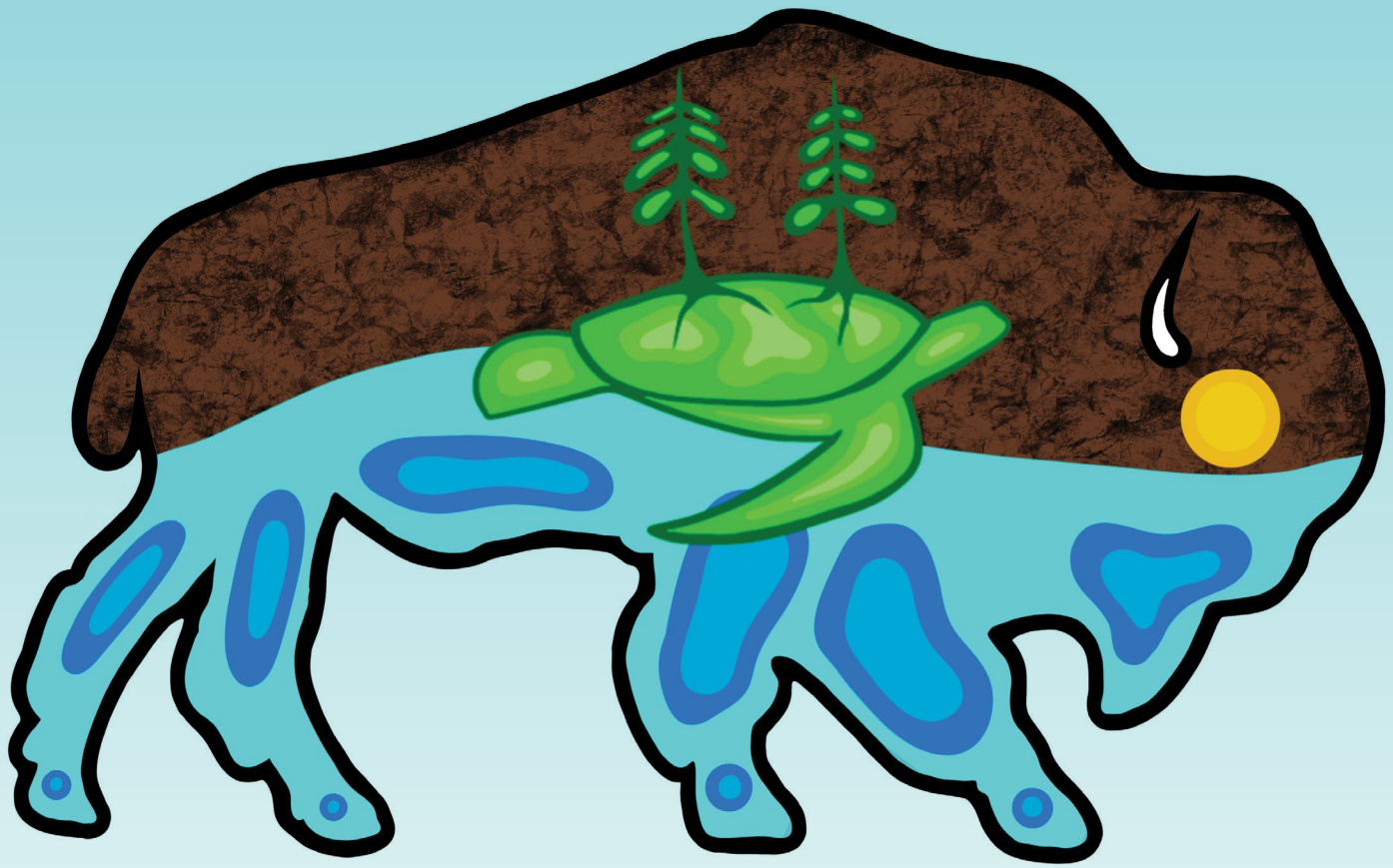
National Indigenous Electrification Strategy

Strategy to Accelerate Indigenous Ownership of Net Zero Infrastructure in Canada



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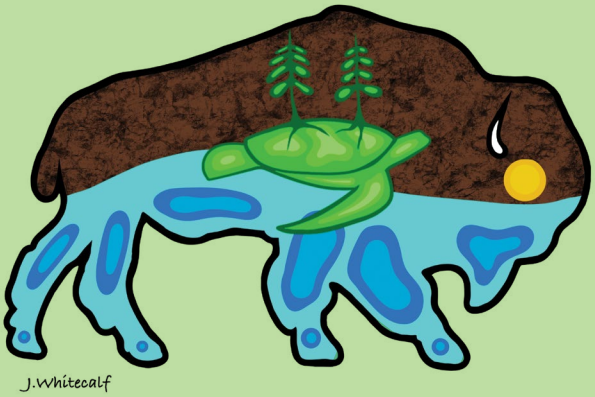
COMMISSIONED BY

FIRST NATIONS MAJOR PROJECTS COALITION

IN PARTNERSHIP WITH

Mokwateh



“The bison represents Indigenous peoples, and the brown hide was used as protection in clothing and homes. It also represents the earth the bison reside on. The eye represents the sun and solar energy. The blue represents water and hydro-electric power. The turtle is Turtle Island, from Cree creation story, that is within Indigenous peoples. The turtle also represents wind power because as the turtle moves wind is created. All the symbols are within the bison to represent that the future of energy is within, and lead by Indigenous people.”

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Strategy to Accelerate Indigenous Ownership of Net Zero Infrastructure in Canada

APRIL 23, 2024

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First Nations Major Project Coalition

The FNMPC is a national, fully First Nation-led not-for-profit organization which currently represents over 160+ First Nations members in 12 provinces and territories across Canada. The FNMPC understands that a strong economy is reliant upon a healthy environment supported by vibrant cultures, languages, and expressions of traditional laws, and supports members to:

- Safeguard air, land, water and medicine sources from the impacts of resource development by asserting its members' influence and traditional laws on environmental, regulatory and negotiation processes;
- Receive a fair share of benefits from projects undertaken in the traditional territories of its members, and;
- Explore ownership opportunities of projects proposed in the traditional territories of its members.

The FNMPC is currently providing business capacity support to its members on 17 major projects located across Canada, each with a First Nations equity investment component, and a portfolio exceeding a combined total capital cost of CAD$30-40 billion. FNMPC's business capacity support includes tools that support First Nations to make informed decisions on both the economic and environmental considerations associated with major project development.

Mokwateh

Mokwateh is an Indigenous-owned consulting and advisory services firm, deeply committed to forging common ground and cultivating the common good. We are a bridge between Indigenous knowledge and western approaches, working diligently to find collaborative solutions that promote social and economic benefits for Indigenous peoples across Canada. At the heart of our mission is a profound respect for the rich tapestry of Indigenous cultures and traditions. We draw on the insights of the past, engage with the realities of the present, and envision a future where Indigenous communities thrive in harmony with their values and aspirations. We help our clients join this mission by creating and executing corporate strategies and policies.

The information contained in this report contains what the FNMPC and Mokwateh gathered from jurisdictional review, literature review, expert review, and two roundtables with Indigenous experts, industry, government, and subject matter experts, including some of FNMPC's member First Nations. Information and recommendations in this report reflect that research but does not comprehensively represent First Nations or Indigenous priorities on climate change and the net zero transition. The hundreds of Indigenous nations in Canada each have unique relationships their lands and waters, and as such here is no single approach to Indigenous governance of these lands/waters. Indigenous rights-holders, nations, and their members are the only ones who can decide what is good for themselves, their lands, their waters, and their future generations. Further, major project ownership is a significant undertaking and should be thought through carefully with expert advisory. This report only highlights challenges and recommendations and represents an introduction to the topic.

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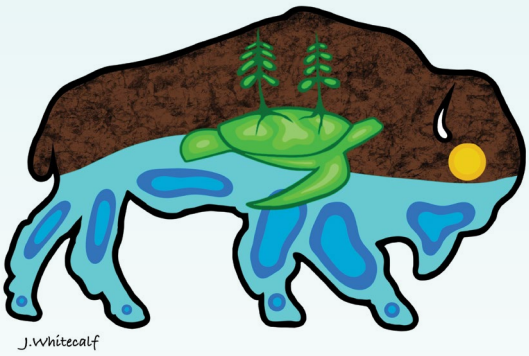


Executive Summary

Canada's energy system is going through a major transformation. Driving this transformation is the urgent need to collectively address the climate crisis across all sectors. This urgency—when paired with Indigenous partnership in and ownership of projects and Indigenous consent—has created exceptional economic opportunities across these same sectors.

Around the world, countries have committed to keep global warming below 2°C. As part of this goal, Canada has committed to reduce greenhouse gas emissions by 40% below 2005 levels by 2030, and to reach net zero emissions by 2050. To stay on target, Canada needs to build a cleaner electricity grid through electrification—which refers to clean energy expansion and increased transmission. Central to the success of this energy transformation are opportunities for Indigenous nations to partner in or own these electrification projects.

To keep pace with accelerating electricity demands, Canada's clean energy sector is forecast to grow 58% in GDP terms by 2030. The capital cost of this opportunity between now and 2050 is estimated at CAD$1.7 trillion.

Electrification in Canada relies on lands and resources to which Indigenous nations are rights-holders. As the required build-out of electricity infrastructure unfolds, Indigenous nations in Canada—already the third largest collective owners of clean energy assets across the country, after governments and utilities —expect to be full economic beneficiaries of electrification. Indigenous equity-owned projects now underway include solar and wind farms, hydroelectric dams, transmission line expansions, battery storage, and geothermal electricity generation. Canada's journey towards economic reconciliation with Indigenous peoples—alongside the accelerating energy transition—presents a competitive advantage for governments, Indigenous nations, and companies. With that in mind, the road to net zero *in partnership* with Indigenous nations must include **Indigenous consent, Indigenous governance, and options for Indigenous ownership in projects.**

The FNMPC and Mokwateh partnered to create this *National Indigenous Electrification Strategy*, funded by the Clean Economy Fund. This initiative centers Indigenous nations as leaders in decarbonizing and doubling Canada's electricity generation, transmission, and distribution systems. The National Indigenous Electrification Strategy Initiative is guided by two goals: (1) to position Indigenous nations as leaders of Canada's net zero transition, and (2) to remove economic, political, and regulatory barriers that will support and promote the development of Indigenous-partnered and -led clean energy projects in Canada.

This Strategy has five parts:

Part 1.
The Journey of Indigenous Nations and Electrification

Canada has a legacy of building energy and other projects on Indigenous lands, a history which remains embedded in the country's electrification journey to this day. Part 1 summarizes the context of this legacy, as well as current trends for the rapid growth in Indigenous nations' ownership—including equity investment—in clean energy infrastructure.

Part 2.
Why Indigenous Leadership in and Ownership of Net Zero Projects are Important

Canada's success with the net zero transition—specifically with electrifying Canada—is inextricably linked to meaningful progress on reconciliation with Indigenous nations. Part 2 of this Strategy explains why Indigenous leadership in and ownership of net zero projects in Canada are important:

Reason #1: Climate Impact on Indigenous Lands
Reason #2: Free, Prior, and Informed Consent
Reason #3: Speed vs. Indigenous Reconciliation: A False Choice
Reason #4: Indigenous Own-source Revenues and Self-determination
Reason #5: Energy Sovereignty for Indigenous Nations
Reason #6: Indigenous Economic Reconciliation
Reason #7: Benefits to Indigenous Nations' Membership
Reason #8: The Business Case for Indigenous Ownership

Part 3.
Challenges for Indigenous Ownership of Electrification Projects in Canada

The rationale for Indigenous ownership of clean energy generation and transmission in Canada is strong. However, this Strategy identifies challenges Indigenous nations may encounter when seeking ownership of electrification projects:

Challenge #1: Indigenous Access to Competitively-Priced Capital
Challenge #2: Capacity
Challenge #3: Financing Indigenous-Owned Electricity Infrastructure
Challenge #4: Utilities and Regulators Constrained by Legislation and Policy
Challenge #5: Lack of Regulation Supportive of Indigenous Nations Forming Indigenous Utilities
Challenge #6: UNDRIP and FPIC are Inconsistent Across Canada
Challenge #7: Canada's Underbuilt Transmission Grid
Challenge #8: Remoteness of Many Indigenous Nations
Challenge #9: Global Critical Minerals Demand
Challenge #10: Impact Assessment and Permitting
Challenge #11: Contrasting Priorities: Affordability and Reconciliation
Challenge #12: Technology and Market Education
Challenge #13: Indigenous Nations' Wheeling/Retail Access to the Grid

Part 4.
Project and Policy Highlights Across Jurisdictions

Across Canada, many Indigenous nations are already successfully engaged in electrification projects and are demonstrating leadership in electrification. Part 4 highlights examples from coast to coast, as well as jurisdictional policy highlights in:

New Brunswick & example North Shore Mi'kmaq Tribal Council SMR Investment
British Columbia & example Tu Deh-Kah Geothermal
Yukon & example Atlin Hydro Plant
Saskatchewan & example Awasis Solar
Québec & example Uashat mak Mani-utenam Wind Farm
Ontario & example Chatham to Lakeshore Transmission Line
Alberta & example Chappice Lake Solar-Storage

Part 5.
Recommendations for Canada's Indigenous-led Electrification Future

Electrification in Canada must be rooted in free, prior and informed consent (FPIC), the principles of UNDRIP, and must lead towards Indigenous economic reconciliation. This Strategy is targeted towards three audiences: government and regulators, the private sector, and Indigenous nations—each of whom play a key role in the rapid electrification of Canada's economy. Part 5 provides a set of recommendations for each audience, all of which flow directly from the context, rationale, challenges, and case studies outlined in the report, and present many insights shared by roundtable experts.

Recommendations for Governments and Regulators

1. Support Indigenous access to capital via loan guarantees and other programs.
2. Fund foundational and comprehensive Indigenous capacity supports.
3. Create opportunities along the value chain of electrification for Indigenous nations.
4. Provinces and Territories should implement a policy and investment framework to incentivize Indigenous partnerships.
5. Governments, regulators, and utilities should present Indigenous nations with risk mitigating options to participate in clean energy project ownership.
6. Governments must appropriately equip regulators and utilities with resources to simultaneously address multiple project layers, such as: reliability, speed of projects coming online, ratepayers, environmental protection, and Indigenous reconciliation.
7. With guidance and direction from Indigenous expertise, governments must support the implementation of UNDRIP.

8. With guidance and direction from Indigenous expertise, governments must provide capacity supports for the implementation of free, prior, and informed consent by Indigenous nations.
9. The Canadian federal government needs to play a role as a convener of the provinces and territories to harmonize opportunities and ensure Indigenous needs in electrification are met.
10. Prioritize Indigenous participation or ownership in electricity assets over electricity rates.
11. Take the regulatory steps needed to support the formation of Indigenous utilities, at all scales.
12. Support the rapid build-out of interjurisdictional transmission lines and interties.
13. Governments in all jurisdictions must implement wheeling policies needed to allow Indigenous nations to sell power to end users.
14. Governments should build in direct-award and prioritization of procurement contracts for impacted Indigenous nations' businesses, either in construction or other procurement related to electrification projects.
15. Support Indigenous labour, skills, and training in the clean energy sector.
16. Reframe the affordability challenge of the net zero transition to prioritize Indigenous economies.
17. Strengthen Indigenous participation in impact assessment process by improving opportunities for collaboration with Indigenous nations and by supporting the capacity of Indigenous Governing Bodies to lead impact assessment.
18. Fast-track remote Indigenous nations to exit from diesel dependence.

Recommendations for the Private Sector

19. Create a detailed reconciliation action plan in partnership with Indigenous nations and implement the plan as part of corporate strategy.
20. De-risk investments and attract more capital for proposed projects by conducting early, informed, relationship-based, and well-resourced partnerships with impacted Indigenous nations.
21. Develop priority Indigenous procurement policies for all projects to support Indigenous businesses and incentivize industry-Indigenous partnerships.
22. Hire and appoint Indigenous people into board and leadership positions in companies and on projects, particularly Indigenous women.
23. Fund Indigenous capacity supports.
24. Support Indigenous access to capital.
25. Support and prioritize Indigenous leadership in projects.
26. Create opportunities for eventual majority or full Indigenous ownership of net zero projects.
27. Create project site policies and safeguards to protect Indigenous women, girls, and Two Spirit individuals.
28. Lenders should invest with their best rates on Indigenous-owned electrification projects.

Recommendations for Indigenous Nations

29. Indigenous nations should require the procurement process for electrification projects be a co-developed process with direct Indigenous input.
30. Focus capacity building on increasing climate and energy literacy and undertaking comprehensive community planning.
31. Explore the experiences of other Indigenous nations as owners of clean energy projects.
32. Know and understand what questions to ask before investing in a clean energy project or rate regulated utility project.
33. Identify and take advantage of opportunities along the value chain of electrification.
34. Consider creating an Indigenous-led integrated resource plan.
35. Explore opportunities for an Indigenous-owned utility.
36. Learn about and understand the different legal arrangements and structures for project ownership and partnerships.
37. Know what the highest standards are in Indigenous equity ownership and risk mitigation.
38. Consider each of the project development phases, and the potential barriers and economic opportunities of each.
39. Consider Indigenous ownership in transmission projects.
40. Don't rely on project proponent projections for advice.
41. Consider joining leadership positions such as the board of directors, advisory, and/or upper management positions.
42. Support Indigenous youth in electrification trades, business development, and energy literacy.
43. Consider creating Indigenous-led impact assessment protocols for any new project.
44. Explore options to secure the Indigenous nation's access to competitively-priced capital.

Foreword: Chief Sharleen Gale

FORT NELSON FIRST NATION; TREATY 8; CHAIR OF THE FIRST NATIONS MAJOR PROJECTS COALITION; COUNCIL MEMBER OF THE CANADA ELECTRICITY ADVISORY COUNCIL

Indigenous peoples are among the first to experience the direct consequences of climate change, because of our dependence upon, and close relationship to, our lands and waters since time immemorial. Our ancestors passed on to us the rights and responsibilities to these lands and waters: in the face of climate change, we need to up our game. Although the rapid heating of the Earth's atmosphere is a collective problem, local clean energy initiatives across Canada, and around the world, are already becoming an important part of the solution.

For my First Nation, and for many of the member First Nations of the FNMPC, one of the critical steps we are taking to help solve the climate crisis is our ownership of, or partnership in, electrification projects. From clean generation projects to new transmission lines, these initiatives need to take place on our terms, on Indigenous terms. For Canada to meet its net zero commitments and get these projects built, there needs to be Indigenous participation and free, prior, and informed consent.

This National Indigenous Electrification Strategy speaks to Indigenous nations, the private sector, government, and utilities. It shares what the FNMPC has learned both through our expert roundtables on electrification, our service delivery to our members on electrification projects, and from the experiences of our First Nation members across Canada. This is an important journey we are all walking together—not only among Indigenous nations as we collaborate and discuss successes and challenges – but also with people across Canada who want to see Indigenous nations at the forefront of this net zero energy transition.

Mussi cho.
Chief Sharleen Gale

Foreword: JP Gladu

SAND POINT FIRST NATION; FOUNDER AND PRINCIPAL MOKWATEH

Canada is at a crossroads: we either meet our net zero commitments in partnership with Indigenous nations, or we fail to make progress on both economic reconciliation and the energy transition. In this transition, the intersection of Indigenous values and clean energy is not just an opportunity—it is a necessity. Working together is paramount in addressing climate change.

The involvement of Indigenous peoples in Canada's economy and decision making has long been undervalued and overlooked. To move forward, governments and industry must integrate perspectives that value Indigenous land, water, knowledge, and leadership, and embed each of these pillars into stronger economic policies and practices.

One significant hurdle we need to overcome is the challenge Indigenous nations and businesses encounter when trying to access competitive capital. The perceived high risk associated with these ventures often places an unfair burden on Indigenous nations, hindering our ability to participate in, and benefit from economic opportunities. By re-evaluating the ways in which financial support is given, and by recognizing the value that Indigenous lands and knowledge bring to the table, we can begin to level the playing field.

Canada's next steps in the electrification of its vast energy system must include: meaningful, sustainable partnerships with Indigenous nations, a commitment to Indigenous value-aligned policies, the decolonization of economic barriers that limit Indigenous nation's participation in, and ownership of, major projects.

Moving forward, we should all be guided by the knowledge passed down by the Indigenous ancestors of this land, and the direction from our membership—including youth and Elders since time immemorial. With this approach, we can build a more equitable and sustainable economy that benefits both the climate and all Canadians.

Miigwetch,
JP Gladu

Introduction:
National Indigenous Electrification Strategy Initiative

"For future generations to prosper in Canada, we must both steward the environment responsibly and advance healthy, respectful relationships among those who call it home. And we must redress these simultaneously because they are intrinsically connected. It starts with all Canadians understanding the history of this land, known for thousands of years by many First Peoples as Turtle Island. In their quest to take the land's resources for profit and power, European colonizers disrupted and ripped the social, economic, and cultural fabric of entire Indigenous societies, severing relationships between families, communities, and the land."[1]

About the National Indigenous Electrification Strategy

The First Nations Major Projects Coalition (FNMPC) and Mokwateh partnered to create this National Indigenous Electrification Strategy, funded by the Clean Economy Fund. This initiative centers Indigenous nations as leaders in decarbonizing and doubling Canada's electricity generation, transmission, and distribution systems.

The National Indigenous Electrification Strategy Initiative is guided by two goals:

- **Goal 1.** To position Indigenous nations as leaders of Canada's net zero transition.
- **Goal 2**. To remove economic, political, and regulatory barriers that will support and promote the development of Indigenous-partnered and -led clean energy projects in Canada.

[1] Deloitte LLP, 2021 June 21. Promises, promises: Living up to Canada's commitments to climate and Indigenous reconciliation www2.deloitte.com/content/dam/Deloitte/ca/Documents/consulting/ca-indigenous-report_en.pdf

The Strategy was informed by five major sources (Figure 1):

1. **Roundtables:** Findings from two Mokwateh/FNMPC-hosted electrification roundtables where government, industry, and Indigenous experts provided input on the meaningful development of public policy, political, financing, and capacity support for Indigenous leadership, partnership, and ownership in the electrification of Canada.
2. **Literature Review:** Themes identified in the contemporary and fast-changing body of literature on the net zero transition in Canada, as well as the highest standards in and business case for Indigenous infrastructure ownership.
3. **Jurisdictional Review:** A review of jurisdictions in Canada and Indigenous case studies to build understanding of the broad landscape that makes up Canada's challenges in electrification.
4. **First Nations Membership:** Knowledge from the commercial transactions FNMPC has supported for our First Nations members' equity ownership/partnership on existing net zero projects.
5. **Expert Review:** An expert review of this Strategy by those listed on the title page.

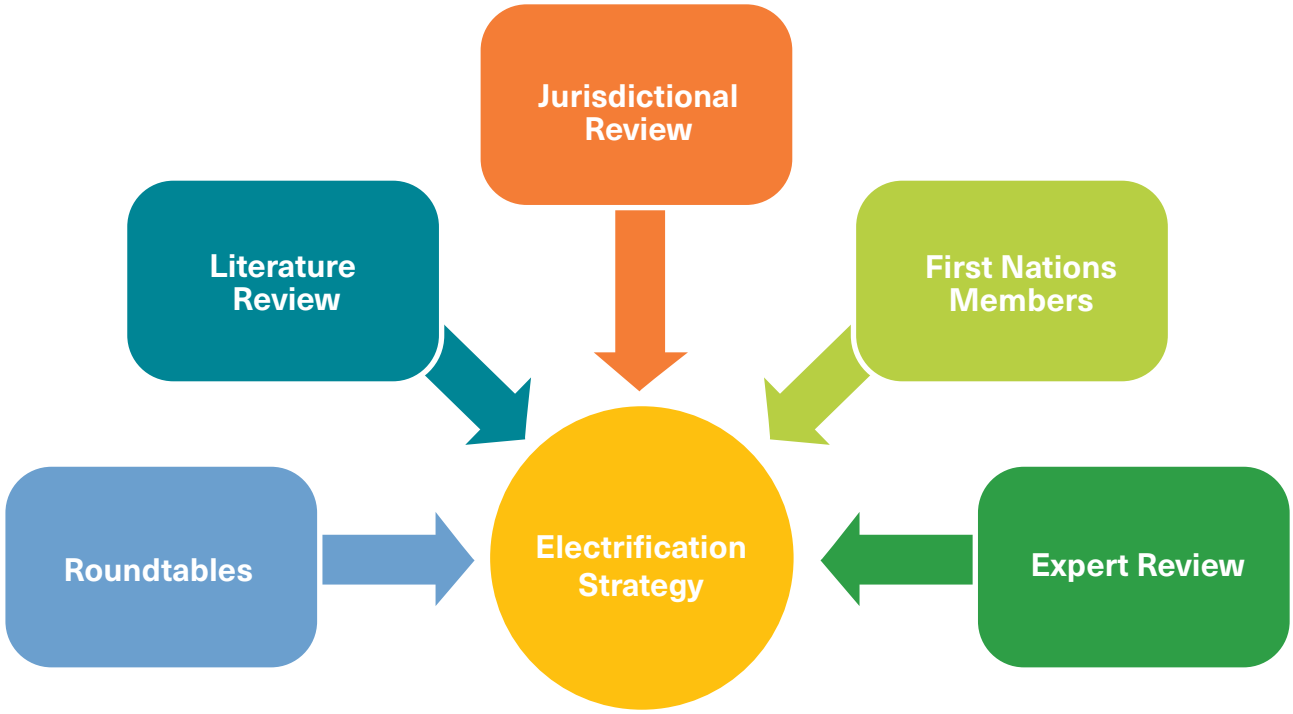


Figure 1. Inputs to National Indigenous Electricification Strategy

This Strategy provides recommendations for First Nations, government, and industry on how First Nations should be supported to develop major projects that not only help electrify Canada's grid, but also take steps towards economic reconciliation and greenhouse gas emission reduction.

Why the Net Zero Transition?

"After Our Time, How Will the World Be?": Climate science and the rationale for net zero

Indigenous knowledge-holders and climate scientists have been at the forefront of identifying the impacts of climate change on ecosystems and the human-caused heating of the Earth's atmosphere respectively.[2] Notably, the Vuntut Gwitch'in First Nation in Old Crow, Yukon declared a climate emergency titled "Yeendoo Diinehdoo Ji' heezrit Nits'oo Ts' o' Nan He' aa"[3] ("After Our Time, How Will the World Be?").[4] People around the world are now noticing these changes—subtropical cyclones, wildfire smoke, sustained arctic cold fronts, floods, heat waves, catastrophic fires, and species decline.[5]

The most recent research indicates that the Earth's overall temperature increase is on a trajectory to reach 2.7°C above pre-industrial levels by the end of this century. That amount of heating is well above the target established in the *Paris Agreement* in 2015 to stay at 1.5°C of overall heating to avoid the most catastrophic impacts of climate change.[6] Capping the temperature increase to 1.5°C will require greenhouse gas emissions to be cut in half by 2030, "a revolutionary change in less than a decade".[7]

Scientific calculations of how much more carbon dioxide the atmosphere can tolerate before a domino effect of catastrophes exponentially accelerates is about nine years from the time of publication of this Strategy. Since greenhouse gas emissions accumulate in the Earth's atmosphere over time, it is crucial that we reduce those emissions now and slow the acceleration of atmospheric heating.[8]

> *"Acknowledging the traditional knowledge of our elders which is supported by the findings of the United Nations Intergovernmental Panel on Climate Change's "Special Report on Global Warming of 1.5°C", and that preventing the rise of global temperatures above 1.5°C requires unprecedented reduction of global greenhouse gas emissions."*
>
> - Vuntut Gwitch'in First Nation Declaration Yeendoo Diinehdoo

> *"We are on the clock. The manifestations of climate change—melting ice, increased flooding, forest fires, warming temperatures and human migration—are worsening, and room to manoeuvre is shrinking. If this were a football match, the two-minute warning would have sounded."*
>
> - Public Policy Forum, Project of the Century: A Blueprint for Growing Canada's Clean Electricity Supply – and Fast

[2] Watt-Cloutier, S., 2015. The right to be cold: One woman's story of protecting her culture, the arctic and the whole planet. Allen Lane.
[3] Vuntut Gwitchin First Nation, n.d., Yeendoo Diinehdoo Ji'heezrit Nits'oo Ts'o' Nan He'aa Declaration www.vgfn.ca/pdf/CC%202019%20Declaration.pdf.
[4] Assembly of First Nations, October 2023. National Climate Strategy, afn.bynder.com/m/77556e1d9da51db7/original/2023-Climate-Strategy-Report.pdf.
[5] Casselman, A.S., 10 Aug 2023. Canada in the Year 2060, macleans.ca/society/environment/canada-in-the-year-2060/.
[6] United Nations Environment Programme (UNEP), The Heat Is On: A world of climate promises not yet delivered, Emissions Gap Report 2021, 2021, p. XXIV, Section 7.
[7] Deloitte LLP, 2021 June 21. Promises, promises: Living up to Canada's commitments to climate and Indigenous reconciliation www2.deloitte.com/content/dam/Deloitte/ca/Documents/consulting/ca-indigenous-report_en.pdf.
[8] Annesley, J., Campbell, D., Golshan, A., and Greenspon, E., July 2023. Project of the Century: A Blueprint for Growing Canada's Clean Electricity Supply – and Fast https://ppforum.ca/wp-content/uploads/2023/07/Canada%E2%80%99sCleanElectricitySupply-PPF-July2023-EN-1.pdf.

