# Project Ownership Models for Remote Renewable Energy Development in Partnership with Indigenous Communities

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The author acknowledges that the work for this project took place on the unceded ancestral lands of the xwmə θ kwəy̓əm (Musqueam), Skwxwú7mesh (Squamish), Stó:lō and Səl̓ílwətaʔ/Selilwitulh (Tsleil- Waututh) Nations.

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# Contents

## Executive Summary

The majority of remote Indigenous communities in Canada rely on diesel fuel for electricity generation. As part of ongoing work to reduce diesel reliance among remote Indigenous communities in BC, this report investigates and presents different ownership models for partnerships between utilities or energy developers and First Nations that are used in energy projects across Canada.

Despite being a leader in Indigenous-involved renewable energy projects, BC's growth in the sector has slowed compared to other provinces in Canada. Indigenous communities have identified a number of challenges associated with the status quo of Indigenous involvement in the energy sector in British Columbia, both in the reliance on diesel fuel and in the barriers to advancing renewable energy projects. Some barriers identified could be overcome with shared ownership models for renewable energy projects. Partnerships can offer First Nations and Indigenous communities more opportunities for renewable energy development, but they must be rooted in trusting and respectful relationships. There are a number of important practices that are critical for utilities and developers to understand in order to build successful partnerships with Indigenous communities.

Through a number of case studies of existing renewable energy projects in Canada with Indigenous involvement, this report highlights some critical similarities and differences in different ownership models. It also identifies some trends that help to determine what makes a project or partnership successful, and how ownership models are utilized to respond to provincial regulatory conditions, funding constraints, and project planning needs.

The ownership models are separated into a few broad categories, including the following: Indigenous Ownership, General Partnership: Indigenous Coalition, General Partnership: Indigenous-Developer, Limited Partnerships, and Equity Ownership. These models are presented through cases with accompanying findings about building relationships, community engagement, funding and regulatory conditions, and the distribution of liabilities and profits. While certain models are more advantageous for certain situations, models with full Indigenous participation in planning and equal decision-making power are most effective at creating projects aligned with the principles of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).

Regardless of ownership model, several important themes showed up in successful partnerships, such as clarity of ownership structure, clear delineation of responsibilities and obligations, community buy-in, and respect for Indigenous cultural values and traditional knowledge. If these ingredients form the basis of a partnership, the ownership model may be selected in response to factors specific to an individual project, such as provincial policy and funding availability.

The onus is on BC Hydro and the Province of British Columbia to better facilitate Indigenous participation in the renewable energy sector, both to meet the province's diesel reduction goals as well as to align the provincial energy sector to the commitments made in the Declaration of the Rights of Indigenous Peoples Act (DRIPA). This report offers examples of how other provinces, utilities, and developers have built strong partnerships with First Nations to enable renewable energy development and offers some good practices that can be translated to the BC context.

# Introduction

## Diesel Reduction Initiatives

In British Columbia, the CleanBC plan sets a target of 80% reduction in diesel use for electricity generation in remote communities by 2030 through the Remote Community Energy Strategy (RCES) initiative.[1] There are significant motivations for reducing diesel use in remote communities: the difficulty and cost of fuel delivery, environmental impacts such as greenhouse gas emissions, air pollution, risk of spills, aging infrastructure, and reconciliation with First Nations and Indigenous communities.[2] The Declaration on The Rights of Indigenous Peoples Act (DRIPA) requires the Government of British Columbia to take all measures necessary to ensure that the laws of BC are consistent with the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).[3] Within the energy sector, this means prioritizing and advancing First Nation's energy sovereignty, that is, the ability for First Nations and Indigenous communities to be in charge of their own energy planning and have ownership of energy generation infrastructure.[4]

The Federal Government has committed to reducing diesel use in remote communities through the Pan-Canadian Framework on Clean Growth and Climate Change and committed funding through programs like the Clean Energy for Rural and Remote Communities plan and investments in green infrastructure through Canada's Long-term Infrastructure plan.[5] The government also acknowledges the vital role that reducing reliance on diesel in remote Indigenous communities can have in advancing "energy security, reconciliation, and self-determination" for Indigenous communities in Canada.[6] There is a growing body of literature on policy pathways for diesel reduction in Canada's remote Indigenous communities.[7]

