Indigenous Utilities

The Building of Indigenous-Owned Electrical Utilities in Canada

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COMMISSIONED BY

FIRST NATIONS MAJOR PROJECTS COALITION

IN PARTNERSHIP WITH

Mokwateh

Indigenous Utilities

The Emergence of Indigenous-Owned Electrical Utilities in Canada

APRIL 29, 2025

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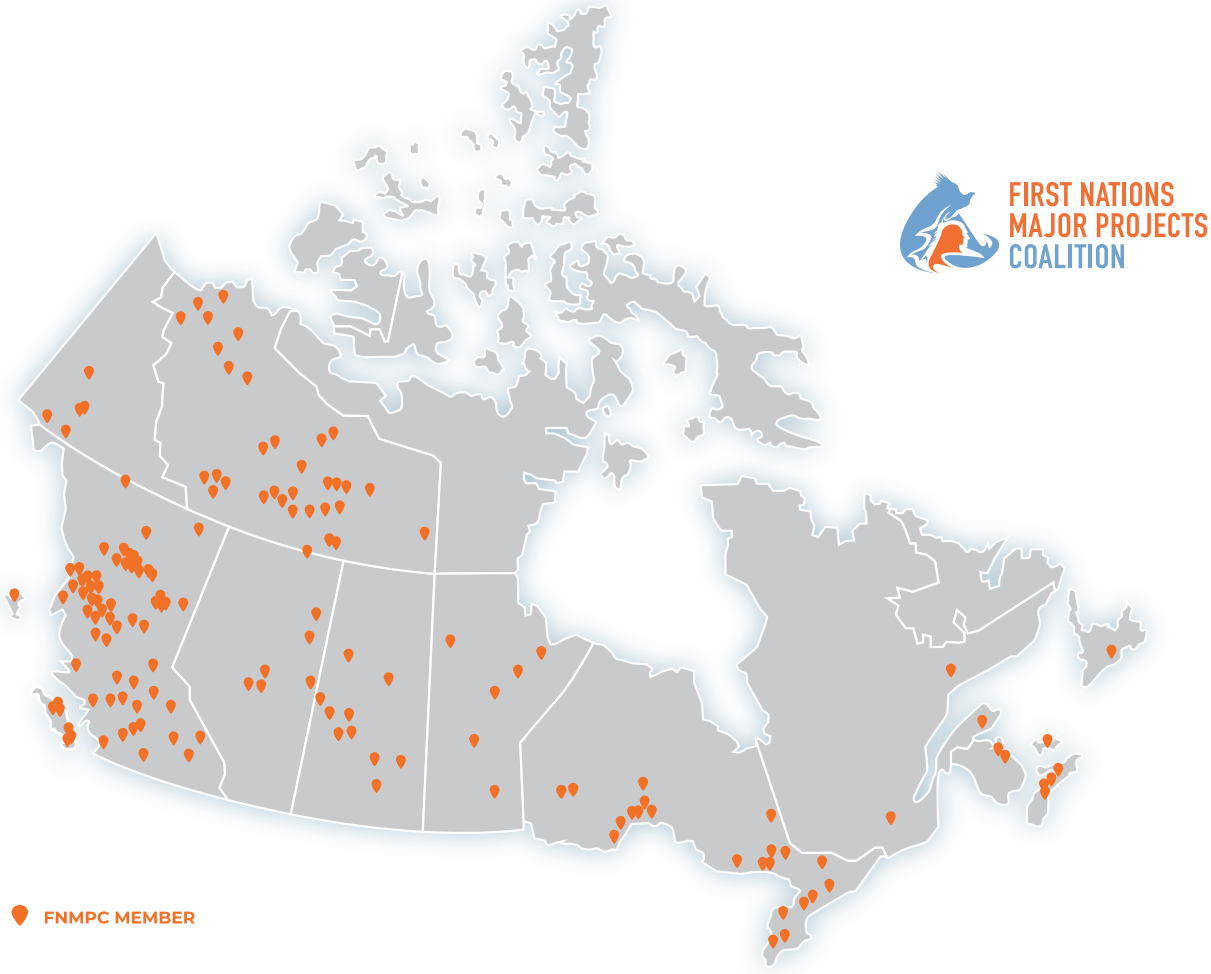
About the First Nations Major Project Coalition (FNMPC)

FNMPC is a national 174 First Nations non-profit collective working towards the enhancement of the economic well-being of our members, understanding that a strong economy is reliant upon a healthy environment supported by vibrant cultures, languages, and expressions of traditional laws. FNMPC supports its 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.

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 over CAD$30-40 billion. FNMPC's business capacity support includes tools that help First Nations to make informed decisions on both the economic and environmental considerations associated with major project development.



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In loving memory of Niilo Edwards, 1986 - 2024

"You will see it in the next decade—the proliferation of Indigenous utilities across this country—because that is what our electrification sector needs in order to meet its demand."

- **Niilo Edwards**, First Nations Major Projects Coalition, Our Collective Advantage Conference, panel on the launch of the National Indigenous Electrification Strategy, April 24, 2024, Toronto, Ontario.

Contents

Executive Summary

Indigenous nations in Canada are increasingly considering, or putting into place, Indigenous-owned utilities for purposes such as energy soverignty and own-source revenues. Over the coming decade, to help meet both its electrification demands and reconciliation commitments, Canada must support Indigenous nations' interest in creating Indigenous-owned electrical utilities and wheeling access to transmission and future grids. Currently absent across most of the country's electricity landscape, Indigenous-owned electrical utilities would proactively keep Canada's electrification and reconciliation goals on track and become critical conduits to bring clean energy coast to coast to coast. More importantly—if done well and not unduly restricted—Indigenous-owned utilities will bolster Indigenous self-determination, nationhood and own-source revenues for Indigenous nations.

The research presented in this paper takes the pulse of Indigenous utilities[1] on both sides of the Canada-US border. Drawing on insights from existing Indigenous-owned utilities and other field experts, it explores why Indigenous nations may form a utility, a range of possible Indigenous utility models, as well as what the barriers, challenges and risks may be. To kickstart momentum for Indigenous utility formation, this paper outlines the following recommendations:

Recommendations for Governments, Utilities, and Regulators

Recommendation 1. Ask the right questions.

Recommendation 2. Take the regulatory steps needed to support the formation of Indigenous utilities, at all scales.

Recommendation 3. In addition to all jurisdictions in Canada lifting restrictions on Indigenous-led utilities, governments should make sure that any Indigenous utilities or authorities meet the criteria listed later in this report.

Recommendation 4. Support the formation of an Indigenous utilities association that can in turn support utilities in a collective manner.

Recommendation 5. Build the legal and regulatory frameworks needed to implement wheeling to allow Indigenous-led utilities to sell power to end users.

Recommendation 6. Fund foundational and comprehensive Indigenous capacity supports in utility development and ownership.

Recommendation 7. Create a regulatory framework that is open to different types, scales, and ownership models of Indigenous utilities.

Recommendation 8. Address historical redress and past damages.

Recommendations for Indigenous Nations

Recommendation 9. Examine potential contractual relations with Provincial/Territorial utilities.

Recommendation 10. Evaluate infrastructure and interconnection alternatives.

Recommendation 11. Develop an electricity supply strategy.

Recommendation 12. Establish wheeling contracts.

Recommendation 13. Understand and plan how electricity rates will be calculated and set.

Recommendation 14. Create a legal structure for the Indigenous utility.

Recommendation 15. Set up a Board of Directors for the Indigenous utility.

Recommendation 16. Avoid pitfalls experienced by existing Indigenous utilities.

Canada's big shift towards electrification needs to include creating the right conditions for successful Indigenous-owned utilities. If successfully implemented, these recommendation will help to set the stage for a new energy era: one where governments and industry uphold free, prior, informed consent and a meaningful commitment to economic reconciliation in order to expand the existing electricity.

[1] The utility models being discussed can be informative for all of Inuit, Métis and First Nations However, the bulk of the analysis and the proposals are focused on First Nations, and don't explore the unique circumstances of the Métis or Inuit.

Forewords

SHARLEEN GALE

(Fort Nelson First Nation)

Executive Board Chair of the First Nations Major Projects Coalition; Council Member of the Canada Electricity Advisory Council

Driven by net zero goals, reconciliation goals, and a massive and ever-growing demand for clean electricity—the electricity sector is now welcoming more Indigenous-led clean energy projects. Our work in the National Indigenous Electrification Strategy (NIES) demonstrated that these goals and this demand will be achieved much faster with the support of Indigenous nations.

As outlined in the NIES, one arena many Indigenous nations are increasingly ready for—but often prevented from doing—is owning and operating our own electric utility, on our terms. During FNMPC's visit to our Indigenous cousins in Arizona, we learned not only what their motivations and successes were, but what needs to change for the proliferation of Indigenous-owned utilities in Canada. This paper outlines all we have learned: I am proud to present this research to our First Nations members, and to all those interested.

Mussi cho.

Economic reconciliation is our competitive edge. As Indigenous nations continue to lead the charge in building new electricity infrastructure, this edge will only sharpen.

In Canada, the full suite of opportunities flowing from Indigenous-owned utilities have yet to be developed. Whether it's a standalone, locally based utility with a strong all-Indigenous workforce, or an Indigenous power authority advocating for multi-Nation rights and competitive access to transmission grid, the possibilities stemming from any Indigenous utility approach will only multiply once barriers, such as regulatory limitations, are removed.

By centering Indigenous utilities, we will undoubtedly notice expedited regulatory processes, greater investor certainty, and more capital for Indigenous nations to invest equity into the electrification projects of our choice.

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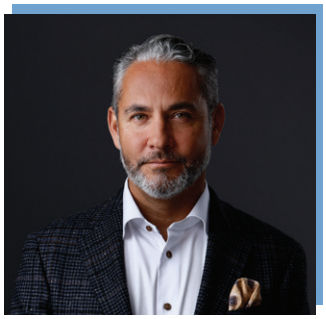


JP GLADU

(Sand Point First Nation)

Founder and Principal, Mokwateh

KWATUUMA COLE SAYERS

(Hupačasath Nation)

Executive Director, Clean Energy Association of British Columbia (CEBC)

First Nations across British Columbia and Canada are at the forefront of the clean energy transition, demonstrating leadership in sustainable energy development—and are just getting started.

Indigenous-owned electrical utilities represent a critical opportunity to meet the growing demand for clean electricity while advancing economic reconciliation. Expanding First Nations ownership in the utility sector will create long-term prosperity, increase energy security, and ensure that Indigenous communities play a central role in shaping Canada's energy future.

I am pleased to see the FNMPC build on the foundation set by the National Indigenous Electrification Strategy and Clean Energy BC's work in highlighting the vital role of First Nations-owned utilities in British Columbia. With the right support and policies in place, we can unlock this potential and move toward a cleaner, more equitable energy future.

"As [First Nations] build our capacity, that's ultimately the goal to be able to provide power to our regions and be utility."

– Indigenous roundtable speaker, Electrification Roundtable, 2023

"[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 customers and wheeling. … moving beyond these short-term Impact Benefit Agreements…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 roundtable speaker, Electrification Roundtable, 2023

"Forming a utility has immediate benefits. It allows the Tribe to have jurisdictional control; you control more of your destiny."

– Ray Wiseman, General Manager of Yakama Power. Washington State[2]

"Indigenous utilities are one 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 roundtable speaker, Electrification Roundtable, 2023

[2] Woven Energy, 8 April 2020. Tribal Utility Highlight: Yakama Power. wovenenergy.co/tribal-energy-news-and-insights/tribal-utility-highlight-yakama-power.

Introduction

The infrastructure and systems used to generate and transport electricity in Canada have almost all been developed without the participation of Indigenous nations. Excluded from system design and the important choices relating to where and how electricity is made available, Indigenous nations' lack of Indigenous-owned utilities currently in Canada **does not represent a lack of interest** on the part of Indigenous nations to lead utilities. To the contrary, many Indigenous nations aspire to build the capacity to take responsibility for the reliable delivery of affordable energy and other utility services to their members and others.

This interest is typically driven by the potential for greater electrical generation and/or transmission, self-determination, or other motivations. However, many Indigenous nations in Canada have a higher level of ambition and skill for creating and owning Indigenous utilities than regulators and governments presently support.

This persistent gap is at odds with Canada's goals for doubling or tripling our electricity grid by 2050. Growth at this scale, within this timeframe, will require an exponential rise in clean energy generation, significant expansion of transmission lines, and more climate resilient infrastructure—all elements Indigenous-owned electrical utilities would help turn up the dial on.

