



This monthly report will look ahead to the upcoming 2015 Canadian Energy Person of the Year event on November 25. Also included are: the highlights from two Washington events in early October on energy supply and North American energy issues; and, the highlights from the WEC's Executive Committee meeting held in Addis Ababa in late October including the pre-COP statement by the World Energy Council.

Award Ceremony - Canadian Energy Person of the Year – November 25, Calgary

There is still time to register and consider sponsorship for this year's award ceremony for the 2015 Canadian Energy Person of the Year, to be held on November 25 at the Hyatt Regency Hotel in Calgary. This event is always a highlight of the Energy Council's annual program of events and activities.

The evening will honour the 2015 recipient, Mr. Michael Cleland. Speakers confirmed to date include Marie-José Nadeau, Chair, World Energy Council, Al Monaco, President and CEO, Enbridge Inc., and Mike Harcourt, a co-nominator who will present the award. Mike Cleland will deliver the annual recipient's address to close out the evening on the topic of critical factors which will influence the energy industry's future.

Please mark this event on your calendars and join energy colleagues from across Canada to celebrate with Mike Cleland and friends. Attractive sponsorship opportunities are available which provide an excellent opportunity to profile your company or organization. Details on registration and sponsorship opportunities are available at www.energy.ca.

Updates follow on the highlights from recent Energy Council events and activities.

World Energy Council – Statement Pre-COP 21

The World Energy Council's Executive Assembly met in Addis Ababa from October 26 to 29. One focal point was the finalization of a WEC statement to the UNFCCC to guide delegates to the upcoming UN Conference of the Parties in Paris. The text of the WEC Statement follows:

The World Energy Council's call to the 21st Conference of Parties

Urgent action requires solidarity beyond dogmatism

The World Energy Council, representing over 3000 organisations from governments, private and state companies, academia, NGOs and energy-related stakeholders, is calling for a clear pathway from Paris that will end the growing uncertainty that has cast a shadow over the energy sector for many decades. The energy community urgently needs:

- ***A clear carbon pricing scheme in line with the global objectives that will allow all to make efficient economic decisions.*** *Of all the measures currently being undertaken on the ground and discussed in Paris, this is the key priority. We call for determined pragmatism from all sides to deliver such a deal that enables significant on-going action beyond dogmatism.*
- ***Predictable policy and balanced regulatory frameworks*** *to unlock the needed investment to ensure affordable, reliable and sustainable energy. **Reducing policy risk is critical.***
- ***Crucial action at regional and national level.*** *Only the adoption of strong and balanced national energy policy frameworks can provide substantive progress. The addition of the Intended Nationally Determined Contributions track to the negotiations is an important step. However, translating the international*

objective to the national level for energy requires an Energy Trilemma approach, which balances the needs of energy security, environment and social agenda.

It is clear that we are not on a 2-degree Celsius track. Our Scenarios show that, with existing technologies, current policies and known rates of innovation, emissions will peak well above the levels required for a sustainable pathway. This will cause both cost and stress on the global economy that will have a significant impact for us all.

The increasing number of extreme weather events affect critical energy infrastructure today. The frequency of extreme weather events has quadrupled over the past 30 years and this trend and its effects will continue without decisive mitigation and adaptation measures. Our work shows that energy leaders in Asia, Africa and Americas are particularly concerned about the rising number of extreme weather events that are putting critical infrastructures at risk and threatening social and economic development.

A historic energy transition is needed. The energy sector is core to the solution and will be fundamental to the successful energy transition. To accelerate this transition requires meaningful engagement with the energy sector and greater dialogue between policy and business leaders to prioritise and bring to scale critical actions on the long road from Paris.

The global energy community will gather at the World Energy Congress in Istanbul in 2016 where we commit to embrace this new frontier. The World Energy Council calls on the Parties in Paris to agree on a clear, unambiguous and equitable climate framework and carbon pricing scheme to enable the energy sector to deliver the needed energy transition for the greatest benefit of all.

The Energy Council was represented at the Executive Assembly by Dr. Oskar Sigvaldason. His highlights follow:

- This was the largest and most comprehensive EA ever, with 700 people in attendance. The Government of Ethiopia and its Member Committee were outstanding hosts for the EA;
- Portugal was selected for hosting the EA in 2017;
- Appointment of the WEC Vice Chair for Middle East/ Gulf States, H.E. Dr. Matar Hamed Al Neyadi;
- WEC issued a statement (noted above) to the UNFCCC in advance of forthcoming COP 21 meeting in Paris; In response, Christiana Figueres, Executive Director, UNFCCC, responded with a very positive and supporting presentation (by video) welcoming WEC's position on the climate change agenda and WEC's supportive call for action.
- A special session was on the WEC's most recent report on managing resilience arising from increasing frequency of extreme weather events, a four-fold increase since 1980. The report was released in early October, entitled "World Energy Perspective: The Road to Resilience- Managing and Financing Extreme Weather Risks";
- An excellent round table discussion based on the recent "2015 World Energy Issues Monitor" publication. This report will be issued later this year. The North America region was represented by Dean Oskvig.
- An excellent update provided by Ged Davis on status of the Global Energy Scenarios work, which is currently being undertaken. Discussed whether and how there could be a substantive North



America contribution to this work with Barry Worthington, Executive Director, United States Energy Association.