## First Nations and Indigenous Communities in BC's Energy Landscape

BC Hydro, BC's public electric utility, is regulated through the British Columbia Utilities Commission (BCUC), and through provincial priorities set by the province through the Ministry of Energy, Mines and Low Carbon Innovation (EMLI).[8] As a part of the Comprehensive Review of BC Hydro, industry experts, government, and BC Hydro have developed recommendations to progress towards achieving the CleanBC climate targets, supporting economic development, and keeping electricity rates low.[9] Concurrently, the Province is collaborating with the First Nations Leadership Council and the

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[1] *Remote Community Energy Strategy*. British Columbia. 2021
[2] *The True Cost of Energy in Remote Communities*. Pembina Institute. 2019
[3] *Declaration on the Rights of Indigenous Peoples Act*. British Columbia. 2019
[4] *First Nations Leadership in BC's Energy Future*. Pembina Institute. 2021
*Off Grid: Community Energy and the Pursuit of Self Sufficiency*... Rezaei & Dowlatabadi. 2016
[5] *Reducing reliance on diesel.* Government of Canada. 2019
[6] *Reducing diesel energy in rural and remote communities.* Government of Canada. 2020
[7] *Diesel Reduction Progress in Remote Communities.* Pembina Institute. 2021
*Pathways to 2030: 80% reduction in diesel consumption in BC's remote communities. Dunsky. 2020*
*Power Shift. Electricity for Canada's Remote Communities.* Conference Board of Canada. 2016
*Power Shift in Remote Indigenous Communities.* Pembina Institute. 2019
[8] *What we do.* British Columbia Utilities Commission 2022
[9] *Phase 2 of the Comprehensive Review of BC Hydro.* British Columbia. 2022

First Nations Energy and Mining Council to "identify and support new clean energy opportunities for Indigenous Peoples related to CleanBC, the BC Hydro Review, and the BCUC Inquiry on Indigenous Utilities," through the Indigenous Clean Energy Opportunities engagement process.[10]

BC's energy policy landscape has seen major shifts in the last few decades.[11] Previous energy policy in the province incentivized a rapid growth small-medium scale energy development through Independent Power Producers (IPPs). Originally, when these policies were put in place many IPPs were operating on Indigenous territories without consulting or involving First Nations.[12] Indigenous groups' outcry and a long campaign of legal activism drove a gradual shift in the IPP industry to establish the duty to consult with Indigenous groups for projects on their territories, opening the door for more Indigenous participation in energy projects in BC. While these policies established BC as a leader in Indigenous involvement in renewable energy development, recent growth in the sector is relatively low compared to other provinces.[13]

Previous provincial efforts at remote community diesel reduction in BC did not prioritize harmonizing goals between government and community leaders. One shortcoming of the Remote Community Electrification program which ran from 2008-2013 was that participating in the program meant surrendering ownership of energy infrastructure to BC Hydro, when community ownership of energy, self-sufficiency, and political self-determination were major goals of BC's remote Indigenous communities.[14] There is still widespread interest among remote Indigenous communities to replace diesel generating infrastructure with renewable energy projects, and Indigenous communities can play a vital role in the growth required in the renewable sector to meet the 2030 climate goals laid out in the CleanBC plan.[15]

Community engagement with BC's remote Indigenous communities identified frustrations with the administration of programs and the disbursement of funding in ways that promoted competition among communities rather than cooperation.[16] Participants noted the problems caused by the enforced dependency on BC Hydro and insufficient and inflexible funding to achieve their energy plans to replace reliance on diesel fuel with renewable energy. Participants also highlighted the intersections between clean energy and healthcare, culture, and food security and expressed interest in working as partners in collaboration with other communities, the province, and the federal government to realize renewable energy development and diesel reduction.[17]

Given the importance of energy sovereignty, self-determination, and alignment of community needs to both the provincial mandate to implement UNDRIP through DRIPA, partnerships with Indigenous communities offer a clear path forward for energy development in remote communities in BC. Sustained, mutually respectful partnerships between Indigenous communities and developers or utilities can be effective vehicle for advancing reconciliation through energy independence.[18]