Transitioning away from fossil fuels

At the 2023 UN Climate Change Conference (COP28)[9], the burning of fossil fuels was singled out as being "by far the leading cause of the climate crisis."[10] Globally, the COP stipulated a tripling of new investments in renewable energy and the "transitioning away" from fossil fuels in power systems. The International Energy Agency's (IEA) *World Energy Outlook* published the same year has found that global demand for all fossil fuels is set to peak by 2030.[11] IEA lead Fatih Birol stated that the transition to clean energy is "not a question of if, it's just a matter of how soon." Half of the world's economies, including Canada, are already "at least five years past a peak in electricity generation from fossil fuels."[12]

WHAT ARE NET ZERO EMISSIONS?

Net zero emissions (often abbreviated to net zero) refers to the overall balance between greenhouse gas (GHGs) emissions produced, and the amount of GHGs removed from the earth's atmosphere. Net zero emissions is reached when the amount of GHGs added is no more than the amount removed/sequestered from the atmosphere. To avoid the worsening of climate change, new GHG emissions must be as low as possible. The largest contributor to GHGs are fossil fuels—coal, oil, and gas.[13]

Figure 2. Net zero is the work to rebalance the tonnes of GHGs removed with the tonnes emitted.

[9] United Nations Framework Convention on Climate Change, 13 December 2023. Conference of the Parties serving as the meeting of the Parties to the Paris Agreement unfccc.int/sites/default/files/resource/cma2023_L17_adv.pdf.
[10] United Nations Environment Program, 20 December 2023. Some key takeaways from the COP28 climate summit https://www.unep.org/news-and-stories/story/some-key-takeaways-cop28-climate-summit.
[11] International Energy Association, October 2023. World Energy Outlook 2023. https://www.iea.org/reports/world-energy-outlook-2023.
[12] Bruce-Lockhart, C., Fulghum, N., and Jone, D., 20 October 2023, Half of the world is past a peak in fossil power, Ember. https://ember-climate.org/insights/research/half-of-the-world-has-passed-peak-fossil-power/
[13] Climate Council, 14 April 2023. What Does Net Zero Emissions Mean? www.climatecouncil.org.au/resources/what-does-net-zero-emissions-mean/.

What does a transition to net zero mean for Canada?

" What Canada needs to do is really get with the program. We actually have to double down on investing [in renewable energy and clean technology], in building that economy that will create jobs and economic opportunity for the future, and stop looking backwards at a scenario that is in the past. The world is moving."

– Hon. Jonathan Wilkinson, Minister of Energy and Natural Resources[14]

Canada's energy system is complex. The way it is regulated, the massive and diverse landscape in which it is situated, and the social, political, and legal realities it is embedded within, all contribute to this complexity. How Canada produces and uses energy in a net zero future will be dramatically different than it is today.[15]

To help imagine this, the Canada Energy Regulator (CER) paints a picture where fossil fuels are replaced by technologies that use electricity; low-carbon fuels (like hydrogen and biofuels) accelerate, while carbon capture, utilization, and storage (CCUS) helps to reduce emissions in many sectors; and, "global demand for fossil fuels falls steeply, reducing oil and natural gas prices and Canadian production of those commodities".[16] The Public Policy Forum illustrates a similar picture, where net zero for Canada means getting "back to an abundant system, one built on the back of technology rather than fossil fuels and, therefore, ultimately less susceptible to price shocks, supply interruptions and planned inefficiency".[17]

The Assembly of First Nations (AFN) has articulated that the transition to net zero in Canada starts with the recognition of the climate crisis, including safeguarding the "inherent, Treaty and constitutionally protected rights of First Nations, respect[ing] First Nations knowledge systems, and uphold[ing] Treaties and other constructive arrangements between First Nations and the Crown".[18] To do so, the AFN asserts the "Federal, provincial, and territorial governments to take urgent and transformative climate action that meets the requirements outlined in the *Intergovernmental Panel on Climate Change and Canada's Changing Climate Report* (2019) to reduce emissions in Canada by 60% below 2010 levels by 2030 and reach net-zero emissions by 2050." Figure 3 summarizes what Canada has committed to for the net zero transition.

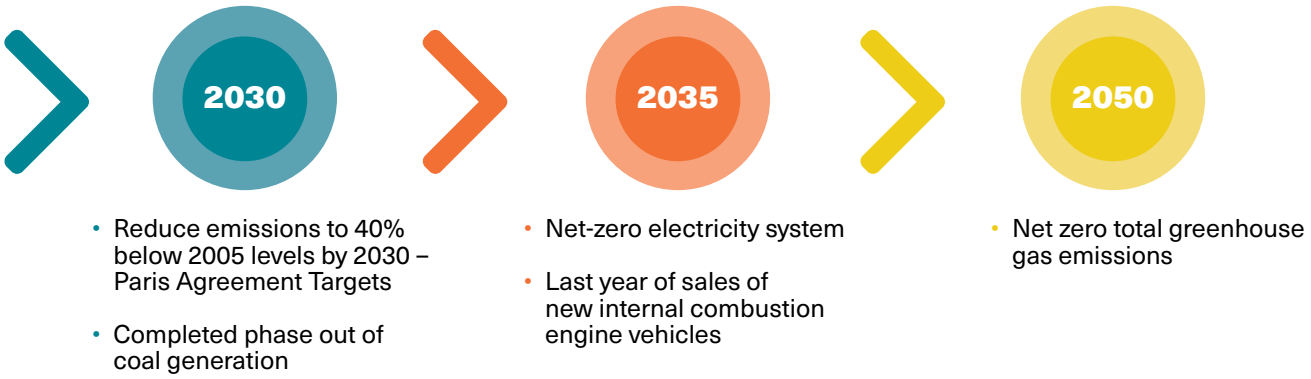


Figure 3. Canada's major net zero commitments.

[14] Rabson, M., 26 October 2023. Canada must move faster than the rest of the world on renewable energy: Wilkinson, National Observer. https://www.nationalobserver.com/2023/10/26/news/canada-renewable-energy-wilkinson.
[15] Canada Energy Regulator, 2023. Canada's Energy Future 2023: Energy Supply and Demand Projections to 2050. https://www.cer-rec.gc.ca/en/data-analysis/canada-energy-future/2023/canada-energy-futures-2023.pdf.
[16] Ibid.
[17] Annesley, J., Campbell, D., Golshan, A., and Greenspon, E., July 2023. Project of the Century: A Blueprint for Growing Canada's Clean Electricity Supply – and Fast https://ppforum.ca/wp-content/uploads/2023/07/Canada%E2%80%99sCleanElectricitySupply-PPF-July2023-EN-1.pdf.
[18] British Columbia Assembly of First Nations, April 2019. BC First Nations Climate Strategy and Action Plan Development. https://www.bcafn.ca/priority-areas/environment/climate-emergency/bc-first-nations-climate-strategy-action-plan/bc-first.

How big is the net zero opportunity?

Global economies are becoming increasingly ambitious about reducing emissions through the electrification of their energy supply. In 2023, 510 gigawatts of renewable capacity were added to the global energy production, equal to the power capacity of Germany, France and Spain combined.[19] Where will Canada land in the rapid acceleration of electrification? The size of the opportunity associated with the resulting electrification of Canada is massive (see Table 1).

Table 1. The size of the electrification opportunity in Canada.

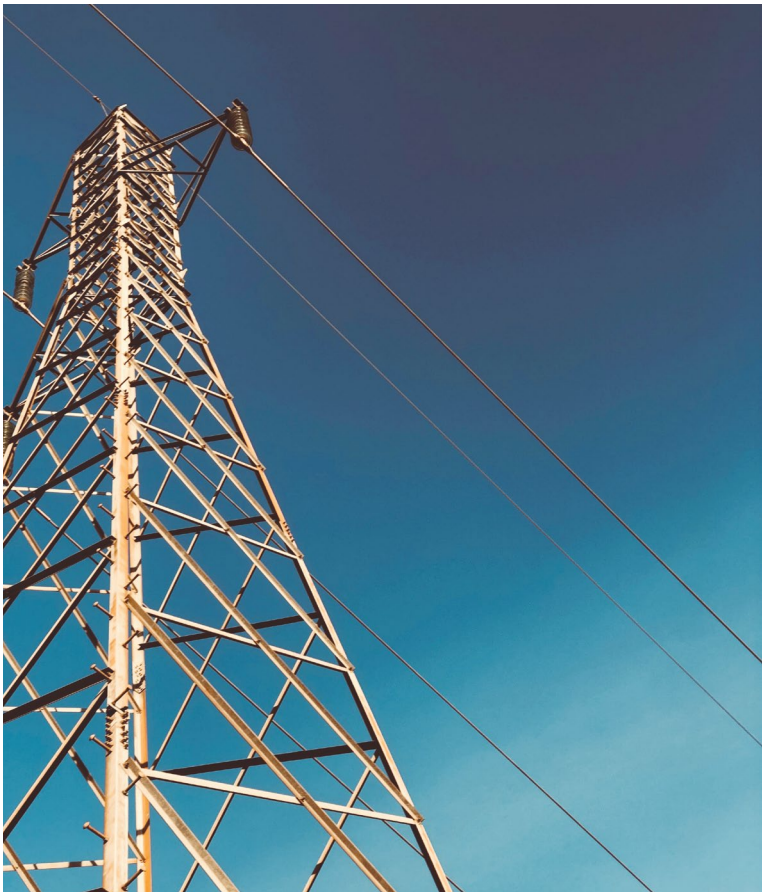
58% GDP growth	"The clean energy sector's GDP is forecast to grow an impressive 58% by 2030—significantly more than fossil fuels, which will grow only 9%. By 2030, clean energy will make up 29% of Canada's total energy GDP, up from 22% in 2020."[20]
2.2 - 3.4x supply	"In its 2023 budget, the Government of Canada forecasted that demand for electricity will double between now and 2050, while supply capacity will have to grow by an astounding 2.2 to 3.4 times today's volume." [21]
$1.1-1.7 trillion	"The Conference Board of Canada has put the cost of the clean electricity transformation before us at $1.7 trillion, nearly the size of the entire Canadian economy in 2023. Université de Montreal's Canada Energy Outlook report estimates the price tag at $1.1 trillion."[22]
$5 billion grants	The Government of Canada has committed approximately $5 billion in grants and contributions for targeted clean electricity programs. Within this $5 billion includes several programs of interest:[23] » $1.5 billion for the Smart Renewables and Electrification Pathways Program; » $250 million for the Clean Electricity Pre-Development Program; » $25 million for the Strategic Intertie Pre-Development Program; » $500 million for the Clean Energy for Rural and Remote Communities Program.

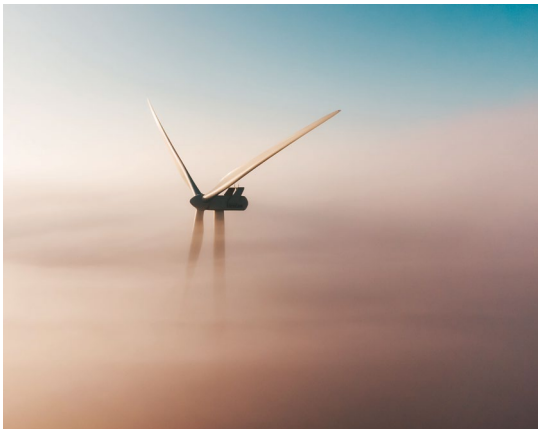
[19] Moorhouse, J., International Energy Agency, n.d. LinkedIn post. https://www.linkedin.com/posts/jeremy-moorhouse-41280715_cop28-renewables-activity-7151147639802118144-VCWe/?utm_source=share&utm_medium=member_desktop.
[20] Clean Energy Canada, October 2018. Batteries Not Included. cleanenergycanada.org/report/batteries-not-included/.
[21] Annesley, J., Campbell, D., Golshan, A., and Greenspon, E., 19 July 2023. Project of the Century: A Blueprint for Growing Canada's Clean Electricity Supply – and Fast https://ppforum.ca/publications/net-zero-electricity-canada-capacity/.
[22] Ibid.
[23] Government of Canada, 2023. Powering Canada Forward. https://natural-resources.canada.ca/our-natural-resources/energy-sources-distribution/electricity-infrastructure/powering-canada-forward-building-clean-affordable-and-reliable-electricity-system-for/25259.

The Public Policy Forum illustrates the size of the opportunity in Canada in terms of projects that many can relate to:[24]

> *" Imagine every dam, turbine, nuclear plant and solar panel across Canada—and then picture a couple more next to them. Two more James Bays in Quebec. Two more Point Lepreaus in New Brunswick. Two more Niagara Falls in Ontario. Two more Site Cs in British Columbia. Canada's national landscape is currently dotted by more than 100 power plants of at least 250 MW, each big enough to supply a city of 180,000. Soon we will need 220-340 of them…. At the same time as adding all that new capacity, we also must subtract from the current electricity generating stock the remaining coal plants, particularly in Saskatchewan and Nova Scotia, that are regulated to go out of business by 2030, as well as those plants that are ready for normal retirement."*

This unprecedented growth in Canada's electricity supply is now bringing together governments, Indigenous nations, and industry to make this transformation happen. Given the land- and water-based impacts these projects will have on Indigenous lands, this growth will need to be matched with investment in Indigenous free, prior, and informed consent to make it possible.





[24] Annesley, J., Campbell, D., Golshan, A., and Greenspon, E., 19 July 2023. Project of the Century: A Blueprint for Growing Canada's Clean Electricity Supply – and Fast https://ppforum.ca/publications/net-zero-electricity-canada-capacity/.

Context and Foundation: Previous Work Related to this Strategy

This Strategy focuses on Indigenous leadership and ownership in the current push to rapidly electrify Canada's energy system. However, a vast body of literature is foundational to the context of this focus. The existing work and topics in Table 2 underpin this Strategy.

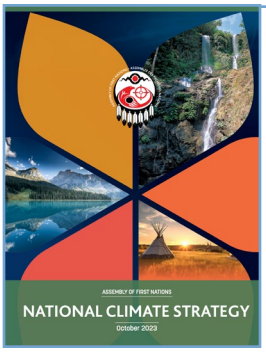
Table 2. Recommended readings and topics that underpin this Strategy.

Recommended Reading(s)	Topic
Final Report of the Truth and Reconciliation Commission[25]	Impacts of colonization on Indigenous peoples in Canada, and the Calls to Action.
Final Report of the National Inquiry into Missing and Murdered Indigenous Women and Girls[26]	The persistent and deliberate human and Indigenous rights violations and abuses are the root cause behind Canada's staggering rates of violence against Indigenous women, girls and 2SLGBTQQIA people.
United Nations Declaration on the Rights of Indigenous Peoples[27]	The minimum standards for the survival, dignity and well-being of the Indigenous peoples of the world.
Indigenous Clean Energy report "Enabling Efficiency: Pathways and recommendations based on the perceptions, barriers, and needs of Indigenous people, communities, and organizations"[28]	Demand-side management and the energy efficiency of Indigenous homes and buildings.
Canadian Climate Institute report "Electric Federalism: Policy for Aligning Canadian Electricity Systems with Net Zero"[29]	Canadian federal policy alignment with net zero.
Dunsky Energy "Build Things Faster", Electricity Canada[30]	Canada's policy, capacity, and regulatory challenges on accelerating electricity infrastructure, not directly related to Indigenous ownership.
NASA: The Causes of Climate Change[31]	The cause of climate change and the greenhouse effect.
International Energy Agency, World Energy Outlook 2023[32]	Global energy projections and the transition to net zero.

[25] National Centre for Truth and Reconciliation, 2015. Truth and Reconciliation Commission Reports. https://nctr.ca/records/reports/.
[26] National Enquiry into Missing and Murdered Indigenous Women and Girls, 2019. Reclaiming Power and Place: The Final Report of the National Inquiry into Missing and Murdered Indigenous Women and Girls. https://www.mmiwg-ffada.ca/final-report/.
[27] United Nations, 2017. United Nations Declaration on the Rights of Indigenous Peoples. https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf.
[28] Indigenous Clean Energy, December 2023. Enabling Efficiency: https://indigenouscleanenergy.com/wp-content/uploads/2023/12/Enabling-Efficiency-Report-December-2023.pdf.
[29] Canadian Climate Institute, May 2022. Electric Federalism: Policy for Aligning Canadian Electricity Systems with Net Zero. https://climateinstitute.ca/wp-content/uploads/2022/05/Electric-Federalism-May-4-2022.pdf
[30] Electricity Canada, 10 May 2022. Electricity Canada launches two new reports, "Build Things Faster" and "Back to Bonbright". https://www.electricity.ca/news/time-to-get-building-a-cleaner-reliable-and-affordable-electricity-grid/
[31] NASA, March 2024. The Causes of Climate Change. https://climate.nasa.gov/causes/.
[32] International Energy Association, October 2023. World Energy Outlook 2023. https://www.iea.org/reports/world-energy-outlook-2023.

Indigenous Leadership: Energy Transition and Climate Change

In addition to the topics and readings suggested in Table 2, a growing body of work on Indigenous leadership related to the energy transition and climate change, has been led by Indigenous experts in this area. Prominent examples of work premised on Indigenous self-determination, self-government, and Indigenous decision-making include:

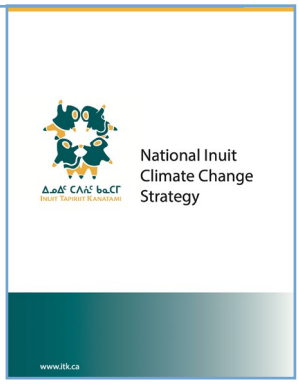


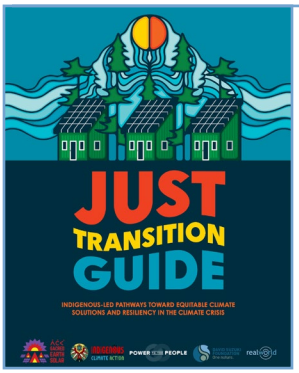
Assembly of First Nations' National Climate Strategy, *October 2023*[33]

The Assembly of First Nations' (AFN) National Climate Strategy report is a comprehensive look at climate change in the context of First Nations in Canada. It is the culmination of deep engagement and research and spells out clear actions and opportunities within seven major areas that should underpin a First Nations-led approach to climate change that is holistic, integrated, and based in systems solutions. The AFN's Strategy is more comprehensive on climate than this narrower FNMPC/Mokwateh Strategy which focuses primarily on Indigenous partnership/ownership of electrification net zero projects.

National Inuit Climate Change Strategy[34]

The National Inuit Climate Change Strategy calls for climate actions to be effective, appropriate, equitable, and sustainable for Inuit Nunangat and to be in line with the collective Inuit vision for building the sustainability, prosperity, and well-being of Inuit communities in the face of a changing climate. The Strategy identifies five priority areas where integrated approaches and coordinated actions are necessary to meet adaptation, mitigation, and resilience-building needs in areas including knowledge and capacity-building, health, well-being, the environment, food systems, infrastructure, and energy.





Just Transition Guide: Indigenous-led Pathways Toward Equitable Climate Solutions and Resiliency in the Climate Crisis[35]

The Just Transition Guide was created by Sacred Earth Solar and Indigenous Climate Action, led by Melina Laboucan-Massimo, (Lubicon Cree)[36] and brings stories of Indigenous leadership on renewable energy, eco-housing, and food security. It demonstrates how to prioritize Indigenous knowledge for the building of Indigenous resilience in the face of climate change and uses case studies to illustrate Indigenous success studies in implementing an equitable net zero transition.

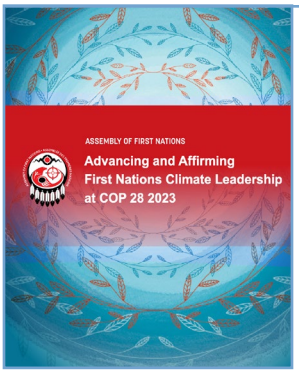
[33] Assembly of First Nations, October 2023. National Climate Strategy, afn.bynder.com/m/77556e1d9da51db7/original/2023-Climate-Strategy-Report.pdf.
[34] Inuit Tapiriit Kanatami, 2019. National Inuit Climate Change Strategy. https://www.itk.ca/wp-content/uploads/2019/06/ITK_Climate-Change-Strategy_English_lowres.pdf
[35] Laboucan-Massimo, M., November 2023. Just Transition Guide. static1.squarespace.com/static/ 5c9860bf77b9034bc5e70122/t/6555222edcea4d681ccf0454/1700078320040/Just+Transition+Guide.pdf
[36] Founder, Sacred Earth Solar; Co-Founder, Indigenous Climate Action.

Promises, promises: Living up to Canada's commitments to climate and Indigenous reconciliation[37]

"Indigenous peoples are leaders in climate change mitigation and land relationship planning. Their rights and traditional knowledge systems are critical for developing effective solutions to climate change and for achieving climate justice and reconciliation. Yet, it is a constant battle to have Indigenous voices included and heard in climate change discussions." - Jason Rasevych (Ginoogaming First Nation) and Fiona Kirkpatrick Parsons (Lac La Ronge First Nation)[38] This paper discusses how advancing reconciliation is an opportunity for Canada to address climate change while supporting a new and respectful relationship between Indigenous and non-Indigenous people.

First Nations Power Authority Education Series[39]

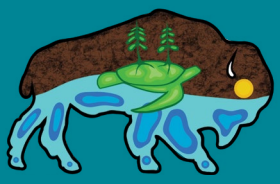
The First Nations Power Authority has an excellent online resource, including explainer videos on wind, solar, geothermal, hydro power, biomass, and clean energy 101.



Advancing and Affirming First Nations Climate Leadership at COP 28 2023[40]

"The Climate Strategy aims to prioritize First Nations' rights, self-determination, and knowledge systems within federal, provincial, and territorial climate action; promote First Nations solutions to the climate crisis, grounded in their inherent rights, self-determination, and traditional knowledge systems; and call for urgent and transformative climate action in line with the First Nations-in-Assembly Declaration of a First Nations Climate Emergency."

[37] Deloitte LLP, 2021 June 21. Promises, promises: Living up to Canada's commitments to climate and Indigenous reconciliation www2.deloitte.com/content/dam/Deloitte/ca/Documents/consulting/ca-indigenous-report_en.pdf.
[38] Ibid.
[39] First Nations Power Authority, 2021. First Nations Power Authority Education Series. fnpa.ca/geothermal-energy/
[40] Assembly of First Nations, October 2023. National Climate Strategy, afn.bynder.com/m/77556e1d9da51db7/original/2023-Climate-Strategy-Report.pdf.



Part 1: The Journey of Indigenous Nations and Electrification

Canada's Legacy of Energy Projects on Indigenous Lands

Indigenous nations have long been structurally and politically excluded from the development of energy policy.[41] The widely publicized Mackenzie Valley Pipeline Inquiry in 1974 found that large-scale Canadian industrial developments have consistently "depreciated the [I]ndigenous economic base".[42] These decades of Indigenous exclusion and economic undermining have been met, to this day, with Indigenous nations fighting for the inherent and legal rights for lands and waters.[43] Despite documented concerns, and an unwavering fight by Indigenous nations to be sought for project consent impacting Indigenous lands and waters, industry and governments, by and large, have proceeded with developments on Indigenous lands without Indigenous inclusion or consent.

To this day, many net zero projects disregard the historical legacy of colonization.[44] Proponents and governments are building new energy infrastructure, and some are disregarding, even perpetuating, the colonial legacy of disregarding Indigenous rights and responsibilities. Experts at the roundtables convened for this paper spoke to this reality in their territories:[45]

" [Our First Nation has been] in lengthy negotiations since the end of 1970s, we're almost 50 years into that. The [Province] doesn't want to sign. And they're coming to talk about partnership in the energy sector. It fits their needs. What about First Nations? That's a problem."

[41] Laboucan-Massimo, M., November 2023. Just Transition Guide. static1.squarespace.com/static/ 5c9860bf77b9034bc5e70122/t/6555222edcea4d-cf0454/1700078320040/Just+Transition+Guide.pdf.
[42] Berger, T.R., 1977. Northern Frontier, Northern Homeland: The Report of the Mackenzie Pipeline Equiry. https://publications.gc.ca/collections/collection_2015/bcp-pco/CP32-25-1977-1-eng.pdf.
[43] Podlasly, M., and von der Porten, S., 2019. The Role of Indigenous People in Major Project Development: Paths for Indigenous Participation in Electricity Infrastructure. https://fnmpc.ca/wp-content/uploads/MPC-Finalv.11.pdf.
[44] Assembly of First Nations, October 2023. National Climate Strategy, afn.bynder.com/m/77556e1d9da51db7/original/2023-Climate-Strategy-Report.pdf.
[45] Quotations from speakers featured in this report were transcribed but not verified. Quotations may contain inaccuracies, errors, and in some cases have been edited only for minor grammatical errors.

"One barrier [to Indigenous participation in clean energy] right now is our legacy infrastructure, large hydro projects, which were done [via] private land claims. [They have] come at a cost with Indigenous communities who were not considered as part of that equation and were provided zero benefits, in fact, large degradation."

"In our areas there are legacy issues regarding hydro, more than half of our First Nations are affected by it. It has caused loss of land. One First Nation has lost over 900 acres. Another couple First Nations have completely been taken out of the community, they relocated."

Canada is not the only country with a history of failing to seek Indigenous consent for new projects. In Norway, a state-owned company illegally developed a wind farm on Sámi lands and must pay damages to the Sámi $675,000 every year for the next 25 years.[46] In the United States, an energy proponent was ruled to have trespassed on Osage lands and were forced to tear down the 84-turbine wind farm entirely at a cost of nearly $260 million.[47] These are just two examples of many where governments and the clean energy industry continue to act inconsistently, perpetuating a colonial approach.

"While our world transitions to renewable energy from fossil fuels, it is essential that we are critical and aware of the impacts of "clean" energy so we do not replicate the same system of harms that have been perpetuated from the previous energy era."

- Melina Laboucan-Massimo (Lubicon Cree, Founder, Sacred Earth Solar; Co-Founder, Indigenous Climate Action)[48]

[46] Rasmussen, E., 21 December 2023. Norway to pay Sámi reindeer herders millions for violating their human rights, Grist. https://grist.org/global-indigenous-affairs-desk/norway-to-pay-sami-reindeer-herders-millions-for-violating-their-human-rights/.
[47] Hofschneider, A., 13 February 2024. There's a big climate cost to failing to recognize Indigenous sovereignty, Corporate Knights. corporateknights.com/leadership/big-climate-cost-of-failing-to-recognize-indigenous-rights/.
[48] Laboucan-Massimo, M., November 2023. Just Transition Guide. static1.squarespace.com/static/

Trends for Indigenous Nations: From Past Decades to Now

Indigenous leadership in electrification is a turning point in the legacy of projects and should mark the end of Canada's poor engagement with Indigenous nations. This Strategy builds on previous work published by the FNMPC that demonstrated how Indigenous peoples around the world are increasingly leading equity ownership of major electricity projects and infrastructure.

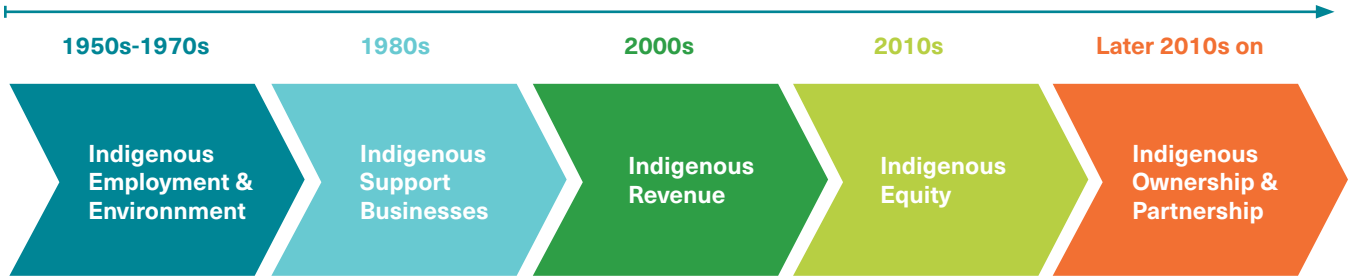


Figure 4. Evolution of Indigenous participation in major projects (Source: The Role of Indigenous People in Major Project Development, FNMPC, 2019)

When Canada's current electrification system was built, the influence that Indigenous nations have today was never contemplated. Improved Indigenous involvement and processes have evolved into increased Indigenous ownership in projects and now, in many cases, Indigenous nations are at the forefront of this energy transition.[49] Now, equity ownership of resource and infrastructure projects is the norm and is seen by Indigenous people as a means to pro-actively exercise Indigenous rights, protect Nation interests and share in the economic benefits derived from major projects.[50]

Indigenous leadership and governance on clean energy infrastructure ownership in Canada

" Many Indigenous [nations] are striving to combat climate change by focusing on the economic opportunities that it may create. For example, increased demand for renewable energy, and using wind and solar as well as emerging opportunities in carbon capture and sequestration, as well the potential for the new hydrogen economy, could make these lands an important resource for such projects, replacing fossil fuel-derived energy, and limiting greenhouse gas increases."

