



### DECARBONIZATION - MARKET ACCESS - CLIMATE CHANGE

The context for this Energy Council event was that the next five years ahead of the energy sector in western Canada will be strongly impacted by many significant factors. Among these are delays in moving ahead with new infrastructure to access new export markets, the oil and gas supply bubble, and persistent low international oil prices. On the policy front, major changes in climate policy are being implemented, and aggressive targets have been set to transform the electricity generation mix in Alberta and Saskatchewan. Decisions are pending on BC's long-awaited first LNG project which will initiate a completely new energy sector in western Canada. On the national stage, Canada's approach to developing a climate plan has been announced, further to the global agreement reached at the December 2015 COP21 conference in Paris and the Vancouver Declaration following the First Ministers' Meeting there on March 6, 2016.

Organized under the theme of **Responding to Shifting Markets and Changing Policies**, the keynote speeches and sessions focused on three key topics: decarbonization, market access and climate change. Positive answers emerged for the two framing questions which set the context for the event:

- What's ahead for the resource-based economies in western Canada in the face of shifting markets and changing policies and how can the sector thrive, deliver economic and social benefits, and grow stronger in changing times?
- How do we continue to exploit western Canada's rich endowment of fossil and renewable resources and continue to grow a world-leading, resource based economy in sync with social, environmental and economic goals?

#### PROGRAM AT A GLANCE

May 10, 8:00AM to 3:15PM, Hyatt Regency, Imperial Ballroom 5/7/9	
Welcome from Energy Council of Canada	Colin Andersen Chair, Energy Council of Canada
Opening Keynote	Overview of Market Conditions, Outlook for the Near Term, Major Issues Facing the Industry Harold "Skip" York is the Vice President of Integrated Energy in Wood Mackenzie's America's Research Team responsible for cross-segment integration of petroleum market issues for North America. He is a frequent guest on news networks, such as Bloomberg and CNBC and contributes a blog on <a href="http://www.Forbes.com">www.Forbes.com</a> .
Session 1 DECARBONIZATION	Session Chair: Gianna Manes, President and Chief Executive Officer, ENMAX Corporation Panelists: • Bob Chow, Director, Transmission Integration, IESO • Robin Campbell, President and Chief Executive Officer, Coal Association of Canada • David Erickson, President and Chief Executive Officer, AES • Justin Riemer, Assistant Deputy Minister, Alberta Economic Development and Trade, Alberta
Session 2 MARKET ACCESS: CHANGING THE CONVERSATION	Session Chair: Claudia Cattaneo, Western Business Columnist, National Post Panelists: • Roxanna Benoit, Vice-President, Public and Government Affairs, Enbridge Inc. • Chris Bloomer, President and Chief Executive Officer, CEPA • Jim Ellis, President and Chief Executive Officer, AER • JP Gladu, President and Chief Executive Officer, CCAB
Luncheon Address	David Keane, President, BC LNG Alliance, brings considerable energy and LNG experience to the BC LNG Alliance, having worked globally in the energy sector for more than 35 years in over 15 countries.
Session 3 CLIMATE CHANGE	Session Chair: Linda Coady, Chief Sustainability Officer, Enbridge, Inc. Panelists: • Dave Collyer, Director and Energy Consultant, former CEO, CAPP • Jonathan Moser, Head, Environment & Public Affairs, LafargeHolcim Canada Inc. • Laurie Pushor, Deputy Minister, Ministry of the Economy, Saskatchewan
Closing and Update on Energy Council Program	Graham Campbell, President, Energy Council of Canada

The overall message from the dialogue was positive; constructive approaches and potential solutions are in the making in each of the three key topics.

## Mayor Nenshi's Opening Remarks



Colin Andersen, Mayor Nenshi, Graham Campbell, Brigitte Svarich

At the Opening Reception, Calgary's Mayor spoke proudly about the strong resilience of the city's energy sector to stressed market conditions, evidenced by the fact that the City had emerged stronger from similar economic downturns in the past. While the impact on jobs and investments is acute, the impact is blunted by the fact that the Calgary economy is now much more diverse than in the past. Mayor Nenshi asked the attendees to remember the many First Nations groups who occupied the land for thousands of years prior to the City's earliest beginnings and to respect their traditions and well-being now and in the future.