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[10] *Engagement Process*. Indigenous Clean Energy Opportunities. 2022
[11] *The Campbell Revolution*. Summerville. 2017
[12] *Powering Self Determination*... Fitzgerald. 2018
[13] *Powering Reconciliation*. Lumos Clean Energy Advisors.
[14] *Off Grid: Community Energy and the Pursuit of Self Sufficiency*... Rezaei & Dowlatabadi. 2016
[15] *First Nations Leadership in BC's Energy Future*. Pembina Institute. 2021
[16] *Indigenous Engagement on the Clean BC RCES Summary Report*. Alderhill Consulting. 2021
[17] *Indigenous Engagement on the Clean BC RCES Summary Report*. Alderhill Consulting. 2021
[18] *Off Grid: Community Energy and the Pursuit of Self Sufficiency*... Rezaei & Dowlatabadi. 2016

## Purpose of this Report

The dual mandate for BC's energy sector to reduce remote communities' diesel use and to proactively align with UNDRIP and reconciliation is clear. The challenges associated with the status quo have been evaluated and articulated by remote Indigenous communities.[19] Given the current policy landscape in BC, partnerships between BC Hydro and remote communities can offer a path forward to both implement DRIPA and reduce remote communities' dependence on diesel generation.

This report is an exposition different ownership and partnership models employed in renewable energy projects with Indigenous involvement throughout Canada. It provides context and information about the important elements of successful partnerships with First Nations and Indigenous communities in the renewable energy sector. It is by no means a comprehensive list of partnerships nor best practices, but instead an introduction to the different ownership models that can form the legal backbone of these partnerships, illustrated through a list of existing projects and partnerships throughout Canada.

This project was commissioned by the BC Ministry of Energy, Mines, and Low Carbon Innovation's (EMLI) Community Clean Energy Branch (CCEB) to support the Non-Integrated Area (NIA) Working group. The working group is a collaboration of CCEB, the EMLI Electricity Generation and Regulation Branch, and representatives from BC Hydro to discuss electricity service provision to non-grid connected areas serviced by BC Hydro's transmission and generation infrastructure.

[19] *Indigenous Engagement on the Clean BC RCES Summary Report.* Alderhill Consulting. 2021

## Project Scope

This project involved a jurisdictional scan across Canada to identify cases where non-traditional ownership models have been applied to renewable projects to facilitate partnerships between Indigenous communities and utilities. The cases selected exemplify some of the important practices for building and maintaining business relationships with Indigenous partners in the energy sector, as well as some of the provincial policies that enable such partnerships and facilitate the construction of renewable projects to offset diesel generation, especially in remote areas.

The project does not involve specific research into BC's remote communities or active projects or negotiations in BC. It also does not focus on the existing BC policy landscape and compare it to that of other provinces. The project does not involve any financial modeling to understand how these projects may have impact to ratepayers. Lastly this project does not provide recommendations for BC energy policy change. The intent is that this report, along with other relevant work, will help form the basis for future investigations into policy change at the provincial level.

## Methods

This research was conducted using a range of source material and published work relevant to partnerships between Indigenous communities or First Nations and other energy industry players, such as utilities or developers.

Background research focused on BC energy policy broadly as well as the history of the BC energy sector's treatment of Indigenous peoples. Further research involved academic studies around contemporary Indigenous relations, efforts towards Indigenous self-determination in the energy sector, and diesel reduction efforts, pathways, and progress in Canada.

Following the initial literature review a range of criteria were established as critical areas for investigation in the case study phase of the research. Concurrent to this process, through a survey of reports and available public databases, such as the Indigenous Clean Energy Network database,[20] cases were assembled into a master spreadsheet. After amalgamating a large list of potential cases with significant Indigenous involvement in the development or ownership of renewable energy projects, the focus cases were prioritized based on the following factors: innovation or novelty of ownership structure, partnership directly with a utility as opposed to a private developer, and availability of publicized information on the project.

[20] *ICE Projects.* Indigenous Clean Energy. 2021

# Indigenous Renewable Energy Partnerships in Canada

## General Overview

One way to increase Indigenous participation in the energy sector such that it advances energy independence and centers community planning is to build energy-development partnerships with Indigenous communities. Throughout Canada, Indigenous communities and developers or utilities are forming partnerships with a variety of different ownership models that offer greater flexibility for financing, sharing responsibility, and improved collaboration between industry players and communities. These alternative ownership models can facilitate Indigenous participation in and benefit from the energy sector without placing the burdens of high-cost capital financing or complicated technical operations exclusively on First Nations.

