

Canadian Electricity Association (CEA) Pre-Budget 2017 Submission to the House of Commons Standing Committee on Finance

Contact:

Geoff Smith | Director, Government Relations t 613 688 2064 | c 613 852 9696 | smith@electricity.ca

Canadian Electricity Association 275 Slater Street, Suite 1500 Ottawa, Ontario K1P 5H9 www.electricity.ca

Executive Summary

Tomorrow's economy will be built on a solid foundation of clean, sustainable growth. Growth that will drive innovative new technologies, increase productivity, and create good jobs for Canadians.

Meeting Canada's ambitious climate change targets is as much an economic and financial challenge as it is an environmental one, particularly for resource-based economies such as ours. As we work to operationalize the Paris Agreement, and move from aspiration to action, Canada has a significant advantage in one crucial area: access to abundant sustainable and reliable power.

Today, some 82% of Canada's electricity is generated from non-emitting sources, making it one of the cleanest systems in the world. Furthermore, electricity leads all other domestic industrial sectors in the projected reduction of GHGs.

Recent and significant alignment between federal government policy objectives and the priorities of Canada's electricity sector provides a platform for success for both national environmental and economic objectives. Whether supporting innovation and building infrastructure that will power the Canadian economy, envisioning the pathways to a low-carbon future, or enabling the delivery of cleaner electricity to Indigenous, remote and northern communities, electricity plays an important and transformative role.

However, ensuring federal program and funding design and delivery addresses unique electricity sector challenges, such as gaps in the current system, is essential to achieving results.

Gaps in the Current System

The primary jurisdiction over electricity is provincial and most investment in electricity infrastructure and innovation is funded on a user-pay basis, passed on to ratepayers after approval by arm's-length provincial regulators.

This division of roles has meant that provincial regulators have tended to focus on immediate costs and needs in order to keep rates to the consumer as low as possible, linking them closely to existing or immediately foreseeable requirements. In practice, the result has been a 'ratepayer gap', essentially an overall reluctance by regulators to support experimental pilot projects, innovative technologies, renewable and/or green technologies and extension of service to areas without sufficient ratepayer critical mass such as Northern Canada. Yet, these are the very areas that are priorities for both federal and provincial governments. This focus on ratepayer capacity has created a gap that has repeatedly deferred investment from transformational electricity projects. Moreover, the gap stifles innovation.

In order for federal action in support of the electricity sector's central role in advancing Canada's clean growth agenda and key policy objectives to be effective, it is critical that existing barriers to crucial investments be addressed through policies, program designs and frameworks. Essentially, we must deliver federal support in a manner that overcomes the 'gaps'.

CEA's recommendations for Budget 2017 focus on areas where the federal government has responsibility for electricity policy that has the potential to enhance the electricity sector's capacity to help drive Canada's clean growth agenda.

Please note that recommendations II. and V. were included in our pre-2016 budget submission.

CEA Recommendations for Budget 2017:

- I. Provide first-class electricity to Indigenous, remote and northern communities;
- II. Power new innovative pathways to low-carbon growth through sustained federal leadership and support for clean energy infrastructure;
- III. Support transformational innovation in electricity through a national plan to increase electricity sector R&D;
- IV. Expand tax system support for electricity sector leadership in Canada's transition to a low-carbon economy;
- V. Enhance the protection of electricity Critical Infrastructure by increasing funding for Public Safety Canada's Canadian Cyber Incident Response Centre;
- VI. Increase electricity export opportunities through support for the integrated North American grid.

Recommendation 1: Provide first-class electricity to Indigenous, remote and northern communities.

Canada was founded on the principles of equality and opportunity. Yet many Indigenous, remote and northern communities in Canada still lack access to safe and reliable electricity.

In short, Canada suffers from significant "energy inequality" when it comes to our Indigenous, remote and northern communities. The lack of access to affordable electricity limits economic opportunities, stifles growth and prosperity, and shortchanges the quality of life of those Canadians. While the GHG emissions associated with diesel-generated electricity are modest, getting remote communities off diesel is a commitment that resonates with Canadians.

To date, the 'ratepayer gap', has resulted in an overall reluctance by regulators to support utility led initiatives that lack critical mass, or are uneconomic in nature, often experimental pilot projects, innovative technologies, renewable and/or green technologies that support an extension of electricity service to Canada's Indigenous, remote and northern communities.



CEA recommends sustained federal support for transformational investments to enable the electrification of Canada's Indigenous, remote and northern communities.

Recommendation 2: Power new innovative pathways to low-carbon growth through sustained federal leadership and support for clean energy infrastructure.

There is an enduring need for federal support for clean energy infrastructure projects that have significant potential to deliver a wide range of economic, environmental, and social benefits to Canadians. CEA was encouraged that Budget 2016 included numerous initiatives in support of these objectives.

CEA encourages the government to implement these initiatives in a manner that acknowledges the aforementioned "gaps", ensures support is open and accessible to all infrastructure developers in the electricity sector, and do not unduly inhibit competition in the market. Recent transformational electricity projects made possible by federal government support include:

- a) Northumberland Strait Power Cable Project (funded in 2015);
- b) Lower Churchill Projects (loan guarantee announced in 2011);
- c) BC Hydro Northwest Transmission Line (NTL) (funded in 2009);
- d) SaskPower Boundary Dam Integrated Carbon Capture and Storage Demonstration Project (funded in 2008);

Potential new projects could include expanding inter-regional grid connections, such as linking the Territories into the larger North American grid, the development of new lower-emitting generation capacity in regions and provinces that currently rely primarily on high emitting sources of electricity generation, and enabling infrastructure for major economic development projects seen as having benefits on a national scale.