– Mark Carney, Vice Chair, Brookfield Asset Management, Head of ESG and Impact Fund Investing and UN Special Envoy on Climate Action and Finance[51]

[49] Ibid.
[50] Podlasly, M., and von der Porten, S., 2019. The Role of Indigenous People in Major Project Development: Paths for Indigenous Participation in Electricity Infrastructure. https://fnmpc.ca/wp-content/uploads/MPC-Finalv.11.pdf.
[51] von der Porten, S. and Podlasly, M., May 2021. Roadmap to Investing in Canada: Indigenous Inclusion in ESG, Indigenous Sustainable Investment Conference Summary Report, First Nations Major Project Coalition. https://fnmpc.ca/wp-content/uploads/FNMPC_Conference_Overview_v6.pdf.

Times are changing from when Indigenous nations were compensated little to nothing for major projects that impacted Indigenous lands, and that Nation members did not consent to. Now, collectively, Indigenous nations are the largest asset owners of clean energy, outside of utilities.[52] Increased Indigenous ownership levels in Canada have been generating a range of benefits for major projects, including "reduced regulatory risk, accelerated permit approvals, improved communications channels, and better long-term alignment of interests between industry and Indigenous [nations]".[53] Indigenous leadership and governance on projects restores the ability for Nations to generate revenue from generating and selling clean electricity through agreements with utilities, provinces, territories, and industry, and to centre Indigenous knowledge systems, rights, and autonomy in the net zero transition.[54] This greater Indigenous involvement has been strategic, with an increase in influence over projects through appointed Indigenous board members and increased support by Nation members.[55]

[52] Stephenson, A., 20 March 2023. Indigenous communities leading Canada's clean energy boom, BNN Bloomberg. https://www.bnnbloomberg.ca/indigenous-communities-leading-canada-s-clean-energy-boom-1.1897860.
[53] The Conference Board of Canada, 29 September 2022. Indigenous Ownership Overcoming Obstacles and Forging Partnerships. https://www.conferenceboard.ca/product/indigenous-ownership-overcoming-obstacles-and-forging-partnerships/.
[54] Assembly of First Nations, October 2023. National Climate Strategy, afn.bynder.com/m/77556e1d9da51db7/original/2023-Climate-Strategy-Report.pdf.
[55] The Conference Board of Canada, 29 September 2022. Indigenous Ownership Overcoming Obstacles and Forging Partnerships. https://www.conferenceboard.ca/product/indigenous-ownership-overcoming-obstacles-and-forging-partnerships/.

Indigenous equity investment trends in electrification in Canada

" Current trends are towards greater equity ownership. [Indigenous nations] want to be owners of assets. We want to have a transfer of assets that are existing in our territories to our Nation so that we can sell more power and find those customers." – Expert at Electrification Roundtable

Indigenous nations investing for the first time in electrification projects are in good company: Indigenous nations across Canada are increasingly becoming equity owners (majority or minority) in such projects. Using publicly available information, Fasken[56] has published ownership trends in Indigenous equity participation in energy and related infrastructure projects. As of November 2023, they have estimated, by project type, how many projects in Canada have an Indigenous equity ownership component, noting in the coming years an expectation of increasing numbers in energy storage, renewable energy, and hydrogen projects (Table 3):

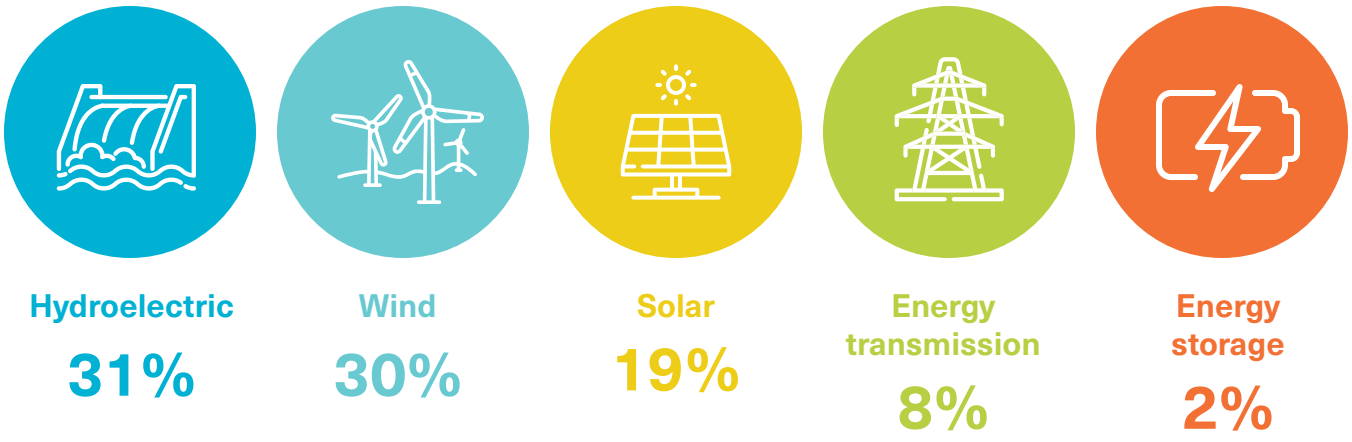


Table 3. Percentage of clean energy projects by sector in Canada with Indigenous equity investments.

[56] Carruthers, A., Bundock, E., and Langlois, S., 22 November 2023, Indigenous Equity in Energy and Infrastructure Projects in Canada, Fasken. https://www.fasken.com/en/knowledge/2023/11/indigenous-equity-in-energy-and-infrastructure-projects-in-canada.

Part 2:
Why Indigenous Leadership in and Ownership of Net Zero Projects are Important

To prevent the most catastrophic impacts of climate change, Canada has committed to halve its green house gas emissions by 2030 (from 2010 levels). Indigenous nations are central to the success, or failure, of this commitment.[57] In Canada, Indigenous nations are already leading the net zero transition. Not only have Nations sounded the alarm on land impacts and importance of emissions reduction, many are leading the build-out of clean energy projects (second only to governments and utilities who have had a 150 year head start).[58] Canada's success in the electrification of our energy systems in the net zero transition is inextricably linked to meaningful progress on reconciliation with Indigenous nations.[59] This section explains why Indigenous leadership and ownership of net zero projects in Canada is important.

[57] Deloitte LLP, 2021 June 21. Promises, promises: Living up to Canada's commitments to climate and Indigenous reconciliation www2.deloitte.com/content/dam/Deloitte/ca/Documents/consulting/ca-indigenous-report_en.pdf.
[58] Stephenson, A., 20 March 2023. Indigenous communities leading Canada's clean energy boom, BNN Bloomberg. https://www.bnnbloomberg.ca/indigenous-communities-leading-canada-s-clean-energy-boom-1.1897860.
[59] Deloitte LLP, 2021 June 21. Promises, promises: Living up to Canada's commitments to climate and Indigenous reconciliation www2.deloitte.com/content/dam/Deloitte/ca/Documents/consulting/ca-indigenous-report_en.pdf.

Reason #1: Climate Impact on Indigenous Lands

From a recording that predates the Village of Lytton burning during the June 2021 heat wave:

" The adverse effects of using the land and resources as we have been doing is now evident. We are experiencing drought, forest fires, heat, flooding, you name it - it's happening. Kanaka Bar's daily temp used to be about 33°C. It is hitting about 35°C. When I leave here and go to town, Lytton is now hitting 41°C. This summer, twice, they've hit 49°C. We are living in the age of consequences, which is the result of 150 years of extractive, exploitive economies, and we are all collectively in the same boat. By becoming aware of the adverse effects of colonization, we can start getting ready for the economy and environment of tomorrow."

- Chief Patrick Michell, Kanaka Bar First Nation[60]

Indigenous peoples have existed and thrived in the lands and waters of their traditional territories for millennia. Because of this long-standing Indigenous place-based relationship, there is an inextricable link between Indigenous peoples, knowledge, identities, and rights from the homelands of each Indigenous nation.[61] As a result of this connection, the impacts of climate change are "particularly devastating for Indigenous peoples many of whom continue to depend closely on what the land provides for their food, shelter, culture, and spiritual sustenance."[62]

" From a reconciliation standpoint, I don't think it's been recognized that Indigenous peoples are disproportionately impacted by climate change. Indigenous peoples should be at the front of the line for funding and resources that mitigate the impact of climate change–it is a vital part of reconciliation."

- Cody Desautel (Colville Tribes), Natural Resources Director, Colville Tribes[63]

Further, Indigenous peoples are among the first to face the impacts of climate change, because of this dependence upon, and close relationship with, the environment and its resources.[64] However, this impact is also one of the reasons that electrification projects must start with Indigenous nations.

[60] RealWorld Media. (2020). Power to the People. Episode 9: Kanaka Bar. APTN. https://www.aptntv.ca/powertothepeople/video/season-1/.
[61] von der Porten, S., Podlasly, M., and Csicsai, P., April 2022. Indigenous Leadership and Opportunities in the Net Zero Transition, First Nations Major Projects Coalition. fnmpc.ca/wp-content/uploads/FNMPC_Primer_04132022_final.pdf.
[62] Deloitte LLP, 2021 June 21. Promises, promises: Living up to Canada's commitments to climate and Indigenous reconciliation www2.deloitte.com/content/dam/Deloitte/ca/Documents/consulting/ca-indigenous-report_en.pdf.
[63] Ibid.
[64] United Nations Department of Economic and Social Affairs Indigenous Peoples, n.d. The effects of climate change on indigenous peoples. https://www.un.org/development/desa/indigenouspeoples/climate-change.html.

Reason #2: Free, Prior, and Informed Consent

" The only road to net zero runs through Indigenous lands."

- Mark Trahant, Editor-at-large of Indian Country Today[65]

Indigenous nations expect to not only be owners of net zero projects and but also to have free, prior, and informed consent as the baseline for any new projects. Canada has endorsed without qualification the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), which includes Article 20(1):

> *"Indigenous peoples have the right to maintain and develop their political, economic and social systems or institutions, to be secure in the enjoyment of their own means of subsistence and development, and to engage freely in all their traditional and other economic activities".*

UNDRIP, alongside legal and socio-political precedents, has highlighted the risks (investment, project, and legal) posed to corporations[66] and governments[67] when they fail to secure the free, prior, and informed consent of Indigenous nations on whose lands or waters the project occurs. Without the full participation of Indigenous people, it is hard to conceive of net zero projects being completed in time to meet net zero target timelines.

> ***" The choice to pursue genuine partnerships with First Nations marks a critical pivot point as to whether or how much a given electricity development can put the adversarial days of lawsuits and protests in the rear-view mirror in favour of a speedier path paved in the values of social justice and shared prosperity."***
>
> – Public Policy Forum, Project of the Century[68]

Please see Table 7 on page 73 for a breakdown of free, prior, and informed consent.

Reason #3: Speed vs. Indigenous Reconciliation: A False Choice

There is no trade-off. The net zero transition presents a unique opportunity to address the urgency of the climate crisis AND the need for Indigenous reconciliation through Indigenous equity ownership of energy and climate solutions infrastructure simultaneously. In this way, the urgent need for the world, including Canada, to decarbonize our energy systems and Indigenous reconciliation are one in the same.

[65] Cited in von der Porten, S., and Podlasly, M., September 2022. "The Only Road to Net Zero Runs Through Indigenous Lands", First Nations Major Projects Coalition.https://fnmpc.ca/wp-content/uploads/FNMPC_Post-Conf_11022022_web.pdf.

[66] Golden, H., 15 Oct 2021. Indigenous tribes tried to block a car battery mine. But the courts stood in the way. The Guardian. www.theguardian.com/environment/2021/oct/15/indigenous-tribes-block-car-battery-mine-courts.

[67] Friedman, L., 25 March 2020. Standing Rock Sioux Tribe Wins a Victory in Dakota Access Pipeline Case, The New York Times https://www.nytimes.com/2020/03/25/climate/dakota-access-pipeline-sioux.html.

[68] Annesley, J., Campbell, D., Golshan, A., and Greenspon, E., 19 July 2023. Project of the Century: A Blueprint for Growing Canada's Clean Electricity Supply – and Fast https://ppforum.ca/publications/net-zero-electricity-canada-capacity/.

"It's crucial to note that addressing climate change and reconciliation is not about trade-offs between prioritizing profit over land degradation or Indigenous rights over environmental impacts… By acknowledging and respecting Indigenous peoples' ownership and decision-making power and supporting their inherent responsibility as stewards of the land, Canada can move forward together."[69]

The Public Policy Forum stated that "if the energy transition is really the biggest thing going on on the planet, we need to be unrelenting in our policy focus, fleet-footed in bridging policy differences and focused on filtering everything—*everything*—through the lens of whether it accelerates or slows the transition."[70] That lens could be more aptly reframed as two binocular lenses: one that makes net zero transition decisions based on whether they further reconciliation with Indigenous peoples, the other based on its potential to accelerate transition. Advancing Indigenous reconciliation and addressing climate change must be done in tandem through policy mechanisms that create opportunities for, and address systemic inequalities faced by, Indigenous nations.[71] [72]

[69] Deloitte LLP, 2021 June 21. Promises, promises: Living up to Canada's commitments to climate and Indigenous reconciliation www2.deloitte.com/content/dam/Deloitte/ca/Documents/consulting/ca-indigenous-report_en.pdf.

[70] Annesley, J., Campbell, D., Golshan, A., and Greenspon, E., 19 July 2023. Project of the Century: A Blueprint for Growing Canada's Clean Electricity Supply – and Fast https://ppforum.ca/publications/net-zero-electricity-canada-capacity/.

[71] Laboucan-Massimo, M., November 2023. Just Transition Guide. static1.squarespace.com/static/ 5c9860bf77b9034bc5e70122/t/6555222edcea4d681ccf0454/1700078320040/Just+Transition+Guide.pdf.

[72] Deloitte LLP, 2021 June 21. Promises, promises: Living up to Canada's commitments to climate and Indigenous reconciliation www2.deloitte.com/content/dam/Deloitte/ca/Documents/consulting/ca-indigenous-report_en.pdf.

Reason #4: Indigenous Own-source Revenues and Self-determination

Indigenous governments need resources to reinvigorate Indigenous laws, governance structures, and decision-making toward rebuilding the self-determination that was partly dismantled by colonization. Own-source revenues (monies generated by the Indigenous nation that are not from colonial government sources) are one way in which Indigenous nations can build economic self-reliance, and thus greater autonomy. A major rational for many Nations is also addressing the infrastructure gap on reserve "created by colonial policies that made Indigenous people wards of the government".[73] That remains an unmet need by the Crown and is estimated at $30 billion for First Nations alone.[74]

UNDRIP ARTICLE 4:

" Indigenous peoples, in exercising their right to self-determination, have the right to autonomy or self-government in matters relating to their internal and local affairs, as well as ways and means for financing their autonomous functions."

Given that independent revenue streams are essential to Indigenous self-determination, the net zero transition is an opportunity for many Indigenous nations to create new sources for own-source revenues, such as through clean energy generation or transmission. The element of Indigenous sovereignty through own-source revenues is important to many Indigenous nations:

" We know that own-source revenue is so important to the needs of our people. As Indigenous people we really look after our own. And that is something that is going to continue."

- Chief Sharleen Gale, Chair, FNMPC & Chief, Fort Nelson First Nation[75]

" For every dollar that we spend on biomass, 95 cents stays in this community. It's totally changing the dynamics of how we heat our homes, and the community is benefiting from those dollars."

- Blair Hogan, Teslin Tlingit First Nation[76]

" Our community is very intentional about beginning a project that is going to bring return back to our community."

- Joseph McNeil, Standing Rock Sioux Tribe, General Manager, SAGE Development Authority[77]

[73] First Nations Financial Management Board, November 2022. The Roadmap Project: Chapter Three Closing the Infrastructure Gap. fnfmb.com/sites/default/files/2022-11/2022-11-09_roadmap_chapter_3_closing_the_infrastructure_gap.pdf
[74] Ibid.
[75] von der Porten, S., and Podlasly, M., September 2022. "The Only Road to Net Zero Runs Through Indigenous Lands", First Nations Major Projects Coalition. https://fnmpc.ca/wp-content/uploads/FNMPC_Post-Conf_11022022_web.pdf.
[76] From Power to the People Episode 7: Teslin, YK and Episode 9: Bella Coola, BC, RealWorld Media Inc., as cited in Laboucan-Massimo, M., November 2023 Just Transition Guide. static1.squarespace.com/static/ 5c9860bf77b9034bc5e70122/t/6555222edcea4d681ccf0454/1700078320040/Just+Transition+Guide.pdf.
[77] von der Porten, S., and Podlasly, M., September 2022. "The Only Road to Net Zero Runs Through Indigenous Lands", First Nations Major Projects Coalition. https://fnmpc.ca/wp-content/uploads/FNMPC_Post-Conf_11022022_web.pdf.

" Sometimes [Indigenous nations] are reliant on federal transfers to build some of their community infrastructure. And so, I think to the extent that communities have their own source revenue, they're hopefully participating in projects in their territory, that can help them have a bit more say and independence with the projects they'd like to have. Having your own money to bring to the project will be helpful in asserting and having your own standpoint."

– Jason Calla, Sḵwx̱wú7mesh Nation, Technical Team, First Nations Infrastructure Institute[78]

" Not only does this [solar and wind farm] create renewable energy and a green economy, but all the funds that the Six Nations of the Grand River Development Corporation make go back to benefiting our community. We're able to invest in things like fire trucks, water line expansion, and housing developments for our people…A big reason for the development corporation was to create an additional source of revenue that the community can use to address funding gaps. This is a revenue stream that we can participate in and feel good about ourselves, because we know this is clean energy. We're participating in the societal shift in how we generate energy in Canada."

- Tabitha Curley, Onondaga Nation[79]

[78] Ibid.
[79] From Power to the People Episode 8: Six Nations of the Grand River, ON, as cited in Laboucan-Massimo, M., November 2023. Just Transition Guide. static1.squarespace.com/static/5c9860bf77b9034bc5e70122/t/ 6555222edcea4d681ccf0454/1700078320040/Just+Transition+Guide.pdf.

Reason #5: Energy Sovereignty for Indigenous Nations

In many cases, Indigenous nations' ownership of clean energy infrastructure such as generation and transmission has the potential to increase energy sovereignty for Indigenous nations.[80]

> *" Energy sovereignty enables our communities to own and operate our own energy systems, thereby increasing our resiliency and allowing for a democratic energy system. When Indigenous communities utilize renewable and locally available energy sources, our dependency on fossil fuel corporations is reduced. Having energy sovereignty means having access to an energy system that aligns with our Indigenous cultures, knowledge, and land rights while mitigating the negative impacts of colonialism and capitalist resource extraction."*[81]

The rationale for supporting Indigenous ownership of electrification assets is furthered by the Assembly of First Nation's call to facilitate "First Nations' energy independence and energy security by supporting the participation and ownership in the generation, transmission, and distribution of energy, including through power purchase agreements".[82] The importance of Indigenous energy sovereignty- and self-determination, was corroborated by roundtable experts:

"There are really good examples of the antiquated regulatory mandates that exist that don't include climate change, that don't include UNDRIP or Indigenous sovereignty in any respect."

"Energy sovereignty as a Nation and energy independence…you've always done projects north to south or vice versa, but never across provinces or across other jurisdictions. That's what's needed."

"Regulators are an oxymoron to Indigenous sovereignty."

[80] Brown, V., 29 April 2019. This is what Indigenous energy sovereignty looks like - A just transition case study, Briarpatch Magazine. https://briarpatchmagazine.com/articles/view/indigenous-climate-action.
[81] Laboucan-Massimo, M., November 2023. Just Transition Guide. static1.squarespace.com/static/ 5c9860bf77b9034bc5e70122/t/6555222edcea4d681ccf0454/1700078320040/Just+Transition+Guide.pdf.
[82] Assembly of First Nations, October 2023. National Climate Strategy, afn.bynder.com/m/77556e1d9da51db7/original/2023-Climate-Strategy-Report.pdf.

Reason #6: Indigenous Economic Reconciliation

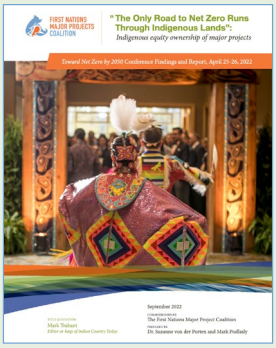
The *Truth and Reconciliation Commission's Calls to Action* included calling "upon the corporate sector in Canada to adopt [UNDRIP] as a reconciliation framework and to apply its principles, norms, and standards to corporate policy and core operational activities involving Indigenous peoples and their lands and resources."[83] There are many Indigenous experts and leaders who have pointed to the net zero transition as one place to begin advancing Indigenous economic reconciliation:

> *" Advancing reconciliation is a powerful opportunity for Canada to tackle climate change and move forward in our shared journey toward a new and respectful relationship between Indigenous and non-Indigenous peoples."*
>
> - Jason Rasevych (Ginoogaming First Nation) and Fiona Kirkpatrick Parsons (Lac La Ronge First Nation)[84]

> *" [A]ddressing the climate crisis cannot be separated from the broader project of First Nations self-determination and reconciliation."*
>
> – Assembly of First Nations[85]

> *" We have to look at the electricity sector. It's a key venue for economic reconciliation."*
>
> – Cole Sayers, Advisor, First Nations Clean Energy & Innovation, Clean Energy BC[86]

> *" This [solar project] is our beginning to energy and economic reconciliation; to start creating a revenue stream and build a foundation that can last for future generations."*
>
> - AJ Esquega of Mashkawiziiwin Energy Projects[87]



Find out more about Indigenous perspectives on net zero.

In 2022, the FNMPC convened experts, chiefs, politicians, Indigenous leaders, C-suite executives, and investment professionals and presented ideas that together laid new ground on what Indigenous nations, industry sectors, and governments can each do to achieve solutions to climate change and Indigenous economic reconciliations. Specifically, they discussed a new reality in which Indigenous nations own, or are presented with the opportunity to own, equity ownership in energy infrastructure projects.

Please view the Toward Net Zero by 2050 Conference Findings and Report: **"The Only Road to Net Zero Runs Through Indigenous Lands"**

[83] National Centre for Truth and Reconciliation, 2015. Truth and Reconciliation Commission Reports. https://nctr.ca/records/reports/.
[84] Deloitte LLP, 2021 June 21. Promises, promises: Living up to Canada's commitments to climate and Indigenous reconciliation www2.deloitte.com/content/dam/Deloitte/ca/Documents/consulting/ca-indigenous-report_en.pdf.
[85] Assembly of First Nations, October 2023. National Climate Strategy, afn.bynder.com/m/77556e1d9da51db7/original/2023-Climate-Strategy-Report.pdf.
[86] Cited in von der Porten, S., and Podlasly, M., September 2022. "The Only Road to Net Zero Runs Through Indigenous Lands", First Nations Major Projects Coalition. https://fnmpc.ca/wp-content/uploads/FNMPC_Post-Conf_11022022_web.pdf.
[87] Power to the People Episode 13: Gull Bay, ON. RealWorld Media Inc. as cited in Laboucan-Massimo, M., November 2023. Just Transition Guide. static1.squarespace.com/static/5c9860bf77b9034bc5e70122/t/ 6555222edcea4d681ccf0454/1700078320040/Just+Transition+Guide.pdf.

Reason #7: Benefits to Indigenous Nations' Membership

Experts at both roundtables consistently noted how Indigenous ownership of and partnerships in clean energy infrastructure can benefit members of the Indigenous nations, including jobs, own-source revenues, cleaner local and global environment, pride, and agency:

" There are economic indicators, environmental, but also more qualitative measures that communities can describe that are hard to quantify. Like community pride and ownership."

" There's the aspect of those projects and how they impact the communities on the long-term basis. For us, our wind farm, there's this pride that we participated in construction on our traditional territory. [Our First Nation is] very proud of our wind farm, and it continues now."

The findings from the two roundtables on how clean energy projects could benefit Indigenous nations and their membership aligns with multiple similar narratives cited in other reports, such as *Just Transition*:

" There is a sense of pride that our community members get from this project. We did that as a community, our leaders did that. The wind farm was created to generate revenues so that all three communities could benefit and grow the Nation."

- Kirt Dedam, Project Manager at Mesgi'g Ugju's'n Energies Inc.[88]

" A lot of the money stays within the community. They hired 116 individuals from our three communities. I actually have a career now because of the wind farm. Thanks to money made from the [Mesgi'g Ugju's'n] wind farm which was then reinvested into the three communities, it has been possible to build a school, a water park, a playground, and a hockey rink."

- Scott Metallic of Listuguj First Nation[89]

" [We] created an industry: new employment, new opportunities for apprentices to go on, not just here, but anywhere in the region."

- Matt Jamieson, CEO, Six Nations of the Grand River Development Corporation[90]

" We know today that globally the healthiest lands are lands that are owned, managed, or influenced by Indigenous peoples."

- Steven Nitah (Łutsël K'é Dene First Nation), Indigenous Relations Advisor, Nature for Justice[91]

[88] Laboucan-Massimo, M., November 2023. Just Transition Guide. static1.squarespace.com/static/ 5c9860bf77b9034bc5e70122/t/6555222edcea4d681ccf0454/1700078320040/Just+Transition+Guide.pdf.
[89] Power to the People Episode 5: Listuguj, QC. RealWorld Media Inc. as cited in Laboucan-Massimo, M., November 2023. Just Transition Guide. static1.squarespace.com/static/5c9860bf77b9034bc5e70122/t/6555222edcea4d681ccf0454/1700078320040/Just+Transition+Guide.pdf
[90] Power to the People Episode 8: Six Nations of the Grand River, ON as cited in Laboucan-Massimo, M., November 2023. Just Transition Guide. static1.squarespace.com/static/5c9860bf77b9034bc5e70122/t/6555222edcea4d681ccf0454/1700078320040/Just+Transition+Guide.pdf.
[91] Deloitte LLP, 2021 June 21. Promises, promises: Living up to Canada's commitments to climate and Indigenous reconciliation www2.deloitte.com/content/dam/Deloitte/ca/Documents/consulting/ca-indigenous-report_en.pdf.

" Renewable energy is one of those rare industries that Indigenous communities embrace willingly because it aligns with our values."

- Matt Jamieson, CEO, Six Nations of the Grand River Development Corporation[92]

" The active participation of Indigenous peoples is critical to achieving net-zero emissions. Indigenous knowledge systems carry the experience and careful consideration of thousands of years of observation and interaction with sensitive ecosystems and the stewardship responsibilities embedded in many Indigenous cultures are a clear reminder that we can do more to protect the environment."

- Catherine McKenna; Chair of the United Nations High Level Expert Group on the Net-Zero Emissions Commitments of Non-State Entities[93]

[92] RealWorld Media. (2020). Power to the People. Episode 4: Six Nations. APTN.https://www.aptntv.ca/powertothepeople/video/season-1/.
[93] von der Porten, S., and Podlasly, M., September 2022. "The Only Road to Net Zero Runs Through Indigenous Lands", First Nations Major Projects Coalition. https://fnmpc.ca/wp-content/uploads/FNMPC_Post-Conf_11022022_web.pdf.