- An invitation from the New Zealand Member Committee for participation in an Asia Pacific Energy Leader's Summit on March 16-17, 2016 in Wellington, New Zealand.

Dr. Sigvaldason's report from the Executive Assembly will be made available to Energy Council members.

Highlights of Two Energy Events in Washington - USEA 8th Annual Energy Supply Forum (October 7), North America Region Energy Forum (October 8)

The guiding theme for both events was: *how countries which have development of fossil fuel resources as a key component of their economies can contribute to achieving reductions in carbon emissions*. Both events were held at the National Press Club, hosted by the United States Energy Association in conjunction with the Mexican Energy Secretariat and the Energy Council of Canada.

These North American region events are of direct interest to our Members. They are a means to hear the latest developments from leaders in the energy sector and the policy community from the United States, Mexico and Canada, and to make connections with their counterparts from across North America

United States Energy Association 8th Annual Energy Supply Forum

The *USEA's 8th Annual Energy Supply Forum* on October 7 heard presentations by industry executives from the three countries on the latest developments and issues in energy supply. The focus was on how they are positioning their companies to tackle issues and implications of climate change. Speakers were from energy corporations in the US, Mexico and Canada. Canadian speakers in the Energy Supply Forum representing Energy Council members were: Gianna Manes, President and CEO, ENMAX; Steve Demers, Vice President, Wholesale Markets, Hydro Québec; and, Colin Andersen, Chair, Energy Council of Canada.

- Update from Mexico – Pablo Mulas del Pozo described the good progress being made on Mexico's aggressive reforms in both the electricity sector and the oil and gas sector.
- Giana Manes, ENMAX – Gave an excellent presentation on how a leading municipal electricity provider is evolving its electricity supply, distribution and end-use systems in an open market setting. Examples were the new natural gas fired Shepherd Energy Centre, major initiatives in energy efficiency and demand management, and the arrangements for supplying electric power to Calgary's C-Train system.
- Greg Guidry, Shell Upstream Americas – Made the case for natural gas as a dominant fuel for a climate-constrained energy market, saying that Shell is now producing more natural gas than oil, and pointed to adding CCS to natural gas-fired electricity generation in the near future.
- Fred Palmer, Peabody – Pointed out that coal is the world's fastest growing fuel, supported the need for regulation of emissions, advocated for policy parity between coal and renewables, and underlined the importance of keeping the cost effectiveness of coal-fired generation in mind when decisions are made about future generation capacity.
- Revis James, Electric Power Institute – Argued for operational flexibility and power exchange between neighbouring jurisdictions when planning the electricity system of the future.



- Pointed out that repeated cycling of centralized generation equipment in order to operate in a market with both intermittent and base load generators will shorten the equipment lifetimes.
- Guillermo Bravo, Abengoa – Providing updates on Abengoa’s international reputation as a leading supplier of electricity transmission equipment and services and their involvement in solar generation and combined cycle generation. Abengoa sees Canada as an important market, starting with construction of the Maritime Link transmission system connecting the Muskrat Falls project in Newfoundland and Labrador with markets in the Maritimes and beyond.
 - Juan Eibenschutz, Mexico’s National Commission of Nuclear Safety and Safeguards – Characterized nuclear energy as the only new source during the last 100 years, now supplying 11% of global electricity generation, with 76,000 MW under construction. Underlined that nuclear energy will remain a key component of global energy supply.
 - Steve Demers, Hydro Québec – Described Hydro Québec’s 40,000 MW of clean hydropower, corresponding to 45% of Canada’s hydropower capacity. He summarized the aggressive growth of hydropower capacity in Canada with projects in Newfoundland and Labrador, Québec, Manitoba, and British Columbia. Expecting that the US’ Clean Power Plan will lead to a growth in demand for hydropower from Canada, and that there may be an opportunity for increased trade with Ontario while some of ON’s nuclear capacity is off-line for refurbishment.
 - Colin Andersen, Energy Council of Canada – Described the big picture for electricity generation across Canada and then the transformation underway in Ontario which includes the implementation of the province’s off-coal policy and growth of generation from renewables and natural gas. Closed with a re-cap of Ontario’s energy policy initiatives and the lessons learned.
 - Francisco Barnes, World Energy Council, Mexico – Described Mexico’s Intended Nationally Determined Commitments and their commitment to securing an agreement at the COP 21 conference. Mexico is working jointly on energy policy and environmental policy in parallel and recognizes reductions in generation as a result of energy efficiency measures as clean electricity.
 - Wade Smith, American Electric Power – Described a novel technology for transmission towers and AEP’s recent report on *Powering Innovation for a Sustainable Future*.
 - Dena Wiggins, Natural Gas Supply Association – Provided an update on the growth of supply from shale gas resources and emerging LNG export projects.

