoyed the program as it shed light on a lot of topics I was aware and not aware of. Being from Leduc, I was really glad that this program involved us too (thank you City of Leduc!) Thanks for involving us and I hope one day I can do something that will make a real change. *Jessica, Leduc Composite High School*

I've appreciated all the efforts you and countless others have put into this conference. I enjoyed the tour and the homes. When we went to the actual Zero2014 conference it took things to a whole new level. It was really good to put not only faces but various perspectives on alternative energy. I think a little more planning into our 'classroom' activities could be better, not to say this is bad, but I really want to be motivated and involved. I loved making the lamps!

Thanks again to Inside Education and the City of Edmonton for making this possible! *Aditi, J. Percy Page High School*

This was an awesome experience, thanks so much for having us. It was a wonderful opportunity to learn about energy in our Capital City. The chance to build the solar lights was fascinating and I enjoyed this so much!

Student, Harry Ainlay High School

I had a great day and a half. I learned a lot of new things about the environment and the little things I can do that will make an impact. It was very interesting to learn about all the new technology for renewable resources, which will be useful when I buy a house. It was all SO much fun! Student, Harry Ainlay High School

Program Evaluation and Next Steps

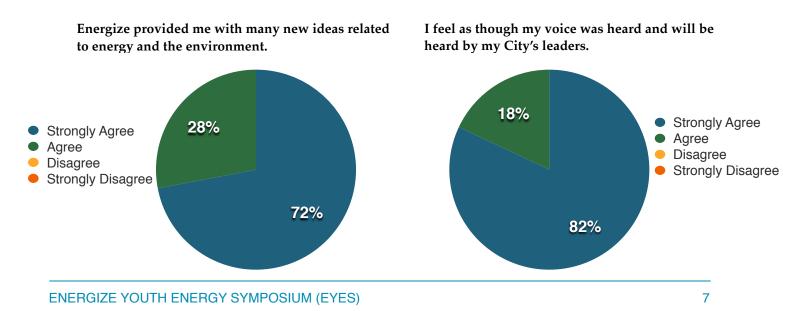
Inside Education is very pleased with the outcomes of the Energize Youth Energy Symposium. Bringing together young people from disparate backgrounds and from a variety of schools across the Capital Region - all of whom with an interest in, and passion for energy and the environment - made for a very robust learning experience.

In anecdotal feedback, and in the formal surveys completed, the students were extremely grateful to be valued as young adults, and to have a 'real' conference experience - particularly their inclusion in the Zero2014 Conference experience. The highlight, of course was the chance for several of the students to spend a few minutes meeting and speaking to Mayor Iveson (not to mention the "Selfie"!) and hearing from the Alberta Minister of Sustainable Resource Development, Hon. Robin Campbell.



The wide variety of experts excited to share their knowledge with the students. We believe there was an excellent balance of experts, and useful combination of presentation styles and hands-on, interactive tools.

Students further appreciated being asked their views on important issues facing the capital region and its sustainability. Through group activity, the use of 'clicker' technology and through facilitated discussion, students felt included in the process and felt their views were heard.



Next Steps

During the program proper, students were also asked to come up with a new 'brand' for this gathering. Several creative suggestions were compiled over the two-day program. These included:

- GOES: Gathering of Environmental Students
- CAEA: Celebrating Alternative Energy Awareness
- Greenovation
- RUN (Resilience United Nations/Navigation) Green

In our view the most creative, and the one that we recommend for future gatherings of Capital Region students on energy and sustainability issues:

The #YEG: Youth Energy Generation

In addition, Inside Education recommends a slight change of focus for our audience in 2016. This is the second event of this sort on which we have worked with the City of Edmonton (the first being Generate Edmonton in 2012). In both cases it was a struggle to attract the sort of interest we had hoped in Edmonton and area high schools. High schools are extremely busy places, and the demands on teachers and students for their time can be extraordinary.

In part for this reason, and also because we are not aware of similar efforts being targeted at this age level, we recommend that The #YEG: Youth Energy Generation Conference in 2016 be targeted at Capital Region **Junior High Schools** (Grades 7-9). We would look forward to the opportunity to discuss this in more detail as the time approaches.

The City of Edmonton and City of Leduc are to be commended for their dedication to, and appreciation of the views of young people in the Edmonton Region. Energize Youth Energy Symposium was an exemplary learning and life experience for all 35 students and teachers who attended. It can only be seen as a resounding success.



Tuesday, April 15

12:15 - 1:00 pm • Welcome Luncheon & Introductions

- 1:00 1:30 pm Intro to EYES
- 1:30 4:30 pm (including travel) Energy Innovations
 - Field trips to:
 - NAIT Renewable Energy Lab
 - Nicole Hannah, Jim Sandercock, NAIT
 - Landmark Homes NetZero House
 - Tara-Lynn Blum & David Cruz Garcia, Landmark Homes

4:45 – 6:00 pm Global Solar Energy in Action Keynote Presentation: **Steve O'Gorman, Star EcoWorks**

6:00 - 7:00 pm • Symposium Dinner

Wednesday, April 16

8:30 - 9:00 am • Breakfast

9:00 - 9:30 am

Activity - Where does our food come from? What is the energy footprint? (Activity from *One Simple Act*)

9:30 - 9:55 am Break + walk to Shaw Conference Centre

9:55 am - 1:00 pm • Zero 2014

- **9:55 10:30 am Mayor Don Iveson,** Keynote: *Municipal Sustainability Call to Action to Address the Climate and Energy Challenges Facing Cities*
- **10:45 11:45 Chris Turner,** Keynote: *The Leap: How to Survive and Thrive in the Sustainability Economy*





ENERGIZE: YOUTH ENERGY SYMPOSIUM

• **11:45– 1:00 pm Luncheon –** (Jeremy Rifkin & Hon. Robin Campbell, Minister of AB Environment and Sustainable Resource Development)

1:30 – 3:00 pm • Student Planning

Return to Hotel, final info pieces on topics that may have piqued interest:

- o Transportation/air quality
- Urban density/planning
- o Building efficiency
- Renewable energy/energy delivery

Modeling on the Citizen's Panel on Energy and Climate Change students will be asked to provide their input as to actions their community can/should take to reduce energy consumption and mitigate climate change.

3:00 - 4 pm • Evaluation and Bon Voyage!