Canada – and most Provinces and Territories – have established barriers for Indigenous nations to create utilities and Indigenous power authorities. These circumstances have amounted to reduced options for Indigenous nations to achieve economies of scale through the sale and distribution of power. Further, Canada's approach stands in stark contrast to its commitment to implement the *United Nations Declaration on the Rights of Indigenous Peoples* which includes Article 5:

> *"Indigenous peoples have the right to maintain and strengthen their distinct political, legal, economic, social and cultural institutions, while retaining their right to participate fully, if they so choose, in the political, economic, social and cultural life of the State."*

Full Indigenous participation includes governments and regulators supporting Indigenous nations to establish Indigenous utilities, which in turn has the potential to accelerate electricity projects by aligning electricity projects ambitions. This proven potential for acceleration is because First Nations are uniquely positioned to lead on and establish what consents, location, and conditions are required by each Nation to get electrification projects underway.

As supported in the research for this paper with existing Indigenous utilities and FNMPC's member First Nations, the individual members of Indigenous nations are at the centre of who could benefit from Indigenous utilities. An Indigenous nations' ability to prioritize affordable rates for members, leverage access to the transmission grid, and develop economic opportunities have the potential to benefit the Nation's members.

Canada—alongside provinces and territories to varying degrees—are increasingly prioritizing more clean energy and economic reconciliation with Indigenous nations. Prodded by demand for clean electricity, this recent momentum will contribute to electrifying the country's power grid. Key to this energy electrification is greater presence of Indigenous nations as partners or owners of electrification projects, including Indigenous-owned electrical utilities.

This paper explores the potential for Indigenous-owned electrical utilities to contribute to the energy transition by ensuring that utility services and infrastructure meet the needs of the members of Indigenous nations. Not all Indigenous nations will want to or have the present capacity to pursue the development of an Indigenous-owned utility at this time. However, by exploring the opportunities and challenges confronting Indigenous-owned utilities, this paper and recommendations provide a clear platform to launch the dialogues necessary to build capacity Indigenous nations to further lead in electrifications.[3]

Why this paper?

"The conclusion is clear: B.C. and Canada need new clean energy sources, and Indigenous providers provide the grounds for a win-win situation. By allowing Indigenous utilities to compete, we create both clean energy and Indigenous economic development opportunities."[4]

An Opportunity to Shift Regulatory Barriers

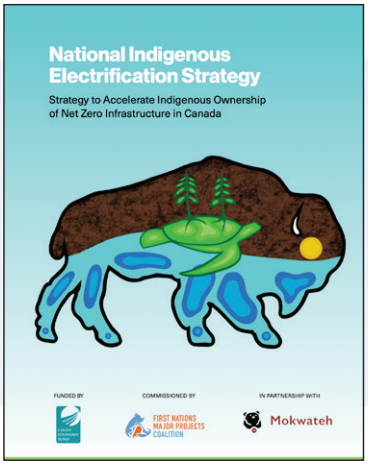
In 2023, the FNMPC brought experts in electrification and Indigenous-owned electricity projects together to discuss electrification in Canada. Dialogue, learnings and recommendations from these roundtables were shared in the National Indigenous Electrification Strategy which, among many findings, reenforced there is a lack of regulation supportive of Indigenous nations forming Indigenous utilities in Canada. The electrification experts who identified this barrier noted a gap in support—bordering on outright deterrence—of Indigenous nations being able to form Indigenous utilities and/or Indigenous power authorities in Canada.

The National Indigenous Electrification Strategy centres Indigenous nations as leaders in decarbonizing and doubling Canada's electricity generation, transmission and distribution systems. One of its goals is to remove economic, political, and regulatory barriers that will support and promote the development of Indigenous-partnered and -led clean energy projects in Canada. With a focus on Indigenous utilities, this paper is an extension of this goal focused on Indigenous utility-specific recommendations.[5]

[3] While the FNMPC recognizes the potential for Indigenous nations to benefit from owning and operating other forms of utilities, this paper focuses on Indigenous-owned electrical utilities because of the current global and domestic push to multiply and electricity transmission grids and generation.

[4] Hira, A., 22 April 2020. B.C. rules prevent Indigenous communities from running their own clean energy utilities. Here's why that should change. The Narwhal. thenarwhal.ca/opinion-bc-hydro-prevent-indigenous-communities-clean-energy-utilities/.

[5] FNMPC and Mokwateh, 2024. National Indigenous Electrification Strategy. April 2024. fnmpc.ca/wp-content/uploads/FNMPC_National_Electrification_digital_final_04222024.pdf.



To read the National Indigenous Electrification Strategy's complete set of recommendations for Indigenous nations, the private sector, government and regulators, visit https://fnmpc.ca/wp-content/uploads/FNMPC_National_Electrification_digital_final_04222024.pdf

Highlights from Existing Indigenous-Owned Utilities

In the United States, Indigenous utilities and power authorities are not simply a possibility, they are a well-established norm. Benefits that these utilities have gained from ownership and operations, include self-determination, governance, better service to membership, and wheeling revenues. Yet, in Canada, there is only a handful of Indigenous utilities and Indigenous power authorities, and to date, they have been largely excluded 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.

Although more Indigenous utilities have been established south of the Canadian border, overlapping narratives run through both sides: a continuing failure to uphold Tribal/Nation rights, long-term dissatisfaction with non-Indigenous utility services, a desire to exercise sovereignty and improve the economic situation of both Tribes and their members through ownership and operation of utilities.

This research was an opportunity to explore challenges and embrace learnings from Indigenous nations leading on Tribal-owned utilities in the United States, as well as the few existing Indigenous-owned utilities in Canada.

Support for Indigenous Self-Determination

Indigenous leadership in electrification presents an opportunity to move past the structural and financial exclusion of Indigenous nations from electricity infrastructure ownership and decision-making, towards greater self-determination and benefits for Indigenous nations, including through Indigenous-owned utilities and wheeling access to the grid (also known as retail access to the grid).

This legacy leaves Nations with a greater share of the negative impacts of electricity infrastructure—such as pollution, destruction of key hunting areas, alienation from millennia-old ceremonial and gathering places, and stranded assets from infrastructure—without sharing in the benefits of them. As these impacts continue to impact the wellbeing of many Indigenous nations, the formation of Indigenous utilities is a positive step towards economic reconciliation.

Indigenous utilities can be a standalone entity or can serve an on-ramp to Indigenous ownership or partnership in major projects. For example, a single Indigenous-owned utility may lead to Indigenous ownership and control of major transmission projects, utility-scale battery storage facility, electrification generation and associated retail access to the power grid. All of these avenues have the potential to provide Indigenous nations with the tools to exercise greater self-determination, offering more flexibility to identify the preferred projects, priorities, and proceeding only on the terms of each Indigenous nation.

Who Is this Paper For?

This paper was written to support the following:

Indigenous nations—This paper is for Indigenous nations and builds on the experiences and leadership of FNMPC members. It outlines how Indigenous utilities work and shines a spotlight on Indigenous utilities that have paved the way.

Governments, Utilities and Regulators—Indigenous utilities in Canada have been slow to emerge, largely due to restrictive legislation and lack of political will in supporting Indigenous utilities, constraints on retail access to the grid, and in-turn dampening economic opportunities for Indigenous nations. Supporting Indigenous nations to succeed as owners and operators of Indigenous-led utilities requires understanding what an Indigenous utility is, as well as what it has potential to be. This paper defines possibilities and offers recommendations on how governments, utilities, and regulators can support them.

What Research Informed this Paper?

Building on FNMPC's decade of experience and expertise in working in the electrical utilities space, this paper was informed by four additional major sources:

FNMPC and Mokwateh National Indigenous Electrification Strategy Roundtables

In person visit to four Arizona Indigneous-owned Utilities

Indigenous Utilities Paper

Literature Review

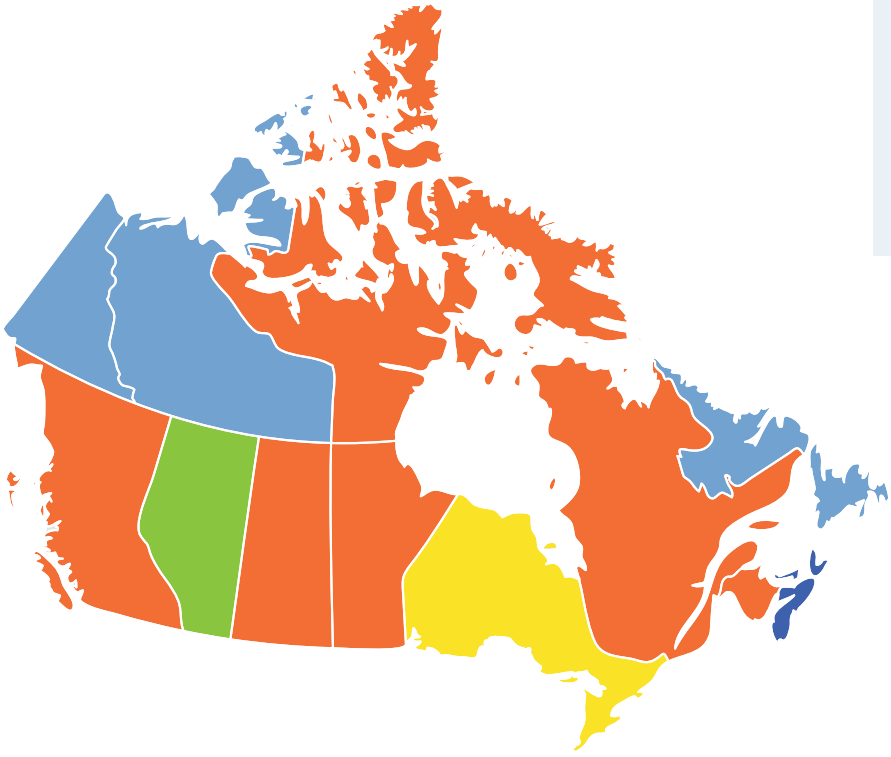
Calls with Indigenous-owned Utilities

Background: Public Utilities, Indigenous Utilities and Canada's Electricity Landscape

Electricity Markets in Canada: A Birds-Eye View

Electricity makes up a large part of Canada's energy system, but how it is managed greatly varies across the country. Under Canada's federal system, each province and territorial government determines the market structure and regulatory approach for electricity generation, transmission, and distribution within their borders. To add to this complexity, electricity is often sold or traded across provincial territorial, and international (US) borders. Notably, Indigenous-led utilities can and do function well in an integrated fashion with the broader electricity system. Like other utilities, Indigenous-led utilities can coordinate effectively with other facets of provincial/territorial electricity systems at infrastructural, operational and regulatory levels (for instance, in coordination with existing utilities and oversight bodies).

The following map highlights the variety of approaches to electricity markets across the country.



- Government-owned monopoly
- Crown corporation generates electricity and transmits to private distribution companies
- Regulated monopolies granted to private companies who generate, transmit, and distribute most electricity
- Private companies generate electricity and sale; Government regulated monopolies responsible for transmission/distribution
- Hybrid - integrates monopoly and competition

What are Utilities?

The term *utilities* is often used interchangeably with public utilities. Water, gas, electricity, telephone lines, waste disposal, sewerage are all examples of services public *utilities* provide.

What do Electrical Utilities do?

Electrical utilities typically provide electricity to customers such as households, commercial buildings, and industry. This can be through power generation, distribution, transmission, power storage, and wholesale power. Services also include monitoring and fixing downed lines, power outages, new hookups, and installing new transmission or distribution lines.

What are Monopolies?

In Canada, some provincial and territorial utilities are legislated monopolies (often Crown corporations), meaning the legislatures have required them to be the only suppliers of the utility (e.g., hydroelectricity) in a given area.

What is a Deregulated Market?

In a deregulated electricity market, power generation assets or transmission lines can be owned by entities other than governments or utilities. In this scenario, companies typically sell electricity into a wholesale market, retail energy suppliers buy this electricity and in turn sell it to customers.

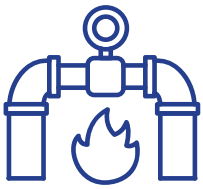
What is a Public Utility?

Public utilities are companies that provide essential services such as water, telecommunications, natural gas, and electricity. Electric utilities are companies involved in the generation, transmission, or distribution of electricity.

EXAMPLES OF TYPES OF PUBLIC UTILITIES

Water

Telecommunications



Natural Gas

Electricity

Governments typically grant electric utilities exclusive or near-exclusive rights to be the sole supplier in a particular market or jurisdiction. Reasons why governments may take this approach include:

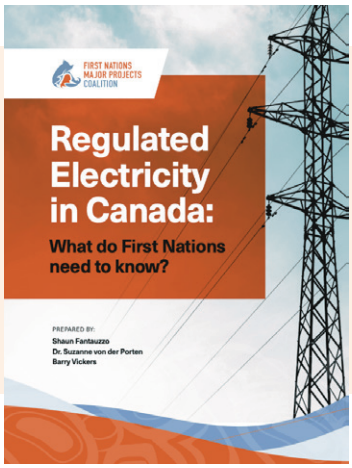
It is more cost-effective for a single regulated company to serve consumers than multiple companies.