Reason #8: The Business Case for Indigenous Ownership

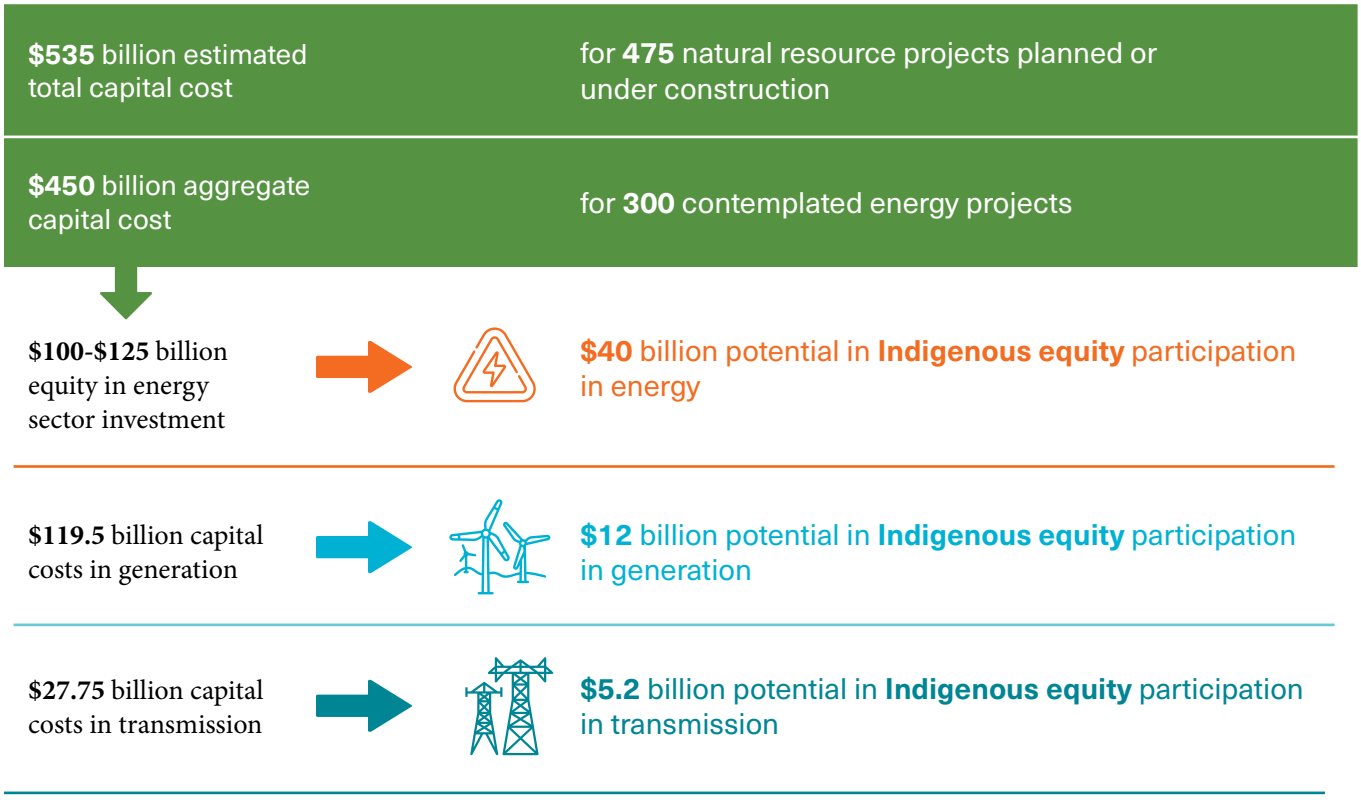
" Collaborating with Indigenous Peoples builds project certainty and mutually beneficial outcomes. Indigenous traditional territories encompass all the land now referred to as Canada. No longer considered acts of benevolence, good Indigenous relationships are integral to business success and for social licence. Investors, shareholders, and regulators are increasing their focus on Environment, Social, and Governance criteria and Indigenous empowerment. Investment will flow where there is support for Indigenous participation."

- National Indigenous Economic Strategy for Canada[94]

Magnitude of opportunity

The First Nations Major Projects Coalition commissioned a report from Colliers Project Leaders to estimate the magnitude of the opportunity for First Nations to partake in equity ownership in the energy sector.[95] The total estimated equity ownership opportunity that is likely to be available for electrification projects in Canada makes a strong business case for Indigenous ownership (Figure 6):

Figure 6. The estimated equity ownership opportunity.



[94] National Indigenous Economic Strategy for Canada, 2022. Pathways to Socioeconomic Parity for Indigenous Peoples. https://niestrategy.ca/wp-content/uploads/2022/05/NIES_English_FullStrategy.pdf.
[95] Colliers Project Leaders, June 2023. Indigenous Equity in the Natural Resource Project Portfolio. Commissioned by the First Nations Major Projects Coalition.

Project certainty for First Nations and industry

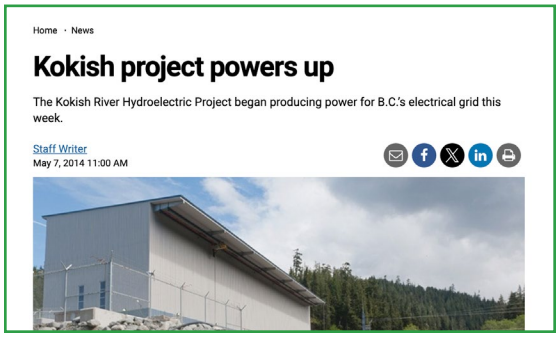
" The number one way to de-risk projects and avoid delays, she observed, is having Indigenous Peoples as partners at the planning stage."

– Penny Favel, VP Indigenous Affairs, Hydro One[96]

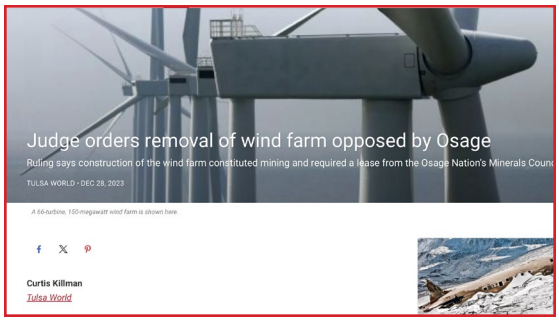
In many cases, investments in electrification projects in Canada can be de-risked for both First Nations and investors through corporate structures and other means. Industry and First Nations can benefit from and de-risk projects not just through Indigenous equity ownership, but also through contracting, procurement, transferrable skills, employment and training. Land use certainty is important for enabling economic opportunities. Stalled projects create economic risks.[97]

Figure 7. Economic risks vs. benefits in Indigenous consent and partnership.

Examples of net zero projects built because of Indigenous consent and ownership[98, 99]



Examples of net zero projects not built because of Indigenous consent and ownership[100, 101]



The Public Policy Forum cited a 2020 Moody's Investors Service report warning "that companies unable to negotiate Indigenous involvement in their projects could see their credit ratings negatively affected. Moody's called on them to factor self-determination and self-sufficiency into their project planning."[102]

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96 As cited in Annesley, J., Campbell, D., Golshan, A., and Greenspon, E., 19 July 2023. Project of the Century: A Blueprint for Growing Canada's Clean Electricity Supply – and Fast https://ppforum.ca/publications/net-zero-electricity-canada-capacity/.

97 Lindley-Peart, M. and Podlasly, M., 24 May 2020. Indigenous Ownership of Electricity Infrastructure: A Case Study, First Nations Major Projects Coalition. https://fnmpc.ca/wp-content/uploads/FNMPCIndigenousElectricityInfrastructurePaperMay2020.pdf.

98 Smith, S., 17 August 2022. N.S. selects five wind projects to produce electricity from renewable sources, CBC News. https://www.cbc.ca/news/canada/nova-scotia/n-s-selects-five-projects-largest-ever-wind-procurement-1.6553677.

99 North Island Gazette, 7 May 2015. Kokish project powers up. northislandgazette.com/news/kokish-project-powers-up-1365297.

100 Golden, H., 15 Oct 2021. Indigenous tribes tried to block a car battery mine. But the courts stood in the way. The Guardian. www.theguardian.com/environment/2021/oct/15/indigenous-tribes-block-car-battery-mine-courts.

101 Killman, C., 28 December 2023. Judge orders removal of wind farm opposed by Osage, ICT. https://ictnews.org/news/judge-orders-removal-of-wind-farm-opposed-by-osage

102 Gale, S. and Greenspon, E., 16 March 2021. First Nations are not obstacles but an opportunity to get things done in just and sustainable ways, Globe and Mail. https://www.theglobeandmail.com/business/commentary/article-first-nations-are-not-obstacles-but-an-opportunity-to-get-things-done/.

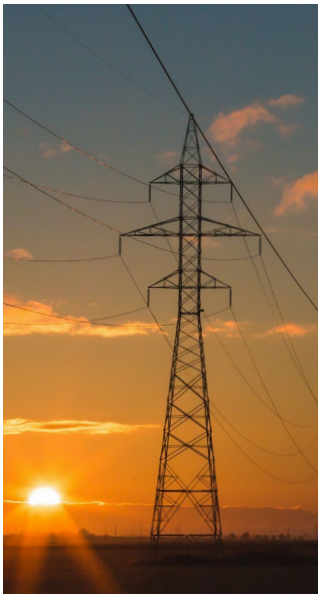
What are the current trends with electrification in Canada?

An FNMPC-commissioned study demonstrated that wind and solar energy are the fastest growing generation sources in Canada, while biofuels and geothermal are emerging as increasingly viable options. Major investments are being made in the low-to-no carbon emission energy generation industry with regulations and policies setting strong direction to phase out coal by 2030, and reach net-zero 2050. Canada's transmission and grid infrastructure is being upgraded and expanded to accommodate increased renewable energy generation and to ensure a reliable and resilient electricity system. This includes projects creating interconnections (transmission lines) between provinces, smart grid technologies, massive electrification projects and extensive system upgrades by provincial operators.

The Canada Energy Regulator (CER) has projected scenarios for Canada's energy future, and predicts the most growth will occur in wind generation, with steady growth of solar, in all scenarios. CER's modeling suggests that the "low capital and operating costs of both resources make them among the most attractive options for utilities and power producers to increase electricity generation to meet growing demand while also reducing GHG emissions."[103] In addition to the big winners, **solar** and **wind**, and the **transmission** needed to build out the grid, other electrification options for a Nation's ownership and partnership includes:[104]

- **Hydroelectric generation:** Expected to increase around 26% from 2021-2050 in each scenario, mostly in provinces with existing hydroelectric facilities.
- **Small modular reactors (SMRs):** Growth expected particularly in the 2035 to 2050 period.
- **Hydrogen:** In the electrical power sector, mainly in Alberta during peak demand periods due to the high price of carbon.
- **Battery Storage:** Projects by 2030 1.5 gigawatts of battery storage in Canada.



[103] Canada Energy Regulator, 2023. Canada's Energy Future 2023: Energy Supply and Demand Projections to 2050. https://www.cer-rec.gc.ca/en/data-analysis/canada-energy-future/2023/canada-energy-futures-2023.pdf.
[104] Ibid.

> *“ We have the largest coastline of any country and we don’t have a single wind turbine on water.”*
>
> - Public Policy Forum[105]

Other emerging and growing technologies include:

- Geothermal electricity
- Offshore wind generation
- New or enhanced inter- and intra-provincial transmission lines
- Pumped hydro
- Storage technologies
- Smart grid technologies
- Behind-the-fence electrical generation
- Critical minerals (including supply of clean energy to mining operations)

First Nations should explore projections and the diversity of options before investing in any project.

[105] Annesley, J., Campbell, D., Golshan, A., and Greenspon, E., July 2023. Project of the Century: A Blueprint for Growing Canada’s Clean Electricity Supply – and Fast https://ppforum.ca/wp-content/uploads/2023/07/Canada%E2%80%99sCleanElectricitySupply-PPF-July2023-EN-1.pdf.

Figure 5. Why Indigenous Leadership in and Ownership of Net Zero Projects are Important

Part 3: Challenges for Indigenous Ownership of Electrification Projects in Canada

Challenge #1: Indigenous Access to Competitively-Priced Capital

Financing challenges are a significant barrier to Indigenous equity participation in natural resource projects. The *Indian Act* has long prevented Indigenous nations in Canada from reasonable and competitive access to capital for investment and economic development, exacerbated by typically low revenues by Indigenous nations and high project costs:[106]

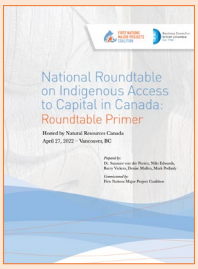
> *Section 89 of the Indian Act prevents First Nations assets "situated on a reserve" from being used as collateral to access financing. This restriction forces First Nations to use complicated legal workarounds before they can engage with lenders. These complexities also impact lender policies regarding asset valuation and risk assessment, which can then prevent Indigenous communities from accessing capital. Or, lenders are willing to finance Indigenous equity participation but at an interest rate that is too high.*

Roundtable experts characterized the barrier that lack of Indigenous access to competitively priced capital can create for building out Indigenous-owned electrification projects (Table 4):

[106] The Conference Board of Canada, 5 July 2023. Indigenous Ownership: Strengthening Economic Autonomy. https://www.conferenceboard.ca/product/indigenous-ownership_july2023/.

Table 4. Challenges to Indigenous access to competitively-priced capital.

Challenge	Context from Roundtable Expert
High Interest Rates	"Because of Section 89 of the *Indian Act*, [First Nations] can't use any of their assets as collateral to get a loan. They're getting incredibly high interest rates from banks, and it makes it so that projects are not economic."
Upfront Access to Capital	"You need to be able to even access capital. You have to know that it's a viable project, there's all this pre-work that needs to be done that's out of pocket. before you can even start applying to these sorts of things. So, that's a barrier right at the beginning for many of our communities."
Need for Non-recourse Financing[107]	"Access to affordable capital on reasonable terms and of low risk with that. In many cases First Nations do not have the balance sheets to support their investment in these projects and so it needs to be non-recourse financing."
Competition for Capital	"Competition for capital… [it is] a real challenge to find capital for all the different projects." "First Nations are faced with a number of opportunities but having the capacity to actually assess those and vet those for which ones, they're competing over scarce resources so there could be great opportunities and dollars left on the table."
Influence	"Funding is the first [barrier], and it's that access to capital at the beginning of the project as Indigenous nations engage with the proponents. We're finding that we don't have a voice until [we've] put money on the table. So, if your project is gaining momentum and the First Nations voice isn't captured at the beginning, that opportunity to have a real impact on the project and to influence direction might have been missed so that's why access to capital early is critical."
Capital Access at the Speed of Business	"[Indigenous] funding [from government] is April 1st to March 31st and then it can disappear. So for us it makes it really tricky sometimes to align that with where the proponents are. How do you get all those stars aligned properly? And then the funding goes out the door. I do find that pretty daunting on some of the big projects."



Find out more about Indigenous access to capital

To read further on Indigenous Access to Capital, please see the **FNMPC National Roundtable on Indigenous Access to Capital in Canada: Roundtable Primer.**

[107] "A non-recourse loan… is any consumer or commercial debt that is secured only by collateral. In case of default, the lender may not seize any assets of the borrower beyond the collateral". Source: https://www.investopedia.com/terms/n/non-recoursefinance.asp.

Challenge #2: Capacity

Indigenous nations owning large-scale electricity infrastructure necessitates making informed decisions, managing risks, conducting due diligence, negotiating terms, collaborating with partners, making operations decisions, maximising spin-off benefits, and informing membership.[108] All of this work requires a capacity that roundtable experts noted is a challenge for many Indigenous nations:

" When we talk about fast-tracking Indigenous ownership, we're not at that place. A lot of us are not at the place to jump on those opportunities to be able to fast track. We're still doing a little bit of catch up, capacity-building and all these things, education, and these pieces."

" These are large, intensive, capital-intensive projects. The timing and the timeline of when the [Indigenous nations] are going to be involved. If it's early on, it might be from a capacity perspective, the community might start to get really excited and say we want to be owners in this project. But by the time the community decides to be owners the train may have left the station."

" One [big challenge] is capacity. There are a lot of [Indigenous nations who] are having trouble with even engaging on energy projects. They're not at a place where they're prepared to have those conversations. Their money is better placed elsewhere at this point."

" There are systematic capacity problems. First Nations are only getting $42,000 a year for economic development. That's a systematic barrier to participation in the industry."

" [The First Nation membership] want to develop some solar project stuff that leads back to capacity. Some people that are like, 'oh yeah, I want to do solar', but they don't really know how the technology works. They don't know how to build stuff, so it kind of just puts them behind the ball."

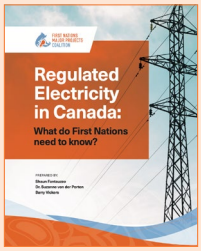
" An opportunity for technology transfer for making [electrification projects] possible is building your capacity… but who could help you out in terms of that coaching and that technology information? Sometimes I feel like that might be the barrier. I wouldn't know where to start if I were starting a project like that. Some communities are really good. They're leading all sorts of stuff and they're open to knowing and learning. While others maybe are like, 'this is crazy. I don't want to do this'."

" Capacity and capital are on both sides of the coin. There's capacity at the community level, whether technical or financial, [and] deal teams. How do communities want to participate in the regulatory piece and negotiate these ownership, employment, contracting, supply chain? Capacities [are] required for that."

[108] The Conference Board of Canada, 29 September 2022. Indigenous Ownership Overcoming Obstacles and Forging Partnerships. https://www.conferenceboard.ca/product/indigenous-ownership-overcoming-obstacles-and-forging-partnerships/.

Challenge #3: Financing Indigenous-Owned Electricity Infrastructure

When it comes to electricity markets in Canada, the provinces and territories are not aligned. While provincial and territorial governments determine the specific market structure and regulatory approach for electricity generation, transmission, and distribution inside their borders, the federal government is responsible for interprovincial and international energy matters, such as electrical grid connections between provinces and to the United States. Regulatory structures vary across the country and ranges from government-owned regulated monopolies to competitive, deregulated markets with investor-owned companies. This inconsistency presents a challenge for many in this sector, including First Nations who cannot necessarily draw insights from Indigenous-owned electrification projects. Further, these circumstances make financing Indigenous-owned electricity and infrastructure difficult.



Find out more about what First Nations need to know about regulated electricity in Canada.

For further information on Indigenous-owned, rate regulated utilities, please see the FNMPC's publication **"Regulated Electricity in Canada: What do First Nations need to know?"**

Across Canada, there is a disparity of opportunity across jurisdictions. For example, Indigenous nations who have access to loan guarantee programs are more likely to be able to finance an equity participation in electricity infrastructure, versus those without. Rate regulations add further complexity to Indigenous financing, due to a convergence of factors. In jurisdictions where utilities are rate regulated, the building costs and profits/returns on power projects are regulated by the Province or Territory's utility. This prioritizes and protects rate payers (end-users of the electricity produced) from having to pay escalating energy costs. However, because of this prioritization, the capital expenditure (money spent to build or maintain a project/asset) is restricted by the regulator.

Indigenous nations looking to invest in equity ownership of new clean energy projects (such as transmission lines or a new wind generation facility) are limited from accessing competitively-priced capital (such as loans with the same interest rates that other borrowers would receive). Why this is the case is because the *Indian Act* does not allow First Nations to collateralize assets to borrow against. For these reasons, financing Indigenous ownership of power generation or transmission projects is complex. Indigenous nations are often left to navigate this complexity, which adds a deterrent to Indigenous ownership of projects, and ultimately stalls consent needed for projects to proceed.

Challenge #4: Utilities and Regulators Constrained by Legislation and Policy

Roundtable experts indicated two main ways in which regulators and utilities have become barriers to Indigenous participation in, and ownership of, clean energy assets: (1) lack of mandate for the regulator to consider reconciliation, or (2) lack of prioritizing Indigenous rights in decision-making processes.

" For the most part there's very little established legal framework for the regulator to enable Indigenous projects, … and the regulator itself can be a barrier."

" [Regulators are] limited by legislation and precedent, so a First Nation would either have to convince legislators or challenge a particular finding within the administrative process and then Court of Appeal… new regulatory statutory requirements such as Indigenous equity participation or GHG reductions ought to be added, and the regulator (or a new Indigenous regulator) provide oversight and mandate utilities to reach targets."

" You have to back it up to the government because the regulator just puts into place government policy. That's all they do. They don't do anything independent of government policy."

"[For enabling Indigenous-led projects], regulators can do very little in the absence of changing their legislative framework. They are operating under very tight legislative frameworks that need to be amended."

Challenge #5: Lack of Regulation Supportive of Indigenous Nations Forming Indigenous Utilities

Several roundtable experts noted a lack of regulation to support Indigenous nations being able to form Indigenous utilities and/or Indigenous power authorities. Attendees noted why this is a barrier:

" Utilities, government and regulatory [bodies] are the barrier [to Indigenous utilities]."

" In non-integrated areas [in BC], they're not connected to [the BC Hydro] grid, but we have to provide service and a lot of those communities are trying to continue moving off diesel and doing small clean projects. And BC Hydro is trying to provide service to those customers. ***There's nothing to say that communities who aren't part of that could go into their own Indigenous utilities."***

In the United States, Indigenous utilities and power authorities are not simply a possibility, they are a well-established norm. However, in Canada, Indigenous utilities and Indigenous power authorities are few and far between, and to date have been largely stifled by regulators and monopoly characteristics of provincial/territorial utilities. These circumstances have amounted to reduced options for Indigenous nations to achieve economies of scale through the sale and distribution of power.

Find out more about Indigenous participation in electricity infrastructure.

Please see FNMPC's 2019 research **Paths for Indigenous Participation in Electricity Infrastructure** which includes exploration of Indigenous utilities in the USA.

Challenge #6: UNDRIP and FPIC are Inconsistent Across Canada

In 2021, Bill C-15, Canada's framework for the implementation into law of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) received royal assent.[109] Free, prior and informed consent (FPIC) are found throughout the Declaration, and is foundational to UNDRIP. Both UNDRIP and FPIC have been adopted, but roundtable experts pointed to the fact that these are both playing out inconsistently across Canada.

" There's a bit of thinking around how do you understand and expand the differences between UNDRIP engagement and consultation, making sure people understand the differences between these things? What do they mean? What are they? I think everyone expects Indigenous people to have a meaningful role in electrification, and then defining what that meaningful role is, and what did the communities want it to be? Different communities will want different roles and in projects, and building that consensus can be a very time-consuming process."

" In BC, the province legislated the UNDRIP and even though there isn't anything specific that says this is what it means, at least it's forced government to consider now reconciliation and rights holders in everything they do. There's good and bad with it."

" We have different jurisdictions, we have UNDRIP or DRIPA in BC but generally speaking in Canada UNDRIP, we talk about free prior and informed consent so the courts have said, depending on the nature of the infringement, it will require consent. The spectrum [ranges from] consultation only to consent... [In] renewable energy and transmission lines you could argue that you need our [Indigenous] consent."

" I think BC is probably the most hypocritical province. They talk about UNDRIP, you've got UNDRIP? Great! How is that being applied on the ground when all the other provinces are creating capital goals and equity. Is that not the principles of self-determination, self-governance, economic prosperity? They will not put these in place… but they hide behind UNDRIP, they say we adopted UNDRIP but where do you actually see it on the ground in BC?"

" There is an uneven permitting and regulatory process from province-to-province. There's not a national approach to that, there's a provincial approach to that. The degree to which Indigenous nations are engaged, are encouraged to incorporate, and participate in it is really left at the hands of the province and UNDRIP is a great example."

" Regulators are governed by rates which were developed in the 1960s. It didn't factor in clean energy. It didn't factor in UNDRIP. I think about how dated those regulations are in desperate need to modernize to support Indigenous-led and Indigenous-owned clean energy projects."

" [In Canada there are] antiquated regulatory mandates that exist that don't include climate change, that don't include UNDRIP or Indigenous sovereignty and that is one of the huge barriers."

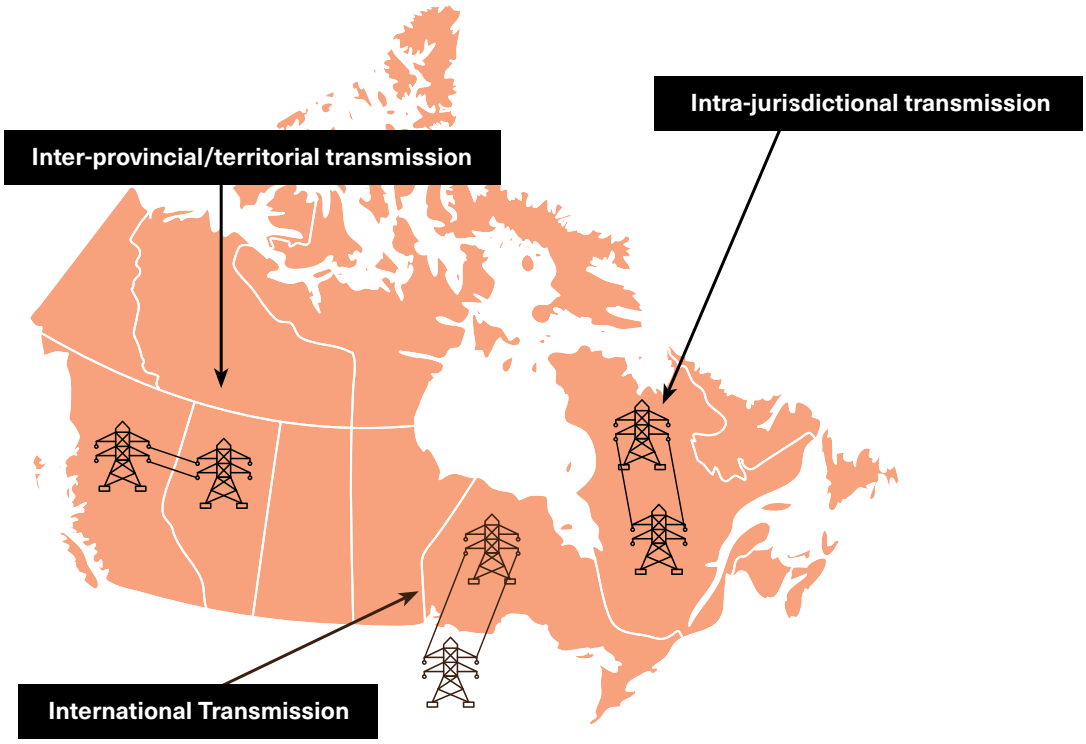
[109] Government of Canada, 10 December 2021. Backgrounder: *United Nations Declaration on the Rights of Indigenous Peoples Act.* https://www.justice.gc.ca/eng/declaration/about-apropos.html.

Challenge #7: Canada's Underbuilt Transmission Grid

" Canada's grids stand apart from one another like islands: for the most part, each province has its own electricity system, with different quirks and characteristics. There are fewer electricity interconnections, or interties, east-west in this country than there is capacity to export to the United States." - Globe and Mail[110]

The electrification of Canada's energy systems entails not only building new clean electricity *generation*, but also the corollary *transmission* lines to connect clean electricity to where it is needed. Canada has a grossly underbuilt national transmission grid: many areas have no transmission connections to the main electricity grid at all, and elsewhere there is very little inter-provincial/territorial transmission. Unless it is expanded, Canada's underbuilt transmission grid will continue to make meeting the growing demand for non-GHG-emitting electricity sources difficult. For success in the net zero transition, Canada's grid requires three primary areas of new transmission to be built out quickly (Figure 8):[111]

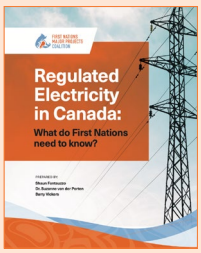
Figure 8. Areas for expanded transmission in Canada.



1. **Intra-jurisdictional transmission** (within provinces and territories) to get clean electricity to areas of growing demand and to connect remote, fossil-fuel dependent communities (many of which are Indigenous).
2. **Inter-provincial/territorial transmission** (e.g., BC-Alberta interties) for the trade of electricity, reliability, and resilience.
3. **International transmission** (Canada-US interties) to increase electricity trade and reliable, clean, and efficient power to both countries.

[110] Cryderman, K., 8 January 2024. The provinces need to play ball with each other on electricity, Globe and Mail. theglobeandmail.com/opinion/article-the-provinces-need-to-play-ball-with-each-other-on-electricity/.
[111] Maloney, J., December 2017. Strategic Electricity Interties: Report of the Standing Committee on Natural Resources. ourcommons.ca/Content/Committee/421/RNNR/Reports/RP9335660/rnnrrp07/rnnrrp07-e.pdf.

Doubling of Canada's electricity would mean building 40,000+ kilometres of transmission lines, which is the length of 4.5 times the Canada-U.S. border with an estimated cost of $44 billion carried out by 215,320 workers.[112] All of this transmission would have to run through Indigenous lands, and in most cases, any new line would run through the lands of multiple Indigenous nations.



Find out more about regulated electricity in Canada.

For further reading on Canada's diversity of rate regulated utilities, please see FNMPC's publication **"Regulated Electricity in Canada: What do First Nations Need to Know?"**

The underbuilt transmission grid is a challenge for Indigenous nations in Canada, particularly those interested in selling clean electricity to market and those with remote geographies where the Nation members do not have equitable access to reliable power. However, the challenges Canada faces to build out the grid mostly creates opportunities by way of Indigenous partnership or ownership of transmission lines. Table 5 summarizes Canada's challenges in transmission expansion, and the potential for Indigenous participation/ownership to act as a solution.

Table 5. Transmission: Canada's challenges and Indigenous opportunities and solutions.

Transmission Expansion Challenge	Indigenous Opportunities and Solutions
Uncertainty: The scale of transmission build out in Canada is considered a key uncertainty with significant impact on electricity investment outcomes.[113]	**De-risking:** Indigenous ownership of transmission lines provides certainty through Indigenous direction on impact assessment, timelines, inter-Indigenous relationships, Indigenous laws, and consent regimes.
Crossing multiple territories and claims: Transmission infrastructure is more complicated than generation in that it often crosses multiple Indigenous territories, lands, and land claims.[114]	**Early Indigenous engagement:** Indigenous nations should be involved in transmission planning from the earliest possible stages so that Nations have time to create or renew protocols and agreements with adjacent Nations.
Sharing data: Jurisdictions tend not to share their economic energy modeling with other jurisdictions, which makes planning intertie transmission difficult.[115]	**Indigenous nations as catalysis:** Indigenous nations may be able to catalyze the interjurisdictional sharing of this modeling through Indigenous-directed implementation of UNDRIP and FPIC.

