

# Ontario Engineering Competition 2013

## Engineering Complete Solutions

Environmental concerns have now been a large aspect of doing business in many parts of the world for a substantial period of time. Many companies include environmental preservation as part of their core values, and engineering education prominently features topics of protecting the environment and utilization of renewable resource planning.

As such, we are seeking an opportunity to allow students to demonstrate their prowess and capability for environmental design, but also to engage in engineering a more holistic and complete solution. This year at OEC our focus is to encourage our competitors to consider the social and economic challenges in addition to the environmental criteria.

Economic sustainability is an incredibly important portion of the project criteria. It is the crux of most if not all engineering projects, for if something is not economically viable, it is not really desirable to complete. While good social and environmental design are important, a product, process or service that does not provide a consistent or stable source of income will not support long term growth of an engineering practice. At the end of the day, the growth and development of the economy are required in the real world. Therefore, it is important to consider the economic ramifications of a project.

The need for good social design criteria arises from the consideration of cultures, values and goals that change from one society to the next. Oftentimes, when a blanket or standardized approach to problem-solving falls short on this aspect, it is to the detriment of all parties involved. The development and implementation of technology, methods or practices have a profound impact on a people. It can exacerbate or help to remedy situations of injustice, freedom and well-being.

Issues such as education, labour, wealth inequality, and the preservation of cultural or societal values need to be considered when considering the quality of a solution. It is therefore to the benefit of everyone to understand, accommodate and incorporate social considerations into designs or projects.

## Presenting Sponsor:



Hatch

## Sustaining Major Patrons:

The logo for Bereskin & Parr, featuring the company name in a blue, serif font above the words "INTELLECTUAL PROPERTY LAW" in a smaller, blue, sans-serif font.

**Bereskin & Parr**  
INTELLECTUAL PROPERTY LAW

Bereskin & Parr

The logo for Hydro One, featuring the word "hydro" in a black, lowercase, sans-serif font, followed by "one" in a red, lowercase, sans-serif font. To the right is a red stylized graphic of a hand or a flame.

hydro one

Partners in Powerful Communities

Hydro One

The logo for Ontario Power Generation, featuring the words "ONTARIO POWER" in a bold, black, sans-serif font above the word "GENERATION" in a bold, red, sans-serif font.

**ONTARIO POWER**  
**GENERATION**

OPG

**Major Patrons:**



McMaster Engineering



JNE Consulting



Suncor

**Patrons:**



Hammond Power Solutions

**Contributors:**



Alberici

**Donors:**



EXPS



AMEC