Providing services requires enormous upfront costs and financial capital (e.g., feasibility studies, permitting, and construction).

To reduce unnecessary redundancies, such as two parallel sets of power lines by two competing utilities.

Ensure government oversight and accountability over essential services.

Adding to service areas where the market fails to incentive infrastructure (e.g., remote transmission lines).



To learn more about this please see FNMPC's "Regulated Electricity in Canada" on electric utility regulation in Canada across provinces and territories. Visit https://fnmpc.ca/wp-content/uploads/FNMPC_Elect_Primer_FINAL-Feb-1-2024.pdf

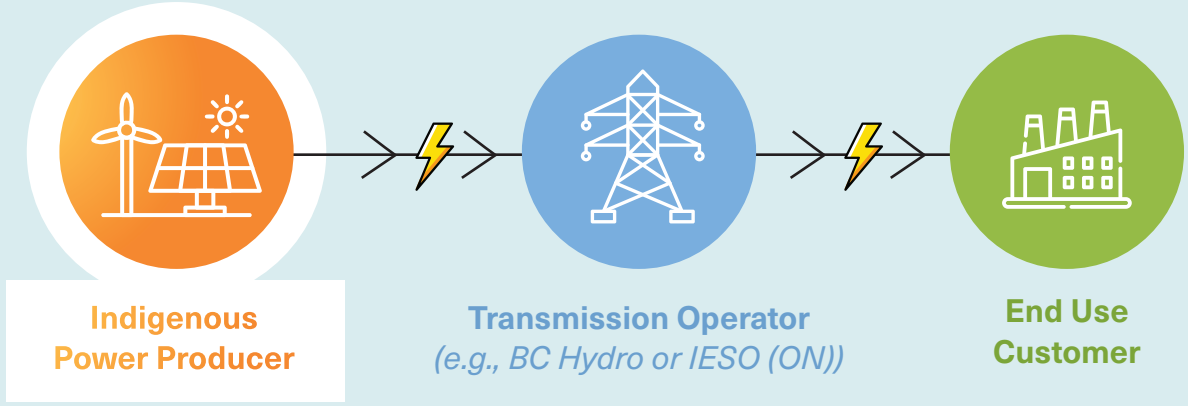
What is an Indigenous Utility?

An Indigenous utility can be defined as a public utility for which, as the owner or operator, an Indigenous Nation has control. It is not limited to the types of services provided, number of Indigenous nations, type of customers (industrial, household), or geographic area. The focus of this paper is on Indigenous-owned/controlled electrical utilities.

Indigenous nations are already leading electrification. This leadership has driven many different types of electrification initiatives, including but not limited to: power purchase agreements; solar, geothermal, hydroelectric, wind projects; grid scale battery storage; operators of off-grid electricity generation; and owners of transmission and distribution lines. Any of these project types can **be *part* of an Indigenous-owned electrical utility company.**

WHAT IS WHEELING?

The term *wheeling* is used to describe "movement of electricity from one system to another over transmission facilities of interconnecting systems."[6] In general, independent power producers do not own the transmission lines needed to deliver electricity to their customers. To move the electricity, the power producers need to enter into agreements with transmission line owners, who then 'wheel' the power to the end use customer.[7, 8] Another term for wheeling is **retail access to the power grid.**



An example of wheeling: the movement of electricity from power generation to customers using transmission lines from another operator / utility.

[6] WÄRTSILÄ Encyclopedia of Marine and Energy Technology, 2024. wartsila.com/encyclopedia/term/wheeling-electric-power-transmission-.
[7] U.S. Energy Information Administration, n.d. https://www.eia.gov/tools/glossary/index.php?id=w.
[8] Eskom, n.d. What you need to know about wheeling of electricity, https://www.eskom.co.za/distribution/wp-content/uploads/2022/07/20220721-Wheeling-concept_Introduction.final_.pdf.

Growth Drivers

Canada's dramatic growth in demand for clean electricity is moving many jurisdictions across the country towards accelerated electrification. For many Indigenous nations, this shift—among other factors—is resulting in greater Indigenous participation on major electrification projects. These driving factors are illustrated below.

Canada Electricity Advisory Council

The 2024 Final Report of the Canada Electricity Advisory Council—sponsored by Natural Resources Canada and focused on decarbonizing Canada's grid—recommends four foundations of a successful electricity transition on which policy measures should be built. Indigenous-owned electrical utilities would support and accelerate all of these foundations.

Canada Electricity Advisory Council's four cornerstones of a successful electricity transition[9]

Speed

To achieve its goals, Canada needs to rapidly expand its clean electricity infrastructure. The involvement of Indigenous Nations is key to enabling more clean energy.

Indigenous Participation

Much of Canada's new electricity infrastructure will be built on Indigenous lands. Indigenous project partnership or ownership will help to rebalance inequality that has long dominated the energy sector.

Affordability

If it is to succeed, the transition must be affordable and cost competitive.

Reliability

Ensuring the reliability of Canada's electricity systems is vital during this accelerated transition

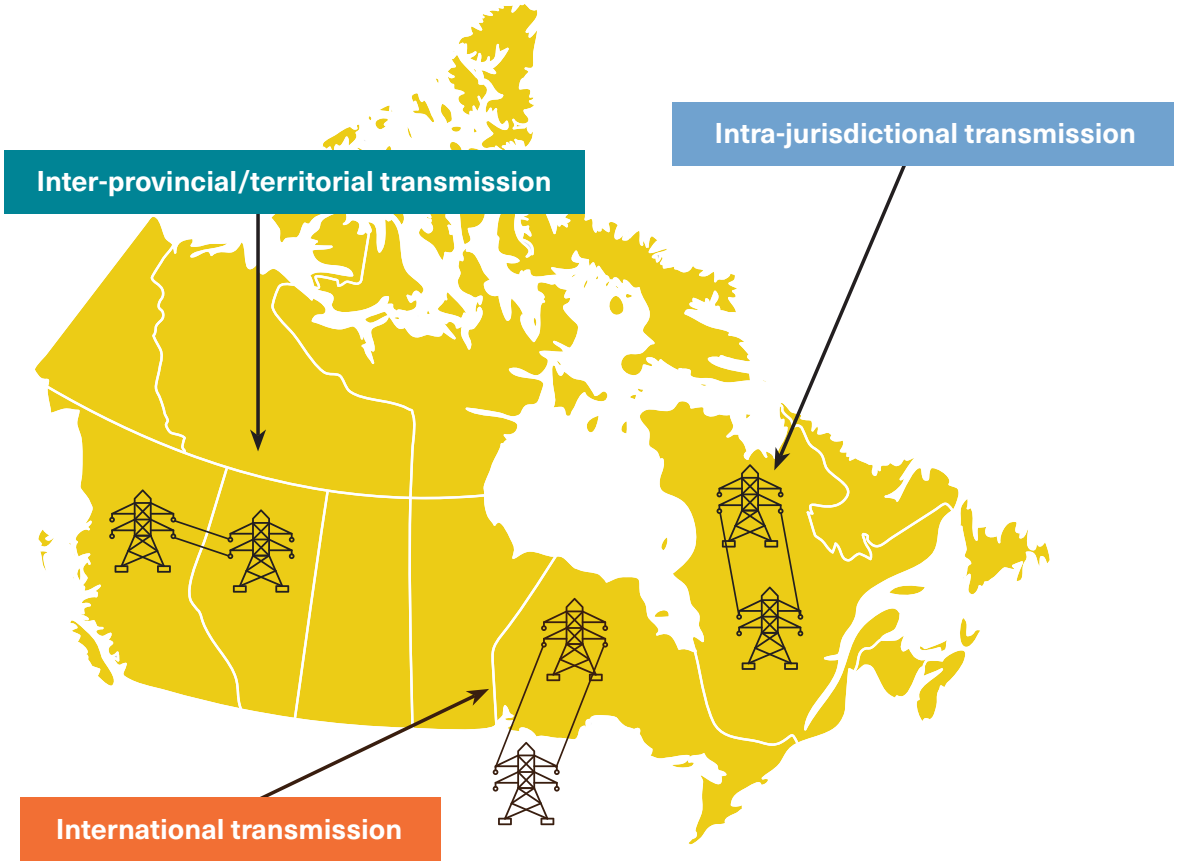
Read the recommendations of the Canada Electricity Advisory Council in their 2024 Final Report "POWERING CANADA: A BLUEPRINT FOR SUCCESS"
Visit: https://waterpowercanada.ca/wp-content/uploads/2024/06/Canada-Electricity-Advisory-Council-Final-Report-2024.pdf

[9] Language adapted from and summarized from CEAC final report.

Transmission

For Canada to reach its electrification goals, there is a need for electricity transmission projects connecting jurisdictions. Indigenous-owned electrical utilities will both benefit from a buildout of better transmission and have the potential to accelerate grid expansion.

Types of expanded transmission needed 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.

Storage

With the growth of solar and wind electricity generation, which produce power only when the sun is shining and the wind is blowing, coupled with drought increasingly making hydroelectric dams less reliable as a source of firm power, there is a growing need for stored electricity such as battery storage. Storage is highly compatible with Indigenous-owned utilities and Indigenous-owned generation projects. For instance, a First Nation's interest in establishing an on-reserve generation could be paired with storage to sell into the "spot market" at the most profitable times of day.

Identified Indigenous Utilities and Authorities (USA/Canada)

**See legend next page for the names of each utility.*

1 Fort Mojave Tribal Utility Authority (FMTUA)
2 Umpqua Indian Utility Cooperative
3 Yakama Power
4 Standing Rock Telecom
5 Southern Ute Indian Tribe Department of Energy
6 Arizona Tribal Energy Association
7 Ak-Chin Indian Community Electric Utility Authority
8 Gila River Indian Community Utility Authority
9 Navajo Tribal Utility Authority
10 Tohono O'odham Utility Authority
11 Hualapai Tribal Utility Authority
12 Mission Valley Power
13 Alaska Village Electric Cooperative
14 Nimiipuu Energy
15 Utilities Department
16 Mohegan Tribal Utility Authority
17 Saginaw Chippewa Tribal Utility Authority
18 Seneca Energy LLC
19 Blue Lake Rancheria Tribal Utility
20 Pechanga Western Electric
21 Pueblo of Acoma Utility Authority
22 Jicarilla Apache Nation Power Authority
23 Chickasaw Tribal Utility Authority
24 Ermineskin REA Ltd.
25 Peigan Indian REA Ltd.
26 Montana REA Ltd.
27 First Nations Power Authority
28 Five Nations Energy Inc
29 Attawapiskat Power Corporation
30 Fort Albany Power Corporation
31 Kashechewan Power Corporation
32 Atlantic First Nations Water Authority
33 Naka Power

Navajo Power (USA)

Navajo Power is a majority Indigenous-owned public benefit corporation that develops utility-scale clean energy projects on US Indigenous lands. Navajo Power focuses on bringing clean energy, such as solar power, to Tribal lands for Navajo families without electricity: they aspire to get up to 500 off-grid homes connected every year.[10] Navajo Power currently has projects under development with Tribal partners across the United States, including New Mexico, Arizona, California and Oregon.

Electricity	Gas	Telecom	Water	Wastewater	Wholesale Power	Transmission/ Distribution	Generation	Battery
✓	✗	✗	✗	✗	✗	✗	✓	✗

Insights from this Utility: Navajo Power's long-term vision is for Indigenous nations to prosper from clean energy. By holding strong on this vision, Navajo Power has been able to bring investment to optimize clean energy infrastructure development (largely solar) for the economic benefit of Indigenous partners, including those beyond their own territory.

FNMPC visit to Navajo Power, November 2024.

[10] Zee, G. et. al., 22 April 2024. Navajo Power seeks to rectify energy injustice deep in Navajo Nation. ABC News, abcnews.go.com/US/navajo-power-seeks-rectify-energy-injustice-deep-navajo/story?id=109345913.

Gila River Indian Community Utility Authority (USA)

In 1998, the Gila River Indian Community formed the Gila River Indian Community Utility Authority (GRICUA) to provide service to their Wild Horse Pass Casino in Chandler, Arizona. GRICUA's goal is to provide reliable, competitively-priced electrical services to Gila River Indian Community members, while assuring the use of services improves health and welfare of the residents. Today, GRICUA's electric system consists of 10 substations, 95 miles of 69 kV transmission lines and 425 miles of 12 kV distribution lines. GRICUA purchases wholesale power from various generating sources and delivers it to over 3400 customers in Arizona's Phoenix Metropolitan area—this includes providing service to 6 of the 7 districts in the Gila River Indian Community.[11]

Electricity	Gas	Telecom	Water	Wastewater	Wholesale Power	Transmission/ Distribution	Generation	Battery
✓	✓	✗	✗	✗	✓	✓	✓	✗

Insights from this Utility: GRICUA operates just south of Arizona's Phoenix Metropolitan area. Proximity to this large population centre has been important for GRICUA to build a ratepayer base. With this base in place, economic viability and future expansion (of solar, battery, and electricity distribution) has greater potential.