Indigenous participation in the renewable energy sector is rapidly expanding throughout Canada. A report from Lumos Clean Energy Advisors, an energy consultancy focused on advising Indigenous communities, finds over 150 medium-to-large scale projects with Indigenous involvement in Canada and a combined total of over 19,500 megawatts of production capacity, with another 50-60 projects coming online in the next 5-6 years.[21]

The cases reviewed in this report span a wide range of renewable energy technologies including wind, hydro, and solar. There are also two cases focused on electricity transmission infrastructure. Most projects surveyed are in remote areas that currently rely on diesel generation and regional microgrids for electricity production and transmission. The cases vary significantly on scale and budget, but all of the cases selected have Indigenous involvement in the planning, development, and ownership of the projects. Cases are spread throughout Canada and found in nearly every province.

There are several ownership models that are prevalent across Canada. In provinces with regulatory conditions that allow for independent electricity producer regulations, Indigenous Nations and communities often team up with a developer form a General Partnership, where ownership is split 50:50, and all decisions are taken jointly. Other cases involve coalitions of small Indigenous communities coming together and forming corporations which in turn partner with large utilities to share ownership in energy infrastructure.

Provincial policies can facilitate and accelerate the development of renewable energy projects and partnerships with Indigenous communities. In many provinces, development grants for Indigenous communities and diesel reduction played a major role in financing these projects. In some provinces, provincial energy planning that sets energy quotas based on percentage of renewable generation or allocating energy production to Indigenous-owned or Indigenous-involved projects played a major role. Other provincial energy policies such as feed in tariffs also often facilitated the development of these projects and partnerships.

A common theme throughout all the cases and the ownership models is the importance of long-term engagement and trust between the utility/developer and the Indigenous Nation or community. Building trusting and mutually respectful relationships with Indigenous communities is an essential

[21] *Powering Reconciliation*. Lumos Clean Energy Advisors.

prerequisite for a successful partnership. There is no shortcut to earning trust and building a meaningful relationship, and the onus is on the utility or developer to demonstrate their commitment to repairing past wrongs, acknowledging, and respecting Indigenous self-determination, and working in genuine collaboration to advance the energy goals of the Indigenous community.

### Report Structure

The remainder of this report presents existing projects in Canada that illustrate the different partnership and ownership models. The case studies are presented in the context of some of the important themes that influence the success of a partnership and project. The report is structured around these themes, starting with the importance of developing a relationship with the First Nation or Indigenous community; highlighting the importance of earning trust and conducting comprehensive community engagement, or empowering the First Nation or Indigenous community to do their own community consultation.

Next the report presents a number of cases to illustrate each different ownership model and explains some of the context for why a certain ownership model was chosen and some of the implications of each model.

The report lastly investigates some important aspects of project management and operations through the frame of different ownership models and offers a general evaluation of different ownership models based on criteria related to enabling First Nations and Indigenous communities' participation in the renewable energy sector.

**Case Study Presentation Table of Contents:**

| | |
|---|---|
| **Forming the Relationship:** | Wuskwatim Power Limited Partnership |
| **Community Involvement:** | Fort McMurray West Transmission Line, Lutsel K'e Solar |
| **Indigenous Ownership:** | Skidegate Solar Akamihk Energy, Fort Severn Solar |
| **General Partnership: Indigenous Coalition:** | Three Nations Energy |
| **General Partnership: Indigenous Developer:** | Apuiat Wind Farm, Innavik Hydro, Mesgi'g Ugju's'n Wind Project, McLean's Mountain Wind Farm |
| **Limited Partnership:** | Stirling Wind Project, Wataynikaneyap Power |
| **Equity Ownership:** | Nanticoke Solar LP, Riviere de Moulin Wind Farm, Lac Seul Hydro |

Photo Source: ncncree.com

### Wuskwatim Power

| | |
|---|---|
| **Indigenous Partner:** | Nisichawayasihk Cree Nation (NCN) |
| **Utility Partner:** | Manitoba Hydro |
| **Project:** | 200 MW Hydro |
| **Location:** | Taskinigahp Falls, Manitoba |
| **Project cost:** | $1.3 billion |
| **Project year:** | 2011 |
| **Ownership Model:** | Limited Partnership |

## Forming the relationship

The Canadian energy sector has a long history of disrespect, disregard, and displacement of Indigenous communities. This shameful history has understandably resulted in a low degree of trust between Indigenous communities and utilities. Repairing these relationship takes time and demonstrated commitment to reconciliation and to the principles of the United Nations Declaration of the Rights of Indigenous Peoples (UNDRIP) and implementation of the Truth and Reconciliation Commission's (TRC) Calls to Action.

