

Youth for Sustainability Leadership

Collaboration opportunities with **sustainable**
Peterborough



*Presentation by Cam Douglas to Sustainable Peterborough
Coordinating Committee December 6, 2016*

Who am I and why am I here?



- ▶ To tell you about a new educational project that supports the work of Sustainable Peterborough
- ▶ To explore with you the opportunities for youth collaboration with SP - to support the work of SP and to provide authentic community-based learning for the new program

OK ... no visitor presentation is complete until they ...

- ▶ Ask for money (if we can provide value-added service to SP)

Program Overview - Youth for Sustainability Leadership

Youth in Sustainability Leadership (YSL) is an innovative new educational program that prepares secondary students for leadership roles in pursuing sustainability at the local and global levels.

The 1 semester program is housed by Trent University and hosted by the Kawartha World Issues Center (KWIC) and is partnered with Fleming College.



School of Environmental &
Natural Resource Sciences
Frost Campus | Fleming College

Why a new program?

Many young people are acutely aware of the precarious state of our planet but lack understanding of the complexity of issues and solutions and have rarely been given the means and opportunity to take positive, meaningful action.

They do encounter some sustainability themes in their secondary curriculum but exposure is inconsistent and without significant weighting or focus.

We don't have any comprehensive environmental leadership programs for high school youth in Peterborough/Kawarthas. Our community, and our planet, cannot really afford to wait

- ▶ YSL responds to needs and opportunities associated with a commitment to sustainability – in general, and a transition to a low carbon future more specifically.
- ▶ Sustainability challenges are enormous, but “greening” economies present significant opportunities to those who are appropriately skilled.
- ▶ Indigenous perspectives on the Land will be central to educational programming.
- ▶ program focuses on creating understanding of challenges and developing a wide range of skills to find and implement solutions at the local and global level.
- ▶ Additional focus on examination of best practices - regionally and well beyond

Where does YSL fit into the larger education picture?

- ▶ UNESCO's *Global Action Plan on Education for Sustainable Development* (ESD) (2015) commits member nations to more directly address sustainability issues in their formal educational systems and to explore new approaches and share best practices.
- ▶ YSL is being launched as a pilot program (Sept 2017-Jan 2018) to explore the potential of a new innovative approach in engaging youth in ESD. Program success will be shared with KPR, PVNC and beyond.

Where does YSL fit into the larger education picture?

- ▶ ESD is not at this time a priority for the KPR Board, and as such they have not picked up the YSL program. The Catholic PVNC Board has shown some leadership but Cam is not certified to teach in this Board
- ▶ To get things started, YSL is being offered as an independent, Ministry of Ed. certified, participant-funded program.
- ▶ Cost: \$5000 for semester program; \$5000 for study tour. Bursaries will be sought within the community and outside
- ▶ Target: 15 students

Leadership - what skills do youth need to lead on sustainability in their communities?

- ▶ community mobilisation skills (facilitation, communication, collaboration, grant/proposal writing, social media etc)
- ▶ communication and organisational skills to access political “levers”
- ▶ approaches for innovation and social/green enterprise

Peterborough Kawartha Haliburton region leads in Sustainability

There are SO many positive sustainability initiatives underway in our midst. The UNESCO RCE initiative puts a spotlight on this. The YSL will tap into this expertise, wisdom and action.

As much as possible and that makes sound educational sense, YSL will be taught “in the community, by the community, for the community” (eg. promotion of local food production, energy efficiency sustainable transportation, green energy generation).

Peterborough Kawartha Haliburton region leads in Sustainability

YSL will regularly visit sustainability initiatives in the field (and host leaders in the classroom) and students will work directly within local government, non government and private sector orgs

The authentic learning opportunities that emerge from this approach should resonate with all types of learners, but importantly have the potential to re-engage youth who have struggled to find relevance in more abstract learning in traditional public education programming.

Academic Program

- ▶ target is grade 11, but grade 12 and “gap” year welcome
- ▶ teaching and learning organized around the “Integrated Curriculum” format, where students are together with their teacher(s) throughout the day.
- ▶ approach provides almost unlimited flexibility for movement between classroom, community and trip/travel settings and allows the class to take advantage of authentic community learning opportunities on short notice (conferences, presentations, workshops and other scenarios).
- ▶ Students will earn 4 OSSD credits during the semester
 - *Gr 12 World Issues; (big picture Environment, Economics, Politics, Human Rights)*
 - *Gr 12 Environment and Resource Management; (hands-on focus on sustainability)*
 - *Gr 11 English - Contemporary Aboriginal Voices; (Indigenous perspectives through literature; communication skill development)*
 - *Gr 11 (Green/Social) Entrepreneurship; (green economy; creative process; social enterprise; proposal writing)*

Kawartha Sustainability Youth Network

Students within YSL will take the leadership role of creating and facilitating a peer-based *Kawartha Sustainability Youth Network* (skill development and action-based) which will encourage and facilitate collaboration of youth across high schools in the Kawartha region.

