

Industry Agenda

Roundtable on the Changing Energy Landscape 2012

Calgary, Canada 15-16 November 2012

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Roundtable on the Changing Energy Landscape

Thursday 15 November

Issue Identification Dinner

- Major challenges for the industry are related to market access, obtaining a “license to operate”, limited skilled labour availability and high costs, as well as better engagement and communications with stakeholders.
- Sustainability of operations is key to the successful development of the industry; best possible use or the least possible impact on water, land and air must be the underlying assumption.
- Climate change is an important component of the sustainability discussion; carbon pricing should play a central role following the logic to turn carbon pricing from a liability to an asset for the industry.

Friday 16 November

Global Economic Outlook

- The pace of change and level of uncertainty in the global economy is increasing while at the same time there is a limited access to information for all.
- Global issues like the Eurozone crisis or the climate change challenge and ongoing socioeconomic shifts impact all countries and regions. Understanding and addressing those issues require multistakeholder discussion at the global level.



01: Naheed Nenshi, Mayor, The City of Calgary, Canada

02: Alison Redford, Premier of Alberta, Canada, and Bob Oliver, Chief Executive Officer, Pollution Probe, Canada

03: Ronald N. Mannix, Chairman, Coril Holdings, Canada

- Canada is getting more attention globally thanks to its stability, credibility, good governance and strong financial sector.
- Canada is short of a skilled labour force to increase its competitiveness and to close the productivity gap in comparison with the US and other alternative destinations for capital. At the same time, there is a significant pool of unemployed youth whose skills and educational background does not fit to needs of the economy.
- The energy sector globally and in Canada has a very positive long-term perspective; however, at the same time the energy industry faces challenges in the short run. It seems that the two perspectives are often disconnected in planning.

Conversation with the Mayor

- A high level of uncertainty and the increasing pace of change do not allow the industry to prepare for future scenarios; building resilient industries is key.
- In current circumstances, the likelihood of construction of the Northern Gateway pipelines seems to be very limited while it seems likely for the Keystone XL; the industry should work on alternative projects, possibly in eastern or even northern directions.
- A rarely known fact is that the oil & gas sector is responsible for one-fifth of investments in renewable energy in Canada; building on oil & gas revenue, the energy industry in Calgary should further expand in the alternative energy sector.
- Canada’s national energy programme is crucial for successful development of the industry, Calgary and the country.



Global Risk 2012: Managing Volatility

- The energy sector has faced discontinuous technological disruptions on the supply side. High volatility may be an innate characteristic of the sector; it is a matter of working with this volatility, rather than trying to reduce it.
- Energy price volatility in fact has not been so high except for the recent time period (2008-2011); the real risk is the public perception of the volatility, which is not always justified.
- In regards to public perception, the sector is generally slow to respond to new information whereas the public is reacting to the information in real time (e.g. social media). Information has instant global coverage, but the sector is still very regional and infrastructure is slow to adapt to new information. To overcome this limitation, the sector needs to:
 - Accelerate the implementation of technology
 - Develop better ways to pre-plan infrastructure to respond faster
- The public is much less concerned about the volatility of supply these days, which is one of the positive impacts that the sector provides; however, such achievements are not well recognized and shadowed by the negative perception.

New Frameworks

Fast-changing energy industry dynamics require new frameworks for the oil & gas sector. Participants shared some of the main concerns and challenges facing the industry:

- The sector is inadequately recognized by the public and institutions. For example, in the UN Secretary-General's five-year action agenda, the oil & gas aspect was not mentioned in the sustainable development framework discussion whereas climate change and renewable energy were highlighted numerous times.
- There is a talent shortage.
- Environment issues and public perception have become much more acute; the public is much more sophisticated and their expectations from the sector are changing.
- Economic challenges are more than just a risk-return issue; investment in community and local development through job training and local content requirements hold much higher importance.

Facing sectorial changes and the need of new frameworks, the discussion focused on the competitiveness of the energy sector in Canada:

- The cost of business in Calgary has been identified as one of the most critical challenges. Rough estimates for the capital expenditure for an oil sands plant was given as an example: the same US\$ 1 billion plant in Calgary can be built for US\$ 300-400 million in the US Gulf Coast, 10-20% lower than the US Gulf Coast in the Middle East or South-East Asia.



02



03

- High labour cost was mentioned as another challenge of doing business in Calgary where wages are 4-5 times higher than in India and about 40% higher than the US Gulf Coast.
- Canada's brand value is recognized as a competitive advantage. Its non-financial aspects, such as stability and transparency, should be promoted more as they are a distinctive strength of the country.
- However, such brand power can easily be at risk as it is seen as a "protectionist" market. Canada should focus on the clarity of the rule, rather than protectionism, to be successful in the longer term.

