CANADIAN ELECTRICITY ASSOCIATION

SUBMISSION TO THE HOUSE OF COMMONS STANDING COMMITTEE ON NORTHERN AND INDIGENOUS AFFAIRS FOR THE STUDY ON

NORTHERN INFRASTRUCTURE PROJECTS AND STRATEGIES

SUBMITTED BY HON. SERGIO MARCHI PRESIDENT AND CHIEF EXECUTIVE OFFICER OF CEA





INTRODUCTION

The Canadian Electricity Association (CEA) appreciates the opportunity to provide insight into the study of critical northern infrastructure projects and regional strategic infrastructure strategies. Founded in 1891, CEA represents a broad range of companies that generate, transmit, distribute, and market electricity to industrial, commercial, and residential customers across Canada. CEA member companies are committed to delivering reliable, affordable, and sustainable electricity to support the clean energy transition and advance Canada's international environmental commitments.

On June 20th and June 21st, an important gathering took place in the Yukon. For the 127-year-old Canadian Electricity Association (CEA), it was the first Board of Directors meeting in Canada's North. The meeting also came at an important juncture in Canadian history—one defined by the pursuit of reconciliation with Indigenous peoples and prosperity for all Canadians.

On the first day, CEA, together with two of our member companies that operate in the North — Yukon Energy and ATCO — hosted a symposium addressing the energy needs of the North, in Carcross, on the traditional territory of the peoples of Carcross / Tagish First Nation.

Despite this backdrop of promise and commitment, Canada's remote and northern communities suffer from a significant level of "energy inequality", where the cost of electricity in many communities is estimated to be over ten times higher than the Canadian average. This lack of access to affordable power has limited their economic potential and stifled the region's economic development and prosperity. It also impacts their social fabric.

Yet, within the challenge of addressing this inequality lies the opportunity for industry, Indigenous peoples, communities, and all levels of government to work in partnership to invest in clean energy, spur economic development, address environmental challenges, and power tomorrow's low-carbon economy.

That is why CEA brought leaders from industry, governments, Indigenous organizations, academia and other community leaders to Carcross for a symposium entitled, "Powering the Future: Partnering in Energy Development", to discuss the unique challenges and opportunities that exist in Canada's North and how we can all work together to build a cleaner, more prosperous future for all.

This report provides a high-level summary of the symposium. It also proposes a number of strategic recommendations for the federal government, that were drawn from the day's discourse. We encourage you to review the recommendations, as well as the various takeaways that are found throughout the report. We also invite you to follow-up with us on further ideas or questions you may have.

Together, we will find ways to address the unique challenges and opportunities facing Canada's North, and ensure no one is left behind in Canada's transition to a low-carbon future.

1. HIGH-LEVEL SEGMENT

The first segment of the symposium was centred on high-level discussions and remarks led by the Honourable Sandy Silver, Premier of Yukon; the Honourable Ranj Pillai, Minister of Energy, Mines, and Resources, Yukon; the Hon. Bob McLeod, Premier of the Northwest Territories; and Grand Chief Peter Johnston, Council of Yukon First Nations.

While the themes of discussion in the high-level segments were similar, the session also highlighted the key differences between the three northern territories and the many communities within them. As Dr. Michael Ross of the Yukon College later reminded participants, "once you've seen one northern community, you've seen one northern community." Each is different, and there is no single solution or approach that will work in every northern community.

The political and Indigenous leaders of Yukon and the Northwest Territories had the following key takeaways:

I. KEY TAKEAWAYS

High-Level Segment: Top 5 Strategic Takeaways

- Governments, industry and Indigenous communities continue to invest in renewable energy research, development and deployment projects, but there are significant challenges to overcome, including capital and operational costs.
- 2. While investments are made in renewable energy sources, diesel will continue to play a large role into the foreseeable future to meet demand.
- 3. Transmission interconnections with southern neighbours are crucial for further advancing local economic development and providing flexibility to meet demand for power.
- 4. Significant and concerted federal funding is needed to make transformative changes to the energy system and reduce greenhouse gas emissions.
- Partnership opportunities for Indigenous communities are increasingly available, but it remains a work-in-progress.

"Our Governments are fairly young, and so too our towns and cities — many of which lack adequate energy infrastructure.

Simply put, our day-to-day relationship with energy varies significantly compared to the rest of the country"

- Honourable Sandy Silver, Premier of Yukon

2. UNIQUE CHALLENGES AND OPPORTUNITIES FOR ENERGY DEVELOPMENT IN THE NORTH

Facilitated by CEA's Chief Operating Officer, Francis Bradley, this session discussed the unique challenges and opportunities facing energy development in the North. Panelists included Andrew Hall, President & CEO, Yukon Energy; Wayne Stensby, Managing Director, Electricity, ATCO; Jay Grewal, President & CEO, Northwest Territories Power Corporation; Bruno Pereira, President & CEO, Quilliq Energy Corporation; and Dr. Michael Ross, NSERC Industrial Research Chair in Northern Energy Innovation, Yukon Research Centre, Yukon College. The section below provides a brief synopsis of the remarks made by the panelists and the key takeaways.