FNMPC visit to GRICUA, November 2024.

[11] Gila River Indian Community Utility Authority, n.d. About GRICUA, https://gricua.net/about-gricua/.

Ak-Chin Energy Services (USA)

In 1992 the Ak-Chin Indian Community originally acquired utility infrastructure and established its own utility authority—now called Ak-Chin Energy Services (ACES)—in order to stabilize and control electric rates for utility customers. Five years later it began providing electrical service to the Ak-Chin Indian Community Reservation. Wholesale power is supplied by Western Area Power Administration, and the current peak load is ~6 MW (power for around 4000 households). By accessing this wholesale electricity market, the Ak-Chin Indian Community have been able to ensure rates stay comparably flat.

Electricity	Gas	Telecom	Water	Wastewater	Wholesale Power	Transmission/ Distribution	Generation	Battery
✓	✗	✗	✓	✗	✓	✓	✗	✗

Insights from this Utility: ACES staff—comprised of many Indigenous nations' members—are hired to operate the electric utility, while infrastructure expansion, maintenance or improvement is done through a contracted local electric company.

FNMPC visit to Ak-Chin Energy Services, November 2024.

Tohono O'odham Utility Authority (USA)

The Tohono O'odham Utility Authority (TOUA) was established by the Tohono O'odham Nation over 50 years ago and is one of the first Indigenous-owned and operated utility authorities in the US. The first service provided by the electric operation was an act of self-determination through wheeling power onto the power grid from an investor-owned utility to a mining operation on the reservation. In 1972—after several years of negotiations and asset acquisitions—TOUA began electric service to one of the mines. This kickstarted TOUA's ability to expand service to all 27 villages, and to anyone within the Nation who wanted power.

Electricity	Gas	Telecom	Water	Wastewater	Wholesale Power	Transmission/ Distribution	Generation	Battery
✓	✓	✓	✓	✓	✓	✓	✗	✗

Insights from this Utility: TOUA has been able capture utility revenue that would otherwise have gone to non-Tribal utilities. However, economically they are challenged because they are in a remote location with a small and distributed ratepayer base, and highly dependent on government grants. Further, the ability to scale up and sell power is hampered by underbuilt transmission grid and a ten year wait to use it for wheeling/retail access.

FNMPC visit to TOUA, November 2024.

Five Nations Energy Inc. (Ontario, Canada)

First Nations Energy Inc. (FNEI) is the 100% Indigenous-owned 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. Attawapiskat, Kashechewan and Fort Albany First Nations wanted a safe, reliable, clean alternative to diesel power generation: the transmission line went online in 2001, bringing "reliable power to over 7,000 people who were previously underserved by the province's energy providers".[12] Three First Nations - Attawapiskat, Kashechewan, and Fort Albany First Nations – each have their own Indigenous utility, corporations set up as local power authorities and distributors of power and fibre optic cable/broadband to their on-reserve members. The Moose Cree and Taykwa Tagamou Nations have a financial stake in the project as well.

Electricity	Gas	Telecom	Water	Wastewater	Wholesale Power	Transmission/ Distribution	Generation	Battery
✓	✗	✓	✗	✗	✗	✓	✗	✗

Insights from this Utility: Five Nations Energy is registered as a non-profit organization, allowing it to invest revenues into line and infrastructure upkeep, and any surplus back into the five First Nations and supporting organizations.

Photos provided by Five Nations Energy Inc.

[12] Syed, F., 20 October 2022. Told 'no' 37 times, this Indigenous-owned company brought electricity to James Bay anyway. The Narwhal. https://thenarwhal.ca/ontario-indigenous-owned-energy/.

Ermineskin REA Ltd. (Ermineskin Cree Nation) (Alberta, Canada)

Ermineskin REA, a non-profit organization, is 100% owned by the Ermineskin Cree Nation. There are ~30 Rural Electrification Associations (REAs) in Alberta, making up an important part of the province's electricity supply to rural areas. REAs are not-for-profit cooperatives that provide electricity to rural Alberta communities, are unique to Alberta, and were established in the 1940s and 1950s primarily by farmers and ranchers.[13] Three of these Alberta-based REAs were established by First Nations and owned by each of Piikani Nation (Peigan Indian REA Ltd.), Montana First Nation (Montana REA Ltd.), and Ermineskin Cree Nation.[14] Ermineskin REA Ltd. currently serves 161 rural consumers in the Ermineskin area. Their office is located across from the Ermineskin band office, and they employ many local First Nation members.[15]

Electricity	Gas	Telecom	Water	Wastewater	Wholesale Power	Transmission/ Distribution	Generation	Battery
✓	✗	✗	✗	✗	✓	✓	✗	✗

Insights from this Utility: By maintaining 100% Indigenous ownership, Ermineskin REA has been able to centre services delivery to Nation members and to stay focused on the priorities of energy sovereignty and self-determination.

[13] Alberta Federation of Rural Electrification Associations, n.d. Our Energy Future, https://afrea.ab.ca/.
[14] Government of Alberta, May 2023. Rural Electrification Associations, ucahelps.alberta.ca/documents/REA%20Contact%20-%20Updated%20May%202023.pdf.
[15] Ermineskin REA, n.d. REA Administration, https://www.ermineskin-rea.com/.

Naka Power (Northwest Territories, Canada)

Naka Power is a joint partnership between ATCO Ltd. and Denendeh Investments Inc. which represents 27 Dene First Nations across the Northwest Territories. Naka Power owns, operates and maintains the power poles, power lines and other electrical infrastructure, plus five substations and five diesel plants. Naka Power has a 24/7 outage and emergency response, makes standby power available and has community functions like public safety and energy conservation programs and street light installation and maintenance.[16]

Electricity	Gas	Telecom	Water	Wastewater	Wholesale Power	Transmission/ Distribution	Generation	Battery
✓	✗	✗	✗	✗	✓	✓	✗	✗

Photos provided by Naka Power

[16] Naka Power, 2024. About us, https://www.nakapower.com/en-ca/about-us/service-area.html.

Why Are Indigenous Nations Forming Utilities?

The leadership of many Indigenous utilities in the United States, and a few in Canada, have provided insights on how and why Indigenous nations chose to form utilities.

Benefits & Reasons

"[Indigenous] utilities can help reverse the historic trend of marginal participation in energy and infrastructure decisions of First Nations by creating an organization that can participate as a peer among the energy providers that currently own and control energy assets on [Indigenous] land."[17]

For many Indigenous nations, forming a utility has been an opportunity to bring long overdue benefits to Nation members. For some, an Indigenous-owned utility has been the clear answer to historical exclusion from power, autonomy or control over traditional lands and waters.

Divided into three topics of Governance, Economic and Indigenous, this section explores what motivated Indigenous nations to take back power, literally.

Governance

The table below outlines examples of **governance**-related priorities identified in this research that motivated Indigenous nations to form a utility.

MOTIVATOR TO CREATE INDIGENOUS UTILITY	EXPLANATION
 **Indigenous sovereignty**	By owning a utility, Indigenous nations are better positioned to shape Indigenous-centred energy policies, develop projects, and manage own energy resources.[18]
 **Collective Indigenous voice**	Indigenous utilities, particularly when aggregated, can advocate for topics like equity, wheeling, and retail access to the grid.
 **Infrastructure self-sufficiency**	As utility owners, Indigenous nations gain control of long-term energy decisions, natural resources businesses, and electrical (or other) infrastructure.[19] Without ownership, the assets and infrastructure linked to public power are often outside of the Nation's control.[20]

[17] Baker Tilly, 20 July 2017. Tribal electric utilities as a driver of tribal sovereignty and economic development, bakertilly.com/insights/tribal-electric-utilities-as-a-driver-of-tribal-sovereignty-and-economic-de.
[18] Woven Energy, n.d. Our Vision, https://wovenenergy.co/our-vision.
[19] Avant Energy, n.d. Tribal Utility Formation: Three Key Considerations for Tribal Electric Utility Formation. avantenergy.com/2018/02/tribal-utility-formation-three-key-considerations-tribal-electric-utility-formation/.
[20] Baker Tilly, 20 July 2017. Tribal electric utilities as a driver of tribal sovereignty and economic development, bakertilly.com/insights/tribal-electric-utilities-as-a-driver-of-tribal-sovereignty-and-economic-de.

New opportunities

Indigenous utilities can attract new economic development related to on-reserve or Indigenous-directed policies and rates. Utility ownership can bring Indigenous nations closer to larger opportunities, such as transmission or generation projects, or direct where services will be available.

Values-aligned rate control

Indigenous utilities can define energy rates, programs, and policies that are aligned with Nation member's values.[21]

Local decision-making power

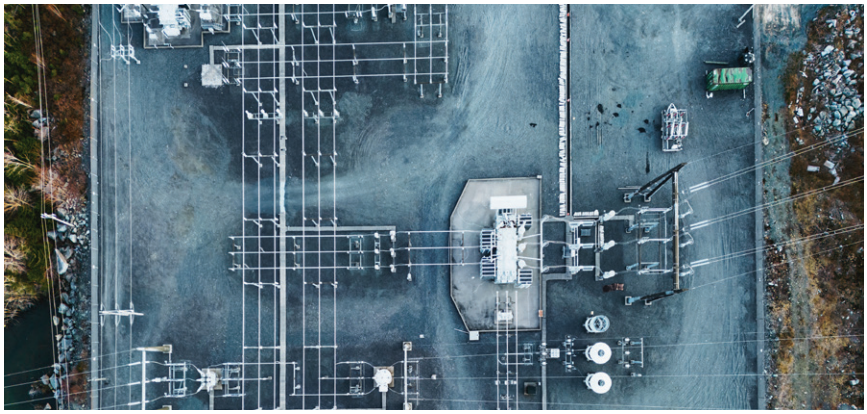
Indigenous-owned utilities put decision-making power and control of assets and infrastructure into the hands of the Indigenous nation.[22]

Indigenizing Crown corporations

Many utilities in Canada are crown corporations, still operating under colonial models. Indigenous-owned utilities support reconciliation and shared decision-making and will help move the country away from outdated structures.

Service reliability

Some Indigenous utilities have been able to offer more reliable service to customers: faster response times to outages, more nimble ability to restore power, and a greater ability to expand the electric system and reinvest in Indigenous-owned facilities.[23]



[21] Woven Energy, n.d. Tribal Utilities, https://wovenenergy.co/tribal-utilities.
[22] Baker Tilly, 20 July 2017. Tribal electric utilities as a driver of tribal sovereignty and economic development, bakertilly.com/insights/tribal-electric-utilities-as-a-driver-of-tribal-sovereignty-and-economic-de.
[23] Gold, L., 2012. Establishing a Tribal Utility Authority Handbook, bia.gov/sites/default/files/dup/assets/as-ia/ieed/ieed/pdf/tribalutility_handbook.pdf.

Economics

While not all utilities are profitable, there is still value in Indigenous control, ownership and operation. A number of economic drivers propelled Indigenous nations to become, or consider becoming, electrical-utility owners. The table below outlines examples of **economic**-related motivators identified in this research.

MOTIVATOR TO CREATE INDIGENOUS UTILITY	EXPLANATION
Economies of scale	When two or more Indigenous nations form a utility, to provide service either regionally or more, economies of scale can bring social and economic benefits across multiple Nations.
Commercial participation in the energy transition	Indigenous nations are well-positioned to take advantage of the economic opportunity and lead the transition. The economic potential of wind and solar alone on US Indigenous Lands totals USD$75 billion in project investment.[24]
Nation-focused economic opportunities	As utility owners, some Nations have been able to maximize the value of energy projects by ensuring any potential benefits are realized across various departments: land and natural resources, gaming, economic development, housing, public works, community services, etc.[25]
Economic diversification	Indigenous utilities are an avenue through which Indigenous nations can diversify investments, assets, holdings, revenues sources, and economic diversification from utility monopolies.[26]
Economic leverage	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.[27]
Transmission expansion	Canada needs to expand transmission. Indigenous utilities are a proven way to accelerate these projects, (e.g., Five Nations Energy) and may be particularly important where an inter-regional grid is built, e.g., multiple nations along the line.

[24] Woven Energy, n.d. Our Vision, https://wovenenergy.co/our-vision.
[25] Ibid.
[26] Baker Tilly, 20 July 2017. Tribal electric utilities as a driver of tribal sovereignty and economic development, bakertilly.com/insights/tribal-electric-utilities-as-a-driver-of-tribal-sovereignty-and-economic-de.
[27] FNMPC and Mokwateh, 2024. National Indigenous Electrification Strategy. April 2024. fnmpc.ca/wp-content/uploads/FNMPC_National_Electrification_digital_final_04222024.pdf.