[112] Annesley, J., Campbell, D., Golshan, A., and Greenspon, E., 19 July 2023. Project of the Century: A Blueprint for Growing Canada's Clean Electricity Supply – and Fast https://ppforum.ca/publications/net-zero-electricity-canada-capacity/.

[113] Canada Energy Regulator, 2023. Canada's Energy Future 2023: Energy Supply and Demand Projections to 2050. https://www.cer-rec.gc.ca/en/data-analysis/canada-energy-future/2023/canada-energy-futures-2023.pdf.

[114] Annesley, J., Campbell, D., Golshan, A., and Greenspon, E., July 2023. Project of the Century: A Blueprint for Growing Canada's Clean Electricity Supply – and Fast https://ppforum.ca/wp-content/uploads/2023/07/Canada%E2%80%99sCleanElectricitySupply-PPF-July2023-EN-1.pdf.

[115] Regulatory Assistance Project, Raab Associates, Ltd., and The Transition Accelerator, 5 October 2020. A Collaborative for Greater Coordination and Integration Among the Electric Grids of Eastern Canada and the Northeastern United States https://transitionaccelerator.ca/wp-content/uploads/2020/10/NEDA-Assessment-Report-October-2020-2.pdf.

Table 5 continued

Procurement: How cost allocation and procurement is done is different between jurisdictions, and a coordinated procurement process for inter-jurisdictional transmission lines does not exist.[116]	**Indigenous procurement:** As Indigenous nations build out procurement strategies—either within Nations or among adjacent Nations—Indigenous priorities can inform how procurement is done in transmission expansion.
Market integration: Markets/tariffs between jurisdictions need alignment and to be able to trade power in real time over distances, with mutual benefits to both. Through transmission, intermittent clean power needs to reach farther than weather systems.[117]	**Indigenous nations as aggregators:** As Indigenous nations build out clean generation assets and Indigenous-owned utilities, leverage in the markets may incentivize transmission, particularly those with Indigenous equity ownership.
Long lead times: Inter-jurisdictional transmission in Canada requires long lead times. Projects are often prolonged, delayed or rejected.[118]	**Indigenous nations as catalysts:** Indigenous ownership of transmission lines has proven to speed up transmission approval and construction.

In sum, Canada's transmission grid is plagued by the artificial borders of provinces, territories and countries that in some cases split Indigenous nations into two or more jurisdictions. It is these same jurisdictions that are fracturing the expansion of Canada's grid. Given that many Indigenous nations have maintained the pre-colonial political/geographic governance structures that transcend the provincial/territorial boarders, it makes sense that Indigenous nations are the conveners across these borders.

Challenge #8: Remoteness of Many Indigenous Nations

Remote Indigenous nations are at a disadvantage when it comes to participation in and ownership of electrification projects in Canada. The Canada Energy Regulator estimates there are 178 remote Indigenous and northern communities not connected to the electricity grid, over half of which are fly-in only.[119] The reasons why remoteness poses a challenge for fair participation in Canada's electrification include:

High costs: The high costs of remote areas make projects less competitive because of construction and labour costs, and restricts possibilities for financing, and/or creating new revenue streams.[120]

Disconnected from the power grid: Remote Indigenous nations cannot benefit from grid-scale clean energy generation projects where power could be sold to create revenues.

Distance from the power grid: If remote Indigenous nations want to create a connection to the grid to sell power (or simply electrify), the cost of such long-distance new transmission is often prohibitive.

[116] Phil Duguay, Clean Energy BC First Nations Energy Summit, November 6-7, 2023, [personal communication].
[117] Ibid.
[118] Energy + Environmental Economics, December 2022. Interregional Transmission Benefit Accrual Analysis. Slide Deck Prepared for Electricity Canada.
[119] Canada Energy Regulator, 15 February 2023. Market Snapshot: Clean Energy Projects in Remote Indigenous and Northern Communities. https://www.cer-rec.gc.ca/en/data-analysis/energy-markets/market-snapshots/2023/market-snapshot-clean-energy-projects-remote-indigenous-northern-communities.html.
[120] The Conference Board of Canada, 5 July 2023. Indigenous Ownership: Strengthening Economic Autonomy. https://www.conferenceboard.ca/product/indigenous-ownership_july2023/.

Reliance on diesel: Remote Indigenous nations are often dependent on diesel-generated electricity, a technology subsidized by the government yet expensive for Indigenous nations. Significant capital and capacity are required to reduce diesel use through renewable heat, clean electricity, energy efficiency measures, or connecting to the main grid.[121]

Capacity: Remote Indigenous nations face significantly higher barriers in building renewable energy projects which require specialized skill sets (e.g., technical, engineering, modeling, commercial, legal).[122]

Restrictive geography: Remote, often northern, Indigenous nations are farther from large shipping ports, sometimes depending on seasonal roads, and therefore restricted from access to transport of materials (e.g., hydrogen fuels or battery minerals).

Lack of road access: Half of the remote and northern communities in Canada are fly-in, making the shipping of materials more expensive and more difficult (in some cases impossible).

Challenge #9: Global Critical Minerals Demand

" Within the context of the UN Declaration and the TRC Calls to Action, Crown engagement with First Nations in critical minerals strategies must be founded on respect and support for First Nations communities' concerns and interests related to critical minerals projects development and value chains. Such engagement must be translated into tangible opportunities to advance recognition and reconciliation and secure benefits sharing with impacted First Nation..."

– BC First Nations Energy and Mining Council, First Nations Critical Mineral Strategy[123]

While critical mineral demand is not the focus of this Strategy, the role that critical mineral supply meets demand in the transition to net zero is make-or-break for the success of electrification. The International Energy Agency estimates that demand for critical minerals could increase by thirty times by 2040 to meet mineral demand for use in electric vehicle batteries and grid storage.[124] This global demand is well-documented. What is pertinent to Indigenous interests in electrification is the potential for Indigenous ownership and/or participation along the critical mineral supply chain, and overcoming the known barriers to doing so, including:[125]

- First Nations barriers for access to capital, *Indian Act*, and delays in financing by government.
- Lack of readiness by some mining companies for First Nations' partnership.
- Governments slowing some industry-First Nations' partnerships with process.
- Overlapping First Nation lands and rights.
- Capacity constraints for many First Nations.

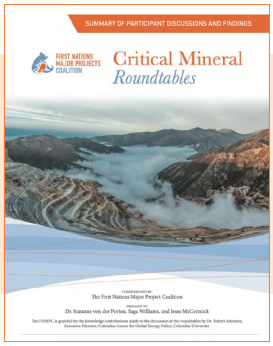
[121] Pembina Institute, 2015. Diesel Reduction Progress in Remote Communities. https://www.pembina.org/reports/diesel-reduction-progress-research-summary-pdf.pdf.2

[122] Laboucan-Massimo, M., November 2023. Just Transition Guide. static1.squarespace.com/static/ 5c9860bf77b9034bc5e70122/t/6555222edcea4d681ccf0454/1700078320040/Just+Transition+Guide.pdf.

[123] BC First Nations Energy and Mining Council, March 2024. First Nations Critical Minerals Strategy. https://fnemc.ca/wp-content/uploads/2024/03/FNEMC_critical_minerals_Report_digital_FNL-March2024.pdf.

[124] International Energy Agency, 05 May 2021. Clean energy demand for critical minerals set to soar as the world pursues net zero goals. https://www.iea.org/news/clean-energy-demand-for-critical-minerals-set-to-soar-as-the-world-pursues-net-zero-goals.

[125] von der Porten, S., Williams, S., and McCormick, J., 6 July 2023. Critical Mineral Roundtables, First Nations Major Projects Coalition. https://fnmpc.ca/wp-content/uploads/FNMPC_Critical_RT_Overview_06072023_final.pdf.



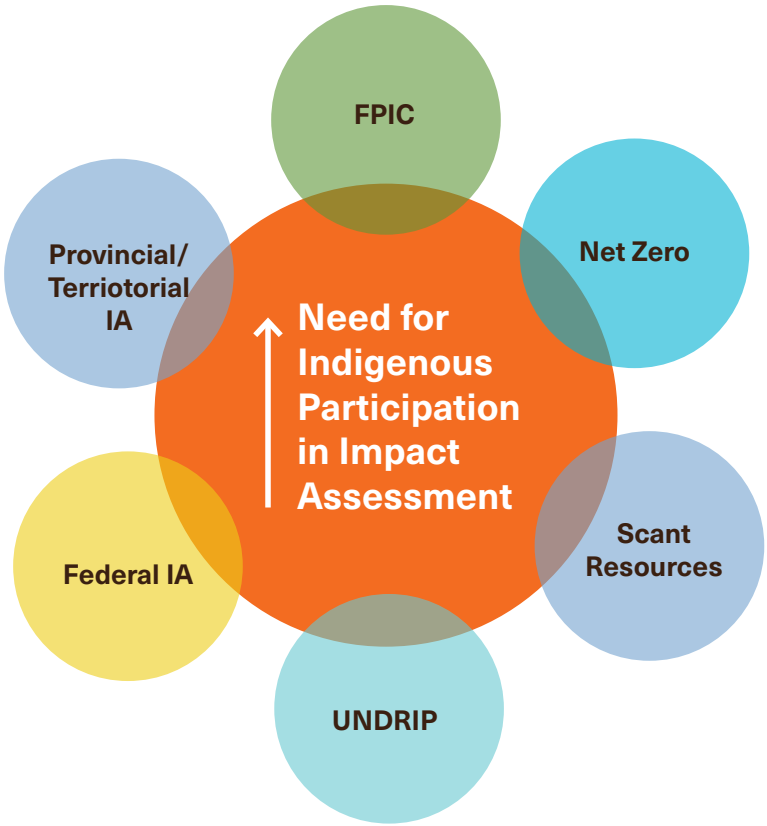
Find out more about Indigenous participation in critical minerals

To read more, please see the **First Nations Major Projects Coalition's Critical Mineral Roundtables Report.**

Challenge #10: Impact Assessment and Permitting

Impact assessments (IA) and environmental policy development in Canada have largely gone ahead without the direction and involvement of Indigenous nations upon whose lands and waters major projects have occurred and continue to be proposed. This approach of Indigenous exclusion not only marginalizes Indigenous nations, but it creates regulatory risks for project development because of potentially challenging regulatory processes. Because of Indigenous nations' demand for free, prior, and informed consent for any projects proposed on the lands and waters of that Nation, Indigenous nations are increasingly involved in impact assessment (Figure 9).[126] In some cases Indigenous nations are asserting the use of the nation's own impact or environmental assessment before any project gets approved.[127]

Figure 9. Drivers of the increased Indigenous participation in impact assessment.



[126] First Nations Major Projects Coalition, October 2020. Guide to Effective Indigenous Involvement in Federal Impact Assessment. https://fnmpc.ca/wp-content/uploads/FNMPC_Guide_Oct15202_FINAL.pdf.

[127] Bruce, A., and Hume, E., November 2015. The Squamish Nation Assessment Process: Getting to Consent , Ratcliff & Company LLP. https://www.ratcliff.com/wp-content/uploads/2020/10/The-Squamish-Nation-Assessment-Process-Getting-To-Consent-Ratcliff.pdf.

As Canada electrifies the grid, a challenge for Indigenous nations will be a rapid growth in the need for Indigenous participation in and approval or denial of impact assessments (Figure 9). Already in Canada, many investors and proponents trying to build out clean energy projects are slowed by regulatory hurdles, averaging 49 months for new generation and 38 months for transmission.[128] Indigenous nations, saddled with project referrals and under-resourced by the Crown, are already facing increasing pressure to provide capacity to impact assessments.

Experts at the roundtables provided some insights on impact and environmental assessments:

" BC has an environmental assessment process that is seen as quite onerous, anyone can slow it down if they raise an issue. There is an opportunity to exempt to get First Nations-led process. We can shepherd projects through permitting with supports that First Nations can lead."

" How do you weave into the Canadian regulatory regime, the increased desire from [Indigenous nations] to also apply their own regulatory regimes, like Indigenous-led assessments? How does Indigenous-led assessment play in, and is that in relation to, or separate from, consultation from an [Indigenous nation's] perspective? That's a massive issue with these types of projects."

" A lot of times there's a focus on the environmental impacts of projects and not necessarily the business benefits. The two of them should be operating simultaneously to make sure that communities have a full picture of the benefits and the costs."

Find out more about Indigenous impact assessment.

Please see the **First Nations Major Projects Coalition's Guide to Effective Indigenous Involvement In Federal Impact Assessment.**

Challenge #11: Contrasting Priorities: Affordability and Reconciliation

The affordability of electricity (in effect, keeping costs low for ratepayers/consumers of electricity) is a focus and priority of most governments and utilities in Canada. Canada ranks third among comparable nations for the lowest electricity rates for residential and industrial use.[129] Reflecting on the fact that Canada's electricity grid was all built on Indigenous lands with little to no compensation provided to or consent sought from Indigenous nations, there is less to boast about for this ranking.

[128] Annesley, J., Campbell, D., Golshan, A., and Greenspon, E., July 2023. Project of the Century: A Blueprint for Growing Canada's Clean Electricity Supply – and Fast https://ppforum.ca/wp-content/uploads/2023/07/Canada%E2%80%99sCleanElectricitySupply-PPF-July2023-EN-1.pdf.

[129] Government of Canada, 2023. Powering Canada Forward. https://natural-resources.canada.ca/our-natural-resources/energy-sources-distribution/electricity-infrastructure/powering-canada-forward-building-clean-affordable-and-reliable-electricity-system-for/25259.

Canada's existing electricity infrastructure on Indigenous lands is a form of subsidy to rate payers that has been born by Indigenous nations. Affordability of electricity rates is premised in part by the uncompensated displacement of Indigenous nations from their lands and waters. The failure to compensate for the use of First Nations lands and the impacts of Canada's existing infrastructure are part of the reason why Canadians enjoy affordable electricity. Electricity rates in Canada are artificially low because the impacts of the infrastructure and the use of the lands continues to remain uncompensated.

Governments prioritize low electricity rates partially because of the political unpopularity of raising electricity rates, concern for low-income ratepayers, and the potential for investors to go where rates are lower for doing business. As characterized in the BC Utilities Corporation states in its 2020 Indigenous Utilities Regulation Inquiry Final Report:[130]

> *" Regulation viewed objectively can be 'something that can benefit the community as a whole'… regulation must balance not only competing private interests 'but the various components of the public interest – long-term versus short-term needs, affordable rates versus efficient price signals, environmental values versus global competitiveness. That is how regulation serves the public interest'."*[131]

However, from an Indigenous economic reconciliation perspective, the priority of keeping rates low can undermine Indigenous ownership in electricity assets. Such ownership requires incentives and capacity supports to encourage industry-Indigenous partnerships, which are likely to be absorbed in the rate-base, markets, or by governments directly. According to one roundtable expert:

> *" The question of rate-base … and keeping costs low to consumers [is] a race to the bottom: power needs to be affordable and competitively-priced, [but] it results in First Nations not being able to realize the maximum benefits. So, is that a government telling the regulator? Or changing the legislation that then empowers that regulator? Because right now all the regulator is doing is following the job they were told to do. So it really is a government-to-government discussion versus a business-to-business discussion."*

How the affordability priority conflicts with Indigenous reconciliation was discussed by roundtable experts:

> *" Maintaining affordability and keeping rates low is primary... there's the wrestling of how we see greater First Nation and Indigenous participation and an overall effort within the province on greening the grid in a sustainable way that addresses affordability concerns as well."*

The current global and national focus on inflation and affordability, coupled with the scramble to reach net zero emissions, is a challenge for Indigenous electricity asset ownership and reconciliation.

Challenge #12: Technology and Market Education

The net zero transition is complex and involves a multitude of very different industries – geothermal, wind, solar, hydroelectric, hydrogen, critical mineral supply, biomass, nuclear, storage, transmission. The transition also involves a rethinking of energy systems, from demand side management to modeling, skills training to energy optimization. Similar to economies and industries around the world, Indigenous nations are on this learning curve and can benefit, to

[130] British Columbia Utilities Commission, 30 April 2020. Indigenous Utilities Regulation Inquiry ~ Final Report. https://www.ordersdecisions.bcuc.com/bcuc/decisions/en/item/470256/index.do.
[131] As cited by BCUC from Exhibit A-8, Hempling's Utility Regulation Report, p. 2.

varying degrees, from access to technology and market education. Roundtable experts characterized the need for this type of education as a challenge:

Quotes from electrification roundtable experts:

" One of the main barriers is educating Chief and Council, leadership, and community about what net zero and electrification energy is."

" [For First Nation] members, energy is something just at the infancy of forefront of education, and it's something that needs to be communicated from leadership, to the membership to have the buy in. Because there's so much on the table and respective capital projects going through. Getting our share and revenue share through this, and then fighting initiatives that we don't agree with. We know it's coming, but we don't have enough education about it."

" I would ask the government across all clean energy about the education piece. I'd ask they step up and start educating the public as a whole. Whether it is through schools, whether it's whatever on all levels, start educating the public on clean energy, the pros and cons, so that First Nations understand."

" If [Indigenous nations have] increased education or increased capacity, then you have access to capital because you're educated, you have the capacity to follow through the project. Have an educated seat at the table and then you get industry support."

Challenge #13: Indigenous Nations' Wheeling/Retail Access to the Grid

In most jurisdictions in Canada, Indigenous nations do not have wheeling access to the power grid. This lack of wheeling access hinders Indigenous power producers, or those interested in building power generation assets, from securing buyers also connected to the grid.

WHAT IS WHEELING?

In electric power transmission, wheeling (also referred to as retail access to transmission and distribution infrastructure) is the "movement of electricity from one system to another over transmission facilities of interconnecting systems."[132] "[Independent power producers] generally do not own the transmission lines that they need to deliver the electricity produced by their power plants to their customers. They must therefore enter into agreements with the owners of these lines to meet their obligations to their customers."[133]

[132] WÄRTSILÄ Encyclopedia of Marine and Energy Technology, 2024, wartsila.com/encyclopedia/term/wheeling-electric-power-transmission-.
[133] U.S. Energy Information Administration, n.d. https://www.eia.gov/tools/glossary/index.php?id=w.

Notably, the same transmission and distribution lines that Indigenous nations in Canada are, for the most part, restricted from wheeling/retail grid access on, also run through Indigenous lands that were, by-and-large, built without Indigenous consent or compensation. Indigenous wheeling access to the transmission grid was discussed by roundtable experts:

> *" So, let's say I want to have a generation of capacity like a wind farm, BC Hydro or Hydro One owns a transmission line. It's a wheeling agreement to use their transmission distribution to take my power and sell it to a third party somewhere within the grid…. In BC, no you can't do that… And in Alberta you can. But it's very unregulated in Alberta as I understand it. In other jurisdictions, I'm not sure if Ontario has got much wheeling agreements. In the US it's very commonplace."*

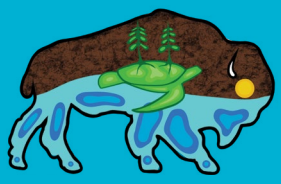
> *" Some First Nations are operating [electricity generation] and they want to take that next step with selling their own power by their own customer [through] wheeling… We want to be owners of assets. We want to have a transfer of assets that are existing in our territories to our Nation so that we can sell more power and find those customers."*

By way of example, the findings of the BCUC's Indigenous Utilities Regulation Inquiry gives context for how significant the lack of Indigenous wheeling access to the grid is, as illuminated through their own engagement with Indigenous nations in BC:[134]

> *" [t]here is currently a ban on "retail access" which means that a utility other than BC Hydro cannot use the BC Hydro transmissions and distribution infrastructure to sell power to customers that are in BC Hydro's service area. Some participants considered that the current prohibition on retail access is constraining economic opportunities for prospective Indigenous utilities… recognition of First Nation rights is less meaningful if Indigenous utilities are relegated to sub-scale utilities, and that they should be able to sell to anyone as restricted by normal market forces… We recommend that the Provincial Government review and revise any policies that, in restricting an Indigenous utility's access to BC Hydro's transmission system, may result in an undue barrier to the First Nation's pursuit of economic self determination."*

Restrictions on Indigenous wheeling access to the transmission grid amount to an undue barrier to the Indigenous pursuit of economic self-determination.

[134] British Columbia Utilities Commission, 30 April 2020. Sec. 4.11 Wheeling Electricity over BC Hydro's System Indigenous Utilities Regulation Inquiry ~ Final Report. https://www.ordersdecisions.bcuc.com/bcuc/decisions/en/item/470256/index.do.



Part 4: Project and Policy Highlights Across Jurisdictions

Across Canada, many Indigenous nations have already successfully engaged in electrification projects. Sharing these models and ideas of success was a major driver for this Strategy. The following examples provide snapshots of jurisdictional policy highlights of innovations around supporting Indigenous leadership in electrification, as well as examples of Indigenous-owned projects from each.

New Brunswick Policy Highlight

New Brunswick and Saskatchewan have signed a memorandum of understanding (MOU) to enhance cooperation on the development of small modular reactors (SMRs) in the two provinces. The MOU provides the ability for the two provinces, and their utility Crowns, to formally share experiences, knowledge, and success on deployment plans, supply chain development, Indigenous relations, labour market development, regulations, and other areas.

NORTH SHORE MI'KMAQ TRIBAL COUNCIL SMR INVESTMENT

All 15 First Nations in New Brunswick are supportive of SMR development in the province, entering into MOU agreements with the two leading developers, Moltex and ARC Clean Energy. In addition, the seven First Nations part of the North Shore Mi'kmaq Tribal Council are making financial investments in both companies. Under the deal, the communities will receive $2 million in share value from Moltex Energy and $1 million in share value from ARC Clean Technology, but the actual number of shares will depend on future valuations of the companies.

British Columbia Policy Highlight

BC Hydro announced a Call for Power in Spring 2023 which will target larger, utility scale projects. They conducted engagements with 99 First Nations to co-design the call and have determined that there will be a minimum of 25% Indigenous equity required for projects to be eligible for the Call for Power. A proposal will be given credit in the evaluation for additional First Nations equity ownership beyond the 25% minimum eligibility requirement up to 51%.

TU DEH-KAH GEOTHERMAL

The Tu Deh-Kah Geothermal Project is Canada's only 100% Indigenous-owned and -led geothermal project and is being advanced by the economic arm of Fort Nelson First Nation – Deh Tai LP. Tu Deh-Kah Geothermal is in the early stages of development with the goal of providing up to 7-15MW of clean, geothermal electricity in Northeastern BC.

Yukon Policy Highlight

The Government of Yukon's Independent Power Producer Policy has a target of 10% of new electrical demand to be met by Independent Power Producers (IPPs) and at least 50% of IPP projects to have a Yukon First Nation ownership component.

ATLIN HYDRO PLANT

The Atlin Hydro Plant owned by Taku River Tlingit First Nation is expected to add eight megawatts of dependable capacity to Yukon's grid. When complete, the Atlin Hydro Expansion project will increase the amount of dependable renewable hydroelectricity available in Yukon to meet winter peaks for power and growing demands for clean energy.

Saskatchewan Policy Highlight

SaskPower has an Indigenous Procurement Strategy that seeks to promote positive relations with Indigenous people, communities, and businesses, and to involve Indigenous people in economic opportunities and growth, including power generation and transmission projects.

AWASIS SOLAR

Awasis Solar Project has been operational since November 2022. The power generated is sold to SaskPower as part of a 20-year Power Purchase Agreement. Awasis Solar Limited Partnership is 95-percent owned by Cowessess First Nation, through Awasis Nehiyawewin Energy Development Limited Partnership (ANEDLP), and 5% owned by Elemental Energy, with Awasis Nehiyawewini Energy Development Corp (ANEDC) having the opportunity to become 100% owners after year five of commercial operations.

Québec Policy Highlight

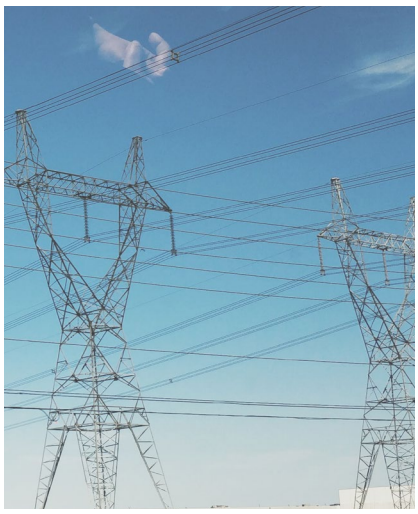
Hydro Québec recently launched their 2035 Action Plan which recognizes that vast majority of Hydro Quebéc's infrastructure projects have been carried out on Indigenous ancestral lands and that they had major impacts on communities. To attempt to reconcile this, they will work with First Nations and Inuit to jointly develop an economic reconciliation action plan and facilitate the financial participation of Indigenous communities in new infrastructure projects.

UASHAT MAK MANI-UTENAM WIND FARM

Hydro-Québec Production signed a 30-year contract with Parceolien Apuiat S.E.C. and Boralex to purchase the energy from a 200-megawatt wind farm. It will be built on the traditional territory identified of Uashat mak Mani-utenam First Nation. The Innu communities and Boralex are 50-50 partners in the project and will equally share the profits generated by the sale of electricity throughout the life of the project.

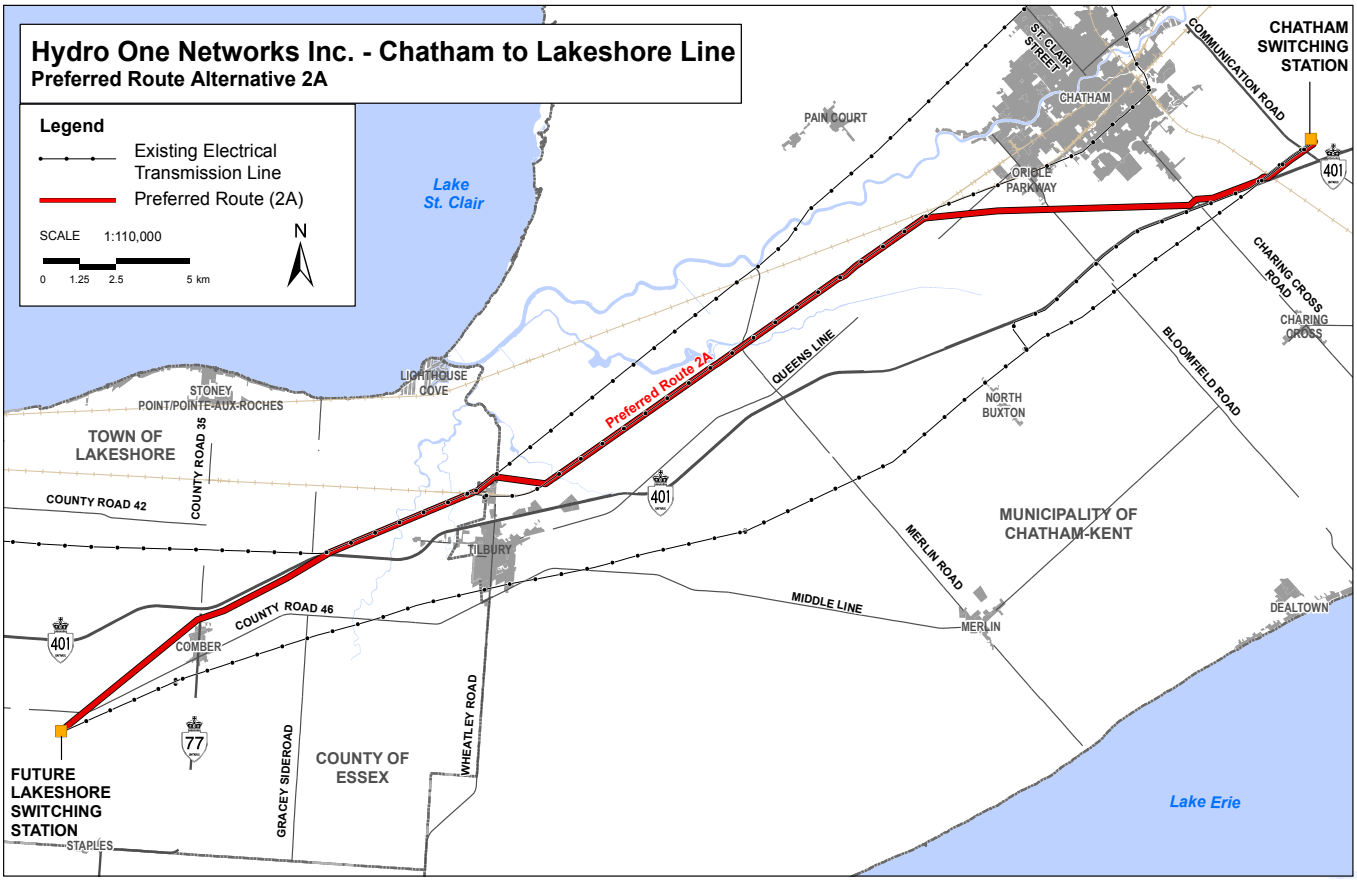
Ontario Policy Highlight

Hydro One has committed to developing and maintaining respectful and positive relationships with Indigenous communities across Ontario. One way of demonstrating this commitment is by creating their 50-50 equity model with First Nations on new large-scale transmission line projects with a value exceeding $100 million. This model will be offered to all future large-scale capital transmission line projects.