In the 1970s, the Churchill River Diversion, a project conducted by Manitoba Hydro, devastated the Nisichawayasihk Cree Nation (NCN) way of life, flooding hunting, trapping, and sacred sites, and ruining traditional fisheries. The NCN were powerless to stop the project and Manitoba Hydro had no enforced duty to consult the Nation.

This long history of distrust and animosity between the NCN and Manitoba Hydro resulted in two court-ordered grievance settlements in 1972 and 1996. The latter settlement required Manitoba Hydro to work with the NCN on any future projects on their territory, and in 1997 they approached the NCN about partnering on a new power station.[22] After 9 years of negotiation and an extensive period of community consultation, led by the NCN council, the NCN voted by referendum to enter into partnership Manitoba Hydro and sign the Wuskwatim Project Development Agreement in 2006.[23]

[22] *Wuskwatim Project History*. Nisichawayasihk Cree Nation. 2021
[23] ibid

The agreement established the Wuskwatim Power Limited Partnership (WPLP) and included many provisions to ensure that NCN values and priorities were respected in the planning and construction process. For example, NCN traditional knowledge was used in the environmental assessment process and in the critical siting and design choices for the power station and construction operations.[24]

As a part of the agreement, Manitoba Hydro funded the opening of the Atoskiwin Training and Employment Center of Excellence, which trained over 300 NCN citizens. Hiring priority was also given to qualified NCN members, and all workers arriving at the jobsite were required to go through cross-cultural awareness workshops and counselling, and construction was conducted in a culturally appropriate manner, stopping anytime human remains or cultural materials were found.[25]

The Wuskwatim Power Limited Partnership is the only case reviewed that fully published the Project Development Agreement document and has a relatively well documented history of the negotiations and construction published on the NCN website. There is also a short documentary on the development of the relationship and the construction of the Wuskwatim Power station available free online. It is clearly a relationship that both parties are proud of.

It is worth noting that the arrangement of the board, which is comprised of 4 representatives from Manitoba Hydro and 2 representatives from the NCN, still puts Manitoba Hydro in a position of power in the partnership. The NCN own 33% of the power station, so the board seats reflect the division of ownership.

The Wuskwatim Limited Partnership is a groundbreaking partnership. It is the first equity partnership between a crown utility and a First Nation or Indigenous community in Canada and demonstrates the importance of forming a relationship grounded in trust and respect to create a successful project partnership.

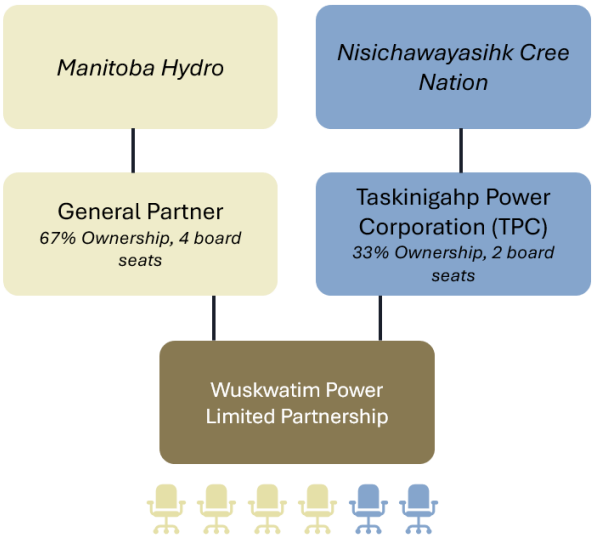



*Figure 1: Structure of Wuskwatim Limited Partnership*

Trust is built over time through demonstrated respect for the culture, values, and knowledge systems of Indigenous communities, and reparation for past harms. The onus is on the utility or developer to earn that trust. Clear pathways of communication, full transparency in data sharing and earnest and respectful engagement are all essential components to forming relationships grounded in trust.[26]

[24] *Wuskwatim Project History*. Nisichawayasihk Cree Nation. 2021
[25] ibid
[26] *Power Shift in Remote Indigenous Communities*. Pembina Institute. 2019

## Community Involvement

Partnerships with First Nations and Indigenous communities in renewable energy development consistently involve robust mechanisms of community involvement. Effective community engagement is often led by the First Nation or Indigenous partner, with funding provided through the project partnership. Indigenous community leadership, when properly resourced, are best positioned to engage their communities to understand needs, priorities, and build inclusive decision-making processes.

