



November 22, 2017

Four New Articles by Canada's Energy Leaders ***Energy in Canada @ 150 and Beyond***

Greetings from the Energy Council of Canada.

You have likely noticed that one of the ways that the Energy Council is commemorating Canada's 150th anniversary is to post articles on Canada's energy future by our energy leaders on topics of their choice. Eight interesting articles have already been posted, on topics ranging from energy policy, digitalization, renewables and new energy technologies.

Four new articles have just been posted which broaden the coverage even further. Here are a few highlights.

Innovation and Energy Change by Bob Hanf, Vice Chair, World Energy Council North America Region; and Executive Vice President Stakeholder Relations and Regulatory Affairs, Emera, outlines Emera's evolution over the past one hundred and seventy-five years, and its current role in helping foster transformation through generation changes, electrification, and various specific projects and initiatives. A focus on smarter electricity systems and better storage are among Emera's efforts that are helping to bring about customer - and community - supporting energy change, while also fostering a culture of innovation in its operating areas.

Colin Andersen, Chair, Energy Council of Canada, in his article entitled *Energy Past ≠ Energy Future* argues that the past will be only a limited prologue to our energy future in a time when a "Grand Transition" is underway, driven by digitization, decarbonisation and decentralisation, and characterized by considerable disruption. Electricity, in particular, is poised for transformation after a relatively static first 100 years, and regulators will be challenged to move beyond today's siloed approaches. He closes with a call to ensure that eliminating energy poverty is a component of the change and innovation to come.

The disruption theme is also discussed in an article by two of the Energy Council's Young Energy Professionals, **Robyn Budd, KPMG, Senior Consultant, Global Infrastructure Advisory, KPMG and Ben Weir, Senior Policy Advisor, Renewables Policy Unit, Ontario Ministry of Energy**. *Mutually Assured Disruption: Change and Change alike in Canada's Electricity Sector*, describes an emerging trend of second-stage pushback of the disrupted against the disruptors in an attempt to reintroduce balance. Specific examples include net metered distribution, where debate continues over grid integration and valuation; and large-scale renewables, where regulators are looking for new ways to cover the costs of services such as capacity and reliability, which were previously inherent in the use of incumbent centralized generators. The authors express the hope that a more stable state will emerge from this mutually disruptive process, to the advantage of ratepayers and the grid.

Writing from the perspective of a large global energy company, **Arne Wohlschlegel, Vice President, Power & Gas, Siemens Canada** has written on *Energy Transition in Canada – A Chance to Come Together*. He calls for the embrace of a zero GHG emission goal for conventional power generation, based on a diversified portfolio and balanced approach. Canada is positioned to play a growing role both as energy supplier and in global climate efforts. Electricity decarbonisation alone will not, however, be sufficient to achieve our goals, making "sector coupling" essential. Digital technologies, such as 3D printing, additive manufacturing, and blockchain-

enabled microgrids, will also enhance efficiencies and create other new opportunities. Wohlschlegel closes with a call for collective vision, and decisive action and investment, in support of Canadian leadership in the energy transition.

I hope that you enjoy reading these interesting and thought-provoking articles.

Still Time in 2017 to Contribute an Article!

Please consider “putting pen to paper” to share your insights on elements of *Energy in Canada @ 150 and Beyond*. Guidelines for authors are available from the Ottawa Office.

Looking ahead, the final posting of new articles will occur in mid-December.

With many thanks to our growing list of authors,

Graham Campbell
President,
Energy Council of Canada