CHATHAM TO LAKESHORE TRANSMISSION LINE

The Chatham to Lakeshore Transmission Line being built by Hydro One is on track to be completed by the end of 2024, a year ahead of schedule. The line will add approximately 400 megawatts of clean electricity to the region. As part of Hydro One's First Nations Equity Model, five local First Nations (Chippewas of the Thames, Aamjiwnaang, Walpole Island, Caldwell, and Kettle and Stoney Point First Nations) will have the opportunity to invest in a 50 per cent equity ownership stake in the transmission line component of the project.



Alberta Policy Highlight

The Alberta Indigenous Opportunities Corporation (AIOC) loan guarantee program guarantees partial or full values of the loans to Indigenous communities. A project must meet the minimum loan guarantee amount of $20 million and be commercially viable. The AIOC serves the natural resources industry broadly. However, as of writing, it has no clean energy projects in its portfolio.

CHAPPICE LAKE SOLAR-STORAGE

The Chappice Lake Solar-Storage project, located 35 km north of Medicine Hat in Cypress County, combines a 21 MWp solar array co-located with an 8.4 MWh utility scale vanadium flow battery from Invinity Energy Systems. This project is a partnership between Elemental and Cold Lake First Nations and is the first utility scale solar + storage project in Alberta to use a flow battery.

Part 5: Recommendations for Canada's Indigenous-led Electrification Future

Electrification in Canada must be rooted in Indigenous free, prior, and informed consent, the principles of UNDRIP, and must lead towards Indigenous economic reconciliation. Strategy recommendations have been targeted for three different audiences: government and regulators, the private sector, and First Nations. Each of these audiences play a key role in the rapid electrification and decarbonization of Canada's economy.

The recommendations provided here flow directly from the context, rationale, challenges, and case studies outlined above, and present many insights shared by roundtable experts.

Recommendations for Governments and Regulators

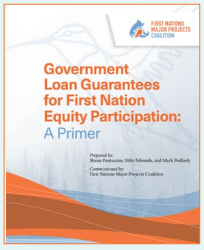
1. Support Indigenous access to capital via loan guarantees and other programs.

For Indigenous nations to participate in ownership of clean power projects, accessible loan guarantee options should be on the table. With such options in place, First Nations would have access to competitively-priced capital and be in a better position to invest in clean power projects and infrastructure, thereby getting projects off the ground faster. Three provinces already have provincial Indigenous loan guarantee programs in place to help accelerate major infrastructure projects: Alberta (AIOC), Ontario (ALGP), and Saskatchewan (SIIFC). As well, at the time of writing, both Canada and British Columbia have announced Indigenous loan guarantee programs. The Canada Infrastructure Bank (CIB) Indigenous Equity Initiative invests in Indigenous equity participation including clean electricity transmission, battery

storage, and electricity generation.[135] The remaining provinces and territories who do not have Indigenous loan guarantee programs should implement them. Experts at the Electrification Roundtables advised:

" It's the government's responsibility to look at access to capital as a combination of climate policy, energy policy and financial policy and tools. It can't just be this one component, it needs to be a package of considerations."

" Get on with it. Put programs in place that will help us. We've heard now there are already [Indigenous nations] that are in energy projects who have succeeded that just need the capital to continue that. You need it at a federal and provincial level as well too."



Find out more about Indigenous loan guarantees.

For further reading, please see FNMPC's **Government Loan Guarantees for First Nation Equity Participation: A Primer**

2. Fund foundational and comprehensive Indigenous capacity supports.

To participate in electrification projects, or any major project, Indigenous nations need access to business capacity and negotiation supports in order to make informed business decisions. Indigenous nations also need to participate in project design and negotiate the business deal at the earliest possible stage. To support Indigenous economic reconciliation, governments must provide capacity supports that allow Indigenous nations to utilize capital effectively and negotiate a good commercial position. At the federal level, there are limited capacity funding programs targeted at supporting Indigenous nations to make informed decisions about their participation in major projects such as electrification. Once successful program has been the Indigenous Natural Resource Partnerships Program (INRP). The Government of Canada should consider recapitalizing INRP as a means of supporting the capacity of Indigenous nations who are participating in electrification projects as well as other major projects.

Capacity supports for Indigenous nations were repeatedly cited as a solution by expert roundtable attendees, for example:

" Having that kind of capacity that nations can go out and get their own members and become well-positioned to interact with proponents within a level playing field."

[135] Canada Infrastructure Bank, 27 November 2023. Canada Infrastructure Bank launches new Indigenous Equity Initiative. https://cib-bic.ca/en/medias/articles/canada-infrastructure-bank-launches-new-indigenous-equity-initiative/.

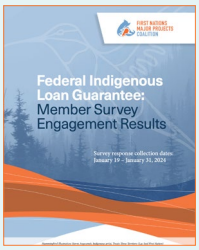
" In my experience with getting the deal made, there are two things: one is a strong loan guarantee program or some sort of backing that kind of counteracts the Indian Act. One piece that helps get deals across the line is making sure there's capacity supports and loan guarantee programs in place."

" Governments need to step up and support more of the education and capacity development. And the financial support so that we can hire our people to interface with projects. And the challenge of a spectrum of communities- their capacity, their sophistication is different."

The disparities in the level of business and governance capacity among First Nations varies widely. In many cases, these disparities are large enough for some First Nations to miss an opportunity, or have their interests watered-down, or worse, disregarded, during negotiations. With this in mind, expert roundtable attendees pointed out the importance of building the capacity of Nations to work through the entire financing process, whether that's finance funding from proponents or from governments to support Nations, both of which can be a long process. These capacity and negotiation supports are pivotal to applying the principles of free, prior, and informed consent to a commercial opportunity.

Echoing the Assembly of First Nations, the governments should:[136]

" Provide stable, adequate, and long-term funding to First Nations to support the revitalization of their legal and governance systems to enable First Nations self-determination in climate-related processes and decision-making frameworks… [AND] Provide financial and technical support to First Nations governments and organizations to create jobs, including in traditional economies, education, training, and skills development for employment in the low-carbon transition."



Find out more about what First Nations are saying about a federal Indigenous loan guarantee.

For more on capacity support needs identified by First Nations, please see FNMPC's **Federal Indigenous Loan Guarantee: Member Survey Engagement Results**

[136] Assembly of First Nations, October 2023. National Climate Strategy, afn.bynder.com/m/77556e1d9da51db7/original/2023-Climate-Strategy-Report.pdf.

3. Create opportunities along the value chain of electrification for Indigenous nations.

The circumstances and priorities of Indigenous nations across Canada are wide-ranging, and yet all should have an opportunity to participate in the net zero transition. Governments can support this by intentionally creating opportunities along various values chains, including job alternatives and training alternatives to oil and gas. For example, an Indigenous nation that chooses not to host a hydrogen generation facility may choose to host a transmission line that powers the facility.

" Develop the whole value chain …for hubs of production. Those Indigenous projects could be the generator, part of that project. We don't want to own that project itself necessarily, but maybe we want the energy supply."[137]

Similarly, an Indigenous nation might be interested in critical mineral processing, but not in extraction or mining.

" There's interest of First Nations partnerships along the [critical mineral] value chain… One of the barriers to participation in the value chain is the capacity in communities on training and education. Historically it is mostly talent and capacity in extraction, but not necessarily the rest of the value chain."[138]

Governments should make every effort to maximize options for Indigenous nations to participate in the net zero transition.

[137] National Indigenous Electrification Roundtable expert.
[138] von der Porten, S., Williams, S., and McCormick, J., 6 July 2023. Critical Mineral Roundtables, First Nations Major Projects Coalition. https://fnmpc.ca/wp-content/uploads/FNMPC_Critical_RT_Overview_06072023_final.pdf.

4. Provinces and Territories should implement a policy and investment framework to incentivize Indigenous partnerships.

To support Indigenous partnerships and ownership of electricity infrastructure, governments must implement measures to make commercial deals and Indigenous partnerships more attractive to lenders and industry partners. Territorial, provincial, and federal governments should enact policies that prioritize Indigenous participation in major electrification projects, including Calls for Power and policies on all new generation and transmission.[139] Such policies and mechanisms to incentivize Indigenous equity ownership of electricity infrastructure have been suggested by roundtable experts and are summarized in Table 6:

Table 6. Commonly used incentives to support Indigenous partnerships.[140]

Carve-outs: exemptions or preferential participation rights in international trade and investment agreements that reserve future contract abilities for Indigenous-owned businesses, typically with the intent of safeguarding constitutionally protected Aboriginal and treaty rights.[141]

Credit Enhancement: the improvement of the credit risk or profile of a transaction or project, typically to obtain preferential financing terms.

Economic Interest: the right to receive or participate in payments arising from an exposure to risk or loss by undertaking a project or other business activity.

Feed-in-Tariffs: an economic policy to promote investment in renewable energy by guaranteeing certain minimum prices that ensure a reasonable profit can be made under long-term contracts, such as Ontario's Feed-In Tariff (FIT) Program.

Indigenous Participation Level: the percentage of the total Economic Interest in the project that is held by one or more Indigenous nation or Indigenous holding vehicle, having a designated percentage the project's total Economic Interest as at the contract date (and/or other milestone dates), up to a 100% Indigenous-owned project.

Minimum Percentage of Ownership: the designated minimum percentage of the total Economic Interest in the project that is held by one or more Indigenous community or Indigenous holding vehicle, measurable at the contract date (and/or other milestone dates of the contract).

Power Purchase Agreement: a long-term contract between an electricity procurement authority or utility, and an electricity generation facility, for the purchase of a designated volume of electricity.

[139] National Indigenous Economic Strategy for Canada, 2022. Pathways to Socioeconomic Parity for Indigenous Peoples. https://niestrategy.ca/wp-content/uploads/2022/05/NIES_English_FullStrategy.pdf.
[140] Unless otherwise indicated, definition provided by Borden Ladner Gervais LLP (BLG).
[141] Schwartz, R., 2017 August 2017. The Case for Adding an Indigenous Chapter to NAFTA, Centre for International Governance Innovation. https://www.cigionline.org/articles/case-adding-indigenous-chapter-nafta/.

Price-adder: an additional amount paid to projects having a designated Indigenous participation level (or other eligibility criteria).

Put Option: A contractual arrangement that would give the holder of the option the right, but not the obligation, to deliver electricity to a provincial or territorial utility on defined terms and conditions.[142]

Rider: a modification, clarification or addition of information to the original contract by the parties after it has been signed.

Set-aside: the reservation of a future contract opportunity or benefit for eligible projects or participants, such as preferential participation rights that give Indigenous-owned businesses or projects a competitive advantage.

Stacking: the adding together of various incentives, rather than Indigenous nations having to choose between incentives. For example, The US *Inflation Reduction Act* (IRA) created new adders (tax credits) that encourage projects that specifically advance elements of an equitable clean energy transition, including where projects are located, who benefits from them, and where materials are sourced. US Tribes can 'stack' these IRA incentives to receive up a tax credit for up to 70% of project costs.[143]

Standard Offers: a contract issued in connection with a government procurement program, where a project that qualifies for a standard set of program rules is offered a standard form of contract for the development and/or operation of a project, such as the Ontario Feed-In Tariff (FIT) Program.

Vendor Take-backs: a financing arrangement where the purchaser satisfies a portion of the asset purchase price through financing, by issuing a note to the vendor, wherein the vendor effectively loans a portion of the purchase price to the purchaser. Vendor take-backs can be used to address shortfalls between the purchase price and available cash flows.[144]

Tax Incentives: government programs providing tax incentives for the development of, or investment in, designated projects, such as a project meeting the Indigenous Participation Level.

[142] Cameron Lusztig, President, Keppel Gate Consulting [Personal Communication].
[143] von der Porten, S. and Podlasly, M., September 2023. The Values Driven Economy Post Conference Report, First Nations Major Projects Coalition. https://fnmpc.ca/wp-content/uploads/FNMPC_TVDE_Conference_Overview_09222023-1.pdf.
[144] Valente, P., 23 October 2013. Vendor take-backs: a useful tool for financing M&A transactions. Deal Law Wire. https://www.deallawwire.com/2018/10/23/vendor-take-backs-a-useful-tool-for-financing-ma-transactions/.

5. Governments, regulators, and utilities should present Indigenous nations with risk mitigating options to participate in clean energy project ownership.

The FNMPC has had demonstrable success in supporting First Nations members on structuring ownership opportunities in a manner where the risks associated with ownership can be minimized and where the social and economic value of First Nations participation as owners can be maximized. Similarly, governments, utilities and regulators should present clear options to Indigenous nations that simultaneously offer both equity ownership and minimizes risk (e.g., construction risk, cost overrun risk) to the Indigenous nation(s). These mitigating factors can be worked out between parties as part of the deal structure or term sheet and can potentially have a favorable impact on the ability of Indigenous nations to finance their participation in a project.

6. Governments must appropriately equip regulators and utilities with resources to simultaneously address multiple project layers, such as: reliability, speed of projects coming online, ratepayers, environmental protection, and Indigenous reconciliation.

Increasingly, regulators and utilities are being asked to align the need for accelerated project speeds with affordability, reliability, environment protection, and Indigenous economic reconciliation/rights.[145] Governments must appropriately resource regulators and utilities for prioritizing all of these simultaneously, which also includes planning for the cost of meaningful Indigenous economic reconciliation.

7. With guidance and direction from Indigenous expertise, governments must support the implementation of UNDRIP.

The Canadian federal government's commitment to UNDRIP must underpin net zero transition in Canada. Meaningful implementation of UNDRIP would operationalize full participation and decision-making power of Indigenous nations in net zero policy and infrastructure in Canada,[146] ensure a fair share of benefits to Indigenous nations from energy development,[147] and support Indigenous self-determination and nationhood.[148] Governments must adhere to their fiduciary duty to Indigenous nations through the full implementation of the *UN Declaration on the Rights of Indigenous Peoples Act*,[149] including recognizing Indigenous jurisdiction and rights to decision-making on traditional territories.[150]

[145] Dunsky, 27 April 2023. Build Things Faster. https://issuu.com/canadianelectricityassociation/docs/ec_sel_frame_-_2023_21_b1a2024679b3b0.
[146] Bledsoe, A., April 2022. Project Ownership Models for Remote Renewable Energy Development in Partnership with Indigenous Communities. UBC Sustainability Scholars Program.
[147] Province of Quebec, 2023. Hydro-Québec's Action Plan 2035. https://www.hydroquebec.com/about/publications-reports/action-plan-2035.html.
[148] Christie, G., May 2007. Aboriginal Nationhood and the Inherent Right to Self-Government. National Centre for First Nations Governance. https://fngovernance.org/wp-content/uploads/2020/09/gordon_christie.pdf
[149] National Indigenous Economic Strategy for Canada, 2022. Pathways to Socioeconomic Parity for Indigenous Peoples. https://niestrategy.ca/wp-content/uploads/2022/05/NIES_English_FullStrategy.pdf.
[150] E.g., Province of British Columbia, 6 June 2022. Tahltan Central Government, B.C. make history under Declaration Act. https://news.gov.bc.ca/releases/2022PREM0034-000899.

8. With guidance and direction from Indigenous expertise, governments must provide capacity supports for the implementation of free, prior, and informed consent by Indigenous nations.

Government and industry partners often fall short of ensuring Indigenous free, prior, and informed consent before moving ahead with natural resource projects. FPIC is a social, environmental, and economic advantage when it comes to getting projects built and should form a foundational component in all regulatory structures and across all jurisdictions in Canada. Governments should apply a robust standard and comprehensive guidance of FPIC paired with effective tools for implementation, including all four elements as shown in Table 7.

Table 7. The four elements of FPIC.

F	**FREE**	A robust build-out that resources Indigenous nations' capacity, including tools, technical support, and financing to provide free, prior, and informed consent. This element ensures consent is considered free of financial or resource burden to Indigenous nations and free of coercion.
P	**PRIOR**	Allowing adequate time for Indigenous nations decision-making and community engagement is the most efficient way for Nations to be able to provide free, prior, and informed consent.
I	**INFORMED**	Well-resourced technical support for cost-benefit analyses and other analyses are crucial for Indigenous nations to be able to provide free, prior, and informed consent.
C	**CONSENT**	The importance of the ability of an Indigenous nation to say 'yes' or 'no' to a project. Including Indigenous nations, representatives on corporate boards to influence industry governance is an example of Indigenous nations being in a position to be clear on all of the elements, risks, and plans for a project. This type of involvement also provides full transparency into the details of what an Indigenous nation is, or is not, giving free, prior, and informed consent to.

9. The Canadian federal government needs to play a role as a convener of the provinces and territories to harmonize opportunities and ensure Indigenous needs in electrification are met.

The challenges and inequities for Indigenous nations in electrification (as described in Part 3) plays out differently depending on the province or territory. In some jurisdictions, the barriers to Indigenous participation in electrification is greater. In these areas, the federal government needs to work with provinces and territories to make sure the electrification infrastructure needs of Indigenous nations are met. If the federal government does not act as a convener across jurisdictions, Indigenous nations are left to struggle with the barriers of each province and territory.

10. Prioritize Indigenous participation or ownership in electricity assets over electricity rates.

Indigenous participation or ownership in electrification should be prioritized over electricity rates, even if that includes an increase in rate payer costs or increased government subsidization for electricity infrastructure.

> *" [Governments and utilities should] move to outcomes other than cheap electricity. That's what our system is built around 20 years ago - the most economically efficient way to have power.... If you're looking for outcomes other than that, then you actually need greater regulation or different policies surrounding the system to get those other outcomes."*

> *" There's a fair question around basis for economic reconciliation because it always comes down to even if we were to change the value that it has an impact on. The electricity system is progressive, everybody pays the same electricity rate. When I think about reconciliation and their obligations, that's something that all taxpayers should be supporting, not just rate payers. There are opportunities where it could be provincial governments or federal government or perhaps to frame some of the extra costs and using the tax base, which is progressive to do that, rather than putting it on the rate payer."*

The costs of Indigenous participation should be aligned with the actual costs of providing the infrastructure rather than the artificially low rates currently enjoyed by Canadians because of the exploitation (or marginalization) of Indigenous peoples. There is a similar narrative structure to carbon pricing, but in the case of low electricity rates it is based on Indigenous impacts instead of atmospheric impacts. Therefore, electricity rate increases related to Indigenous inclusion are, and should be treated as, a positive step towards economic reconciliation with Indigenous peoples, rather than a barrier.

11. Take the regulatory steps needed to support the formation of Indigenous utilities, at all scales.

For governments in Canada to adhere to UNDRIP and support Indigenous economic reconciliation, they must embrace Indigenous rights to self-determination. Government support of the Indigenous right to self-government in electrification does not mean choosing what Indigenous economic activities suit the government, and which do not. Rather, it entails listening to what Indigenous nations are asking for by way of change, including provinces and territories lifting restrictions on Indigenous nations forming Indigenous utilities and/or power authorities:

> *"Governments can put pressure on the utilities and then on regulators to get on board with the Indigenous power purchase policies."*[151]

> *"If we want to change how the [utilities] approach these projects and how they deal with some of this stuff then we need to change the legislation."*[152]

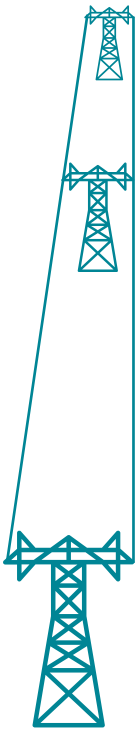
> *"… on-the-ground energy policy is determined by each provincial or territorial government. And yet the provincial, territorial, and federal governments alike remain hesitant to take on leadership or responsibility for responses to the climate crisis in general and energy policy in particular. At the same time, they have not allowed Indigenous communities to exercise authority over their own energy systems."*[153]

Indigenous nations should be able to form or participate in Indigenous utilities, which, if done correctly, could be a vehicle for Indigenous participation in major project development. In addition to all jurisdictions in Canada lifting restrictions on Indigenous nations, governments should make sure that any Indigenous utilities or authorities should:

1. Be led by Indigenous nations.
2. Be adequately resourced.
3. Have clear influence into the regulatory infrastructure of the province or territory.
4. Give Indigenous nations confidence that the Indigenous Utility/Authority's input will be incorporated.
5. Maximize flexibility for the vast differences in circumstances of Indigenous nations across Canada.
6. Allow for scales ranging from single Indigenous nation utility to provincial or national.[154]

[151] Expert roundtable attendee.
[152] Expert roundtable attendee.
[153] Laboucan-Massimo, M., November 2023. Just Transition Guide. static1.squarespace.com/static/ 5c9860bf77b9034bc5e70122/t/6555222edcea4d68-cf0454/1700078320040/Just+Transition+Guide.pdf.
[154] The National Indigenous Economic Strategy for Canada recommends the creation of "an Indigenous environmental oversight body with powers equal to the Canadian Energy Regulator; this entity also appoints representatives to existing regulatory bodies." Source: https://niestrategy.ca/wp-content/uploads/2022/05/NIES_English_Full-Strategy.pdf.

Examples of three models of what Indigenous Utilities could look like:[155]



Model 1 (Small):

On reserve utility delivering service to on reserve customers.

Model 2 (Medium):

A flexible model which allows individual First Nations or collectives of First Nations to establish Indigenous Utilities (within broad design criteria) to undertake certain activities for which they will have defined advantages: a carve out of future calls for power, and the rights to retail access and "unscheduled" use of the transmission system are suggested as the first special rights. A common Indigenous-owned support and advocacy body could develop alongside to work with government and Indigenous nations to help advance and develop the initiative.

Model 3 (Large):

A single, Indigenous vertically integrated utility, with a defined service area carved out from a utility's service area.

12. Support the rapid build-out of inter-jurisdictional transmission lines and interties.

Across Canada there is an urgent need to build out intra-provincial, inter-provincial and inter-national transmission lines that connect fossil fuel dependent jurisdictions to those with reliable, diversified, non-emitting energy sources while still allowing Indigenous nations to reliably sell clean power. In the build-out of these transmission lines across Canada, all of them do and will run through Indigenous lands.

> *" We've all heard this notion of a national energy corridor; maybe a discussion that could happen where you basically move a corridor for energy across Canada that goes through a major environmental process so that you when you want to add another transmission line you don't need to spend a whole bunch of time because you've already gone through a lot of the process."* - Electrification roundtable expert

Future transmission lines must be built with the free, prior, and informed consent if they impact Indigenous nations, and with an option for equity ownership, partnership, procurement, skills development, and opportunities for knowledge transfer. At the national level the federal government should leverage its convening power to incentivize inter-regional integration and transmission.[156]

[155] Lusztig, C., 14 June 2023, Indigenous Utility Design and Transmission Equity. Generate Conference, Richmond, BC, Canada.
[156] Canadian Climate Institute, May 2022. Electric Federalism. https://climateinstitute.ca/wp-content/uploads/2022/05/Electric-Federalism-May-4-2022.pdf.

13. Governments in all jurisdictions must implement wheeling policies needed to allow Indigenous nations to sell power to end users.

In Canada, the energy system (including transmission lines) was built without the consent of or benefit to Indigenous peoples, and yet the impacts were and are born by Indigenous nations to this day. Governments need to enact wheeling policies to allow Indigenous nations retail access to the power grid. Wheeling (see Challenge #13: Indigenous Nations' Wheeling/Retail Access to the Grid) is not only a matter of self-determination: it is an incentive for a new Indigenous Nations clean power generation. Experts at the Electrification Roundtables commented:

" Wheeling needs to be advocated for more fully as an opportunity to exercise [Indigenous] economic potential, the economic potential of servicing the needs that are elsewhere and we all know that the need is elsewhere…. there needs to be some coordination there."

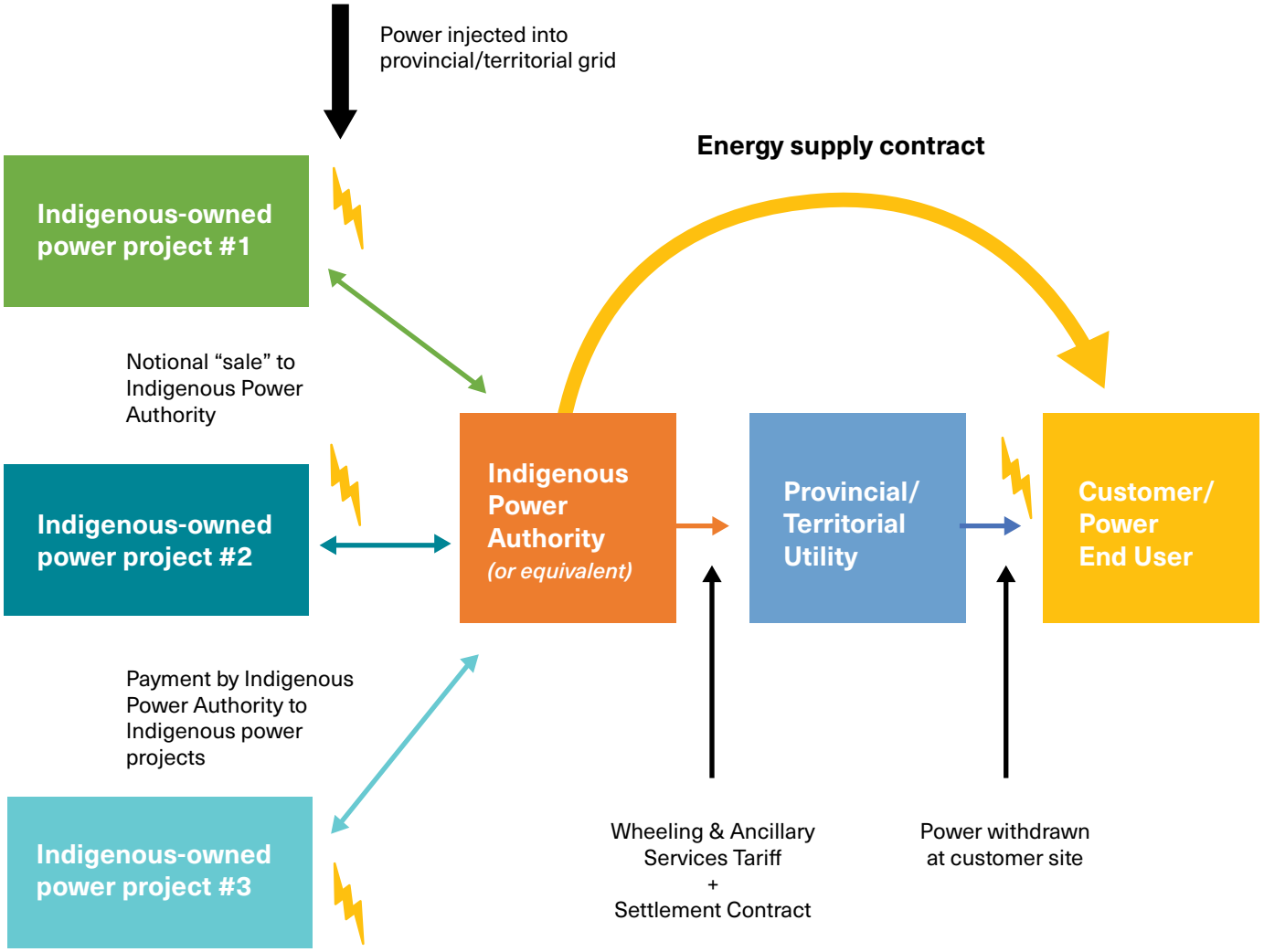
" [Wheeling is] just an accounting exercise, so, wheeling is a worthy policy, but the devil is in the details."

Using the very same transmission grid that was built and runs through Indigenous nations' traditional lands, Indigenous nations should be able to sell power over the grid to each Nation's customers and jurisdictions of choice. As a matter of supporting Indigenous economic reconciliation, governments in all jurisdictions must implement wheeling policies needed to allow Indigenous nations to sell power to end-users.

When implemented, virtual retail access would be a new electricity service that would give Indigenous-owned power generators the opportunity to sell output (power) from projects to customers other than the provincial/territorial utility (see Figure 10 adapted from material provided by Cameron Lusztig, President, Keppel Gate Consulting).[157]

[157] Cameron Lusztig, President, Keppel Gate Consulting [Personal Communication].

Figure 10. Virtual retail access for Indigenous-owned power projects.



14. Governments should build in direct-award and prioritization of procurement contracts for impacted Indigenous nations' businesses, either in construction or other procurement related to electrification projects.

To ensure Indigenous nations are prioritized for procurement contracts for any energy projects on an impacted Nation's lands and waters, governments can link procurement targets directly to departmental performance measures, where all levels of government and corporations are mandated to publicly report on Indigenous procurement. Further, federal and sub-national governments should build in direct-award and prioritization of procurement contracts for impacted Indigenous nations' businesses, either in construction or other procurement related to electrification projects. Expert roundtable attendees identified considerations when supporting procurement for Indigenous businesses:

" The procurement is where the opportunity is in many jurisdictions, and the challenge is the utilities have a mandate to provide the most cost-effective approach to ratepayers. And so, there always seems to be a challenge in balancing. How are the benefits preference-ing Indigenous participation in some way? How will that impact the rates? Usually, the way utilities are structured it becomes a barrier just to get over that initial cost."