I. KEY TAKEAWAYS

Unique Northern Challenges and Opportunities: 5 Strategic Takeaways

- 1. Federal government funding is key for addressing the infrastructure deficit.
- 2. Many northern communities are isolated and depend on diesel generation for meeting demand.
- 3. Isolated energy systems pose significant challenges, including system voltage and frequency regulation constraints, dependence on fossil-fuels, lack of economies of scale, and lack of access to cost-effective energy imports from an integrated North America grid.
- 4. There are opportunities for partnerships with Indigenous communities, federal government, and other independent power producers.
- 5. Integration of new technologies in the North is not as simple as "plug-n-play", thus, opportunities exist for further applied research and collaboration.

"Once you've seen one northern community, you've seen one northern community"

- Dr. Michael Ross, NSERC Industrial Research Chair in Northern Energy Innovation, Yukon Research Centre, Yukon College

3. INDIGENOUS DEVELOPMENT AND OWNERSHIP OF RENEWABLE ENERGY: WHERE WE'VE COME AND WHAT WE NEED MOVING FORWARD

Facilitated by ATCO's Jay Massie, Manager of Northern Operations, this session discussed in broad terms Indigenous economic development and ownership of renewable energy. Panelists included Chief Bruce Charlie, Vuntut Gwitchin Government; Peter Kirby, CEO, Taku River Tlingit Corporation; Kate Ballegooyen, Kluane First Nation; and Nelson Lepine, CEO, Carcross/Tagish Management Corporation. The section below provides a brief synopsis of the remarks made by the panelists and the key takeaways.

I. KEY TAKEAWAYS

Indigenous Development and Ownership of Renewable Energy: 5 Strategic Takeaways

- Self-government and independence in decision-making is an important factor in economic development and ownership of renewable energy projects by Indigenous communities.
- 2. Indigenous communities want meaningful local economic development opportunities through partnerships and collaboration with industry and government.
- 3. There are many examples of successful partnership arrangements, including the Vuntut Gwitchin Government Electricity Purchase Agreement with ATCO.
- 4. Indigenous communities can succeed independently in the renewable energy space, as in the community of Atlin, with the right support from government and industry partners.
- 5. Climate change is an important consideration in the drive for renewable energy in the North.

"Reckon-silly-ation equals status quo. Reconciliation should allow First Nations to determine their future and implement their own economic development projects"

- Peter Kirby, CEO, Taku River Tlingit Corporation

CONCLUSION

CEA is supportive of the federal government's clean growth agenda and stands ready to play its role in advancing northern energy development. However, as articulated by so many speakers at the symposium, sustained support from the federal government is critical to making transformational clean energy investments possible in Canada's North. The region is clearly 'unique', and thus requires a dedicated, custom-made solution.

As well, access to clean, safe and reliable electricity is a precursor for clean water, better education, improved health care, increased economic development, robust employment and, ultimately, a better quality of life for Northern Canadians.

Moreover, any electrification strategy must meaningfully incorporate the North, especially since the North finds itself at a disadvantage when it comes to energy. Indeed, it is the electrification of the North that holds the promise of helping to level the energy playing field and ensuring that no Canadian or region is left behind in the transition to a cleaner, more prosperous future.

In this regard, and drawing from the presentations and discussions at the symposium, CEA would make the following **5** recommendations to the Federal Government:

- 1. The Federal Government must support transformative renewable energy infrastructure projects in Canada's North in terms of financial capital, and research, development, and deployment.
 - Territorial governments, industry and Indigenous communities are continuing to invest in community-based and large-scale renewable infrastructure projects, but there are significant challenges to overcome. Access to capital must be improved, and technical barriers and operational constraints must be alleviated. The federal government has a major long-term role to play in financially supporting these infrastructure projects to ensure the North is not left behind in the transition to a low-carbon economy.
- 2. The Federal Government must work to accelerate research underway to find innovative efficiencies in diesel generation, while concurrently promoting non-diesel alternatives.
 - While investments are made in renewable energy sources, diesel will continue to play a
 significant role in the foreseeable future to meet energy demand in the North. Many northern
 communities have no option but to rely on diesel generation, including as a backup to
 renewables. Understanding these economic and technical constraints, the federal
 government should work to find efficiencies in diesel-fueled generation and promote greater
 energy efficiency programming, among other clean energy solutions, in addition to
 encouraging non-diesel alternatives.
- 3. The Federal Government should work to facilitate transmission interconnections between the North and the South in an effort to end its energy isolation.
 - The three northern territories have isolated electricity grids, and in many cases, the communities within these territories are further isolated from the main power grid. Transmission interconnections with neighbours south of 60 are crucial for further advancing local economic development and providing flexibility to meet demand for power. The territorial governments are investigating options to connect with southern neighbours and the federal government should help facilitate these potentially transformative projects.
- 4. The Federal Government must find and implement "flexible" funding mechanisms for the territorial governments to achieve their climate objectives and targets.
 - The territories are committed to reducing greenhouse gas emissions and moving to a clean

energy future. However, these governments need a "flexible" federal funding approach to make transformative changes to the energy systems and chart their own long-term path to energy sustainability in the region.

- 5. The Federal Government must continue to build new and dynamic partnerships with Indigenous communities, if those communities are to be economically prosperous and sustainable.
 - Indigenous communities are looking for partnerships that would lead to local economic development and a sustainable future for their people. Reconciliation efforts, including self- government, should allow Indigenous peoples to implement their own economic development projects and sustain their communities.

CEA looks forward to the government's response to these proposals, and we are keen to engage with them, in an effort to advance energy solutions for the North.