In doing so, the impact of YSL will extend well past immediate program participants.

This network will be well-positioned to provide a youth voice into local sustainability initiatives

YSL Community Field Placement

Each students will be linked to a local non-governmental, governmental, or private sector organisation (“sustainability mentor”) to

- ▶ come to appreciate their host’s contributions to sustainability and associated geographic scale
- ▶ come to understand host’s challenges, broadly defined
- ▶ discover the required skill set of different actors in host organisation
- ▶ understand the host’s basic financial picture and their approach to grant proposal writing or business plan creation
- ▶ learn of their host’s relationship to other org’s in the community and outside
- ▶ apply a broad range of program skills to a culminating *Sustainability Innovation* project task.

Students will collectively create a community sustainability capacity map for the Peterborough Kawartha Region

Field Placement format

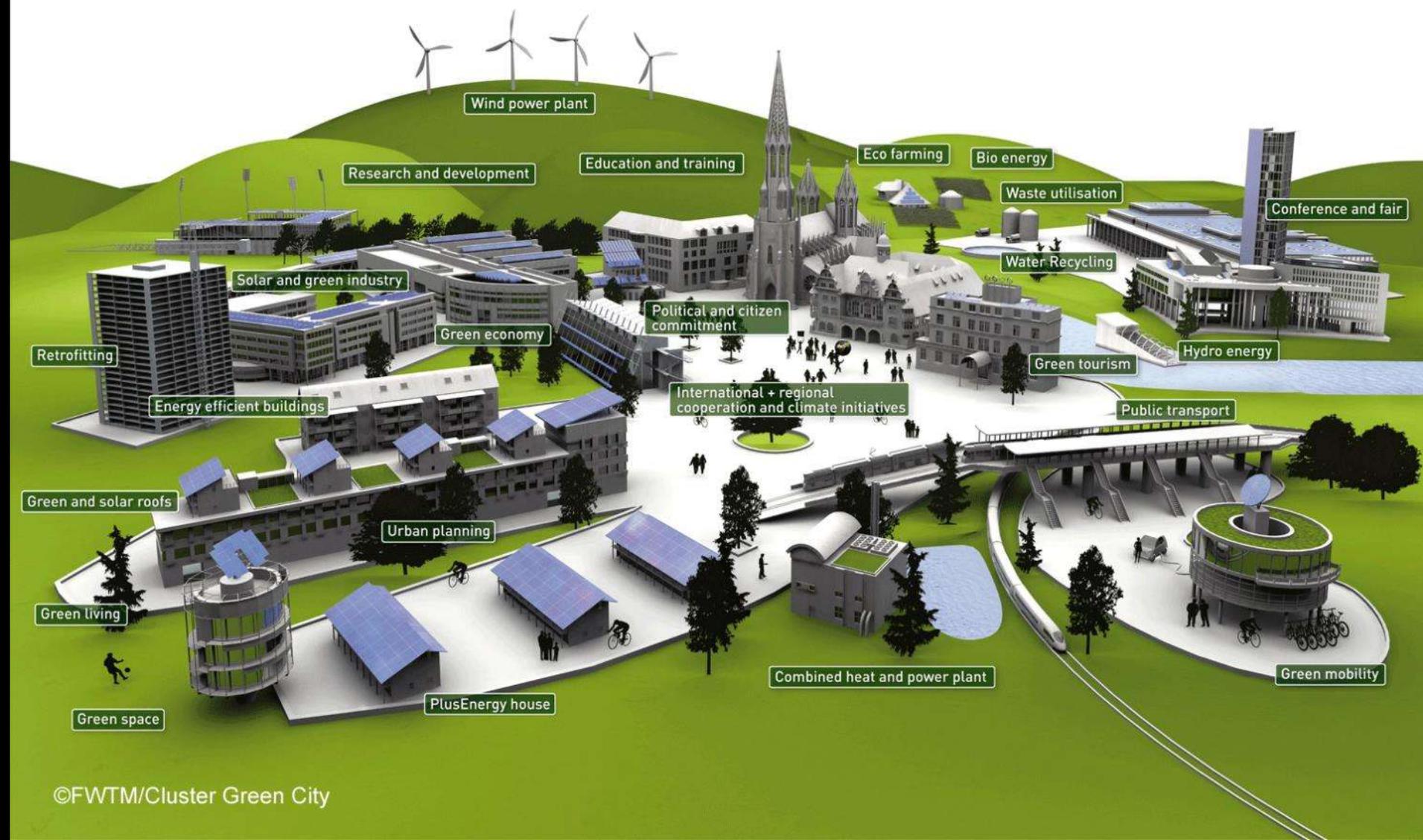
- ▶ be onsite for a half day every two weeks (at pre-set times). They would also be in touch via email, phone or other in between visits as necessary for task completion (see bullet below)
- ▶ sometimes have an assignment to be explored during the visit
- ▶ sometimes be available to help with specific host tasks
- ▶ commit to volunteer with host (a modest commitment will be established)
- ▶ share their final *Sustainability Innovation* project ideas with the host in a forum suitable to the host

