

ICMA: Can you provide an overview of CER's role in regulating the electricity sector in Canada and how it balance between economic, environmental, and social priorities?

Darren Christe: The CER's mission is to regulate energy infrastructure in a way that prevents harm and ensures the safe, reliable, competitive, and environmentally sustainable delivery of energy to Canada and the world. We recognize and respect the inherent and constitutionally protected rights of First Nations, Inuit, and Métis. We provide energy information and analysis that informs and supports Canada's transition toward a net-zero future.

The CER's electricity mandate, as set out in the Canadian Energy Regulator Act, includes regulating the construction and operation of international Power Lines (IPLs) and designated interprovincial power lines, offshore renewable energy projects and offshore power lines, and electricity exports. The CER is also responsible for providing energy information to Canadians. The

authority to designate an interprovincial power line rests with the Governor-in-Council (GIC) and has never been exercised. Provinces regulate the development, conservation, and management of sites within a province for the generation and production of electrical energy. The CER Act also lays out the factors that must be considered when assessing an application, which include (but are not limited to) environmental, health, social, and economic effects; safety and security; and interests and concerns of, and effects on the rights of, indigenous peoples.

ICMA: How does CER coordinate with provincial and territorial regulators to harmonize electricity regulations across Canada?

Darren Christe: From a regulatory perspective, the CER has a limited role in harmonizing electricity regulations across Canada. However, it actively engages with provincial and territorial regulators, including through CAMPUT, an association representing Canada's energy and utility regulators.



ICMA: What mechanisms does CER use to ensure transparency and stakeholder engagement in electricity regulation?

Darren Christe: Engagement is one of the CER's four core responsibilities, encompassing a wide range of activities under its mandate. One key avenue for engagement is the CER Dialogue platform, where ongoing stakeholder consultations related to electricity regulation are taking place. Currently, the CER is seeking feedback on updating its Export and Import Regulatory Framework, including regulations that affect electricity trade.

Currently, the CER is seeking feedback on updating its Export and Import Regulatory Framework, including regulations that affect electricity trade

The CER is committed to ensuring fair, inclusive, transparent, and efficient hearings and making informed decisions. It adopts a cooperative and respectful approach, grounded in the recognition of the right to self-determination, to engage with indigenous peoples in all aspects of its regulatory oversight. Furthermore, the CER expects the companies it regulates to conduct their engagement activities in alignment with the principles of meaningful engagement.

To facilitate public participation - particularly by Indigenous Peoples and organizations - the CER administers a Participant Funding Program. Interested parties can explore various ways to participate in hearings through the CER's website or by contacting one of the process advisors. These advisors are available to assist participants throughout hearing processes and may also visit communities to provide information on the process.

ICMA: How does CER address emerging trends like the transition to renewable energy and the integration of clean technologies into the grid?

Darren Christe: The CER's mandate includes advising and reporting on energy matters. Canadians use CER energy information products and specialized expertise for knowledge, research, and decision-making. The CER publishes a variety of energy information publications covering fossil fuels, electricity, renewables, and other emerging energy sources, as well as key data and information on the facilities it regulates.

In June 2023, the CER published the latest in its series of long-term energy outlooks for Canada, Canada's Energy Future 2023. The report features scenarios exploring what achieving net-zero emissions by 2050 could look like. Key messages from that report include:

In our net-zero scenarios, the types of energy Canadians use change dramatically, including using a lot more electricity. By 2050, we project that electricity makes up around 40% of total end-use energy consumption in the net-zero scenarios, up from 17% in 2021. The electricity system, which decarbonizes by 2035 and achieves net-negative emissions thereafter, is the backbone of our net-zero scenarios. In both net-zero scenarios, electricity uses and generation more than double from 2021 to 2050, becoming the dominant energy source in the energy system.

