



Multiple Pathways to Clean Energy Canada's Western Provinces

REGINA | May 8-10, 2017

Hotel Saskatchewan, 2125 Victoria Avenue

Canada's four western provinces have strong resource-based economies contributing in a major way to their economic growth, employment, and support for social and health programs. Development of the region's diverse mix of fossil, hydro, uranium and renewable resources, together with aggressive conservation and energy efficiency programs, characterize the region's energy sector.

Clean energy has become a central policy goal as a pathway to both achieve provincial emissions reduction targets and to also diversify provincial economies and foster growth in green businesses, investment, and new types of jobs. Policy directions aim to green the generation mix, to enhance the region's electricity infrastructure, and to implement policies matched to each jurisdiction's policy preferences such as carbon pricing and regulation to reduce GHG emissions.

Manitoba's Clean Energy Strategy focuses on made-in-Manitoba solutions to harness water, wind, solar and biomass resources in ways necessary to help provide electricity to power homes, businesses and industries; energy to heat buildings; and fuel to drive vehicles. The strategy focuses on building new generation hydro; expanding transmission that improves electricity reliability and security; adding more wind power as economics allow; promoting geothermal, biomass and solar for heating needs; developing our bio-based fuels; and leading in new cutting edge electric transportation solutions.

Saskatchewan has announced a target to increase the share of electricity generation to 50% of the province's generation by 2030. The plan is to invest in a major expansion of wind power augmented by other renewables, such as solar, biomass, geothermal and hydro, to go along with the world-leading's Boundary Dam 3 coal-fired electricity generation and carbon capture project and more natural gas generation.

Alberta has developed a new strategy on climate change based on recommendations put forward by the Climate Change Advisory Panel. There are four key areas that the Alberta government has moved forward on:

- Phasing out emissions from coal-generated electricity and developing more renewable energy
- Implementing a new carbon price on greenhouse gas emissions
- A legislated oil sands emission limit
- Employing a new methane emission reduction plan.

British Columbia has committed to reduce emissions by 80% below 2007 levels by 2050. The province's new Climate Leadership Plan was announced in 2016. The plan identifies key areas where action can be taken today: natural gas; transportation; forestry and agriculture; industry and utilities; communities and built environment; and public sector leadership. Carbon pricing has been central to British Columbia's policy initiatives. The province was the first jurisdiction in North America to introduce a broad-based, revenue-neutral carbon tax.

Emerging Opportunities and Issues

To advance the dialogue on the emerging energy-related opportunities and issues related thereto, the Energy Council of Canada and its member organizations from the public and private sector across the region have developed a conference on the theme **Multiple Pathways to Clean Energy in Western Canada**. The goals of the conference are to profile the policies and initiatives underway, to learn and better understand the "lessons learned" and the issues in play, and to find promising solutions as a step to making further progress towards achieving each jurisdiction's goals.

Three broad topics will be covered, two pertaining to individual jurisdictions, and one involving an emerging regional opportunity.

1. Transformation of electricity generation

The diversity of the strategies and actions in each jurisdiction which are greening the generation mix will provide an excellent starting point for examining the progress to date, lessons learned, and the impacts to date of the transformations underway.

One interesting aspect will be how each jurisdiction is managing their increasingly-diverse generation fleet to match requirements in systems with a combination of centralized, distributed, base load and intermittent sources, and at the same time, to meet environmental and cost-effectiveness objectives.

2. Climate Policy

Each province has implemented climate policies matched to the characteristics of their energy sector and their policy design preferences. The range of GHG mitigation policies in place span the policy spectrum - carbon regulation and the flow of funds to technology development, major technology investment in carbon capture and storage, transformation of the electricity generation mix and sectoral implications, GHG limits on specific sectors, and carbon pricing and cap and trade regimes.

In parallel, policy initiatives have been implemented to address adaptation to the impacts of climate change. Examples of impacts are extreme weather events which are becoming more frequent and more severe, the interplay between energy and water use and availability, and the long-term implication of climate trends on energy from renewables and hydro.

Issues which will be discussed are the track record to date of emissions reductions, the impact on energy pricing, the interplay between provincial and national policies, the outlook for carbon policy in the future, and the impact and effectiveness of adaptation initiatives.

3. Regional collaboration to enhance the electricity grid

Western Canada has abundant fossil, uranium, hydro and renewable resources across the four provinces. To date, electricity generation, transmission, and distribution have been largely provincial matters coupled with north-south electricity trade with neighbouring jurisdictions in the northern United States.

Dialogue is underway on the idea of expanding electricity trade amongst the western provinces. A regional electricity transmission system would enable an increase in generation from hydropower, to more readily share generation from renewables across the region, to supply peak load in one jurisdiction in times of low demand in a neighbouring jurisdiction, and to increase supply diversity.

The opportunity agenda will be described and discussion will focus on developing the idea of a regional grid further, elements that need to be considered such as supply and demand synergies, costs, market control and regulation, and looking ahead, the critical path ahead.

On behalf of the event Planning Committee, we look forward to your participation on May 8, 9 and 10.

With our best regards,

Guy Bruce
Chair, Planning Committee

Bryan Kneller
Chair, Program Committee

Graham Campbell
President, Energy Council of Canada

May 8 Day One – Opening Reception

6:00 – 8:00 PM Energy Council of Canada: Welcome: Colin Andersen, Chair, Energy Council of Canada

Keynote Speaker: The Honourable Brad Wall, Premier of Saskatchewan *(invited)*

May 9 Day Two – Event Program

8:00 – 8:20 Registration & Networking Breakfast

8:20 – 8:30 Welcome and Update on World Energy Council Reports:
Graham Campbell, President, Energy Council of Canada

8:30 – 9:30 Energy Ministers' Panel

Session Chair: Deborah Yedlin, Business Columnist, Calgary Herald

9:30 – 10:30 Energy Transformation

Session Chair: Mike Marsh, President and CEO, SaskPower

10:30 – 10:45 Coffee and Networking

10:45 – 12:00 Climate Policy

Session Chair: Martha Hall Findlay, President and CEO, Canada West Foundation

12:00 – 1:15 Lunch

Keynote Address: Kim Rudd, Parliamentary Secretary to the Minister of Natural Resources

1:15 – 2:15 Regional Electricity Grid

Session Chair: Kelvin Shepherd, President and CEO, Manitoba Hydro

2:15 – 2:30 Coffee and Networking

2:30 – 3:15 Open Forum – New Learnings, Anything Overlooked, “Take Aways”

3:15 – 3:30 Closing insights, updates on upcoming Energy Council events
Colin Andersen, Chair, Energy Council of Canada

May 10 Day Three – Site Visit

8:00 – 5:00 Boundary Dam CCS Project, Courtesy of SaskPower

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