High-paying jobs

Indigenous utilities can provide jobs and contracting opportunities to Nation members, particularly high-paying and high-skill jobs, and that can potentially be built over generations,[28] (e.g., lines people, electricians, solar and wind project construction and operation[29]).

Scalability

Many of the Indigenous utilities that informed this work had either scaled up their utilities over time, or had plans to scale up - or both.

Reinvestment in the Indigenous nation

Utility revenues that typically otherwise go off-reserve to non-Indigenous entities can instead be reinvested into the Indigenous nations.[30]

Possibility for new development projects

When a Nation develops electricity resources for the long-term, it gives certainty and sustainability to investors.[31] This can help to enable other Indigenous-owned economic projects, such as generation or transmission.

Reduced energy costs

Some Indigenous utilities have directly accessed the wholesale market, or negotiated for long-term electricity contracts, reducing lower power costs for the Indigenous government, members and enterprises.[32] As well, costs associated with electric distribution may go down.[33]

Sowing seeds for future development

Even where only modest revenues are gained, Indigenous utilities can lay a foundation for future economic development by providing a "foot in the door" for infrastructure development and improved grid access.

Control over costs

Utility ownerships can give a Nation the ability to respond to the service needs of member' and can provide a mechanism for First Nations to control retail service costs to members and other customers.

[28] Woven Energy, 8 April 2020. Tribal Utility Highlight: Yakama Power. wovenenergy.co/tribal-energy-news-and-insights/tribal-utility-highlight-yakama-power.
[29] Thomas, P.R., n.d. Tribal Utility Development Energy Development and Services on Tribal Land, Indian Law Special Focus, azattorneymag-digital.com/azattorneymag/201904/MobilePagedArticle.action?articleId=1476899#articleId1476899.
[30] Woven Energy, n.d. Tribal Utilities, https://wovenenergy.co/tribal-utilities.
[31] Baker Tilly, 20 July 2017. Tribal electric utilities as a driver of tribal sovereignty and economic development, bakertilly.com/insights/tribal-electric-utilities-as-a-driver-of-tribal-sovereignty-and-economic-de.
[32] Thomas, P.R., n.d. Tribal Utility Development Energy Development and Services on Tribal Land, Indian Law Special Focus, azattorneymag-digital.com/azattorneymag/201904/MobilePagedArticle.action?articleId=1476899#articleId1476899.
[33] Baker Tilly, 20 July 2017. Tribal electric utilities as a driver of tribal sovereignty and economic development, bakertilly.com/insights/tribal-electric-utilities-as-a-driver-of-tribal-sovereignty-and-economic-de.

Indigenous priorities, values, and wellbeing

"Formed in 1961, [BC Hydro] generates and transports power to most of B.C.'s population. Much of that electricity flows from a string of mega-dams that triggered unprecedented economic growth for some, while flooding territories of First Nations and transforming their ways of life."[34]

A number of economic drivers propelled Indigenous nations to become, or consider becoming, utility owners. The table below outlines examples of **economic**-related motivators identified in this research.

MOTIVATOR TO CREATE INDIGENOUS UTILITY	EXPLANATION
 **Nation-driven energy goals**	Indigenous-owned utilities build a platform to help achieve the nation's energy goals.
 **Better customer service**	When an Indigenous nation owns the utility, customer service is often improved through more responsiveness and having a local presence.[35]
 **Reduced energy costs for nation members**	Indigenous-owned utilities can define energy rates and provide reduced rates for Nation members.[36]
 **Improved local infrastructure**	Revenues from Indigenous utilities can be directed to prioritize and build an Indigenous nation's infrastructure. For example, schools, arenas, health centres, housing and water may be improved to better meet member needs.[37]
 **Nation-centric hiring**	Workforce development opportunities for Nation members can be strengthened by an Indigenous-owned utility.[38] An example: US Tribal utilities typically are non-unionized and can practice Tribal hiring preferences, whereas union agreements may not permit prioritizing Tribal members.[39]

[34] Yunker, Z., 20 Apr 2022. The Coming Indigenous Power Play, The Tyee, thetyee.ca/News/2022/04/20/Coming-Indigenous-Power-Play/.
[35] Woven Energy, n.d. Tribal Utilities, https://wovenenergy.co/tribal-utilities.
[36] Baker Tilly, 20 July 2017. Tribal electric utilities as a driver of tribal sovereignty and economic development, bakertilly.com/insights/tribal-electric-utilities-as-a-driver-of-tribal-sovereignty-and-economic-de.
[37] Five Nations Energy Inc., n.d. Slide Deck presented by Edward Chilton and Lucie Edwards.
[38] Baker Tilly, 20 July 2017. Tribal electric utilities as a driver of tribal sovereignty and economic development, bakertilly.com/insights/tribal-electric-utilities-as-a-driver-of-tribal-sovereignty-and-economic-de.
[39] Western Area Power Administration Renewable Resources Program, September 2010. Tribal Authority Process. www.energy.gov/sites/prod/files/2016/04/f30/tribal_authority_case_studies_report.pdf.

Options for Indigenous priorities

Nation members' having opportunities in clean energy, self-reliance and locally-owned generation.[40]

Control over project placement

Indigenous-owned utilities can determine where infrastructure should be placed, based on Nation member's priorities and values. This takes site placement decisions out of the hands of external parties.

[40] Woven Energy, n.d. Our Vision, https://wovenenergy.co/our-vision.

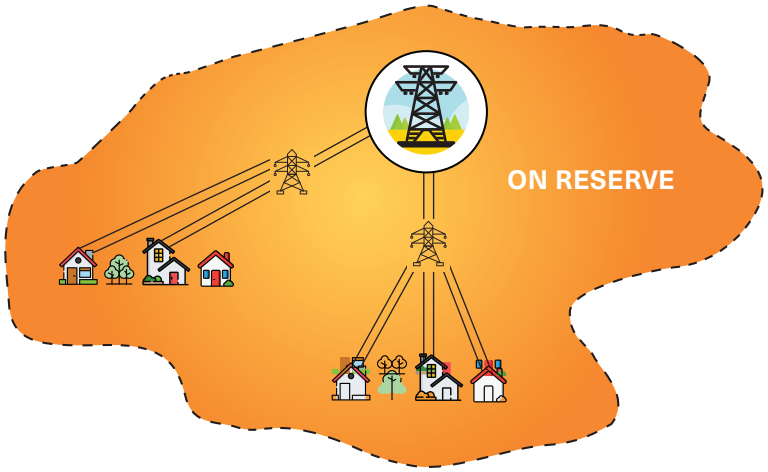
Possible Models for Indigenous Utilities

There should be no limit placed externally—by regulators, lawmakers, policymakers or utilities—on what Indigenous utilities could look like. Further, capacity supports should be provided to Indigenous nations so that Indigenous-owned utilities can excel at providing reliable, affordable services on part, or better than, the services offered by non-Indigenous utilities. Each Indigenous nation exploring the idea of, building, or operating an Indigenous-owned utility may have different motivations for ownership: the greatest flexibility and opportunity should be afforded to all.

Building Versatility: Illustrated Options

The following illustrations offer a visual example and brief description of four possible Indigenous utility models learned about or explored in this research. Please note that these are conceptual infographics, not detailed models. Each utility, based on Indigenous priorities, goals and circumstances should generate a model that is suitable to that Indigenous utility and context.

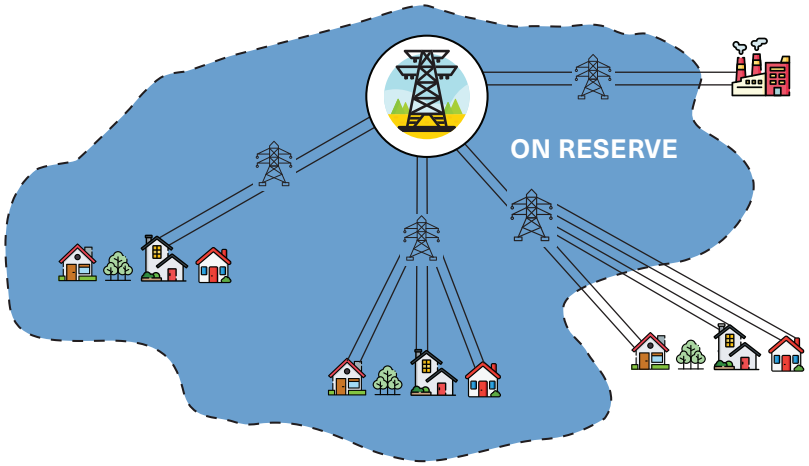
1) ON-RESERVE UTILITY



This type of utility often meets an Indigenous nation's members' needs for power, as well as Nation's goals of self-determination, energy sovereignty, and sometimes reduces energy costs to members. Surplus revenues are not always realized due to the limited customer base.

2) ON-RESERVE UTILITY WITH BROADER CUSTOMER BASE

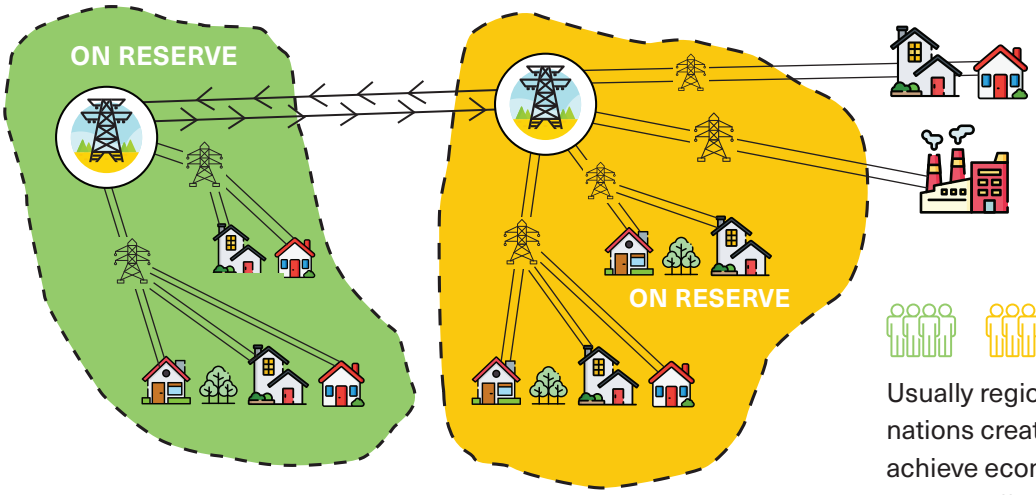
(Similar Example: Gila River Indian Community Utility Authority)



This type of utility often meets the Indigenous nation's members' needs for power and self determination or energy sovereignty goals, as well as builds own-source revenue through off-reserve ratepayers and/or industrial customers.

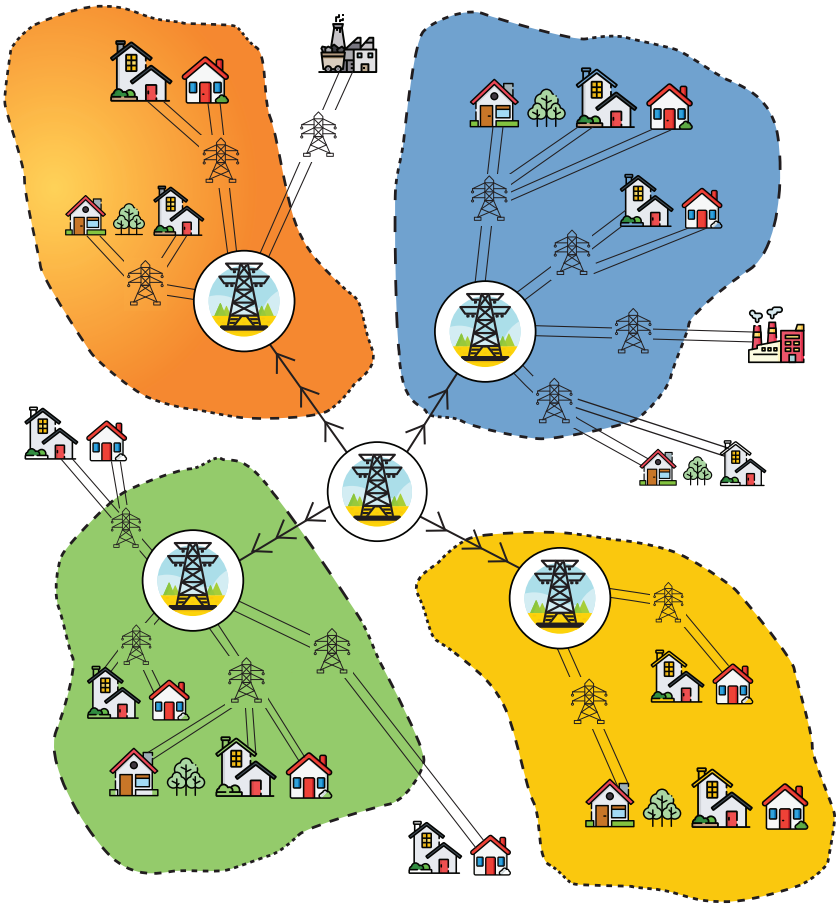
3) TWO OR MORE INDIGENOUS NATIONS CO-OWNING A UTILITY

(Similar Example: Five Nations Energy Inc.)