World Energy Council North America Region Energy Forum

This year’s annual *North America Region Energy Forum* on October 8 featured sessions on: recent policy initiatives to address climate change mitigation and adaptation, the views of industry associations on climate policy directions, and recent developments in carbon capture, use and storage. Closing remarks looked ahead to the possible outcomes of the upcoming UNFCCC conference in Paris. Speakers from Canada in the North American Region Forum were Energy Council members Mike Marsh, President and CEO, SaskPower and Francis Bradley, Chief Operating Officer, Canadian Electricity Association; and also Lisa DeMarco, Senior Partner, Rizzo, Allan and DeMarco LLP.



- Marie-José Nadeau, Chair, World Energy Council – Described how WEC is preparing for the COP 21 Conference in Paris. Policy directions advocated by WEC are: the need for stable and clear policies; no one-size-fits-all approach to policy making; and, the importance of fostering greater dialogue between policy-makers and the business community. M. Nadeau listed the five key policy directions contained in the 2014 World Energy Trilemma: efficient technology transfer and elimination of tariffs on energy technologies; effective and efficient carbon pricing mechanisms; efficient funding mechanisms; remembering to focus on the demand side of the equation as well as the supply side; and, to continue to invest in R&D and innovation.
- Dean Oskvig, WEC Vice Chair, North America – Described the highlights and main recommendations in the recent WEC report entitled *The road to resilience – managing and financing extreme weather risks*.
- Lisa DeMarco, Zizzo, Allan, DeMarco LLP – Described the features of the Trans-Pacific Trade Partnership, recent developments in China on climate policy, the US Clean Power Plan, and recent provincial climate initiatives in BC and Alberta and their implications for emerging climate policy. One highlight was her observation that all emissions from the oil sands added up to the equivalent of the emissions from three coal-fired power plants in Georgia. Other issues which need to be considered are climate justice, third party review of reports of national emission reductions, phase out of fossil subsidies, the practical timing of reaching emission reduction targets, and sustaining the funding in the Green Climate Fund.
- Luis Finkel, American Petroleum Institute – Observed that most energy policy discussions at present are being viewed through the climate lens. Advocated for a broader perspective which includes the benefits as well as the impacts of using fossil fuels, including the possible positive impact of crude oil exports on trade figures, growth and retention of well-paying jobs, and keeping an eye on the emerging policy platforms as the 2016 US election approaches.
- Jim Burkhard, IHS – Sees the environmental movement as a “one-way street”, an example being that we will not see lead being put back into gasoline. This leads to a different future for energy, propelled by dramatic decreases in the cost of new renewables, and a strong focus on remedying environmental impacts and increasing emissions. Although the outlook for oil demand is uncertain, oil will continue to be a major component of energy economies for years to come.
- Francis Bradley, Canadian Electricity Association – Described the many hydropower projects across the country, saying that the electricity sector is the only energy sector that is actually reducing emissions. Foresees a decline in emissions from the transportation sector due to electrification and significant impacts on Canada from the US’ Clean Power Plan. Looking ahead to Paris, will be expecting an agreement that is simpler than those in the past featuring some mechanism to put a price on carbon, more effective regulatory regimes to shorten approval times for major projects, and in North America, greater cooperation around emission trading regimes and targeted support for promising breakthrough technologies.
- Richard McMahon, Edison Electric Institute – Have seen aggressive investments in transmission systems, highlighted by \$104 B USD in 2015, with increasing levels of investment in electricity distribution systems. Costs of utility scale solar are coming down dramatically, in the absence of any regulatory action. System operators are responding to consumers’ demands for electricity that is reliable, affordable and sustainable.
- Mike Marsh, SaskPower – Presented an informative video on SaskPower’s Boundary Dam Carbon Capture Project which has captured 400,000 tones of CO₂ since October 2014. SaskPower is

learning from the operation of the plant and is sharing this information with visitors from across the globe. Also described the Carbon Capture Test Facility at the Shand power plant, and the Aqistore deep saline reservoir storage project associated with the Boundary Dam plant. Decisions regarding refurbishment and installation of CCS technology will be considered later in 2016 and 2017.

- Jared Daniels, US Department of Energy – Underlined the importance of finding good technology solutions to address the environmental impacts of energy production and end-use. Over 10 Mt of CO₂ has been injected by experimental capture projects in the US.

Looking ahead, we look forward to seeing all Board members in Calgary at the Board of Directors Meeting on the afternoon of November 25. The Board will be considering the final versions of the Strategic Plan and the Communication Plan, together with decisions on implementation and resourcing of actions under the two plans.

I hope to see many more of you at the award ceremony for the 2015 Canadian Energy Person of the Year on the evening of November 25.

With best regards,

Graham Campbell

President

