It’s time to register now for three upcoming events this Fall.

The highlight of our 2017 year is the Canadian Energy Person of the Year award event honouring Mr. Al Monaco on November 16 in Toronto.

Preceding this event are the Energy Panel Breakfast on October 31, and the Members’ Roundtable on November 1, both featuring Christoph Frei, CEO and Executive Secretary of the World Energy Council. These three events will be an excellent wrap-up for the Energy Council’s busy 2017.

This report also provides highlights of two events in September - the 2017 North America Region Energy Forum, held in Santa Fe, Mexico on September 12, and the Future of Energy Conference on September 21 and 22 in Edmonton.

Just two quick reminders. Please complete the annual questionnaire for the World Energy Council’s 2017 Issues Monitor and consider contributing an article for the Energy Council’s Energy in Canada @ 150 series. Details on both are provided below.

2017 Canadian Energy Person of the Year Award Event, November 16, Toronto

Please join us at the award ceremony for the Canadian Energy Person of the Year at the InterContinental Toronto Centre. This is a “must attend” event that highlights energy leadership in Canada. You will join the Energy Council’s members and associates from across the energy sector, the recipient’s colleagues, family and friends, and past award recipients.

This year’s recipient is Mr. Al Monaco, President and Chief Executive Officer of Enbridge Inc. The award recognizes and profiles Mr. Monaco’s outstanding achievements and contributions to the energy sector and the community. Among these are:

- achievements during 30 years in leadership roles in the energy sector in both upstream oil and gas exploration and development, and energy delivery businesses;
- transforming Enbridge through a major acquisition, creating the largest energy infrastructure in North America;
- securing regulatory approval and completing numerous projects to increase capacity of Enbridge’s liquids pipeline system, expanding market access for Canadian producers;
- substantive engagement and insightful input into high-level dialogue on energy issues in Canada, including his recent messages about North America’s energy export opportunity, the imperative to earn and build public trust, and climate change;
- his dedicated contributions to national and local charitable organizations; and,
- his commitment to advancing sustainability in the energy sector, by ensuring that Enbridge’s decisions have the best possible impact on stakeholders, the environment, and communities.

So, please register now and extend an invitation to your colleagues and friends to join you.
I believe that your organization would benefit from supporting this event as a sponsor and we would appreciate your support.

Registration and sponsorship details are available on our website and by contacting Max Arsenault (max.arsenault@energy.ca, 613-232-8239 x 603).

A charitable donation will be made by the Energy Council of Canada to the charity chosen by Mr. Monaco – Pathways to Education.

Seventeen prominent Canadian energy leaders have received this award since 2001.

Individual registration is now open HERE.

**Energy Panel Breakfast, Toronto Global Forum, October 31, Fairmont Royal York, Toronto**

We are pleased to partner with the Toronto Global Forum again this year to present an Energy Panel Breakfast. This year’s theme is *What Can Energy Scenarios Tell Us About Global and Domestic Energy Futures?* This will be the opening event for Energy Day at the Toronto Global Forum.

The World Energy Council’s 2016 Scenarios, which depict trajectories for global energy trends in response to three climate models, will be presented. The global picture will be compared to the scenarios developed for the Province of Ontario in the *2017 Long-Term Energy Plan* (LTEP). The 2017 LTEP will incorporate the projected impacts of the policy provisions of the *Ontario Climate Change Action Plan*. Toronto’s climate change plan will fill out the picture from the perspective of Toronto Hydro, Canada’s largest municipal electricity utility. So, we will hear about energy futures from the global, provincial and municipal perspectives.

Presenting the World Energy Council’s 2016 scenarios will be Dr. Christoph Frei, Secretary-General and Chief Executive Officer of the World Energy Council.

A panel consisting of Dr. Frei and representatives of two Member organizations will compare and contrast the main message from the three perspectives:

- **Dr. Christoph Frei**, Secretary-General and Chief Executive, World Energy Council;
- **Peter Gregg**, Chief Executive Officer, Ontario Independent Electricity System Operator; and
- **Anthony Haines**, President and Chief Executive Officer, Toronto Hydro Corporation.

Registration is now open HERE.

Sponsorship opportunities are available for this event. Please contact Max Arsenault¹ for further information.

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¹ [max.arsenault@energy.ca](mailto:max.arsenault@energy.ca), 613 232 8239 ext. 603.
Members’ Roundtable, Discussion of Global and Provincial Energy Scenarios, November 1, Boardroom of the Ontario Independent Electricity Systems Operator, Toronto

One of the benefits of membership in the Energy Council of Canada is the opportunity to discuss important energy issues with peers during Members’ Roundtables. Each Roundtable is opened by the guest speakers, followed by an open facilitated discussion under Chatham House Rules.

The details and implications of the scenarios issued by the World Energy Council and the Government of Ontario will be the topic for the Members’ Roundtable on November 1. Dr. Christoph Frei has been invited to open the discussion, followed by highlights of the province’s 2017 Long-Term Energy Plan presented by Peter Gregg, President and CEO, Independent Electricity System Operator for Ontario, and comments on the energy policy aspects by Serge Imbrogno, Deputy Minister, Ontario Ministry of Energy.