Usually regionally adjacent Indigenous nations create a co-owned utility; may achieve economies of scale, serve both on- and off-reserve customers and/or industrial customers.

(4) INDIGENOUS POWER AUTHORITY



Provincial- or territorial-scale Indigenous Power Authority with features such as (a) reselling wholesale power, (b) wheeling power over the grid, (c) regulating power and making trade decisions, (d) owning and generating power that is sold to the grid and/or industrial customers, (e) advisory where decisions are implemented and are implemented by regulators, (f) ownership of portions of new or existing transmission and distribution lines.

Indigenous-owned utilities can take many different forms. There are many variations and possibilities for both established and prospective models: what works for one Nation may not work or be well-suited to another. Additionally, suitability my also vary by jurisdiction, e.g., Alberta vs. Ontario. Alongside the illustrated examples, it may be helpful to consider how Dr. Christina Hoicka and Cameron Lusztig summarized similar approaches to Indigenous utilities or power authorities—as a capacity building point of contact, an industrial interconnection, a put contract, a retailer or wheeling agreement, and/or a regional vertically integrated power authority.[41]

[41] Hoika, C.E., et al 2 Jul 2024. "Stretch and transform" for energy justice: Indigenous advocacy for electricity institutional, transformation in British Columbia, Canada, SSRN, dx.doi.org/10.2139/ssrn.4879616.

Going Big: Indigenous Power Authorities

"I'm all for a First Nations Power Authority"

- Former Chief Patrick Michell of the Kanaka Bar Indian Band, or T̓eqt̓aqtn̓mux[42]

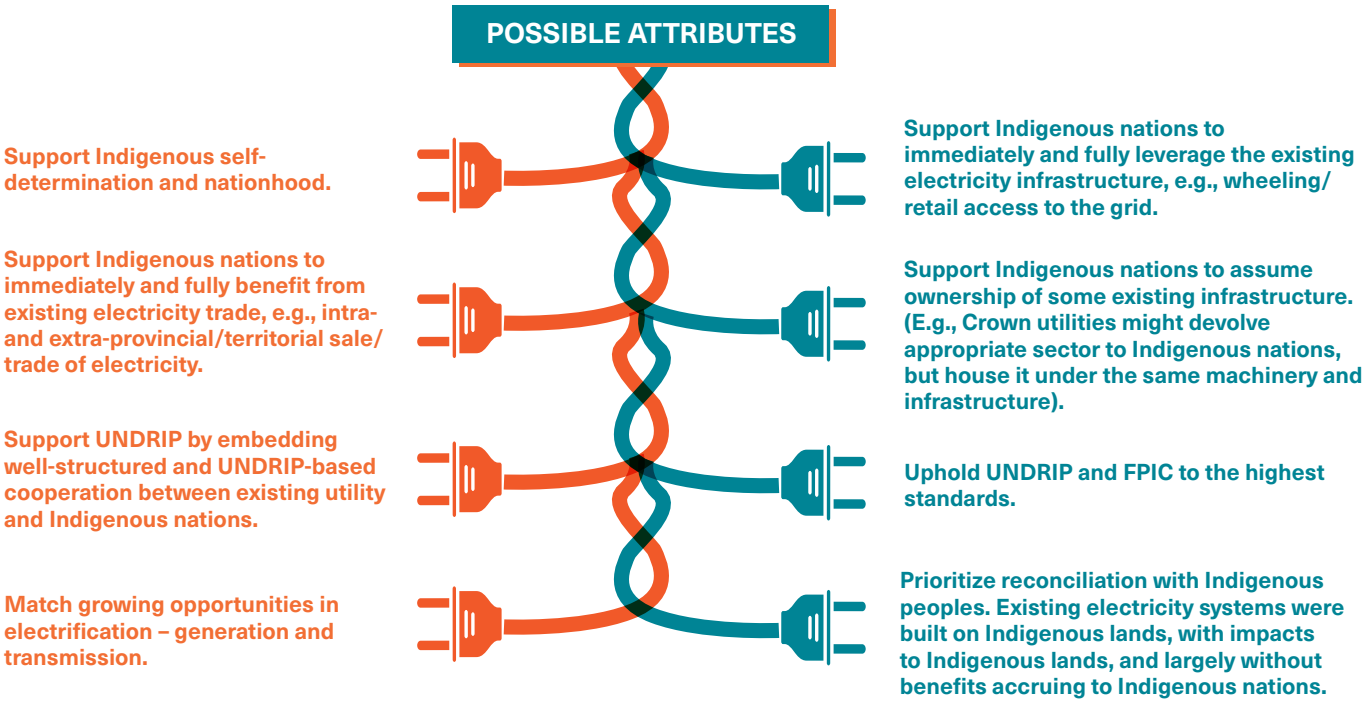
"Say First Nations in the [British Columbia] Lower Mainland want to power Amazon's new facility downtown, they should have an opportunity to have a power purchase agreement with them to sell power to their facility."[43]

- Kwatuuma Cole Sayers (Hupačasath Nation), Executive Director, Clean Energy BC

An Indigenous power authority is one of many Indigenous utilities models and can take many forms with numerous possibilities. Very generally, an Indigenous power authority is multiple Indigenous nations convening strength to influence or engage with power-related regulations, policies and activities. Because an Indigenous power authority's reach is often larger than on-reserve or even smaller-scale Indigenous-owned utilities, it has the potential for greater capacity and more influence to advocate for members Nations' values, rights and interests.

Possible Attributes of Indigenous Power Authorities

What an Indigenous power authority can or should look like is highly variable. However, whatever form it takes, the Indigenous power authority model is a powerful option that should be made available to Indigenous nations. With its unified approach, and alignment with the *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP), an Indigenous power authority can:



[42] Yunker, Z., 20 Apr 2022. The Coming Indigenous Power Play, The Tyee, thetyee.ca/News/2022/04/20/Coming-Indigenous-Power-Play/.
[43] Ibid.

Select Examples of Indigenous Power/Utility Authorities

There are a few known examples of Indigenous power/utility authorities, all of which incorporate some, but not all of the principles and objectives outlined above.

First Nations Power Authority (FNPA)

FNPA began in Saskatchewan and is now expanding into other provinces. Examples of activities they are involved in include: liaising between government power providers and other power-related corporations, supporting Indigenous communities to become active participants in the energy sector, and contributing expertise on power projects by bringing forward perspectives and knowledge from multiple Nations.

Atlantic First Nations Water Authority (AFNWA)

AFNWA is a First Nations-owned, full-service water and wastewater utility for Nations in New Brunswick, PEI and Nova Scotia, and is an example of how a group of First Nations have worked together for self-determination, "to control a resource that is critical for public health, and protection of the environment." AFNWA currently operates, maintains and provides capital upgrades for all water and wastewater assets for 13 participating First Nations.

Arizona Tribal Energy Association (ATEA)

ATEA was founded in 2006 by five tribes from across Arizona to fill a gap in the utility sector that often ignored their unique interests. As a group, ATEA was envisioned to broadly further tribal electric-sector interests, through the creation of a named entity and through its member involvement." ATEA represents its members at federal, state, regional and national forums.

What Are Experts Saying about Indigenous Power Authorities?

"[Kwatuuma Cole] Sayers had done the research and organizing needed to win a mandate from attending nations to move forward with a big, bold idea …First Nations would generate, procure and manage a dedicated slice of B.C.'s electricity needs on their own terms through a new organization, a First Nations' Power Authority. And nations would gain access to sell power on province's powerlines, meaning that B.C. residents could one day buy their power directly from First Nations, instead of BC Hydro. [This] raises many complex questions. First, it requires legal changes to BC's energy laws. Second, it challenges the status quo of B.C.'s electricity system… Then there is the fact that, as the climate crisis intensifies, some experts see a renewable energy boom coming to B.C. This time, said Sayers, First Nations should be part of it … In 2019, the province passed the Declaration on the Rights of Indigenous Peoples Act and committed to fold its principles into laws, policies and modes of governing."[44]

– The Tyee, featuring Kwatuuma Cole Sayers' insights on power authority models

"A Mi'kmaw Elder once told to me that a system is automatically made better when you own it. The [Atlantic First Nations Water Authority] is about taking responsibility out of the hand of the Federal Government and into First Nations."

- James MacKinnon, Director of Engagement & Government Relations, Atlantic First Nations Water Authority[45]

"Get the governance right and the rest will follow"

[44] Yunker, Z., 20 Apr 2022. The Coming Indigenous Power Play, The Tyee, thetyee.ca/News/2022/04/20/Coming-Indigenous-Power-Play/.
[45] Fuller, M., et. al., 15 November 2024. The Atlantic First Nations Water Authority: an Indigenous water utility guided by Etuaptmumk or Two-Eyed Seeing, FACETS, https://www.facetsjournal.com/doi/10.1139/facets-2024-0071.

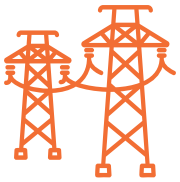
What are the barriers, challenges and risks for Indigenous utilities?

"[Provincial/Territorial Utilities], can spread [fixed costs in relation to regulation'] out over its millions of customers, but when First Nations are restricted to selling power on reserve, utilities are out of the question."[46]

Indigenous nations who have the economic case and desire to create a utility may be restricted by regulation or legislation. Where such restrictions are not preventing Indigenous-owned electrical utilities, other challenges may stand in the way. Understanding barriers may help interested Nations to navigate any present or future issues. The following section explores restrictive regulation or legislation, market and political barriers, and business risks.

RESTRICTIVE REGULATION & LEGISLATION

In some jurisdictions, legislation prevents First Nations from regulating or creating utilities.



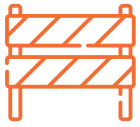
Wheeling restrictions

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

"The inability to sell back to the main grid cuts off all external sources of revenues and sources of investment needed to run the utilities."[47]

Laws preventing Indigenous utilities

In some cases, restrictive legislation makes it impossible for First Nations to secure new customers to sell power generated on the Nation's territories.[48] This means First Nations would be excluded from the transmission and regulatory monopoly.[49]



Constitutional barriers to the participation Indigenous nations

The *Constitution Act, 1867* states provinces have jurisdiction over "development, conservation and management of sites and facilities in the province for the generation and production of electrical energy".[50] However, lands reserved for First Nations falls under federal jurisdiction. This regulatory gap can make it harder for some First Nations to form or regulate utilities because the regulatory and legislative structures do not exist at the federal level and provincial laws may not extend to federal lands.

[47] Yunker, Z., 20 Apr 2022. The Coming Indigenous Power Play, The Tyee, thetyee.ca/News/2022/04/20/Coming-Indigenous-Power-Play/.

[47] Hira, A., 22 April 2020. B.C. rules prevent Indigenous communities from running their own clean energy utilities. Here's why that should change. The Narwhal. thenarwhal.ca/opinion-bc-hydro-prevent-indigenous-communities-clean-energy-utilities/.

[48] Yunker, Z., 20 Apr 2022. The Coming Indigenous Power Play, The Tyee, thetyee.ca/News/2022/04/20/Coming-Indigenous-Power-Play/.

[49] In most cases the restrictions will be upstream and broad - not only will First Nations be restricted from securing new customers, they are also restricted from owning and operating infrastructure or other functions that would be required to successfully run a utility. Ultimately, it is usually the monopoly structure which prevents Indigenous participation rather than express rules preventing Indigenous utilities.

[50] Curry, K., May 2022. Law Reform to Support Replacing Remote Community Diesel Generators with Clean Energy, UVic Environmental Law Centre, gov.bc.ca/assets/gov/farming-natural-resources-and-industry/electricity-alternative-energy/community-energy-solutions/rces_legal_recommendations_from_elc_uvic_may_2022.pdf.

Financial limitations due to the *Indian Act*

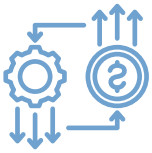
Financing challenges are a significant barrier to Indigenous equity participation in infrastructure projects in Canada. The *Indian Act* has long prevented Indigenous nations from access to capital for investment and economic development, exacerbated by typically low revenues by Indigenous nations and high project costs.[51]

MARKET AND POLITICAL BARRIERS

In Canada, market and political barriers are hindering the formation of Indigenous utilities.

