

THE ENERGY ROUNDTABLE

Sixth Annual National Energy Roundtable Conference – draft programme

Tuesday, June 9th, The Design Exchange, 234 Bay Street, Toronto

8:00 am Registration opens. Breakfast served

8:30 am Welcome remarks

8:35 am **National grid strategy**

Electricity provides a tremendous potential competitive advantage in a world focused on carbon reduction. Canada has abundant capacity to create and distribute electricity, but remains a patchwork of systems improvised over time with disparate outcomes. Provinces have each attempted to be self-sufficient and there is little interprovincial trade to take advantage of strengths and weaknesses, and no national strategy in this area of provincial jurisdiction. A unified national grid and electrification strategy that addresses transport, heating and cooling processes in buildings and the electrification of Canada's industrial, manufacturing and transport processes should be a priority. The panel will examine how a pan-Canadian electricity strategy is the basis for turning what is at times a vulnerability into a national competitive advantage.

9:20 am **Energy system optimization**

We live in an age of disruption where the evolution and integration of high tech solutions is creating rapidly growing markets for new products. As renewable energy and storage technologies become cheaper, increasing numbers of utility customers are installing them at their homes and businesses to cut power costs and meet environmental goals. Given this tension between legacy assets and disruptive technologies how do you ensure you the system at a whole provides value? Valuing assets and determining if they add value going forward is a complicated, but necessary process and central to saving rate payers money. The panel will examine what a holistic approach to energy system optimization looks like, including how can we optimize existing assets and determine what is missing to ensure meaningful transformation in the energy sector.

10:05 am Networking break

10:30 am **Morning keynote**

10:55 am **Battery storage**

As energy systems decarbonize, many see the current boom in natural gas generation as a "bridge" to a low-carbon future. Advancements in battery technology, however, could make that bridge shorter than anticipated. Grid scale storage projects are replacing multiple major power plants. While smaller in scale, the recent growth in utility-size storage has been outpaced by behind-the-meter installations, which grew more than 300% in 2018 alone. As storage becomes cheaper it holds promise not just as stationary sources of power, but mobile ones as well. EVs could provide an important source of power demand growth for generators and utilities, as well as opportunities to use the vehicles' batteries to meet grid needs. The panel will examine the advances required to meet our ambitions for energy storage.

11:40 am Fireside chat: Sustainable finance and energy transition

12:00 pm Networking luncheon and keynote address

1:15 pm Energy Ministers discussion

1:45 pm

New nuclear and its role in the energy mix

Energy demand is growing at a faster pace than ever before. Overlaid with climate change and recent UN reports that highlights the urgent and immediate need for deep decarbonization, what are the real solutions? Nuclear energy requires that commercial and academic organisations being at the cutting edge of technology, and translating ground-breaking R&D into products and services which can be deployed on nuclear sites. This includes small and advanced reactors, which have the potential to transform the nuclear sector in adding to the range of nuclear power options. This panel will examine nuclear energy's role in "the energy mix" and how the sector can achieve its potential.

2:30 pm

Industry 4.0: Operational Excellence by Scaling Data & Advanced Analytics

Energy companies are facing an unprecedented convergence of technological, social, and regulatory forces. As artificial intelligence, automation, Internet of Things, blockchain, and 5G become pervasive, their combined impact will reshape standard business architectures. The "outside-in" digital transformation of the past decade is giving way to the "inside-out" potential of data exploited with these exponential technologies. They are altering energy companies' operations. These technologies are also creating unprecedented levels of industry dislocation, with new entrants fundamentally changing the economics of the business. The panel will examine how energy companies can thrive by conceiving and offering compelling new customer and end-consumer experiences, advance operational efficiencies, launch new digital offerings and build innovation ecosystems.

3:15 pm

Reverse Pitch Sessions

This session is a juncture for entrepreneurs and startups to connect with local and multi-national organizations to discover how their energy technology solutions have the potential to solve real business problems.

4:30 pm

Close

5:30 pm

Cocktail