## Demand for Western Canada's Heavy Oil for Global Oil Markets

To set the stage, Harold "Skip" York, Vice President of Integrated Energy in Wood Mackenzie's Americas Research Team, shared his insights on the critical trends in energy markets in North America. Global energy demand is expected to quadruple by 2035 driven largely by the growth of Asian economies leading to a steadily growing demand for fossil fuels. The heavy oil produced in western Canada is an ideal source of supply to contribute to meeting this demand. One proviso of course is that new pipeline infrastructure needs to be available to access these expanding markets.

Mr. York foresees a gap between growing LNG demand and current supply projections starting early in the next decade. Filling this gap is the primary target for the several west coast LNG projects currently under consideration.

He sees an opportunity for Canada to meet the growth in global energy demand by acting now to create a supply chain from wellhead to wheels with an unprecedented reduction in its environmental footprint.



## Decarbonization

Transformations across western Canada's energy sector are underway, driven by emerging policies, by enhanced oil and gas extraction practices offering superior environmental performance, and by new environmental technologies. Taken together, these transformations will substantially change the energy sector's exploitation of western Canada's fossil and renewable resources, leading to a leaner, cleaner and more efficient sector overall.

The decarbonization panel chaired by Gianna Manes, President and CEO, ENMAX Corporation, addressed the issues and opportunities from four perspectives.

- Innovation in energy technologies, collaborative research amongst industry players, and an openness to change were the key elements to achieving environmentally responsible development of Alberta's fossil and renewable resources.
- It is essential to address and find solutions for the acute impacts from implementation of aggressive environmental policies on the people residing in resource-dependent communities.
- Making the transition from coal's 40% share of electricity generation to zero by 2030 and beyond will require significant growth in generation from natural gas and renewables. The AESO will be releasing their projections for the future generation mix shortly.
- There are useful observations from other jurisdictions' experiences in making major changes to the generation mix. Each jurisdiction will need to customize an approach that matches their particular energy situation and their policy preferences.



Gianna Manes

Gianna Manes' wrap-up comments started with the positive observation that there are significant emerging solution elements which include electricity-natural gas convergence, new generation and extraction technologies with superior environmental performance, and electricity storage. Second, each jurisdiction will have to find the optimum solution matched to the current and desired future configuration of its energy system, the resource opportunities at hand, and its policy preferences; there is clearly no "one size fits all" solution. Third, the challenges ahead are very significant; transforming the electricity mix in Alberta from the current 40% share to zero from coal is a major, long-term undertaking. And fourth, addressing the social impacts on the communities and people affected by the transformation must always be a high priority for governments.

### **Market Access: How to Change the Conversation**

Finding ways to make progress on creating new pipeline infrastructure to increase the flow of western Canada's production of oil and natural gas to new export markets is a central issue in the region and nationally. Recent difficulties have been encountered in earning public acceptance for major energy projects; the fate of proposed energy infrastructure projects remains uncertain.

This session focused on "how to change the conversation" with respect to earning public support; in essence, finding a way to make decisions on major energy infrastructure projects in the best overall interest of Canada.

Claudia Cattaneo, Western Business Columnist, National Post, and her panelists spoke about a number of positive developments which will improve the conversation.

- A frank observation that a centrally important factor in changing the conversation is a change in behavior, such as, building respectful relationships between the parties involved in the market access dialogue, objectively assessing performance, for example, via third party verification, and telling the story about how the transition to a lower carbon economy will be impacted by the project in question.
- Three of the key players have distinct roles to play: policy-makers, to set clear and consistent policy directions; the industry, to perform to achieve high standards of public safety, environmental protection and respectful engagement with people affected by their operations or projects; and regulators, to carefully consider the project's full cycle encompassing design, construction, operation, and monitoring. Stepped-up communication with all those affected during the project's full cycle is recommended.
- Many facts illustrate the pipeline industry's track record: close to 100% of product delivered, high levels of reliability and safety, and recent MOUs signed with local fire chiefs to ensure prompt and effective response if an incident does occur. It is important to get the message about this high standard of performance inserted into the ongoing dialogue around proposed pipeline projects.
- While the majority of First Nations communities are positive about resource development within their vicinity, there are strong interests and expectations around protection of the land, free access, and opportunities for employment, business development, and community benefits. The recent situation can't continue, calling for respectful dialogue at the earliest stages of project development.