Post Secondary Partners

- ▶ YSL to be physically based within Trent's School of Education, with links to the School of the Environment and (Canada's only) Indigenous Environment Studies Program. Fleming will provide YSL access to its School of Environmental and Natural Resource Sciences.
- ▶ University/college setting will provide YSL student access to a rich learning environment in general, and to staff, professors, facilities and events (workshops, conferences etc) more specifically.
- ▶ Trent and Fleming have agreed to a "dual credit" arrangement whereby YSL grads achieving 80% would receive Trent U's 1st year Environmental Studies credit and/or several Fleming 1st year courses (being determined)

Study Tour - Northern Europe

- ▶ Germany, the Netherlands, Denmark and northern Europe in general demonstrate inspired leadership in the development of sustainable transportation infrastructure, energy efficiency, deployment of renewable energy, sustainable city design and a commitment to fighting climate change in general.
- ▶ The Goal for the 3 week intensive tour is to expand students sense of "what is possible" through examination of (truly) best practices and to capitalize on generated inspiration upon return to Peterborough
- ▶ Direct interaction with local youth will be established
- ▶ Destinations:
 - Freiburg Germany





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 - Groningen, Holland

Highest cycling mode
share in the world: 51%





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 - Groningen, Holland
 - Samsø, Denmark



SAMSO: THE ENERGY SELF-SUFFICIENT ISLAND



The first island to become completely energy self-sufficient in 10 years?

11 ONSHORE WIND TURBINES

1 turbine generates enough electricity to power **630 houses**.

The turbines transmit electricity to the mainland when more electricity than the island can consume is generated.



OFFSHORE WIND TURBINES

10 103m high offshore wind turbines constructed in 2003 produce more energy than the island uses for transport

3 x STRAW FIRED PLANTS

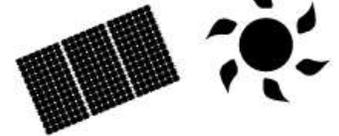
-  Tranebjerg
Heats **263** households
-  Ballen / Brundy
Heats **232** households
-  Onsbjerg
Heats **76** households

SAMSO: ISLAND FACTS

Area: 114 km²
Population: 4,000
Investment: DKK 368 million

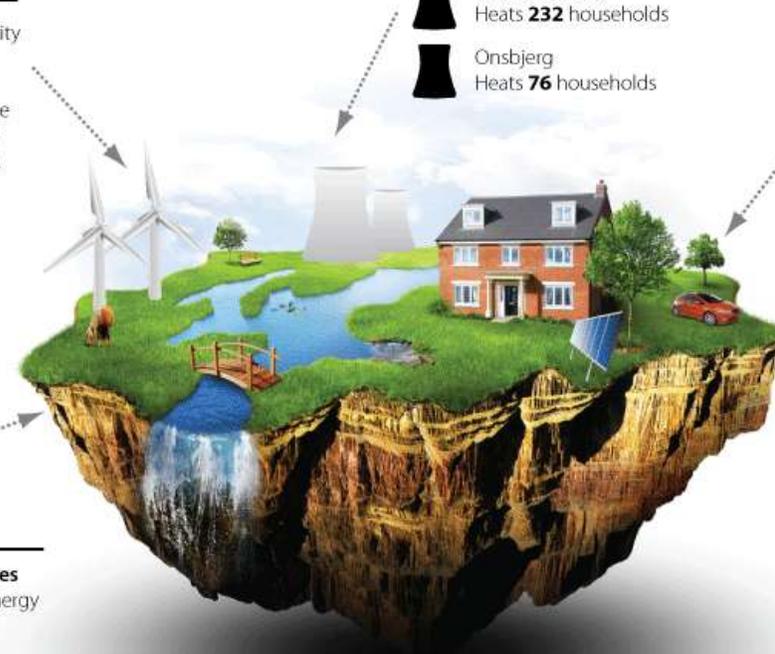
SOLAR PLANT

One of the heating plants receives heat from **2500 m²** of solar panels. This is combined with a **900 KW** wood chip fired boiler.



EXCESS ENERGY

Excess electricity produced from offshore wind farms is invested in new energy projects.



11 1MW onshore wind turbines generate 28,000 MWh, that's more electricity than the island's total consumption and the equivalent of 690,000 gallons of oil.

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 - Samsø, Denmark
 - Copenhagen, Denmark







Can we work together?

- ▶ Can YSL provide a point of contact for SP youth engagement?
- ▶ Are there some SP functions that might best be carried out by a committed, managed, and time/location flexible group of secondary students?
- ▶ Might SP be a good portal to link YSL students to “sustainability mentors” in local government, non gov. and private sector organisations?
- ▶ Would (modest) financial support of a program like YSL fit within SP budget priorities?

Thanks for making time for me today!