

Fifth Annual National Energy Roundtable Conference
Tuesday, June 4th, The Design Exchange, 234 Bay Street, Toronto

- MC **Jason Langrish**, President, The Energy Roundtable
- 8:00 am Registration opens. Light breakfast served
- 8:30 am Welcome remarks
- 8:35 am **Session 1: Accelerating energy transition**
- The conflicting nature between a continued increase in demand for energy and the global anticipation of a carbon constrained future requires that stakeholders in the energy sector revise their strategies for long-term growth and development. Natural gas is expanding to replace coal and diesel, as it serves as a reliable partner for renewable energy sources and for electrifying industrial processes and freight transport. As provinces push clean energy policies, they are also investigating how they can adapt heating, power generation, utility grids and business models for emerging resources. Nearly every province is taking regulatory or legislative action on grid modernization or utility business model reform, including on questions of advanced metering infrastructure, storage deployment, data access and revenue reforms. The panel will explore how regulatory approaches and business strategies are evolving as we seek to balance affordable energy security and sustainability.
- **Brian Bentz**, President & CEO, Alectra Utilities
 - **Susan Uthayakumar**, President, Schneider Electric Canada
 - **Steve Oldham**, Chief Executive Officer, Carbon Engineering
 - **Malini Giridhar**, Vice President, Business Development & Regulatory, Enbridge Gas
- Session chair: **tbc**
- 9:20 am Ministers discussion led by **Tom Clark**, Chair, Global Public Affairs
- 10:00 am Networking break
- 10:30 am Fireside chat with **Terry Young**, Vice President, Policy, Engagement & Innovation, Independent Electric System Operator (IESO).
- 11:00 am **Session 2: DERs and grid optimization – where are we?**
- Historically, we've had a pretty one-sided relationship with energy. We use energy from the grid, we pay the bill, and the cycle continues. 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. When applied to the energy sector, Blockchain can further enable DERs that allow people trade energy among themselves, seamlessly connecting producers with investors who are willing to pay upfront for the right to consume energy. Panelists will discuss the technical advances, business models and policy frameworks needed to contribute to a lasting transformation of the energy sector.
- **Gaëtan Caron**, President & CEO, NB Power
 - **Hari Suthan**, Chief Strategic Growth & Policy Officer, Opus One Solutions
 - **Additional speakers tbc**
- Session chair: **Jane Allen**, Senior Vice President, Strategy & Innovation, Hydro One
- 11:40 am **Session 3: Energy Storage: The Holy Grail of sustainable energy systems?**
- 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. California recently approved four battery projects that will mark the first time that multiple major power plants will be replaced with battery storage. While smaller in scale, the recent growth in utility-size batteries has been outpaced by behind-the-meter installations, which grew more than 300% in 2018 alone. As batteries become cheaper they hold promise not just as stationary sources of power, but mobile ones as well. Electric vehicles 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 that are crucial if we are to meet our ambition for energy storage.
- **John Carrington**, Chief Executive Officer, stem
 - **Curtis VanWalleghem**, Chief Executive Officer, Hydrostor
 - **Brett Galura**, Chief Technology Officer, Fluence Corporation (tbc)
- Session chair: **tbc**

- 12:20 pm Luncheon.
- 1:45 pm **Session 4: National electrification 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 its electricity story is one of feast coexisting with famine: 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 and manufacturing 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.
- **Speakers tbc**
- Session chair: **tbc**
- 2:30 pm Cyber security and critical infrastructure discussion
- 3:00 pm Networking break
- 3:20 pm **Session 5: Investing trends in power and utilities**
Evolving business models, portfolio rationalization and growth opportunities are driving competition in the North American power and utilities industry. Buyers are pursuing deals to bolt on growth opportunities and enhance their business models, while sellers are attracted to deals to shore up balance sheets, rationalize portfolios and monetize investments at attractive valuations. Within the sector, many component parts need investment ranging from upgrading legacy systems to building new capabilities. Investment in renewable, clean energy is increasing. Furthermore, new transmission lines are needed to connect areas rich in renewable energy resources to major load sites. There is also the infrastructure aspect behind the power, such as a natural gas fuel supply delivered through pipelines or liquefied natural gas terminals. The panel will examine investment trends in the power and utilities sectors.
- **Ken Locklin**, Director & Senior Portfolio Advisor, Impax Asset Management
 - **Additional speakers tbc**
- Session chair: **Jane Kearns**, Senior Advisor, MaRS Cleantech
- 4:00 pm **Session 6: Is data the new oil?**
Digital technologies are making energy systems more transparent and intelligent, triggering new business models and regulatory frameworks. Data collection and exchange are growing exponentially and competition for customers is shifting to the online channel where the Internet of Things promises new product and management options. Utilities now have competition from Tesla, Google and telecom companies. The pace of this change is partly due to rapid digitization and intelligent machines in our homes and buildings means there is more two-way flow of information. If energy systems are digitalizing, the evidence of this is even more apparent in how quickly our homes are going through rapid digitalization, playing out in the form of the connected home and removing the need for utility services. The panel will examine the convergence of data from electrification, transport and telecoms and discuss what it means for infrastructure planning.
- **Speakers tbc**
- Session chair: **tbc**
- 4:45 pm Close by **Jason Langrish**, President, The Energy Roundtable