In her closing remarks, Ms. Cattaneo was positive that progress is being made towards "getting to yes". The new political leadership federally and in Alberta has substantially changed the conversation in the direction of more inclusive engagement with all parties with interests in a project, concerted climate policy actions and international engagement that will hopefully lead to greater support for resource development, and, stepped-up federal-provincial dialogue as well. Second, in addition to political engagement, "getting to yes" will require all stakeholders - industry players, First Nations, ENGOs - to show leadership, understanding of others' views, and a degree of flexibility. Third, once thorough consultations and dialogue have been done, it is then time to make a decision; it



Claudia Cattaneo



is important to respect when “enough is enough”. And lastly, the progress on “getting to yes” is very fluid, requiring the full engagement and attention of all players, building on the recent positive momentum.

### Climate Change

The rapidly-evolving climate change policy file was discussed in detail by the third panel, chaired by Ms. Linda Coady, Chief Sustainability Officer, Enbridge Inc. The Session Chair and panelists discussed reactions to the latest policy directions from the perspectives of the three panelists: an experienced industry observer, a major energy user, and a senior official from the Saskatchewan government.



Linda Coady

- The recently-announced Alberta Climate Leadership Plan was seen as the product of an effective and expeditious collaboration between government, industry, and the ENGO community. The components of the Plan, a carbon price, sweeping changes to the electricity generation mix, a push for more generation from renewables and natural gas, and limitations on methane emissions, appear to fit together well. As the Plan is implemented, there will be winners and losers, particularly those that have operations that are high cost and carbon intensive. Taken together, the Plan will help those advocating for increased market access, since it signals that Alberta is taking climate change seriously.
- Energy intensive companies are looking for harmonized policies across jurisdictions as a means to minimize operational and overall compliance costs. Recent policy directions were endorsed, with a preference for a broad carbon tax and for allowances for trade-sensitive industries to preserve competitiveness.
- Saskatchewan has invested in technology solutions for climate change mitigation, primarily in a world-first project at a coal-fired power plant that incorporates carbon dioxide capture, use of the captured CO<sub>2</sub> to enhance production at a nearby oil field, and permanent storage of the excess in a deep geological formation. Saskatchewan supplies 22% of global uranium supply which is used in nuclear reactors offsetting emissions that would have been produced from other fuels.

Ms. Coady’s wrap-up comments provided an overall positive read on the consultation process and features of the Alberta Climate Leadership Plan and the end-use sector’s call for harmonized climate policy across Canada. In addition to mitigation policy, more attention should be given to adaptation policies directed to dealing with the impacts of climate change, such as the expected increase in frequency and severity of extreme weather events which put energy infrastructure at risk.

### Keynote Luncheon Address - David Keane, President, BC LNG Alliance

The topical example of an entirely new emerging LNG industry in Canada was profiled in the Luncheon Address by



David Keane

Mr. David Keane, President of the BC LNG Alliance. Speaking on behalf of the association’s 13 member companies, he underlined the major development opportunity for BC and Canada around the first projects for LNG facilities, shipping, upstream gas supply, and pipeline facilities to connect supply the supply basins northeast BC with gasification facilities on the west coast. The anticipated global LNG demand is concentrated in Asian markets, principally in Japan, South Korea, India and Taiwan. BC’s global-scale LNG projects are well-positioned to meet this demand. He pointed out that urban air quality is a primary driver for the growth in natural gas demand, through reducing the use of coal for electricity generation.