An open discussion will follow, chaired by Colin Andersen, Chair, Energy Council of Canada.

We look forward to your participation in this Energy Council event, and to welcoming Christoph Frei, Peter Gregg, and Serge Imbrogno to this informative Members’ Roundtable. Please mark each of these events on your Outlook calendars now!

Highlights of Events in September 2017 – Outreach Activities

Colin Andersen and I were involved in several outreach activities in September.

For the North America Region Energy Forum in Santa Fe, Mexico, Colin Andersen was co-host for the session on Climate Change Policies with panelists Sergio Marchi, Canadian Electricity Association, Sheila Slocum Hollis, with Duane Morris LLP in Washington, and Rodolfo Lacy, with Mexico’s energy department.

Colin represented the Energy Council of Canada at the World Energy Leaders summit the following day and I participated as an observer.

Also in September, Colin attended the Ontario Energy Network Roundtable and delivered a luncheon address on September 28 at the Ontario Energy Board following an invitation from Rosemarie Leclair, the OEB’s Chair and CEO.

I participated in two events in September representing the Energy Council of Canada.

North America Region Energy Forum, September 12, Santa Fe, Mexico

The North America Region Energy Forum is organized jointly each year by the Mexican World Energy Council Secretariat, the United States Energy Association, and the Energy Council of Canada. Each year’s Forum is an opportunity for energy leaders to gather in a trilateral setting to discuss issues of interest to their countries and to identify ways to collaborate.

It was a great pleasure to work with Pablo Mulas del Pozo, head of Mexico’s World Energy Council Secretariat, and Barry Worthington and Kim Grover with the United States Energy Association to develop the program and arrange for co-hosts and speakers.

The timely theme for 2017 was Regional Collaboration on Climate, Clean Energies and Environmental Issues. Four topics were pursued in panel sessions:

- Medium and Long-Term Energy Scenarios for North America;
- Technologies for GHG Reduction;
- Climate Change Policies; and
- Energy Trade in North America.
I was very pleased with the excellent line-up of co-hosts and panelists from Canada who participated in the Forum, each of whom represents a Member organization of the Energy Council.

- **Bob Hanf**, Executive Vice President, Stakeholder Relations and Regulatory Affairs, Emera Inc., and North America Region Vice Chair, World Energy Council opened and closed the event.
- **Frank DesRosiers**, Assistant Deputy Minister, Innovation and Energy Technology, Natural Resources Canada;
- **Colin Andersen**, Chair, Energy Council of Canada;
- **Guy Bruce**, Vice President, Special Projects, SaskPower;
- **Siegfried Kiefer**, Chief Strategy Officer, ATCO Ltd. and Canadian Utilities Limited, and President, Canadian Utilities Limited;
- **Sergio Marchi**, President and CEO, Canadian Electricity Association;
- **Tom Scarinci**, Global R&D Leadership, Siemens Power and Gas Division; and,
- **Oskar Sigvaldason**, President, SCMS Global.

Here are a few highlights from the presentations and the discussion\(^2\). Starting from the status quo, energy is already a key North American benefit: 470 million consumers of energy, and $141 billion in energy trade. The United States and Canada are connected by some 35 major electricity transmission lines, most of which support two-way flows, and 70 oil and gas pipelines.

Session-by-session …

- The session on *Medium and Long-Term Energy Scenarios for North America* principally focused on reducing GHG emissions, showed strong similarities: continued reliance on fossil fuels for the foreseeable future, albeit with a declining share, replacing coal-fired generation with wind and solar, and widespread electrification of energy end-uses primarily focused on transportation, but also in industry and buildings.

  Most sobering was that none of the scenarios achieved the level of reductions needed to meet the declared 2°C target. What would be needed to do so beyond the scenario’s already-aggressive features? Major improvements in energy efficiency, reducing emissions in the freight sector by shifting off diesel to natural gas and biodiesel, even more wind and solar combined with widespread storage, and a significant increase in green public transport.

- There was much commonality heard about the most promising *Technologies for GHG Reduction*. A fully integrated, actively monitored and controlled electricity grid, linking transmission, distribution, electricity storage, and energy consumers topped the list. Efficient electrification, tapping into a combination of decentralized and centralized generation based on renewables, natural gas, and nuclear, and digitally connected and interactive management systems were other features. Carbon capture and storage technology was seen as promising, provided it can be made economic by offsetting technology costs with revenues from the sale of carbon. System instability was identified as one risk arising from too quickly adding intermittent distributed generation.

- Much greater diversity characterizes *Climate Change Policies*. Mexico set strong sustainability goals as part of broad and aggressive reforms of its energy sector; for example, Mexico’s target for annual energy efficiency improvements is 3.7%, twice the pace of improvements since 1990.

\(^2\) Also refer to the event report posted on *From the President’s Desk* at [www.energy.ca](http://www.energy.ca).
Canada’s provinces have a strong track record of experience from implementing a spectrum of climate policies: carbon pricing; emissions regulations; policy-driven greening of the generation mix; bilateral participation in a cap and trade regime; and, widespread energy conservation programs. Canada’s national policy has been announced in the *Pan-Canadian Framework for Clean Growth and Climate Change*. Three key themes characterize Canada’s climate policies: a stepped-up ambition to achieve targets, collaborative efforts between industry and government, and working closely with our North American partners, for example by further integrating energy systems.