CEA recommends the federal government maintain its leadership and support for clean energy infrastructure.

Recommendation 3 – Support transformational innovation in electricity through a national plan to increase electricity sector R&D.

If we are to find the next game-changing technology, Canada's electricity sector need a real-world 'sand box' in which technologies and innovations can be tested and refined. The current policy and regulatory environment in which Canadian utilities operate does not stimulate innovation or encourage risk related R&D investments. Provincial regulators are focused on maintaining low electricity rates or compelled to find cost savings through incentive based regulatory rate-making regimes.

By addressing existing regulatory and policy gaps, we can incentivize Canadian utilities to launch pilot projects and conduct technology trials that will help reduce emissions, increase efficiency and make Canada a leader in the high-margin knowledge-economy.

A national plan to increase electricity sector R&D should:

Offer direct funding to the most promising areas, such as:

- Carbon capture and storage;
- Grid integration of distributed energy resources;
- Grid scale storage;
- Grid integration of electric vehicles;
- Demand response;

- The optimization of asset use; and,
- Fault detection and mitigation.

Promote key partnerships by:

- Bringing federal and provincial government decision makers, electricity companies and innovative suppliers together for a strategic discussion regarding how the regulatory gap can be bridged;
- Integrating the Mission Innovation goals and aspirations into government programs and policies;
- Ensuring that the mandates of NSERC, SDTC, NRC and R&D divisions of NRCan have the electricity system and electrification as central to their research mandates.



CEA recommends the federal government work with Canada's electricity sector to develop a national plan to increase electricity sector innovation and R&D.

Recommendation 4 – Expand Tax System Support for Electricity Sector Leadership in Canada's Transition to a Low-Carbon Economy.

As Canada's proven, clean-energy solution, electricity is playing a central role, providing options and solutions for federal and provincial governments, as part of Canada's transition to a low-carbon economy. To date, electricity leads all domestic industrial sectors in the projected reduction of GHGs, having reduced emissions by nearly 30% since 2005, and the sector is likely to reduce emissions by an additional 30% by 2030.

To support the electricity sector's ongoing "heavy lifting" on GHG reductions, enhanced tax system support through Accelerated Capital Cost Allowance for all types of electricity infrastructure will enable electric utilities to retire aging assets, such as coal-fired generation facilities, and integrate new renewable technologies and enable transmission infrastructure, in a more cost-effective way that will lessen impacts on utility bottom lines and rates for customers.



CEA recommends that the federal government amend the *Income Tax Act* to enable the Accelerated Capital Cost Allowance for electricity infrastructure that supports Canada's transition to a low-carbon economy.

Recommendation 5 – Enhance the protection of electricity Critical Infrastructure by increasing funding for Public Safety Canada's Canadian Cyber Incident Response Centre (CCIRC).

The electricity sector is one of Canada's ten Critical Infrastructure sectors as identified by Public Safety Canada (PSC) who work closely with all levels of government in Canada as well as international partners and the private sector to protect physical and cyber assets essential to Canada's national security and economic prosperity.

In its role as Canada's Cyber Emergency Response Team (CERT), PSC's Canadian Cyber Incident Response Centre (CCIRC) plays an integral role in the preparedness, prevention and response to cyber events through the research, facilitation of information sharing and partnerships. Increasing CCIRC's capacity and capability would enhance its ability to support the protection of CI facilities from growing cyber threats, in a threat environment the electricity sector sees as accelerating and becoming increasingly complex.



CEA recommends that Budget 2017 increase funding for Public Safety Canada's Canadian Cyber Incident Response Centre (CCIRC).

Recommendation 6 – Increase electricity export opportunities through support for the integrated North American grid

Recently, there has been concern expressed regarding Canada's growing trade imbalance with the United States, and the increased competition from other countries for a healthy share in that prestigious market.

Canada's electricity trade with the U.S., however, has not followed this trend. Rather, Canada has seen its trade surplus in electricity grow over the past decade, with the country posting net electricity export revenues of approximately \$3 billion annually.

With environmental issues assuming increasing importance in the U.S., especially in light of the Obama Administration's Clean Power Plan (CPP), which mandates more stringent emissions standards for American power plants, and the ambitious 2016 North American Leaders Summit agreement to increase continental clean power generation to 50% by 2025, there is an opportunity for Canadian electricity exports to be significantly strengthened in the years ahead.

CEA has developed a roadmap to leverage our integrated continental electricity system, as a foundation to seize opportunities through expanded collaboration between Canada, the United States, and Mexico. The roadmap makes the following recommendations:

- 1. Increase trade in clean electricity and support electricity "trade missions" in the U.S.;
- 2. Promote the electrification of transportation;
- 3. Streamline permitting processes for cross-border transmission projects;
- 4. Pursue joint innovation and research and development projects:
- 5. Support clean electrification in remote and Indigenous communities;
- 6. Coordinate carbon pricing mechanisms;
- 7. Examine climate adaptation risks and practices;
- 8. Enhance electric grid security and reliability;
- 9. Collaborate on energy information;
- 10. Ensure meaningful consultation with industry.



CEA recommends that Budget 2017 support measures to increase electricity exports to the U.S. and to enhance continental collaboration on electricity.

Conclusion

The Canadian electricity sector is Canada's clean energy solution, and provides a strategic advantage over all but a few countries. To press this advantage, Canada needs to invest in tomorrow's energy systems today. We need to build a smarter, stronger and more responsive electricity system; we need to prepare for the impacts of climate change in a methodical way.

And it is far past time to bring affordable, reliable energy - and its many social and economic benefits - to every Canadian regardless of where they live.