01: Nicholas Gee, Senior Vice-President, Weatherford International, Switzerland, and Greg Stringham, Vice-President, Markets and Transportation, Canadian Association of Petroleum Producers, Canada

02: Ronald N. Mannix, Chairman, Coril Holdings, Canada, Lee Stein, Chairman and Founder, Prize Capital, USA and Peter Madden, President, Oil Sands, AMEC, Canada

03: Tony Meggs, Executive Vice-President, Talisman Energy, Canada



01

New Markets

- Getting access to new markets for Canadian oil & gas will be an important factor of Canadian economic success. However, serious challenges occur – the industry is missing a social “license to operate”, which is mainly related to environmental concerns. Moreover, society does not see the link between its well-being and the oil & gas industry.
- It seems that there is a plenty of misleading oil & gas-related information in the public domain. Thus, it is important to increase the level of people’s energy literacy. Moreover, a common language should be created to communicate among all stakeholder groups. Fundamentally, multistakeholder engagement is a prerequisite to gain a “license to operate”.
- Environmental concerns in the past have ultimately had a positive outcome of the industry operations, making it more sustainable and environmentally friendly. Today, an important part of the solution to address those concerns is the application of world class, state-of-the-art extraction technologies. Canada should become an example in this respect. This would facilitate obtaining “license to operate” domestically and abroad.
- Access to new export markets would obviously be beneficial for Canada. In parallel, extending the value chain in the domestic market could bring added value as well.
- Placing midstream facilities, such as having refineries in places other than in the Province of Alberta, would spread economic benefits among other non-producing provinces. However, refined products are more targeted for specific markets which would restrict Canada to a limited numbers of customers, whereas crude oil is a global commodity and can be easily redirected to other markets.
- It is a favourable time to develop LNG export facilities. While the US does not seem to be willing to export its production, British Columbia and Alberta could become a natural gas export window for North American gas. As there are several projects under development, it would be useful to coordinate in this respect to spread it over time and spread risk.
- Realizing export ambitions would require engagement of Canadian leading companies in global, multistakeholder dialogue in addition to national or provincial dialogue with communities.

Premier’s Closing Remarks

- The attitude of policy-makers towards the oil & gas industry and especially pipelines evolved over time. Today, there is more understanding that government is an important stakeholder and has its role to successfully realize the potential.
- There is need to honestly acknowledge mistakes from the past and to clear them in order to move forward. Whenever possible, realized projects should be used to show what successful and sustainable development looks like.
- Multistakeholder engagement of the industry, policy-makers and civil society on the environmental and First Nations side is a prerequisite.



01: Harrie Vredenburg, Director, Global Energy Executive MBA, Haskayne School of Business, University of Calgary, Canada, and John Kingston, Global Director of News, Platts, USA
02: Susannah Pierce, Vice-President Shell Canada Value Chain Integration, Royal Dutch Shell, Netherlands
03: Greg Stringham, Vice-President, Markets and Transportation, Canadian Association of Petroleum Producers, Canada
04: John Tilton, Professor, Colorado School of Mines, USA, and Ronald Denom, President, SNC-Lavalin International, Canada
05: Jean-Francois Poupeau, Executive Vice-President, Schlumberger, USA, and Paul Smyke, Senior Director, World Economic Forum USA



Session Description

Canada and the United States are at the frontier of technological development in the oil & gas sector, especially in relation to unconventional resources such as shale, tight oil & gas and oil sands. The proliferation of unconventional resources is having a huge transformative effect on the energy landscape in North America and the world.

The changing dynamics in the energy sector calls for new ways to think about the markets and business models. Now, with soaring oil & gas supplies emerging from Canada and the United States, but with limited markets within the region, the private sector, government and civil society need to find the right framework that will be of mutual long-term benefit to stakeholders. Also, given discrepancies in supply and demand, the stakeholders are seeking to develop new operational and technological strategies, risk identification and allocation, trading and marketing methods, and infrastructure investment plans.

The “New West Partnership”, an unprecedented and historic economic partnership between the provinces of British Columbia, Alberta and Saskatchewan, highlights the opportunities and benefits of cooperation in the region. This transformative partnership represents a combined gross domestic product of more than US\$ 500 billion. The Calgary roundtable discussion brings further expertise and strategic insights, and a neutral platform for dialogue and partnership, into the heart of the region.

The roundtable in Calgary convenes business leaders from oil & gas, oilfield services and engineering & construction industries, along with members of civil society and key policy-makers in a series of private and interactive discussions.

The outcomes from the roundtable will be discussed at the World Economic Forum Annual Meeting in Davos-Klosters in January 2013.