" Governments can easily direct the Crown to procure additional projects that have 50% in Indigenous equity stakes, whatever standards they'd like to set. It's more complicated in jurisdictions like Alberta and to a certain extent Ontario, but it can be a struggle for government."

" [We should] explore new transmission and who owns that sort of procurement and not necessarily the utility and monopoly situations, so that we could also find opportunities for First Nations to order those lines out right and get it done."

" Thinking about the procurement side… making sure Indigenous businesses are involved. They're the ones selling the picks or whatever you happen to need, and that's where you get a broader set of benefits."

15. Support Indigenous labour, skills, and training in the clean energy sector.

Governments should clearly define a roadmap for ensuring that specific training and support for Indigenous nations are aligned with meeting the need for skilled labour in the electricity sector.[158]

" [Indigenous nations need better] access to education. Governments need to step up and support more of the education and capacity development."

" You have to be certified. We have a lot of workers that work down to the [United] States that have over 25 years in different sectors, [and who] come back to Quebec and are not certified to work. Unless it's in the community. But then you're limiting yourself. We took it upon ourselves for the first project to hire someone that would just work with individuals to get them certified. But it's so much work to do internally, to do that. The ongoing process. Even to run a chainsaw you need a certificate. To be on a hydro project, help them clear or cut areas. Need to be certified. Takes three to four days for training just to get cert to run that chainsaw."

16. Reframe the affordability challenge of the net zero transition to prioritize Indigenous economies.

Keeping electricity rates low has been the focus and priority of most governments and utilities across Canada. From an Indigenous economic reconciliation perspective, the priority by governments and utilities to keep electricity rates low undermines Indigenous ownership in electricity assets. Such ownership requires incentives and capacity supports to encourage industry-Indigenous partnerships, likely to be absorbed in the rate-base, markets, or by governments directly. Governments should make every effort to reframe—in both policy and messaging—the affordability challenge of the net zero transition to prioritize Indigenous economies.

[158] Dunsky, 27 April 2023. Build Things Faster. https://issuu.com/canadianelectricityassociation/docs/ec_sel_frame_-_2023_21_b1a2024679b3b0.

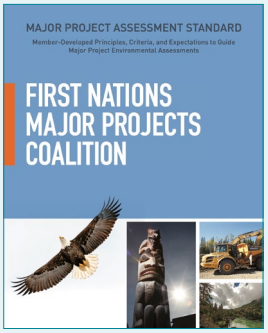
17. Strengthen Indigenous participation in impact assessment process by improving opportunities for collaboration with Indigenous nations and by supporting the capacity of Indigenous Governing Bodies to lead impact assessment.

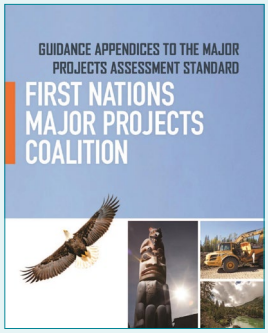
Indigenous nations have historically been pushed to the periphery of, or excluded from, impact assessment processes in Canada. Impact assessments and environmental policy development have largely proceeded without the direct participation of Indigenous nations in whose territories major projects have been proposed. However, Indigenous nations are increasingly taking the lead in impact assessment on impacted Indigenous lands and waters.[159]
To further support this Indigenous leadership, all of national, provincial, and territorial governments should make legislative changes to impact assessment legislation to recognize the jurisdiction of Indigenous nations to lead decision making in accordance with Indigenous legal systems, culture, and values. Indigenous Peoples need to have the capacity to participate effectively and that can be achieved by showing respect for Indigenous jurisdictions on electrification projects, including by supporting Indigenous-led impact assessment processes.[160] Such legislation should be guided by Indigenous free, prior, and informed consent, and prioritization of Indigenous-led impact assessments over other impact assessment processes.

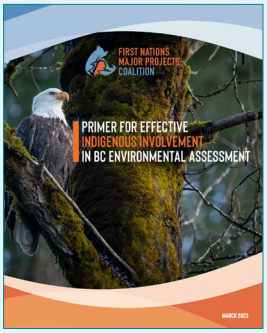
Examples of jurisdictions who have provisions for Indigenous-led assessments that could be considered as a benchmark for other jurisdictions include (1) Section 7 of BC's DRIPA legislation (which "enables the Province and Indigenous governing bodies to enter into agreements that recognize Indigenous decision-making with the provincial statutory decision-making framework",[161] (2) *Canada's Impact Assessment Act*[162] (which has provisions to "authorize the Indigenous governing body, with respect to those lands, to exercise powers or perform duties or functions in relation to impact assessments."),[163] and the *Nisga'a Final Agreement Act* which has environmental assessment and protection provisions (see Chapter 10[164]).

Find out more about FNMPC's environmental tools.

Please see the **FNMPC's Environmental Tools, a series of reports on Indigenous Involvement in Environmental Impact Assessments**







[159] von der Porten, S., Williams, S., and McCormick, J., 6 July 2023. Critical Mineral Roundtables, First Nations Major Projects Coalition. https://fnmpc.ca/wp-content/uploads/FNMPC_Critical_RT_Overview_06072023_final.pdf.
[160] First Nations Major Projects Coalition, March 2023. Primer for Effective Indigenous Involvement in BC Environmental Assessment. https://fnmpc.ca/wp-content/uploads/Sept-13-2023-FNMPC-Primer-for-BC-EA-FINAL.pdf.
[161] Province of British Columbia, 5 February 2024. Making Decisions Together https://www2.gov.bc.ca/gov/content/governments/indigenous-people/new-relationship/united-nations-declaration-on-the-rights-of-indigenous-peoples/making-decisions-together.
[162] *Impact Assessment Act* (SC 2019, c. 28, s. 1) https://laws.justice.gc.ca/eng/acts/i-2.75/index.html.
[163] Ibid.
[164] *Nisga'a Final Agreement Act,* 1999. Chapter 10 Environmental Assessment and Protection. https://www.bclaws.gov.bc.ca/civix/document/id/hstats/hstats/1406682601.

18. Fast-track remote Indigenous nations to exit from diesel dependence.

Provincial, territorial, and federal governments should fast-track remote Indigenous nations to remove diesel-generated electricity dependence. The world now has all the technology, all the know-how, the political will, and climate mandates to address the expensive, polluting, and resource-intensive diesel dependence many Indigenous nations are locked into. Currently, there is far too much red tape, multi-year studies, and too little resources for Indigenous nations to get clean projects up and running in short order. The limited number of ratepayers in the territories compared to in the provinces is also a factor in this realm.

Recommendations for the Private Sector

" Renewable energy [companies] are actually not that good in respecting Indigenous rights. They have this feeling that because they bring up something good, something green, that they are automatically a good thing."

– Genevieve Rose from the International Work Group for Indigenous Affairs.[165]

19. Create a detailed reconciliation action plan in partnership with Indigenous nations and implement the plan as part of corporate strategy.

Just as many private sector companies have established net zero plans, so too should companies create and implement detailed reconciliation action plans with their existing or prospective Indigenous partners. As one of the expert roundtable attendees noted, the success of companies to transition to a low carbon future…

" …is inextricably linked to recognizing and respecting Indigenous peoples' inherent rights, spiritual and cultural connection to the land, and traditional ecological knowledge. Engagement with Indigenous peoples should therefore be at the core of the journey to net zero. This entails [companies] connecting and amplifying their voices and drawing on their subject matter expertise as cultural knowledge holders and custodians of the land."[166]

The creation of a reconciliation action plan entails a deep dive in education for most companies, including learning about rights and responsibilities of Indigenous nations, and the unique circumstances that underpin Indigenous participation, laws, languages, values, priorities, and protocols. The implementation of the reconciliation action plan should be monitored by a corporation's board of directors and implemented as a key part of corporate strategy with progress reported out through the company's annual report or other reporting requirements.

FNMPC ADVISORY CENTRE

Get Support

For support on creating a corporate reconciliation action plan, please contact the **FNMPC Advisory Centre**.

[165] Hofschneider, A., 13 February 2024. There's a big climate cost to failing to recognize Indigenous sovereignty, Corporate Knights. corporateknights.com/leadership/big-climate-cost-of-failing-to-recognize-indigenous-rights/.

[166] Deloitte LLP, 2021 June 21. Promises, promises: Living up to Canada's commitments to climate and Indigenous reconciliation www2.deloitte.com/content/dam/Deloitte/ca/Documents/consulting/ca-indigenous-report_en.pdf.

20. De-risk investments and attract more capital for proposed projects by conducting early, informed, relationship-based, and well-resourced partnerships with impacted Indigenous nations.

Corporate partnerships with Indigenous nations in electrification projects are an essential element to project success and avoidance of delays.[167] Approaches to partnerships with Indigenous nations should be (Figure 11):

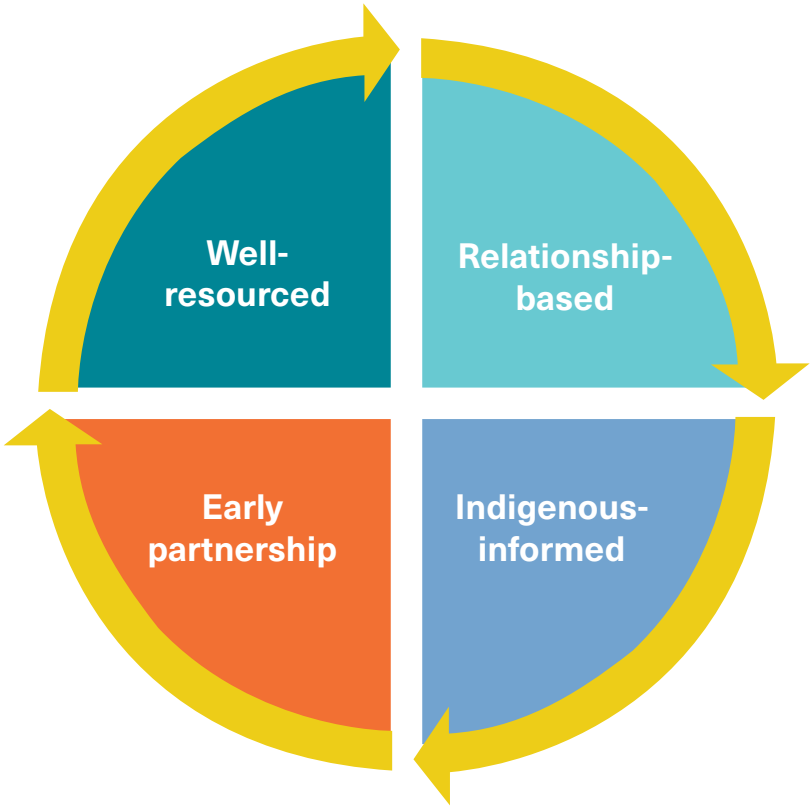


Figure 11. Basic standards of partnerships with Indigenous nations.

1. **Conducted early:** connect with prospective Indigenous partners at the earliest possible concept phase of a project.
2. **Relationship-based:** approach Indigenous nations with an open mind and genuine interest in building a long-term relationship.
3. **Informed:** Learn in advance about the history, protocols, priorities, values, and interests of Indigenous partners. This avoids burdening Indigenous nations with educating company players, and sets the stage for a relationship beginning in a place of understanding.
4. **Well-resourced:** Meetings with project referrals take time away from often already stretched Indigenous governments. Engagement with prospective Indigenous partners should be well-resourced to compensate Elders, staff, legal personnel, consultants, and Nation members asked to participate in project review.

[167] Dunsky, 27 April 2023. Build Things Faster. https://issuu.com/canadianelectricityassociation/docs/ec_sel_frame_-_2023_21_b1a2024679b3b0

Find out more corporate partnerships with Indigenous nations.

For more on corporate partnerships with Indigenous nations, **please see the section on "Excellence in Indigenous-Industry Partnerships on Major Projects" in FNMPC's Values Driven Economy Post-Conference Report.**

21. Develop priority Indigenous procurement policies for all projects to support Indigenous businesses and incentivize industry-Indigenous partnerships.

Industry and companies looking to partner with Indigenous nations on electrification projects (or any major projects) should prioritize Indigenous businesses in procurement contracts. Procurement projects should have contracts that includes:

(1) Establishing partnership requirements;

(2) Requiring an Indigenous nation's say into the content of "request for proposals";

(3) Negotiating an Indigenous nation's equity participation;

(4) Requiring an open book bidding process;

(5) Requiring Indigenous content minimums;

(6) Introducing contracting targets;

(7) Bonding requirements.[168]

Procurement should be approached by industry partners with the option for Indigenous nations to become the ultimate operator of the facility or project, and across the value/supply chain. While not all Nations will take this route, the option should be on the table.

22. Hire and appoint Indigenous people into board and leadership positions in companies and on projects, particularly Indigenous women.

As of 2023, the number of *Canada Business Corporations Act*[169] public company board positions held by Indigenous peoples is 17.[170] Across all industries, the private sector should hire and appoint Indigenous peoples, particularly women, into positions such as board members, advisory, and/or upper management positions. This could include Indigenous nation members, knowledge-holders, youth, Elders, and/or hereditary or elected leadership.

[168] Bonding ensures that the job is performed and that the company is protected against losses from theft or damage done by the contracted group's employees.
[169] *Canada Business Corporations Act* (RSC , 1985, c. C-44).
[170] MacDougall, A., Valley, J.M., Armour, J., and Zigler, A., 11 October 2023, Osler, Report: 2023 Diversity Disclosure Practices – Diversity and leadership at Canadian public

" Are [Indigenous nation] members on [the project/company] board? …is this happening in a vacuum or are [Nation members] aware of this project? Has it been brought to them, and do they approve of it? Or are they going to get it at the 11th hour, and they say we don't want this. You just wasted a lot of time and energy and money."[171]

Significant Indigenous representation at the board level is to make sure Indigenous values are respected, that Indigenous protocols and principles are respected—particularly on the lands of those Indigenous nations impacted by the projects.

" I believe every company that deals with Crown land matters needs to have an Indigenous director on its board. There is no substitute for lived experience by rights-holders."[172]

Indigenous hiring and board appointments requires education and equity-diversity-inclusion training within existing leadership ranks to contribute to the capacity of companies to work effectively with Indigenous partners.

[171] Expert at Electrification Roundtable.
[172] JP Gladu (Sand Point First Nation), cited in ICD Online "*Unpopular governance opinions: What Canadian directors think*".

23. Fund Indigenous capacity supports.

It is to the advantage of both Indigenous nations and project proponents to fund Indigenous capacity supports. Industry partners are typically well-resourced and need to level the playing field in order for their Indigenous partners to create a strong partnerships that benefits the partnering Indigenous nations to the fullest extent possible.

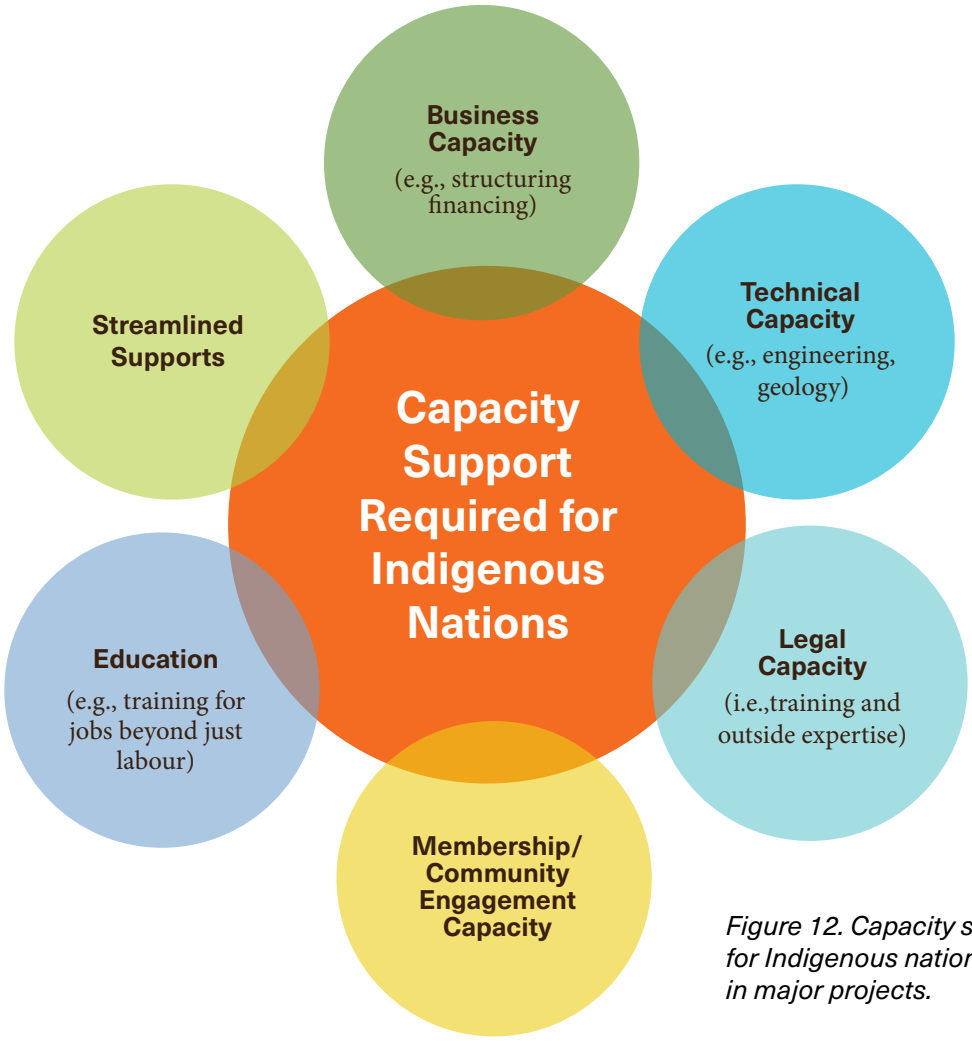


Figure 12. Capacity supports required for Indigenous nations' partnerships in major projects.

> *" When the proponent provides enough capacity for them to have a robust legal team, financing team, their own people that they can hire to come to the table, and, outside of government, negotiate a deal, that actually isn't being forced by the Crown, that is instead being forced by their own control and environmental principles."*[173]

The capacity supports typically required by Indigenous nations to participate in projects includes business capacity, technical capacity, legal capacity, membership engagement capacity, education, and permitting and regulatory capacity (Figure 12).[174]

[173] Expert Electrification Roundtable participant.
[174] von der Porten, S., Williams, S., and McCormick, J., 6 July 2023. Critical Mineral Roundtables, First Nations Major Projects Coalition. https://fnmpc.ca/wp-content/uploads/FNMPC_Critical_RT_Overview_06072023_final.pdf.

24. Support Indigenous access to capital.

Indigenous nations need access to capital to participate in clean energy projects in Canada, and both governments and industry must play significant roles in catalysing this access. Expert roundtable attendees weighed in on various aspects of this topic:

" There are 72 private equity firms, and six of them have Indigenous mandates. It's about socializing, debunking myths, and marketing success … Canada is just opening its eyes to the Indigenous economy."

" Project proponent partner and major developers lack creativity around financing options. They need to be more creative and [be] willing to solve problems."

" Partnership with First Nations is just good business. What's funny is we've talked about access to capital, and ironically, we've had situations where it's only through partnership with First Nations that access to capital was made possible to the proponents, so we must recognize that this is a power play and power partnerships."

" The key is in securing private investment to attract economic growth broadly and Indigenous and ownership unlocks that."

Industry partners can support Indigenous access to capital in a variety of ways:

1. Create **deal structures** that are easily financeable by Indigenous nations, including offering credit enhancements.
2. Ensure that Indigenous nations have an **option to buy** in at early stage of project (such as when it is being commissioned) to avoid construction risk and other risks.
3. Implement a corporate Indigenous **mandate for Indigenous equity ownership minimums**.
4. Provide **financing** at a competitive price to the Indigenous nation.
5. Support an **application to a lenders** (e.g., Canada Infrastructure Bank; Banks).
6. Use existing company assets to **collateralize the loan**.

25. Support and prioritize Indigenous leadership in projects.

Breaking with the long-standing trend of industry-led and -governed projects, electrification project proponents should support and prioritize Indigenous leadership on projects. The first step in operationalizing this support is asking the Indigenous nation partner to identify what supports are needed to grow or develop such leadership. This may include:

26. Create opportunities for eventual majority or full Indigenous ownership of net zero projects.

Where desired by the Indigenous nation, many electrification project proponents are designing clean energy infrastructure for eventual majority or full Indigenous ownership of net zero projects. While companies investing in electrification projects must expect a reasonable rate of return on projects, the long-term wellbeing and steady revenues for Indigenous nations should be prioritized. This prioritization should include the centering of Indigenous investment opportunities and skills/knowledge transfer in project design.

27. Create project site policies and safeguards to protect Indigenous women, girls, and Two Spirit individuals.

Indigenous women, girls and Two Spirit individuals may be cautious of some mainstream climate solutions since (1) many projects involve extraction and infrastructure that impact Indigenous land- and water-based practices, and (2) personal safety is a threat because of the increased violence. This wariness stems from the history of violence against Indigenous women, girls, and Two Spirit individuals in the construction sites and work camps in the construction and operation of infrastructure and extractive projects. In the past such violence has been directly connected to the acquisition of land and waters in the interest of economic development projects. Industries involved in any new infrastructure must create project site policies and safeguards to project Indigenous women, girls, and Two Spirit individuals.

28. Lenders should invest with their best rates on Indigenous-owned electrification projects.

Indigenous-owned and -partnered electrification projects in Canada now constitutes very de-risked lending for private sector lenders. The safeguards that are de-risking this industry are government-backed loan guarantees, rate regulation (predictable return), and many precedents across Canada that demonstrate these as being excellent projects. Many lenders in Canada will need to review their internal risk assessment for this sector and realign investing with their most competitive rates into Indigenous-owned electrification projects such as transmission lines and generation facilities. Lenders may also explore known options such as Indigenous bonds or green bonds to finance new electrification projects.

Recommendations for Indigenous Nations

"It's time to clean up our earth… and get rid of the greenhouse gases… we need to look after it and become owners. So go for it."

– Ken Cameron (former Chief, Saulteau First Nation)[175]

29. Indigenous nations should require the procurement process for electrification projects be a co-developed process with direct Indigenous input.

Procurement is the act of a company or government purchasing goods and/or services from a third party required to build and operate a project. An example of procurement is a project construction company coming to build a solar farm on Indigenous lands, and the contract for the construction camp services (food, water delivery, camp construction, waste removal, cleaning) being held by the Nation government (or Indigenous member-owned businesses).

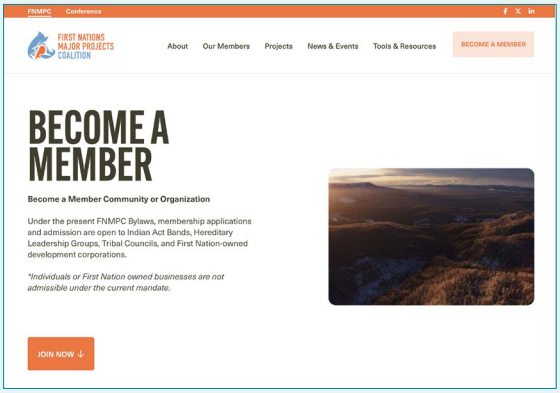
During project construction and other phases of projects, proponents build their projects by hiring and awarding contracts to outside parties to provide goods and services that eventually become part of the completed and operating project (such as a mine or a wind farm). In most cases, the majority of a project's budget—particularly during the construction phase—is spent on procurement contracts. Once the project is built and operating, companies will often contract other companies to provide supplies and services required to run the day-to-day operations of the project. These operational period contracts are also an economic and employment opportunity for First Nations governments and their businesses.

The three main benefits for Indigenous nations taking advantage of contracting and procurement opportunities are (1) the resulting jobs and Nation income, (2) developing long term capacity to grow Indigenous participation in the economy including transferrable skills and (3) building "anchor clients". Indigenous nations should require that the procurement process on projects impacting their lands or waters provide options that include:

- ✓ establishing Indigenous partnership requirements;
- ✓ requiring an Indigenous nation's say into the content of "request for proposals";
- ✓ negotiating an Indigenous nation's equity participation;
- ✓ requiring an open book bidding process;
- ✓ requiring Indigenous content minimums;
- ✓ introducing contracting targets;
- ✓ bonding requirements.[176]

[175] First Nation Energy Summit, Vancouver, BC, Nov 7, 2023. [Personal communication].
[176] Bonding ensures that the job is performed and that the company is protected against losses from theft or damage done by the contracted group's employees.

Importantly, Indigenous procurement targets or set asides must focus on all the range of skilled jobs and contracts applied to Indigenous nations to fully create opportunities for Indigenous businesses and to build the experience and skillsets of the Nation. In other words, a diverse range of procurement contracts need to be provided, not only the more basic contracts.



Find out more about First nations procurement and contracting.

For access to FNMPC's members-only report **First Nation Procurement and Contracting: A Guidance Document, please become a member of the FNMPC.**

30. Focus capacity building on increasing climate and energy literacy and undertaking comprehensive community planning.

Indigenous nations may consider focusing capacity building efforts on increasing climate and energy literacy, and undertaking comprehensive community planning, all of which will set the stage for participation in and ownership of electrification projects. This might include exploring options for project technologies that suit the Nation's priorities and opportunities in the region e.g., wind, solar, transmission, behind-the-fence generation, nuclear, geothermal, offshore wind, hydro, micro hydro, battery, storage, tidal, etc. As Melina Massimo Lubicon (Lubicon Cree) has observed"[177]

" Creating dialogue about energy in your community is the first step to building a project. It is important to create dialogue so that people in your community start to increase their knowledge about climate change and energy literacy. It creates space for people to start dreaming about the change they want to see. It allows for a collective vision to emerge."

31. Explore the experiences of other Indigenous nations as owners of clean energy projects.

Canada's electrification has the potential to reinvigorate inter-Indigenous collaboration and solidarity which has been present among Indigenous nations since time immemorial. Prior to and following colonization, Indigenous nations in the United States and Canada have created and upheld inter-nation political agreements such as

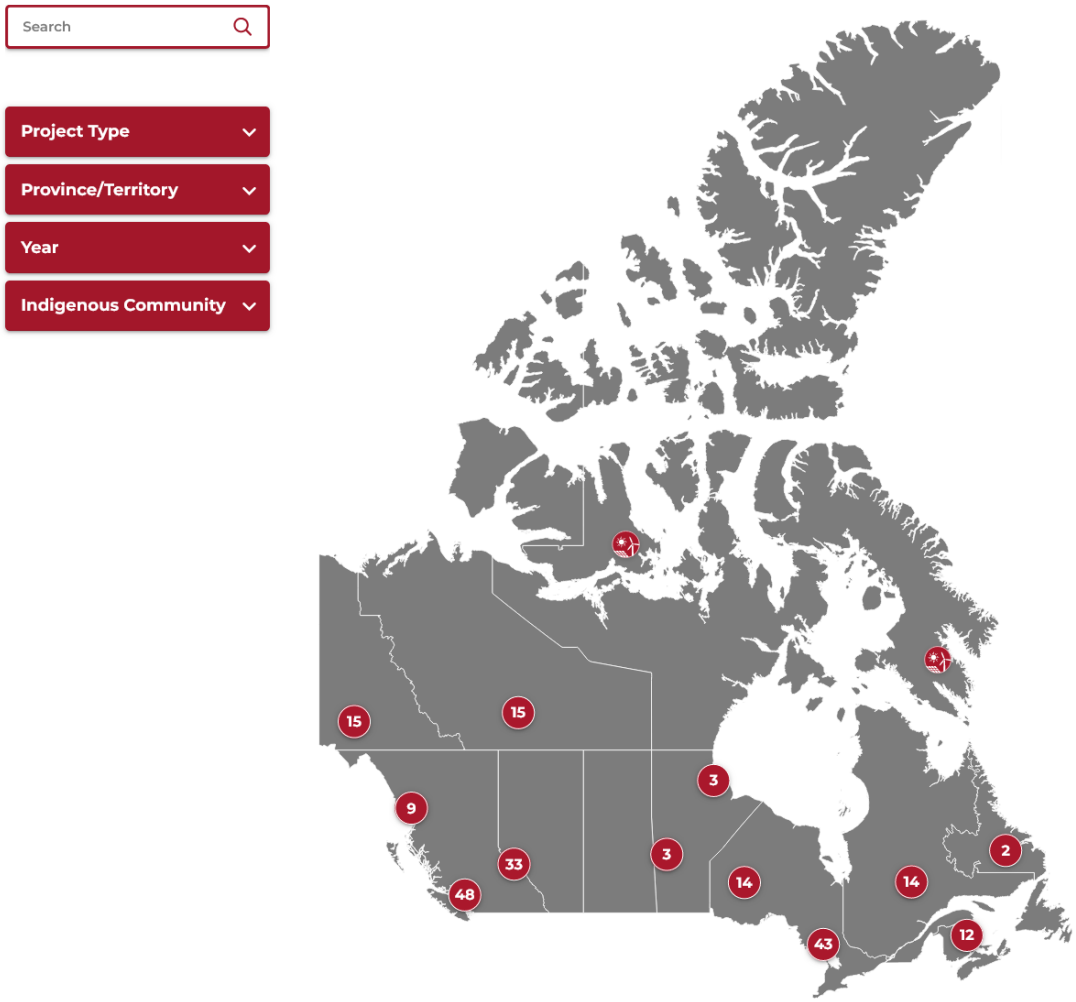
[177] Laboucan-Massimo, M., November 2023. Just Transition Guide. static1.squarespace.com/static/ 5c9860bf77b9034bc5e70122/t/6555222edcea4d681c-cf0454/1700078320040/Just+Transition+Guide.pdf.

confederacies, treaties, and alliances on diplomatic relationships, arrangements for shared fishing and hunting, mutual arrangements for times of need, and collaboration in defense of lands and resources.[178]

Electrification is no different: it presents an opportunity for Indigenous nations to work together, or even simply learn from the experiences of other Nations who own or are developing clean energy projects. In this same vein, the Assembly of First Nations has suggested Indigenous "peer-to-peer climate discussions and information sharing (climate data, resources, templates) through the development of an online climate network and discussion forum."[179]

While Part 4 of this document provides a few examples of project innovation across jurisdictions, nothing can replace directly meeting with other Indigenous nations to see projects underway and learn what is or isn't working. A useful place to start to learn about Indigenous clean energy projects in Canada is Indigenous Clean Energy's Indigenous-led *Clean Energy Project Map.*[180]

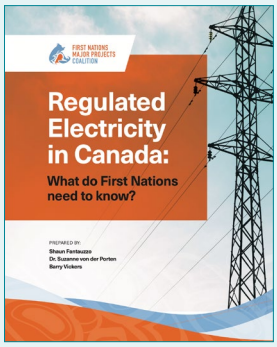
Indigenous Clean Energy's Clean Energy Project Map



[178] von der Porten, S., Corntassel, J., & Mucina, D. (2019). Indigenous nationhood and herring governance: strategies for the reassertion of Indigenous authority and inter-Indigenous solidarity regarding marine resources. AlterNative: An International Journal of Indigenous Peoples, 15(1), 62-74. doi.org/10.1177/1177180118823560.
[179] Assembly of First Nations, October 2023. National Climate Strategy, afn.bynder.com/m/77556e1d9da51db7/original/2023-Climate-Strategy-Report.pdf.
[180] Indigenous Clean Energy, March 2024. Indigenous-led Clean Energy Project Map. https://indigenouscleanenergy.com/connect-learn/indigenous-led-clean-energy-project-map/.