Positive factors favouring development of an LNG industry in BC are the leadership and support of the BC government, proximity to natural gas resources, robust environmental standards that will make it the “cleanest LNG in the world”, and the economic opportunities opening up for communities in the region through construction, environmental monitoring and operations of gasification facilities, pipelines and marine transportation. The LNG “Pathway to Success” is expected to yield significant growth in investment and family incomes, new jobs, and reduction in programs which currently provide community support.

### Who participated in the dialogue?

Energy Council events attract attendees from several energy sectors, and the Calgary event was no exception. Half of the 122 attendees represented energy companies and industry associations, and companies supporting the energy sector made up an additional 12%. The remaining came from government departments, regulators and electricity operators, media, consultants and academics.

### Dialogue with Members – May 9 and 10

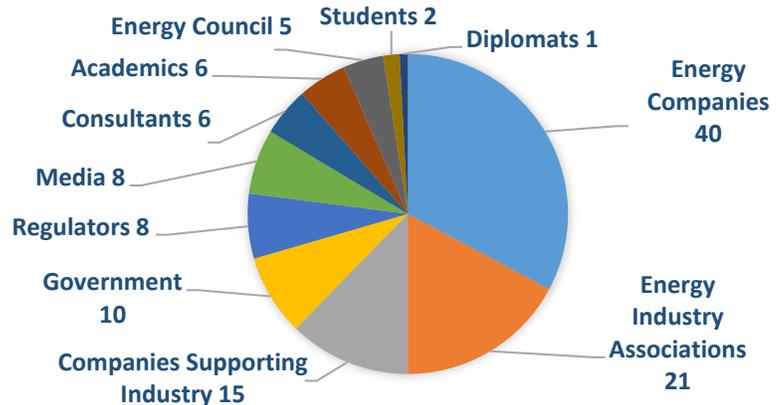
One action item under the Energy Council’s 2016 – 2018 Strategic Plan is to organize focused discussions with our Members on energy topics they identify in advance.

During the Members’ Roundtable following the Board of Directors’ meeting, Board Members discussed two recently released reports. The highlights of the Trottier Energy Futures Project, entitled *Canada’s Challenge & Opportunity: Transformations for major reductions in GHG emissions*, were presented by Dr. Oskar Sigvaldason. Eleven scenarios based on different technology pathways were analyzed for their impact on Canada’s emissions to 2015 and the corresponding marginal cost of implementation. The main findings of the CNEPRA report mentioned above were discussed, led by Dr. Jennifer Winter and Martha Hall-Findlay from the University of Calgary’s School of Public Policy.

One of the keynote speakers for the Calgary event was invited to meet with the Board Members over a private lunch. David Keane, President, BC LNG Alliance, presented an overview of the opportunities which will arise from development of a LNG sector on the west coast of BC. Discussion addressed the role that governments play in advancing energy projects and the status of dialogue with communities around the projects’ impacts on neighbouring communities.

The feedback from Members following these closed discussions has been very positive. We will be organizing similar opportunities for discussion as we plan future Board meetings and events.

### RESPONDING TO SHIFTING MARKETS AND CHANGING POLICIES CALGARY, MAY 9 & 10, 2016



Energy Council of Canada Team

Top Row: Graham Campbell, President, Bryan Kneller, Program Committee Chair, Colin Andersen, Chair  
Bottom Row: Brigitte Svarich, Director of Operations, Krystal Underhill, Coordinator of Events and Stakeholder relations

### Looking Ahead – Energy Council’s 2016 Program

This year’s event in Atlantic Canada will continue the Energy Council’s dialogue on climate change theme under the title – *A Regional Solution to Atlantic Canada’s Carbon Challenge*. The event will be hosted by Emera Inc. at their energy efficient head office building in Halifax.

Closing the 2016 program will be the highlight of the year, the award ceremony for the 2016 Canadian Energy Person of the Year. This annual event honours a person who has both demonstrated excellent corporate leadership in the energy sector and has also made a major contribution to the energy sector as a whole and also to the community. The 2016 recipient and the details on the award ceremony will be announced shortly.

### Appreciation to Our Sponsors and Supporters

The Energy Council of Canada is pleased to thank the sponsors and supporters for this event.

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Graham Campbell  
President, Energy Council of Canada