In the United States, a change in policy direction has been marked by the announced intention to withdraw from the 2015 Paris Accord. Industry is taking extensive measures to reduce carbon emissions. Many climate programs, emissions trading programs, and clean energy investments by state governments are continuing, working independently or in regional clusters.

- There was uniform agreement on the many benefits and opportunities arising from *Energy Trade in North America*, channelled through private sector investments in infrastructure, close trilateral collaboration by the three governments, and many state-to-province initiatives. The mutual benefits are clear: good, middle class jobs, a stimulus for economic growth, helping to reduce energy costs for businesses and consumers, and collectively, advancing North American energy independence. Plus, trilateral energy trade is seen as a pathway to achieving environmental goals. Pillars that support trilateral energy trade are: reliability, affordability, building investor confidence, and digitalization.

- One very interesting trilateral development is that government leaders will be meeting soon to get started on developing a North American Energy Strategy.

- Also, talks are underway to have Mexico join Canada and the U.S. as a member of the North American Electric Reliability Corporation.

Canada will host the North America Region Energy Forum in 2018.

**Future of Energy Conference, University of Alberta, September 21 – 22, Edmonton, Alberta**

I participated as a panellist in the opening session of the *Future of Energy Conference* organized by the German Embassy and the University of Alberta’s *Future Energy Systems* program. The event was designed to bring together leading researchers from Germany and Canada, as well as the decision makers from federal and provincial governments and business representatives, to discuss current topics of mutual interest.

My panel focused on *Can we have a global energy transition strategy?* with panellists:

- **Dr. Larry Kostiuk**, Director, Future Energy Systems, University of Alberta
- **Coleen Volk**, Deputy Minister of Energy, Government of Alberta
- **Dr. Dan Wicklum**, CEO, Canadian Oil Sands Innovation Association (COSIA)

Some general conclusions were that:
• There would be strong merit in working towards a global energy transition strategy, but that the task is made difficult due to the diversity of policy directions across the globe;
• The transition is already happening, evidenced by transformation of the generation mix to a greater share from renewables and in the transportation sector;
• Innovation will play a key role in the energy transition, both for initiatives involving conventional and no-conventional resources and for advancing digitalization and business practices;
• The World Energy Council’s 2016 scenarios portray three possible pictures of energy futures, characterized by varying degrees of climate policy prescriptiveness, of reliance on market forces, and of international cooperation; and,
• The continuation of the energy transition already in North America will see a fully integrated and interconnected electricity grid, widespread electrification of end-use applications in the transportation, buildings and industrial sectors, and, increasing digitalization of energy systems.

The Future Energy Systems initiative at the University of Alberta develops the energy technologies of the near future, examines their integration into current infrastructure, and considers their social, economic, and environmental impacts.

Quick Reminders

Here are two quick reminders. Please consider following up on these and contact the Ottawa Office if you have any questions.

Invitation to Contribute to the World Energy Council’s 2017 Energy Issues Monitor

The WEC’s annual World Energy Issues Monitor reports on the survey responses from 1,200+ leading energy executives across the globe. The survey methodology is a global questionnaire which assesses their views under four broad headings:

- Macroeconomic Risks and Vulnerabilities;
- Energy Geopolitics and Regional Issues;
- Energy Policies and Business Environment; and,
- Energy Visions and Technology.

An additional issue in this year’s survey is Digitalization. Previous surveys have indicated that “It is now perceived be energy leaders globally to be an issue of both relatively high impact and uncertainty.”

Canadian energy leaders have contributed to the three most recent World Energy Issues Monitors, in 2014, 2015 and 2016. We are aiming to increase the number of respondents in 2017 so that the results reflect Canadian views as comprehensively as possible. Our goal for 2017 is to double the Canadian response rate.

We invite you to contribute to the 2017 survey by providing your input together with other Canadian energy leaders. The one-page multiple choice questionnaire is available HERE, along with definitions of the terminology. We anticipate that this should take approximately 15 minutes of your time to complete. All responses will be treated as anonymous and will be used solely for the purpose of the survey report.

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3 World Energy Issues Monitor 2017: Exposing the new realities
Please complete the questionnaire and return it to Max Arsenault before October 22, 2017.

Contribute to the Articles by Canada’s Energy Leaders – Commemorating Canada’s 150th Anniversary

You are invited to contribute an article to this series. Please contact the Ottawa office for the author’s guidelines.

Check out the Energy Council website under the Energy in Canada @ 150 and Beyond icon. Many thanks to the authors for their interesting and informative articles.

Stay tuned for the posting of the next batch of articles from energy leaders in the Energy Council’s commemoration of Canada’s 150th anniversary of Confederation.

With best regards,

Graham Campbell
President,
Energy Council of Canada
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<td>Global Regional Advisory Committee 2:00pm - 4:00pm</td>
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Energy Council of Canada
Conseil canadien de l’énergie