Utilities and developers can support community engagement by being fully transparent throughout the planning process. This includes financial and commercial data, projections, and business models, as well as energy and environmental data collected by the developer and or utility.[27]

By fully equipping the First Nation community with the relevant information to make informed decisions about their energy future, the utility partner can help build trust and project buy-in throughout the community.

Photo Source: pppcouncil.ca

### Fort McMurray West Transmission

| | |
|---|---|
| **Indigenous Partners:** | Athabasca Chipewyan First Nation, Bigstone Cree Nation, Gunn Metis Local 55, Miksew Cree First Nation, Paul First Nation, Sawridge First Nation, Sucker Creek First Nation |
| **Utility Partner:** | ATCO |
| **Project:** | 500 kV Transmission |
| **Location:** | Edmonton – Fort McMurray, Alberta |
| **Project cost:** | $1.6 billion |
| **Project year:** | 2019 |
| **Ownership Model:** | Equity Ownership |
| **Details:** | Seven Indigenous communities have a combined 40% ownership in the infrastructure |
| **Contract:** | 35 year Alberta Energy System Operator (AESO) contract |

The Fort McMurray West Transmission line, running from just west of Edmonton, Alberta, to Fort McMurray engaged with seven Indigenous communities, conducting over 3000 in person meetings over a period of 3 years to ensure they "understood the concerns and viewpoints of all constituents and integrated their feedback" into the planning process.[28]

[27] *Power Shift in Remote Indigenous Communities*. Pembina Institute. 2019
[28] *Alberta Powerline*. ATCO. 2021

## Lutsel K'e Dene Solar

| | |
|---|---|
| **Indigenous Partners:** | Lutsel K'e Dene First Nation |
| **Utility:** | Northwest Territories Power Corporation |
| **Project:** | 35 kW Solar |
| **Location:** | Lutsel K'e, NWT |
| **Project cost:** | $330,000 |
| **Project year:** | 2019 |
| **Ownership Model:** | Indigenous Owned |
| **Details:** | Unique PPA with Northwest Territories Power |

Photo source: Arctic Energy Alliance

The aforementioned Wuskwatim Generating Project employed extensive community consultation with months of public meetings and information translated into Cree to ensure all community members understood the project.[29]

In many cases, education about energy technologies and opportunities is an important vehicle for community engagement. The Lutsel K'e Dene Solar Installation in the Northwest Territories included education sessions with students grades 7-12 lead by the installers of the system. Lutsel K'e is a small community of 350 residents, and involvement in the project has created a sense of pride amongst the community members.[30]

In addition to holding community meetings and supporting participatory decision-making processes, community involvement often includes training and employment benefits. Four community members from Lutsel K'e participated in a five-day solar training course and two of those worked on the installation.[31]

Building technical and operations capacity is crucial for energy projects in partnership with remote Indigenous communities. Not only does temporary and ongoing employment in these projects represent a significant source of economic benefit to the community, training local residents for the project can reduce operations and maintenance burdens for the utility partner. In fact, it could be crucial to the project's success. Lack of local maintenance expertise is often cited as a key reason for failure of remote renewable energy projects.[32]

The Wuskwatim Project Development Agreement also included training and priority hiring for over 300 NCN citizens through the Hydro Northern Training and Employment Initiative and provided for the construction of the Atoskiwin Training Center. Training wasn't only limited to NCN members, as the PDA also included provisions for a Wuskwatim cultural awareness program. All employees coming to the jobsite to work on the project were required to do a cultural awareness orientation before starting work, to ensure that the values and culture of the NCN were respected throughout the construction of the project.[33] Having these strong protections for culture as well as the training and economic benefits of participating in the project helped to create support and buy in for the project and the partnership despite a history of mistreatment and lingering mistrust among community members.

[29] *Wuskwatim. A New Way Forward.* Manitoba Hydro. 2014
[30] *Solar PV Case Study: Lutsel K'e Dene First Nation.* Pembina Institute.
[31] ibid
[32] *Why renewable energy microgrids fail...* Duran, Sahinyazin. 2021
[33] *Wuskwatim Project History.* Nisichawayasihk Cree Nation. 2021

## Arrangements / Ownership models

There are no standardized ownership models for partnerships with Indigenous communities; the success of any project is firmly rooted in the strength of the relationship between the Indigenous community and the utility partner. Ownership structures are developed in response to a number of factors, including provincial regulatory frameworks, availability of funding, governance capacity of a Nation or community, and capacity of a utility partner to support an Indigenous partnership. There are 4 major categories of ownership models that developers, utilities, and Indigenous groups generally form to finance and operate renewable energy projects in Canada.

