

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. Breakfast served
- 8:30 am Welcome remarks
- 8:35 am **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. The panel will explore how strategies are evolving as we seek to balance affordable energy security and sustainability.
- **Susan Uthayakumar**, President, Schneider Electric Canada
 - **Steve Oldham**, Chief Executive Officer, Carbon Engineering
 - **Neetika Sathe**, Vice President, Advanced Planning, Alectra Utilities
 - **Malini Giridhar**, Vice President, Business Development & Regulatory, Enbridge Gas Inc.
- Session chair: **Thomas Timmins**, Partner, Gowling WLG
- 9:20 am Fireside chat on innovation and its role in the evolution of the electricity system: **Terry Young**, Vice President, Policy, Engagement and Innovation, Independent Electric System Operator (IESO) in conversation with **Bruce Lurie**, President, Ivey Foundation
- 9:45 am **Ministers Discussion: Hon. Greg Rickford**, Minister of Energy, Northern Development and Mines, Ontario and **Jonatan Julien**, Minister of Energy and Natural Resources, Quebec. Discussion led by veteran journalist **Tom Clark**, Chair, Global Public Affairs
- 10:30 am Networking break
- 11:00 am **A 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 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.
- **Francis Bradley**, COO & VP Public Affairs, Emerging Issues, Canadian Electricity Association
 - **Karen Hutt**, President & CEO, Nova Scotia Power
 - **JP Gladu**, President and CEO, Canadian Council for Aboriginal Business (CCAB)
 - **Kate Chisholm**, Senior Vice President, Chief Legal & Sustainability Officer, Capital Power
- Discussion led by: **Bruce Lurie**, President, Ivey Foundation
- 11:40 am **Where is the smart money going?**
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.
- **Geeta Sankappanavar**, Co-Founder and President of Grafton Asset Management
 - **Ken Locklin**, Director & Senior Portfolio Advisor, Impax Asset Management
 - **Jean Trudel**, Chief Investment Officer, Innergex
 - **Chris Jarratt**, Co-Founder and Vice Chair, Algonquin Power and Utilities Corp.
- Session chair: **Tom Rand**, Managing Partner, ArcTern Ventures

12:20 pm Networking luncheon. Fireside chat (at 1:00 pm) with **Ken Hartwick**, President & CEO, Ontario Power Generation. Discussion led by **Tom Clark**, Chair, Global Public Affairs

1:25 pm **The role of nuclear 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? Clean energy is a given but how do we get there? Is it renewables? Hydro? Nuclear? Hydrogen? Electrification of transportation? "Yes" is the answer. We need diversity in energy supply to meet our carbon reduction goals, while balancing the market demands of economic growth and human desire for quality of life. This panel will examine "the energy mix" from hydrogen to nuclear and how we can get there together.

- **Mark Lesinski**, CEO, Canadian Nuclear Laboratories
- **Richard Sexton**, President & CEO, Atomic Energy of Canada Ltd
- **Jennifer Rowe**, Senior Vice President, Corporate Affairs, Ontario Power Generation

Session chair: **John Gorman**, President & CEO, Canadian Nuclear Association

2:05 pm **DERs and grid optimization**

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 Thomas**, President & CEO, NB Power
- **Faisal Kazi**, President & CEO, Siemens Canada
- **Hari Suthan**, Chief Strategic Growth & Policy Officer, Opus One Solutions

Session chair: **Jane Allen**, Senior Vice President, Strategy & Innovation, Hydro One

2:45 pm Networking break

3:00 pm **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 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.

- **Mark Triplett**, Chief Operating Officer, stem
- **Gord Reynolds**, Chief Operating Officer, NRStor
- **Curtis VanWalleghem**, Chief Executive Officer, Hydrostor

Session chair: **Kathleen Kauth**, Director, Transactive Energy, Peak Power

3:40 pm **Data is 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 and energy companies now have competition from tech 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, this is even more apparent in how quickly our homes are evolving, 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.

- **John Villali**, Research Director, IDC Energy Insights
- **Farrukh Akram**, Enterprise Innovation Executive, Amazon Web Services
- **Nima Tabatabai**, International Markets Development Leader, KiWi Power Ltd.
- **Tomo Matesic**, President, Entegrus Transmission

Session chair: **Tonja Leach**, Executive Director, QUEST

4:30 pm Close by **Jason Langrish**, President, The Energy Roundtable

6:00-8:00 pm Cocktail reception at **The One Eighty**, 55 Bloor Street East, Floor 51, Manulife Centre