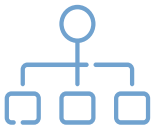
Limited options due to utility monopolies

Indigenous utilities and Indigenous power authorities are few and far between in Canada. To date, they have largely been stifled by regulators and monopoly characteristics of provincial or territorial utilities. This has led to less options for Indigenous nations to achieve economies of scale through the sale and distribution of power.



Upfront construction costs

The infrastructure required to provide utilities' services is very expensive. If capital costs are part of the business model, the returns are long term. Securing necessary access to capital would be a challenge for any new builds.[52]



Capacity deficits

Some Indigenous nations still need to build internal capacity, governance structures, balance sheets, and/or gain experience to create an Indigenous-owned utility.

Federal structure differences

Across the country, the regulatory structure varies, ranging from government-owned regulated monopolies to competitive, deregulated markets with investor-owned companies. Therefore, the ability for Indigenous nations to share expertise about Indigenous utilities could be limited by the non-transferability of contexts.

[51] 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.

[52] The Atlantic First Nations Water Authority provides an example of how up front can be addressed by taking over existing infrastructure and then having a regulated structure to guide future capital investments. Most capital would still flow from the federal government, but it would be deployed based on First Nations priorities.

MARKET AND POLITICAL RISKS

The ownership, management, and operation of an electric utility is expensive, complex, and entails substantial risk.[53]

Securing offtake agreements

Electricity purchase/offtake agreements are highly variable among jurisdictions. Indigenous nations have had circumstances where electrical generation is built, but offtake agreements are not secured.

Limited retail access to the grid

In jurisdictions where wheeling is not restricted, there are cases where, because of an oversubscribed transmission grid, the Indigenous nation cannot sell power over transmission lines.

Fluctuation in market prices

In jurisdictions where market forces dictate energy prices (e.g., Texas), there is both a risk, and potential gain, from fluctuation, and therefore lack of predictability in the market prices for the sale of power.

Project delays

There are long delays between strategic planning, feasibility, and execution.[54] Construction delays and cost escalation are also risks with the building of utility infrastructure.

Note: not all areas of utilities' service delivery may be independently profitable for a First Nations utility. However, that should not be a barrier to First Nations participation in the utilities sector. The other benefits are still there. For instance, Hydro One Remote Communities serves remote communities in Ontario and is on a different track for capital funding and rate setting. The work to service those areas is at an overall loss to Hydro One - but there is no reason why Hydro One should have a monopoly over operations in remote and isolated locations just because the costs exceed the revenues. Further, an Indigenous utility might be better placed to get on-reserve businesses going and make these parts of the grid more profitable. These concepts should be considered in all provincial/territorial contexts.

[53] Western Area Power Administration Renewable Resources Program, September 2010. Tribal Authority Process. www.energy.gov/sites/prod/files/2016/04/f30/tribal_authority_case_studies_report.pdf.

[54] Woven Energy, n.d. Our Approach, wovenenergy.co/our-approach.

BCUC INDIGENOUS UTILITIES INQUIRY

In 2019, the British Columbia Lieutenant Governor in Council (Cabinet) directed the British Columbia Utilities Commission (BCUC) to launch an inquiry into the regulation of Indigenous energy utilities and to provide recommendations on how Indigenous utilities should be regulated.

"The inquiry was precipitated by a case brought against the BCUC by the Beecher Bay First Nation in June 2016. B.C.'s electricity system is run as a provincial monopoly by BC Hydro, with the exception of a few municipal-level utilities. Beecher Bay wanted to build and run an electrical utility within the reserve. BCUC denied the request. That decision effectively denied Indigenous groups the ability to run their own utilities, and profit from the environmental and economic benefits that come with it."[55]

During the inquiry, the BCUC heard that it is important to many First Nations to be able to own a utility to:[56]

- promote economic development
- set rates in a way that benefits Nation members
- extend jurisdiction of Nation-owned utilities beyond reserve boundaries
- update and secure Energy Purchase Agreements (EPAs)
- lift the prohibition on wheeling (retail access to the transmission grid)

The final report of the BCUC Indigenous Utilities Inquiry included recommendations that:

- an Indigenous utility be regulated by a competent arm's length regulator.
- the regulator of an Indigenous utility follow best practices of ratepayer protection for all ratepayers.
- an Indigenous utility be defined as a public utility for which, as the owner or operator, an Indigenous Nation has *de facto or de jure* control.[57]

"BC Hydro's discretionary role in considering or implementing efforts towards reconciliation and climate goals represents a disconnect in the regulatory scheme."

– Katie Curry, University of Victoria Environmental Law Centre.[58]

[55] Hira, A., 22 April 2020. B.C. rules prevent Indigenous communities from running their own clean energy utilities. Here's why that should change. The Narwhal. thenarwhal.ca/opinion-bc-hydro-prevent-indigenous-communities-clean-energy-utilities/.

[56] Curry, K., May 2022. Law Reform to Support Replacing Remote Community Diesel Generators with Clean Energy, UVic Environmental Law Centre, gov.bc.ca/assets/gov/farming-natural-resources-and-industry/electricity-alternative-energy/community-energy-solutions/rces_legal_recommendations_from_elc_uvic_may_2022.pdf.

[57] Additional recommendations pertained to topics such as procedural matters.

[58] Curry, K., May 2022. Law Reform to Support Replacing Remote Community Diesel Generators with Clean Energy, UVic Environmental Law Centre, gov.bc.ca/assets/gov/farming-natural-resources-and-industry/electricity-alternative-energy/community-energy-solutions/rces_legal_recommendations_from_elc_uvic_may_2022.pdf.

Government, Utilities & Regulators: Recommendations & Questions

These recommendations—derived from the literature review, expert interviews, and primary data - articulate opportunities to advance Indigenous-led utilities and propose solutions to potential barriers with a focus on self-determination, innovation, and accountability to First Nation members. This research yielded recommendations for (1) governments, utilities and regulators, and (2) Indigenous nations.

Recommendations for Governments, Utilities, and Regulators

The following recommendations can be implemented by governments to support the formation, implementation, and success of Indigenous utilities.

Recommendation 1. Ask the right questions.

Indigenous utilities can take many different forms. To understand what could work best, governments, utilities and regulators are currently well-positioned to ask more about, rather than unilaterally define, Indigenous utilities. The diversity of existing Indigenous utilities demonstrates that—rather than honing in on a limited models of utilities—the more room Indigenous nations are given to form an Indigenous utility, the better: for governments, this should be the goal. This open-minded approach supports self-determination and puts Indigenous nations in a better position to form utilities. As well, it allows Nations to get into the market and have an early-mover advantage now underway with the clean energy transition. With this in mind, the right question is not, "What is the single model for an Indigenous utility?" The right question is, "How can governments support and create enabling legislation and regulation to encourage the formation and financing of Indigenous-owned utilities, as soon as possible, and with the greatest advantage to and leeway for Indigenous nations?"

Recommendation 2. 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:[59]

Recommendation 3. In addition to all jurisdictions in Canada lifting restrictions on Indigenous-led utilities, governments should make sure that any Indigenous utilities or authorities meet the following criteria:

1. Be led by Indigenous nations.
2. Be adequately resourced.
3. Have clear influence on Provincial/Territorial regulations.

[59] FNMPC and Mokwateh, 2024. National Indigenous Electrification Strategy. April 2024. fnmpc.ca/wp-content/uploads/FNMPC_National_Electrification_digital_final_04222024.pdf.

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 a range of scales: from single Indigenous nation utility to provincial or national.[60]

Recommendation 4. Support the formation of an Indigenous utilities association that can in turn support utilities in a collective manner.

An Indigenous utilities association could provide interested First Nations a venue to share interests, technical skills, commercial concerns. These associations would also initiate dialogue on how concurrent Indigenous jurisdictions might operate within a jurisdiction.[61] Like Indigenous Guardian Networks, associations have the potential to bring Indigenous nations together to share ideas and act collectively. Provinces/Territories should fund and support the formation of Indigenous utilities association(s).

Recommendation 5. Build the legal and regulatory frameworks needed to implement wheeling to allow Indigenous-led utilities 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—borne by Indigenous nations to this day. Further, the electrical infrastructure used by provinces, territories and their utilities are located on Indigenous lands, yet Indigenous nations are excluded from the use of this infrastructure. Governments need to enact wheeling policies to allow Indigenous nations retail access to the power grid. Wheeling is not only a matter of Indigenous self-determination: it is an incentive for a new Indigenous-led clean power generation.[62] Retail access arrangements should consider the benefits and possibilities of wholesale energy rates.[63]

Recommendation 6. Fund foundational and comprehensive Indigenous capacity supports in utility development and ownership.

Governments and their utilities should fund foundational and comprehensive Indigenous capacity supports in Indigenous utility development and ownership.[64] To participate in electrification projects, including the development or ownership of utilities, Indigenous nations need access to business capacity and negotiation supports in order to make informed business decisions. As well, Indigenous nations need to participate in project design and negotiate business deals at the earliest stage possible.

There are limited capacity funding programs targeted at supporting Indigenous nations to make informed decisions about becoming a utility owner. To support Indigenous economic reconciliation, governments must provide capacity supports that will allow Indigenous nations to become owners, operators and economic beneficiaries of Indigenous-owned utilities. Given this, collaboration between Provincial/Territorial utilities and First Nations to assess capacity and identify gaps should play a central role in creating capacity supports.

[60] Ibid.
[61] Podlasly, M., and von der Porten, S., 2019. The Role of Indigenous People in Major Project Development: Paths for Indigenous Participation in Electricity Infrastructure, docs.bcuc.com/documents/proceedings/2019/doc_54541_c3-3-fnmpc-writtenevidence.pdf.
[62] FNMPC and Mokwateh, 2024. National Indigenous Electrification Strategy. April 2024. fnmpc.ca/wp-content/uploads/FNMPC_National_Electrification_digital_final_04222024.pdf.
[63] Cairns, J. BCUC, 27 June 2023. Presentation Slide Deck on the BCUC Indigenous Utility Regulation Inquiry.
[64] FNMPC and Mokwateh, 2024. National Indigenous Electrification Strategy. April 2024. fnmpc.ca/wp-content/uploads/FNMPC_National_Electrification_digital_final_04222024.pdf.

Recommendation 7. Create a regulatory framework that is open to different types, scales, and ownership models of Indigenous utilities.

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".

As a minimum standard, any Indigenous utilities regulatory framework should embody UNDRIP, which includes free, prior and informed consent. This means ensuring that, as Indigenous nations consider utility ownership and operation, Nations are not beholden to a single model but rather have a collective right to develop and maintain utilities that speak to the Nation's own priorities, needs and circumstances. To support this, regulatory frameworks should be highly flexible, with maximum space granted to support different benefit-sharing or co-ownership models.[65]

Recommendation 8. Address historical redress and past damages.

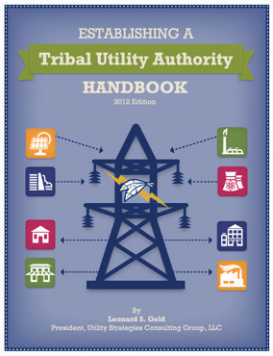
"For a lot of utilities in Canada, be prepared to deal with historic redress. And that's a difficult conversation to have in the context of new projects, but always remember why you were at the table, and the history of it… while we look to the future, we are all here because of the past too, and we have to take that into account." - Niilo Edwards, Founding CEO, First Nations Major Projects Coalition.

These eight recommendations are specific to ways government, utilities and regulators can support Indigenous-owned utilities. For more information on how to better support First Nations with electrification projects, additional recommendations can be found in FNMPC's National Indigenous Electrification Strategy. https://fnmpc.ca/tools-and-resources/reports-publications/

[65] Indigenous Peoples Rights International, 15 Oct 2024. Exploring shared prosperity: Indigenous leadership and partnerships for a just transition. business-humanrights.org/en/from-us/briefings/exploring-shared-prosperity-indigenous-leadership-and-partnerships-for-a-just-transition/.

Questions Governments, Utilities, and Regulators Could Ask

As more Indigenous nations build capacity and readiness to own and operate utilities, there are pivotal ways governments, utilities, and regulators can elevate the potential for success and growth of the new utilities. Building on the recommendations above, the following questions encourage governments, utilities and regulators to consider—not just how they can walk alongside Indigenous nations—how they can intentionally create conditions that support the growth of Indigenous-owned utilities, at the pace required for the energy transition now underway.



See the Establishing a Tribal Utility Authority Handbook to see examples of considerations such as cash flow analysis, capitalization requirements, valuation of electric facilities, planning engineering and construction standards, purchase power costs, transmission and distribution delivery costs, substations and pro forma examples of legal agreements. https://www.bia.gov/sites/default/files/dup/assets/as-ia/ieed/ieed/pdf/tribalutility_handbook.pdf

Indigenous Nations: Recommendations & Questions

Recommendations for Indigenous Nations

The following recommendations are intended for Indigenous nations who are either considering or planning to form a utility, as well as those exploring the idea of an Indigenous power authority.