- 01:** Alison Redford, Premier of Alberta, Canada
- 02:** Matthew Harwood, Group Head of Strategy, Petrofac, United Kingdom, and Tim Marchant, Adjunct Professor, Haskayne School of Business, University of Calgary, Canada
- 03:** Thomas G. Searle, President, CH2M HILL Canada, CH2M HILL Companies, Canada, and Ric Sorbo, Senior Vice-President and General Manager, Hydrocarbons & Chemicals, SNC-Lavalin Group, Canada
- 04:** Alison Redford, Premier of Alberta, Canada, and Robert Greenhill, Managing Director and Chief Business Officer, World Economic Forum, Switzerland

Programme

Thursday 15 November

19.00 - 21.00

Calgary Petroleum Club, Viking Room

Issue Identification Dinner

A working dinner that serves to introduce participants to one another, as well as identify the key issues related to the Changing Energy Landscape.

Welcoming Remarks by

- **Ronald N. Mannix**, Chairman, Coril Holdings, Canada
- **Robert Greenhill**, Managing Director and Chief Business Officer, World Economic Forum, Switzerland

Friday 16 November

07.30 - 08.15

Calgary City Hall

Breakfast and Conversation with the Mayor

During this informal exchange, the issues identified from the last night's dinner will be shared with the mayor, along with the following topics:

- What is the policy mix that allows Calgary to be such a successful example of an economy built around an energy cluster?
- What are some of the best examples of the public and private sectors working together in this context?
- What are the remaining challenges that the mayor, civic leaders and stakeholders in the energy economy see in the years ahead?

Special Guest

- **Naheed Nenshi**, Mayor, The City of Calgary, Canada

08.15 - 09.00

Calgary City Hall

Global Economic Outlook

Informal discussion among participants on the global economic outlook that will impact the industry and the region.

Moderated by

- **Robert Greenhill**, Managing Director and Chief Business Officer, World Economic Forum, Switzerland

09.00 - 10.00

Calgary City Hall

Global Risk 2012: Managing Volatility

This session aims to stimulate strategic discussions about energy-related issues in the North American and global context. It also aspires to deepen the understanding of the interdependencies between energy issues, geopolitical and socioeconomic risks to facilitate further strategic conversations in the private and the public sector. The Forum's Risk Response Network will present key findings from a breakthrough study on global risks and the "extreme volatility in energy and agriculture prices", highlighting this risk's systemic nature in the global risk landscape.

Dimensions to be discussed:

- In the short to medium term, how would severe fluctuations in energy and agriculture prices impact industry at large? Do such concerns surface in your strategic discussions?
- In your opinion, what current global developments might be the main drivers underpinning extreme fluctuations in energy prices in the future?
- Is your industry well equipped for adapting to and recovering from adverse effects of potential severe energy price fluctuations in the future?

Moderated by

- **Robert Greenhill**, Managing Director and Chief Business Officer, World Economic Forum, Switzerland

10.00 - 10.15

Break

10.15 - 11.30
Calgary City Hall

New Frameworks

This session will bring together oil & gas, oilfield services and engineering & construction industries to identify the key factors that shape the industry. It aims to capture a deeper understanding of the interdependencies and how to foster resilience, given the fast-changing industry dynamics.

Dimensions to be discussed:

- What are the key factors shaping the global industry and affecting dynamics among the players, including the traditional oil& gas, oilfield service and engineering & construction companies?
- What are the right frameworks, roles and responsibilities from the perspectives of industry players, policy-makers and civil society to address the dynamic changes in the North America region?

Moderated by

- **Peter Madden**, President, Oil Sands, AMEC, Canada

Firestarters

- **Nicholas Gee**, Senior Vice-President, Formation Evaluation and Well Construction, Weatherford International, Switzerland
- **Matthew Harwood**, Group Head of Strategy, Petrofac, United Kingdom
- **Susannah Pierce**, Vice President Shell Canada Value Chain Integration, Royal Dutch Shell, Netherlands

11.30 - 12.45
Calgary City Hall

New Markets

A roundtable discussion on new markets for oil & gas produced in the region. This will include members of civil society, key policy-makers as well as business representatives. The objective of the session is to address questions from the perspective of relevant stakeholders.

Dimensions to be addressed:

- How can challenges related to unlocking the export potential of Canada's oil & gas be resolved?
- To solve these challenges, what responsibilities and roles should be taken on by private sector, federal and state governments and regulatory authorities?

Special Guest

- **Alison Redford**, Premier of Alberta, Canada

Firestarters

- **Dean Foreman**, Chief Economist, Talisman Energy, Canada
- **Bob Oliver**, Chief Executive Officer, Pollution Probe, Canada
- **Harrie Vredenburg**, Director Global Energy Exec MBA, Haskayne School of Business, University of Calgary, Canada

Moderated by

- **John Kingston**, Global Director of News, Platts, USA

12.45 - 13.15
Calgary City Hall

Closing Remarks

Special Guest

- **Alison Redford**, Premier of Alberta, Canada

13.15 - 14.00
Calgary City Hall

Wrap-up Lunch

List of Participants

Sincere thanks are extended to all participants to the Roundtable on the Changing Energy Landscape 2012.

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Special Guests

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Naheed Nenshi

Mayor of Calgary
Canada

Ken Hughes

Minister of Energy of Alberta
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