32. Know and understand what questions to ask before investing in a clean energy project or rate regulated utility project.

Indigenous nations need to be able to make financially-informed decisions about becoming owners and/or proponents of power generation projects, transmission lines, and power distribution lines. In most provinces and territories across Canada, owners and operators of electricity projects/assets are public utilities that offer an essential service. Given this, these projects or assets are subject to government regulations (e.g., permitting requirements and economic controls tied to construction and operating costs, returns on invested capital, utility rates, etc.) meant to protect the public interest. Understanding the economic and financial policies of these public utilities is essential for First Nations interested in participating or investing in economically regulated electricity projects.



Find out more about what questions to ask before investing.

To know what questions First Nations should ask before investing in a project, and to learn more about rate regulated utilities, please see FNMPC's report **Regulated Electricity in Canada: What do First Nations need to know?**

33. Identify and take advantage of opportunities along the value chain of electrification.

A value chain is the series of steps or processes that go into the creation of a final project or product. In the context of net zero, a good example is the battery mineral supply/value chain which often involves planning, exploration mining, processing or smelting the metals, transport, manufacturing, and minerals recycling. While the onus is on governments to create opportunities along the value chain of electrification for Indigenous nations, it is important for Indigenous nations to consider what areas of electrification are best suited to the values and priorities of the Nation and membership. For example, an Indigenous nation might be keen to own part of transmission line with royalties, rather than take on the responsibility of hydroelectric generation that supplies the line.

34. Consider creating an Indigenous-led integrated resource plan.

Most public utilities create integrated resource plans that identify objectives for long-term management and planning. For example, an integrated resource plans for some electric utilities entails an evaluation of planning alternatives such as new generating capacity, power purchases, energy efficiency, and cogeneration.[181] Indigenous nations interested in building greater regional leverage in electrification may consider creating an Indigenous-led integrated resource plan. Indigenous nations in Canada who have created Indigenous-led integrated resource plans for their traditional territories have based them on Indigenous knowledge, and Nation values and priorities, rather than commercial or public utility priorities. These plans included protocols, sites appropriate and not appropriate for electrification projects, and what the terms are for Indigenous participation, ownership, and procurement. Ideally, Indigenous-led integrated resource plans flow from the Nation's comprehensive community plans. Further, Indigenous-led integrated resource plans may set some groundwork for establishing an Indigenous utility, or an aggregation of Indigenous utilities among nations with common interests in a region.

35. Explore opportunities for an Indigenous-owned utility.

Some First Nations attendees of the annual First Nations Energy Summit expressed interest in creating one or more Indigenous utilities.[182] Indigenous utilities are something that Indigenous nations across Canada may also be interested in exploring. Indigenous utilities could take a variety of formats and scales depending on the priorities and circumstances of each Nation, but generally such a utilities could involve roles such as those described in Table 8.[183] [184]

Table 8. Possible roles of Indigenous utilities.

Possible Roles of Indigenous Utilities	Description
 **Operator**	A go-between for Indigenous projects and a provincial/territorial utility.
 **Collector**	Collector of power from Indigenous projects for sale to a provincial/territorial utility through a put option.[185]
 **Advocate**	Advocacy with governments on behalf of the interests of Indigenous nations with on matters such as electricity policy.

[181] 16 U.S.C. § 2602 (19).
[182] The First Nations Energy Summit is an annual conference organized by Clean Energy BC. https://cleanenergybc.org/.
[183] Cameron Lusztig, President, Keppel Gate Consulting [Personal Communication].
[184] Roundtable participant suggestions.
[185] See Recommendation 4 above for more detail on put options.

Consultant

The Indigenous utility might develop expertise in power development, finance, interconnection, and procurement.

Regulator

Some Indigenous nations may be ready to take on a greater role in power regulation.

Asset Manager

Many Indigenous nations would benefit from greater control over electricity asset management.

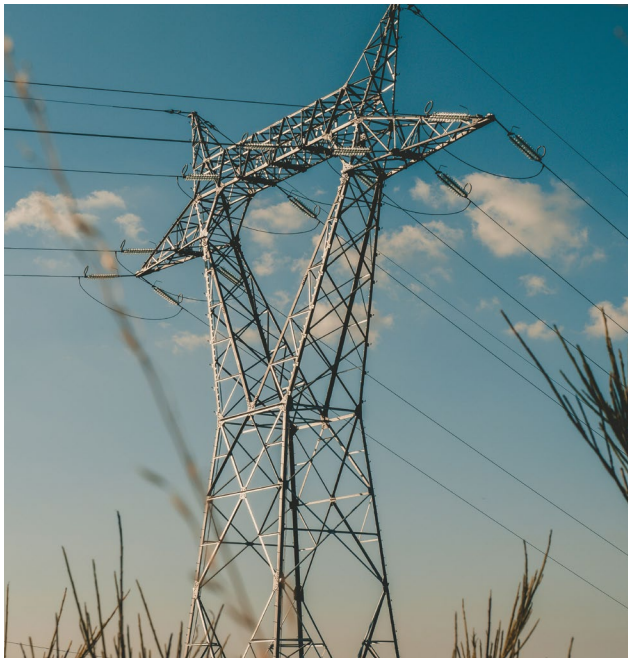
Expert roundtable attendees commented on Indigenous-owned utilities:

" As [First Nations] build our capacity, that's ultimately the goal to be able to provide power to our regions and be utility. There are some [Indigenous] nations who might not [want to be a utility]. But I think that's just a lack of education around what a utility is and that we do have the ability to do it."

" [Our Nation has] had conversations around Indigenous utilities… where some First Nations … want to take that next step with selling their own power by their own customer and wheeling. And … moving beyond these kind of short term IBA…towards greater equity ownership. We want to be owners of assets. We want to have a transfer of assets that are existing in our territories to our Nation so that we can sell more power and find those customers."

" Indigenous utilities are regulatory vehicle to advance generation and transmission ownership because you know if you look out 10 years, there are some jurisdictions in this country that are already advancing toward that kind of a model."

Indigenous utilities and power authorities are not simply a possibility, they are a well-established norm in the United States. For example:



- Aha Macav Power Service (California)
- Umpqua Indian Utility Cooperative (Oregon)
- Yakama Power (WA state)
- Southern Ute Indian Tribe Department of Energy (Colorado)
- Arizona Tribal Energy Association (AZ)
- Ak-Chin Indian Community Electric Utility Authority (AZ)
- Gila River Indian Community Utility Authority (AZ)
- Navajo Tribal Utility Authority (AZ)
- Tohono O'odham Utility Authority (AZ)
- Hualapai Tribal Utility Authority (AZ)

In Canada, Indigenous utilities and Indigenous power authorities are few and far between, and to date have been largely stifled by provincial/territorial regulators. However, one prominent Indigenous-owned electricity transmitters is Five Nations Energy in Ontario.

Five Nations Energy Inc.

First Nations Energy Inc. (FNEI) is the corporation behind the Omushkego Ishkotayo Project (Western James Bay Transmission Line Project), a 270 km long transmission line that services Attawapiskat, Fort Albany, and Kashechewan.

"FNEI is one of five licensed electricity transmitters in Ontario; and is also the only Indigenous-owned electricity transmission company in Canada, as well as in Ontario."[186]

Find out more about Indigenous participation in electricity infrastructure.

Please see FNMPC's 2019 research **Paths for Indigenous Participation in Electricity Infrastructure** which includes exploration of Indigenous utilities in the USA.

[186] Five Nations Energy Inc., March 2024. Who is FNEI? https://fivenations.ca/index.php/about.

36. Learn about and understand the different legal arrangements and structures for project ownership and partnerships.

To the extent possible, Indigenous nations should become aware of the different legal arrangements and project structures for Indigenous ownership of and partnerships in major projects. It is most important that partnerships and ownership arrangements are established with clear definitions of the "distribution of responsibilities, liabilities, and profits, or a definitive pathway and timeline for negotiating those distributions".[187]

Table 9. Examples of types of Indigenous partnership and ownership of electrification projects.[188]

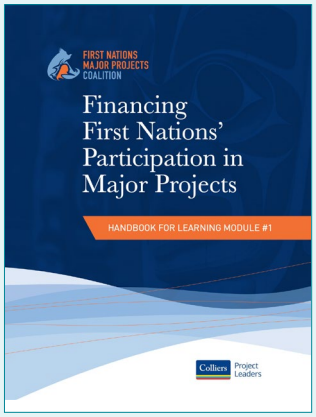
	Types	Examples
	**Indigenous Nation Involvement**	Fort McMurray West Transmission Line[189]
	**Indigenous Ownership**	Fort Severn Solar[190]
	**General Partnership, Indigenous Coalition**	Three Nations Energy Inc.[191]
	**General Partnership, Indigenous Developer**	Innavik Hydro[192]
	**Limited Partnership**	Wataynikaneyap Power[193]
	**Equity Ownership**	Chatham to Lakeshore Transmission[194]

[187] Bledsoe, A., April 2022. Project Ownership Models for Remote Renewable Energy Development in Partnership with Indigenous Communities. UBC Sustainability Scholars Program.
[188] Ibid.
[189] ATCO, March 2024. Alberta Powerline Transmission Project. https://electric.atco.com/en-ca/community/projects/fort-mcmurray-west-500-kv-transmission-project.html.
[190] Turner, L., 5 November 2021. Ontario's most northern First Nation goes green with their first solar project, CBC News. https://www.cbc.ca/news/canada/thunder-bay/fort-severn-solar-1.6237812.
[191] Three Nations Energy, March 2024. Who are we. https://www.3ne.ca/.
[192] Innavik Hydro, 2017. Innavik Hydroelectric Facility. https://www.innavikhydro.com/.
[193] Wataynikaneyap Power, March 2024. https://www.wataypower.ca/
[194] Hydro One, March 2024. Chatham to Lakeshore Line. https://www.hydroone.com/about/corporate-information/major-projects/chatham-to-lakeshore.

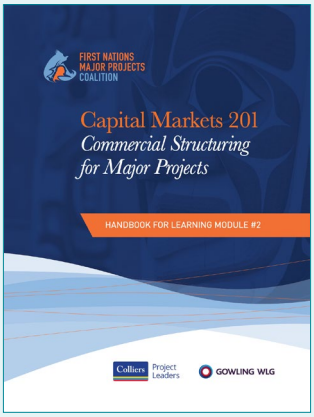
For example, Indigenous nations may consider the creation of Indigenous-owned economic development corporations, or other legal entities (e.g., Table 9) that will not only limit liability but also support Nations to take advantage of economic opportunities occurring in the net zero transition. Different legal and project arrangements—such as fixed payments, royalty revenues, risk, board positions on projects—all impact Indigenous revenue streams and ultimately self-determination.

Find out more about financing Indigenous participation in major projects and capital markets.

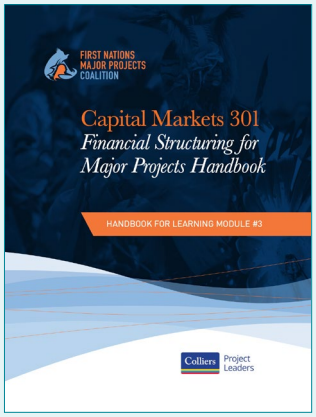
For more information on project financial structuring, commercial structuring, and capital markets, please see **FNMPC's Capital Markets Series.**



Capital Markets 101: Financing First Nations' Participation in Major Projects



Capital Markets 201: Commercial Structuring for Major Projects



Capital Markets 301: Financial Structuring for Major Projects Handbook

37. Know what the highest standards are in Indigenous equity ownership and risk mitigation.

Indigenous nations should ask provincial or territorial utilities, governments or regulators to (1) meet the highest standards to date[195] of Indigenous ownership and to (2) simultaneously minimize risk for Indigenous nations. The level and nature of Indigenous nations, participation may vary, and new generation and transmission build-out should be designed with sufficient flexibility to permit meaningful participation from Indigenous nations in various ways that match the capacity, risk tolerance, objectives, and priorities of each. Such flexibility has been demonstrated by other jurisdictions such as Hydro One in Ontario where the equity model offers First Nations a 50% equity stake in all future large-scale capital transmission line projects.

[195] The highest standards in Indigenous ownership are fast-evolving, and should be monitored, and then matched or exceeded by governments/utilities.

38. Consider each of the project development phases, and the potential barriers and economic opportunities of each.

Most major projects typically have several phases, many of which Indigenous nations may choose to participate in strategic ways. Appendix A outlines the different project phases and the potential barriers and economic opportunities of each.

39. Consider Indigenous ownership in transmission projects.

There are many opportunities for Indigenous nations to participate in transmission project ownership across Canada. Indigenous ownership in this area is fast emerging in Canada (e.g., Wataynikaneyap Power (ON); Chatham to Lakeshore Transmission (ON); North Coast Transmission Line (BC), Alberta Power Line (AB)). Part 3 of this Strategy provides the rationale for Indigenous leadership in transmission in Canada, see Table 5: Transmission: Canada's Challenges and Indigenous Opportunities and Solutions.

The expansion of transmission in Canada is uniquely notable in the Indigenous electrification context given that most existing and proposed transmission lines run through the lands of two or more Indigenous nations. The ability for Indigenous nations to collaborate with neighbours on these linear assets is an opportunity to build Indigenous-Indigenous co-ownership, increase commercial negotiating power, leverage Indigenous self-determination, and reinvigorate long-standing Indigenous-Indigenous collaboration and solidarity.[196]

Expert roundtable participants commented on various elements of Indigenous ownership of and participation in transmission:

" These are linear transmission projects going over thousands of kilometers in some cases, so you're working with multiple First Nations. Bringing that collective together for First Nations and really working together. Does the governance model work the same for every jurisdiction? Likely not. Different First Nations are not all the same across Canada … and we've seen different approaches."

" Transmission carries tendency for a lower risk than generation so it's often a greater opportunity [for Indigenous nations]"

" Hydro One [Ontario] has set the bar for transmission at 50% First Nations equity ownership, that's really good, and I think that should inform our discussions with generation."

[196] von der Porten, S., Corntassel, J., & Mucina, D. (2019). Indigenous nationhood and herring governance: strategies for the reassertion of Indigenous authority and inter-Indigenous solidarity regarding marine resources. *AlterNative: An International Journal of Indigenous Peoples*, 15(1), 62-74, doi.org/10.1177/1177180118823560.

40. Don't rely on project proponent projections for advice.

" Outside experts and businesses do not always understand or have our best interests at heart and are often driven by profits rather than by a need to address the historical legacy of colonization, energy and economic poverty, or the increasing impacts of climate change."

– Just Transition Guide[197]

" First Nations are faced with a number of opportunities but don't have the capacity to actually assess those and vet those."[198]

Indigenous nations investing in electrification projects need to be certain that the Indigenous nation and business is receiving trustworthy advice on which industries and projects are sound investments, and which are in decline or risky. While it may be helpful to corroborate impact assessments, revenue projections, risks, and other information provided by project proponents and industry partners, Indigenous nations should conduct due diligence with independent expertise.[199]

41. Consider joining leadership positions such as the board of directors, advisory, and/or upper management positions.

Industry is beginning to understand the importance of hiring Indigenous people to all ranks, particularly as board members, advisory and/or upper management. The effect of this effort being made by companies is that Indigenous nation members can consider joining such positions. For example, if Indigenous nation members become board members or advisories to a company or project building clean electrification infrastructure on the impacted Indigenous nation's lands, such a position would help make that Nation's values known—either widely within a company, or for a particular electrification project.

" Measuring Indigenous participation, in the private sector, it's very common. Of course, we talk about procurement jobs. Do these companies have Indigenous people on their board of directors? They should, anything to do with land should have Indigenous directors."

42. Support Indigenous youth in electrification trades, business development, and energy literacy.

" Just seeing the kids that come in and say 'my Dad is a solar guy. That's what I want to do when I grow up. I want to be able to put those panels on.' It has increased the pride in our community."

-Vickie Wetchie, General Manager, Montana First Nation[200]

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197 Laboucan-Massimo, M., November 2023. Just Transition Guide. static1.squarespace.com/static/ 5c9860bf77b9034bc5e70122/t/6555222edcea4d681c-cf0454/1700078320040/Just+Transition+Guide.pdf.

198 Expert Electrification Roundtable participant.

199 The Conference Board of Canada, 29 September 2022. Indigenous Ownership Overcoming Obstacles andForging Partnerships. https://www.conferenceboard.ca/product/indigenous-ownership-overcoming-obstacles-and-forging-partnerships/.

200 Cited in Laboucan-Massimo, M., November 2023. Just Transition Guide. static1.squarespace.com/static/ 5c9860bf77b9034bc5e70122/t/6555222edcea4d681c-cf0454/1700078320040/Just+Transition+Guide.pdf, p.133.

Where possible, Indigenous nations should support youth in areas such as electrification trades, business development, and energy literacy. As a sector that is growing exponentially,[201] and one that aligns with the environmental priorities of many Indigenous nations, youth would be well-positioned to build careers in electrification. Several experts at the Electrification Roundtables highlighted the importance of Indigenous youth in electrification:

" [We need to work] with Indigenous youth bringing them to all these processes, to have Indigenous youth actually participating in these processes would be another way to think outside the box."

" We've got to stand up, we have a right to the economy, entrepreneur[ship] and [to] make a living and profit for our people, while everybody else is getting rich around us. The youth are getting educated. We have to show them it's not for nothing."

"[We can] run simulations with the youth council in a small town or sponsor a youth conference on energy literacy and regulatory literacy."

"For us, our wind farm, there's this pride that we participated in construction on our traditional territory. [Our Nation is] very proud of our wind farm, and it continues now. We have site visits with our youths. It's not something that's common with other wind farm projects… There's ongoing capacity by getting individuals working at the site where we have a mentorship program. Those are measurables that are hard to gauge but have huge impact in communities."

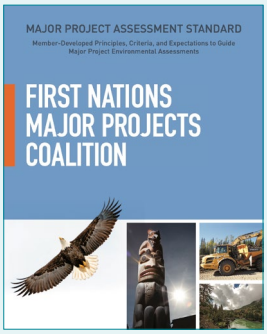
43. Consider creating Indigenous-led impact assessment protocols for any new project.

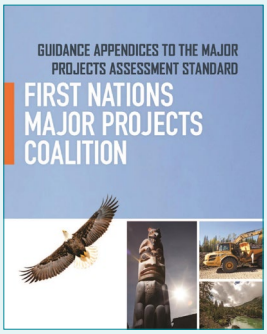
Examples of Indigenous nations who have conducted their own environmental and impact assessments for new projects on their territories include: the Sḵwx̱wú7mesh Úxwumixw (Squamish Nation), Tsleil-Waututh Nation, and Stk̓emlúpsemc te Secwépemc Nation. These assessments were conducted in accordance with Indigenous laws and governance, emphasizing the importance of Indigenous cultural perspectives, knowledge, and history. These assessments were independent and stemmed from the concern that the federal and provincial impact assessment processes were inadequate to address the concerns and perspectives of Indigenous nation. The advantages of Indigenous nations creating Nation-specific impact assessment protocols lie in the ability of Indigenous nations to define the process. Indigenous assessments can be grounded in Indigenous values, priorities, and legal systems. Indigenous nations may also wish to consider co-administration of impact assessment processes with other jurisdictions to exercise greater influence over project assessments and decision making.

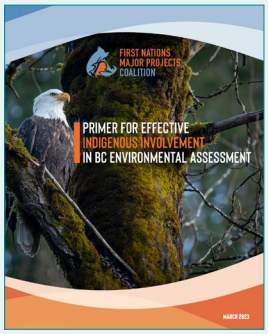
[201] Liebreich, M., 22 February 2024, Net Zero Will Be Harder Than You Think – And Easier. Part II: Easier, BlooombergNEF. about.bnef.com/blog/liebreich-net-zero-will-be-harder-than-you-think-and-easier-part-ii-easier/.

Find out more about FNMPC's environmental tools.

Please see the **FNMPC's Environmental Tools, a series of reports on Indigenous Involvement in Environmental Impact Assessments**







44. Explore options to secure the Indigenous nation's access to competitively-priced capital.

Indigenous nations pursuing participation in and ownership of electrification assets in Canada face considerably greater barriers in accessing competitively-priced capital as compared to non-Indigenous investors. As a result, exploring options to secure capital is advised. Options in Canada that may help Indigenous nations secure capital include, but are not limited, those listed in Table 10.

Table 10. Some options for Indigenous nations to secure capital for electrification and other projects.

Types	Examples
Alberta Indigenous Opportunities Fund (AIOC)	Crown Corporation created by of the Alberta Government, whose investment supports are available fornatural resource projects with at least one Alberta-based Indigenous investor. The AIOC supports Indigenous investments with loan guarantees backed by the Province of Alberta.[202]
Ontario Aboriginal Loan Guarantee Program (ALGP)	ALGP focuses support on Indigenous participation in Ontario for new renewable green energy infrastructure like wind, solar and hydroelectric and other electricity infrastructure projects.[203]

[202] Alberta Indigenous Opportunities Corporation. https://www.theaioc.com.
[203] Ontario Financing Authority. "Ontario Aboriginal Loan Guarantee Program". www.ofina.on.ca/algp/faq.htm#p3.

Saskatchewan Indigenous Investment Finance Corporation (SIIFC)	SIIFC was established to provide access to capital for Indigenous nations and entities participating in Saskatchewan's natural resource and value-added agriculture sectors.[204]
Federal Indigenous Loan Guarantee Program (Canada)	(Upcoming) At the time of writing, this loan guarantee program has been announced in the Fall Economic Statement but not implemented.
BC First Nations Equity Financing Framework	(Upcoming) At the time of writing, this Nations Equity Financing Framework has been announced in Budget 2024 and an Indigenous land guarantee has been tagged for inclusion.
First Nations Finance Authority (FNFA)	First Nations can access bond markets and low-interest loans.
Canada Infrastructure Bank (CIB)	CIB provides investment funding for green infrastructure, clean power, public transit, trade and transportation and broadband infrastructure, including for Indigenous nations.
Indigenous Natural Resource Partnerships (NRCan)	Increase the economic participation of Indigenous nations and organizations in the development of natural resource projects that support the transition to a clean energy future.
Smart Renewables and Electrification Pathways (SREP)	Provides ~$4.5 billion until 2035 for smart renewable energy and electrical grid modernization project, including $3 billion to support projects that are actively supplying clean, affordable, and reliable power to Canadian electrical grids.

" You need to have money upfront. You need to have some sort of money upfront to be able to even access capital. You have to know that it's a viable project, there's all this pre-work that needs to be done that's out of pocket before you can even start applying to these sorts of things. So, that's a barrier right at the beginning for many of our communities."[205]

[204] Government of Saskatchewan. https://siifc.ca/about.
[205] Expert Electrification Roundtable participant.

Conclusion and Next Steps

In 10 or 20 years, Canada's energy system will likely look very different than it does today. When we look back at this Strategy and how this early phase of the energy transformation played out, will the strategic-build out of the required electrification infrastructure—in partnership with Indigenous nations—have created the conditions for Nations to flourish and direct revenues towards their memberships' priorities? Will Canada, on its journey to electrifying the country's energy system, have substantively supported the collective advantage of Indigenous free, prior, and informed consent?

This Strategy emphasizes the importance of Indigenous participation and equity ownership in the electrification of Canada's energy system. The extent to which this is done well—whether projects have maximized Indigenous benefits, participation, and ownership opportunities—can only be evaluated by Indigenous nations. As governments, regulators, the private sector and Indigenous nations take action on Canada's energy transformation, this Strategy provides a few more bricks in the road towards net zero and calls for the collective path to be built on partnership with Indigenous nations, Indigenous consent, and the principles of Indigenous governance and self-determination.

As next steps, the First Nations Major Projects Coalition and Mokwateh will work with Indigenous and non-Indigenous partners to make progress on the 44 recommendations outlined in this Strategy. Making progress means (1) ensuring as many Indigenous nations as possible have access to this Strategy, and know how to access supports for participation in, and ownership of, electrification projects, and (2) that the Strategy—specifically, the recommendations—reach as many governments, utilities, and private sector entities as possible.

Feedback on this Strategy is encouraged and can be sent directly to **FNMPC** and/or **Mokwateh**.

Atlin Hydro Plant

Appendix A: Solutions and Economic Opportunities for Indigenous Nations at the Different Phases of Project Development

PROJECT	POTENTIAL BARRIERS	SOLUTIONS AND ECONOMIC OPPORTUNITIES
Preliminary engagement	» Lack of access to resources and/or local essential services to initiate project development.	» Build trust and transparency with the local Nation, learn its priorities, culture, history, and treaty rights, as applicable.
Project development, due diligence	» High transaction costs, both direct and indirect, for the local Indigenous community, workers and entrepreneurs.	» Build partnerships with Indigenous-led organizations and skilled experts. » Build partnerships with private-sector organizations and skilled experts that specialize in advising or otherwise supporting Indigenous-led projects. » Identify Nation investment opportunities that can reduce transaction costs for Indigenous participation and enhance productivity for Indigenous-owned businesses and workers, such as housing costs.
Secure funding	» Restricted access to collateral (land rights). » Limited credit history with financial institutions that are risk-averse or subject to regulatory constraints. » Limited access to alternative financing options.	» Access to capital from an Indigenous-led financial institution. » Access to capital from a financial institution at competitive rates. » Access to capital through a government-funded infrastructure bank. » Revenue-sharing agreement with opportunity for percentage of Indigenous-ownership to increase over the term. » Subsidies, incentives, or funding grants to reduce project costs and enhance project competitiveness. » Reinvestment of land claim or other settlement funds by an Indigenous community in the local Nation.

Secure leave to construct, environmental assessment(s), licenses, permits, certifications, commissioning, and any other regulatory approvals.	» Inadequate consultation on the potential environmental impacts to traditional territories. » Large up-front capital investment for infrastructure upgrades in the local Indigenous nation to support the construction phase, such as roads or bridges to the site.	» Direct participation and decision-making in project management with accountability for submitting applications and securing regulatory approvals, i.e. an Indigenous-owned business, person, or Nation is the license or permit holder. » Direct participation and leadership in the environmental assessment process.
Ongoing operation and maintenance	» No ownership interest in an asset impacting a local Indigenous nation. » Lack of long-term investment in the local Indigenous nation. » Wealth transfer out of the Indigenous nation.	» Stable own-sourced revenue with wealth being reinvested in the local Indigenous nation. » Economic participation opportunities for Indigenous-owned businesses and workers supporting ongoing operation and maintenance over the lifetime of the asset. Explore training and capacity building to fill skills gaps.

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