Recommendation 9. Examine potential contractual relations with Provincial/Territorial utilities.

Whatever form an Indigenous utility ultimately takes, the first major transaction is often an agreement with the current (e.g. Provincial or Territorial) utility to either: "(1) negotiate a purchase/sale of the utility's electricity infrastructure; or (2) negotiate a service agreement for the utility to continue to own and operate the electricity distribution infrastructure."[66] A third option (3) may be negotiating the current utility or government to transfer assets at no cost—as a form of historical redress, upholding commitments to Indigenous economic reconciliation.

Recommendation 10. Evaluate infrastructure and interconnection alternatives.

Many of the initial costs of forming an Indigenous electric utility relate to acquiring infrastructure (e.g., distribution lines) and interconnecting to the larger grid (e.g. substations and interconnecting transmission lines). Building the infrastructure is expensive (sometimes prohibitively) but can reduce the complexity of negotiating a purchase or wheeling agreement with the existing utility. Indigenous nations forming an electrical utility should consider working with sector experts to plan a suitable electric system and correctly estimate the value of existing on-reserve infrastructure, costs of building, and expected returns.[67]

Recommendation 11. Develop an electricity supply strategy.

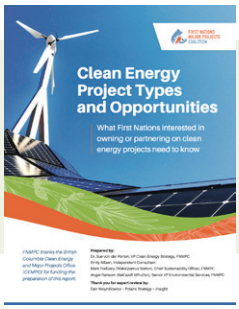
Once electrical infrastructure is acquired or built, power supply costs are often the largest on-going expense for Indigenous electric utilities. Given this, the opportunity to achieve electric cost savings is based on whether or not

[66] Thomas, P.R., n.d. Tribal Utility Development Energy Development and Services on Tribal Land, Indian Law Special Focus, azattorneymag-digital.com/azattorneymag/201904/MobilePagedArticle.action?articleId=1476899#articleId1476899.
[67] Ibid.

the Indigenous nation can generate or purchase cheaper power than the existing utility.[68] Any new Indigenous-owned electrical utility has the unique advantage of very cheap options for renewable power generation, e.g.,

- Solar power costs have fallen by 85% since 2010 and has been the fastest-growing source of electricity generation for 19 years.[69]
- Wind power costs have fallen by 55% since 2010.[70]
- Battery costs (used for storage and deployment of electricity) have fallen by 90% since 2010, from USD$1500/kWh to USD$139/kWh.[71]

Indigeous utilities are uniquely positioned to take advantage of these technologies, and others, because power can be generated with only wind or sun as inputs, can be stored in batteries, and sold when needed via wheeling on transmission grids and/or distributed to nation members and customers.



To learn more about Clean Energy Project Types and Opportunities, please see FNMPC's paper: https://fnmpc.ca/wp-content/uploads/FNMPC_Clean_Energy_09192024_highres.pdf

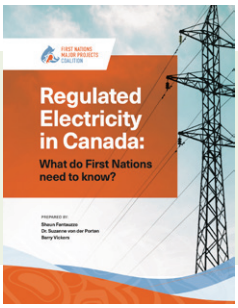
Recommendation 12. Establish wheeling contracts.

In addition to buying or producing power, an Indigenous-owned electrical utility will ideally able to enter into wheeling contracts—agreements with the transmission line operators—to sell power through the transmission grid to various customers (e.g., an industrial costumer in need of clean power).[72] Establishing wheeling contracts will be a "heavier lift" in jurisdictions where governments/regulators have unduly restricted Indigenous retail access to the transmission grid, notably built on and over Indigenous lands and waters. In some instances, Indigenous owned utilities could provide a foundation for behind-the-fence infrastructure for direct-to-industrial applications (e.g., generating energy to a mine or city on or adjacent to the First Nation's territories.)

Recommendation 13. Understand and plan how electricity rates will be calculated and set.

Rate structures—the cost of electricity—will plan an important and ongoing role in the economic viability of the Indigenous electrical utility. Understanding the unique markets, rate structures, rate regulation, and industrial power pricing in the jurisdiction within which the Indigenous utility is embedded will be key to estimating revenues and creation of own-source revenues for the Indigenous nations.

[68] Avant Energy, n.d. Tribal Utility Formation: Three Key Considerations for Tribal Electric Utility Formation. avantenergy.com/2018/02/tribal-utility-formation-three-key-considerations-tribal-electric-utility-formation/.
[69] EMBER, December 2024. Clean Electricity, https://ember-energy.org/focus-areas/clean-electricity/.
[70] International Renewable Energy Agency, 2024. Renewable Power Generation Costs in 2023, irena.org/-/media/Files/IRENA/Agency/Publication/2024/Sep/IRENA_Renewable_power_generation_costs_in_2023.pdf.
[71] Sanchez Molina, P., 1 December 2023. Battery prices down 14% this year, PV Magazine, https://www.pv-magazine.com/2023/12/01/battery-prices-down-14-this-year-says-bloombergnef/.
[72] Thomas, P.R., n.d. Tribal Utility Development Energy Development and Services on Tribal Land, Indian Law Special Focus, azattorneymag-



To learn more, please see FNMPC's paper Rate Regulated Electricity in Canada: https://fnmpc.ca/wp-content/uploads/FNMPC_Elect_Primer_FINAL-Feb-1-2024.pdf

Recommendation 14. Create a legal structure for the Indigenous utility.

Indigenous nations who proceed with forming an Indigenous utility should create a legal structure that matches the goals and values of the Indigenous nation(s) for which it is serving and owned by. Some of the possible utility structures identified in this research included, but are not limited to:[73, 74, 75, 76]

Informed and arms-length commercial and legal expertise should be leveraged to create the most optimal structure for the Indigenous nation(s) forming the utility.

[73] Note that these are not mutually exclusive options. For example, an Indigenous-owned utility could be a band-operated electrical utility that is a not-for-profit entity.
[74] Baker, K. and Hinze, S., October 2006. Primer on Minnesota's Property Taxation of Electric Utilities, Minnesota House of Representatives, https://www.house.mn.gov/hrd/pubs/pruttax.pdf.
[75] Thomas, P.R., n.d. Tribal Utility Development Energy Development and Services on Tribal Land, Indian Law Special Focus, azattorneymag-digital.com/azattorneymag/201904/MobilePagedArticle.action?articleId=1476899#articleId1476899.
[76] Remote Communities, n.d. Hydro One, https://www.hydrooneremotes.ca/upload/documents/about-us/remotes-at-a-glance-may-2022-english.pdf.

Recommendation 15. Set up a Board of Directors for the Indigenous utility.

Indigenous nations may consider setting up a Board of Directors, ideally whose members have outside experience in utility operations and business and ideally are themselves Indigenous, or have a true appreciation of Indigenous contexts and values.

Recommendation 16. Avoid pitfalls experienced by existing Indigenous utilities.

Research for this paper identified several pitfalls experienced by existing Indigenous utilities. These include, but are not limited to:

[77] Woven Energy, n.d. Our Approach, wovenenergy.co/our-approach.

[78] Western Area Power Administration Renewable Resources Program, September 2010. Tribal Authority Process. www.energy.gov/sites/prod/files/2016/04/f30/tribal_authority_case_studies_report.pdf

[79] Thomas, P.R., n.d. Tribal Utility Development Energy Development and Services on Tribal Land, Indian Law Special Focus, azattorneymag-digital.com/azattorneymag/201904/MobilePagedArticle.action?articleId=1476899#articleId1476899.

Questions Indigenous Nations Could Ask

Indigenous nations considering utility ownership are taking a meaningful step towards self-determination. However, it may be useful to consider the current utilities landscape—locally, regionally, federally—to best position each Nation's unique situation, and understand which models may or may not work. As part of this research, the following questions were identified as a starting point for Indigenous-owned electrical utility exploration.

- Will the utility be feasible? Evaluation of feasibility may include technical and financial due diligence, current costs of service versus costs of service, legal and regulatory framework, and organizational capacity.[80]
- Is there a feasible market (either profitable or could refer to end-user need based demand for service) for Indigenous utilities?
- How do regulatory systems promote or restrict Indigenous-led utilities?
- What services does the Indigenous utility have the potential to take on? E.g., electrical wholesale, distribution, transmission, generation, water, sewerage, battery, gas, etc.
- What are the interconnection alternatives?[81]
- Are there neighbouring Indigenous nations with which to partner on an Indigenous utility to scale-up or reach an economy of scale?
- What is the potential for a larger vertically integrated utility?
- How will capital investment be secured? Are there grants, loan guarantees, lenders or investors that can secure capital? Where Indigenous nations are in collaboration, how will financial cooperation be structured?
- There are many Indigenous utilities in the USA and Canada who provide utility services. Which ones should our Nation connect with to learn lessons from?
- What is the procurement strategy to maximize benefit to Indigenous-owned businesses?
- What are the risks and how can they be mitigated?
- How will the Nation set up the capacity needed to set up and meet the legal/power responsibilities of the utility?

[80] Baker Tilly, 20 July 2017. Tribal electric utilities as a driver of tribal sovereignty and economic development, bakertilly.com/insights/tribal-electric-utilities-as-a-driver-of-tribal-sovereignty-and-economic-de.

[81] See discussion of this topic here: Avant Energy, n.d. Tribal Utility Formation: Three Key Considerations for Tribal Electric Utility Formation. avantenergy.com/2018/02/tribal-utility-formation-three-key-considerations-tribal-electric-utility-formation/.

Conclusion: What Conditions Will Set Indigenous Utilities Up for Success?

This paper identified Indigenous-owned utilities that were working to better serve their Nation's membership and energy needs, bring self-determination and nationhood, and/or Indigenize utilities previously managed externally. However, although some Nations were financially "breaking even" or creating revenues without government grants, others were not. This research illuminated the fact that—in addition to the benefits of self-determination that many Indigenous utilities provide—Indigenous nations strive to create utilities that will create steady, predictable revenues far beyond *breaking even*. Further, the full scale of opportunity to build Indigenous-owned electrical utilities must be created immediately for Indigenous nations to maximize benefit from the clean energy transition.

Although the conditions for economic success for each Indigenous-owned utility will vary—e.g., geography, rate-regulation, market, construction costs, political climate, weather, proximity to the power grid and a host of other factors—it is worth noting common conditions identified through this research. These include, but are not limited to:

Enabling regulatory/legislative frameworks

- Government support (funding, loan guarantees, PPAs/EPAs)
- Interjurisdictional transmission and power sharing agreements
- Collaborative frameworks for integration

Market Conditions

- Availability of power purchase agreements where generation is part of the utility
- Retail access to the transmission grid
- Market standards and off reserve rates

Capacity Conditions

- Experience in electricity or economic development
- Potential for a collective of First Nations
- Other revenue sources to offset setbacks (damage to lines; prices changes)

Economic Conditions

- Potential return on investment
- Construction costs and price of renewables
- Access to competitively priced capital

Location Conditions

- Proximity to a substation and transmission
- Proximity to urban centres
- Adjacent customer/ratepayer base

Indigenous-owned electrical utilities will be an integral part of Canada's clean electricity picture but, to date, the diverse and connective role these utilities will play has yet to be fully painted in. As this research shows, the Indigenous utility landscape is not a blank canvas: existing Indigenous utilities on both sides of the Canada-US border brought insights, essential perspectives, and stories of success into focus.

How can Indigenous nations, government, utilities and regulators work together to make success the new normal?

To start, First Nations need to be supported with the capacity, tools and opportunities to engage as utility owners, including wheeling access to transmission grids and downstream customers. Ongoing collaboration, a full-spectrum commitment to reconciliation, and dismantling barriers will all support Nations to take the next step. If this is the path forward, the near horizon holds a resilient, inclusive and sustainable energy future.

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"[Canada's] whole framework and system was built without the participation of Indigenous nations in mind and that needs to start changing. When you compare the steps taken against the goals that Canada and the rest of the world have set on a net zero transition and electrifying the country, we are not moving fast enough. Governments are going to need partners in Indigenous nations to move this forward quicker. There will come a day soon when you will see a scenario where Indigenous nations and partner with developers and are bringing their own plans to government saying 'we are doing this on our lands'. In order to electrify, governments are going to have to get on the program and support that. I'm not outrageous in thinking this, it is going to happen. This is the type of innovative leadership that we're seeing, it's also the drive that we are seeing within our First Nations membership. Policy is going to change to accommodate that, and you will see it in the next decade the proliferation of indigenous utilities across this country because that is what our electrification sector needs in order to meet its demand."

- **Niilo Edwards**, First Nations Major Projects Coalition, Our Collective Advantage Conference, panel on the launch of the National Indigenous Electrification Strategy, April 24, 2024, Toronto, Ontario.

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