A portfolio of emerging technologies plays a key role in our net-zero scenarios, especially to address more difficult-to-reduce emissions. In both net-zero scenarios, a portfolio of options plays important supporting roles, including carbon capture, utilization, and storage (CCUS), hydrogen, negative emission technologies, and nature-based solutions. By 2050, between 60 to 80 MT of CO2 are captured from various sectors using CCUS in the net-zero scenarios, which is about 9% of Canada's total GHG emissions in 2021. We project hydrogen use reaches around 8.5 MT by 2050 in the net-zero scenarios, or 12% of total energy use.

To facilitate public participation – particularly by Indigenous Peoples and organizations - the CER administers a Participant Funding Program

Canada's oil and natural gas industry significantly reduces its emissions in our net-zero scenarios and, while production declines, the pace of global climate action determines by how much. Reaching net-zero in our scenarios is driven by increasingly strong climate policies, in Canada and abroad.

ICMA: What do you identify as the key challenges currently facing Canada's power sector, particularly with respect to achieving net-zero emissions goals by 2050?

Darren Christe: A transition to a net-zero energy system changes the types of fuels, infrastructure, and technologies used to meet Canadians' energy needs, not the level or quality of energy services received.



In June 2023, the CER published the latest in its series of long-term energy outlooks for Canada, Canada's Energy Future 2023. The report features scenarios exploring what achieving net-zero emissions by 2050 could look like

Like any economic transformation, a move towards a net-zero future will create opportunities for some and present challenges to others. While our Canada's Energy Future 2023 report doesn't make recommendations on the social and economic aspects that need to be managed in this transition, it can be used by governments, businesses, and individuals to help plan for such a future. The analysis in this report, and any from the Energy Futures Series, is not a prediction of future outcomes; it is a projection of what might occur given a set of assumptions. For instance, if the pace of adoption of new climate initiatives is faster or slower than our assumptions in this report, actual production and emissions levels would likely differ from what is projected. Accurate outlooks face an enormous challenge, as there are many uncertainties surrounding something as complex as the energy system.

ICMA: What role does CER play in addressing the rising demand for electricity while ensuring affordability and reliability for Canadian consumers?

Darren Christe: The CER's role in Canada's electricity sector is relatively limited. Provincial and territorial governments, regulators, utilities, system operators, and market participants play a significant role in addressing challenges such as reliability. Additionally, federal departments like Natural Resources Canada and Environment and Climate Change Canada play a role in developing programs and policies that directly impact the sector.

ICMA: How does CER plan to evolve its regulatory framework to address the challenges decarbonization and climate change?

Darren Christe: Ensuring that we are prepared to regulate with excellence in a changing environment is a priority for the CER. We have identified "Preparing for the Energy Future" as a Strategic Priority in our recently developed 3-year Strategic Plan. This includes informing the energy transition by offering expertise and insights as the energy system moves toward a net-zero economy across Canada, as well as focusing on energy innovation, security, competitiveness, and safe, reliable energy transmission infrastructure that is resilient to the effects of climate change.

ICMA: What is CER's vision for Canada's electricity sector in the next decade, and how does it align with national energy strategies?

Darren Christe: The CER is a regulatory body that exercises the powers and performs the duties and functions conferred to it by the CER Act. The CER does not develop or set government policy, including federal climate policies. As Canada's federal energy regulator, we

The CER's role in Canada's electricity sector is relatively limited. Provincial and territorial governments, regulators, utilities, system operators, and market participants play a significant role in addressing challenges such as reliability

support Canada's emissions reduction ambitions in multiple ways. For example:

- We are collaborating with Natural Resources Canada to develop a regulatory framework for renewable energy projects and power lines in Canada's offshore areas.
- We are ensuring we are prepared to oversee the transportation of clean fuels like hydrogen by pipeline, should a facility be proposed within our jurisdiction.
- We provide energy information to Canadians through reports like our Energy Futures Series and Market Snapshots.

The Editorial Board thanks Mr. Darren Christe, Chief Economist, Canada Energy Regulator (CER) for sparing from his precious time to give exclusive interview for Chartered Management Accountant Journal.