### Indigenous Ownership

In many projects, favorable funding conditions and the right access to developers can enable fully Indigenous-owned projects, such as the solar arrays at Lutsel K'e Dene First Nation and Skidegate on Haida Gwaii. As most First Nations face financial barriers that limit their ability to support major developments on their own, these projects are often on the smaller side and are often solar or run of river hydro projects.

Having full ownership of the project allows a First Nation or Indigenous community full control over the planning, operations, and profit of a renewable energy project. Chief Councillor Billy Yovanovich of the Skidegate Band Council said that this project "is one more step towards energy independence."[34] Full ownership of a renewable energy project not only offers the full economic benefit of a project but can help build community capacity and instill a sense of pride in the community members in the alignment of their energy technology and their worldview.

Indigenous ownership of energy projects is aligned with the principles of energy sovereignty and UNDRIP.

#### Skidegate Solar

| | |
|---|---|
| **Indigenous Group:** | Skidegate Band Council |
| **Installer:** | Spark Energy, Canadian Energy |
| **Utility:** | BC Hydro |
| **Project:** | 100kW Solar |
| **Location:** | Skidegate, BC |
| **Project year:** | 2017 |
| **Ownership Model:** | Indigenous Owned |
| **Details:** | Largest community owned solar project in Canada at the time |

*Photo source: https://www.haidagwaiiobserver.com/local-news/haida-gwaii-solar-projects-are-looking-up/*

There are many other examples of fully Indigenous owned renewable energy projects in Canada, such as Akamihk Energy Inc, and Fort Severn Solar in Alberta.[35]

[34] *Skidegate Band Council Solar Project…* Cartwright. 2017
[35] *About Us*. Akamihk Energy. 2019
*Remote First Nation completes solar project in northern Ontario*. Laskaris. 2021

### General Partnership: Indigenous Coalition

General partnerships split ownership evenly between or among partners.

Three Nations Energy Inc. (3NE) in Alberta is a corporation formed by two local First Nations and a local Metis association. 3NE is a general partnership created for the communities to jointly pursue renewable energy development opportunities. The central goal of the partnership is to establish greater energy sovereignty for its members, and to "demonstrate a successful model of 100% Indigenous owned clean energy development."[36]

3NE was founded based on community conversations in 2018 and is governed by a 6-person board of directors, with two members from each partner on the board. Each of the three partners own equal shares in the general partnership.

By joining together as a coalition to create a general partnership First Nations and Indigenous communities are able to support the development of much larger projects. The 3NE Solar Farm project is supported by a smaller ATCO owned solar farm and battery storage facility and the return on the investment is secured through a long-term power purchase agreement with ATCO. The project is expected to offset 25% of the diesel used to power these remote communities, about 800,000 liters per year.[37]

Photo source: 3ne.ca/3ne-solar-farm

#### Three Nations Energy

| | |
|---|---|
| **Indigenous Partners:** | Athabasca Chipewyan First Nation, Mikisew Cree First Nation, Fort Chipewyan Metis Association |
| **Utility:** | ATCO |
| **Project:** | 2.2 MW Solar |
| **Location:** | Northwestern Ontario |
| **Project cost:** | $7.76 million |
| **Project year:** | 2020 |
| **Ownership Model:** | General Partnership, Indigenous Coalition |
| **Details:** | Long term power purchase agreement with ATCO<br>Largest remote solar farm in Canada |

General partnerships such as 3NE often lead to further projects beyond a single development. 3NE describes itself as a "catalyst for collaboration" between the three partners and with the governments of Canada, Alberta, and the local regional municipality.[38] Beyond the solar farm, 3NE is pursuing programs in community energy planning, small scale residential solar deployment, wood fuel heating, energy efficiency, and sustainable food production.[39]

[36] *Goals and Philosophy*. Three Nations Energy. 2021
[37] *Three Nations Energy Solar Farm*. Three Nations Energy. 2021
[38] *About 3NE*. Three Nations Energy. 2021
[39] *Community Projects*. Three Nations Energy. 2021


Photo source: Apuiat.com

### Apuiat Wind Farm

| | |
|---|---|
| **Indigenous Partner:** | Innu Nation |
| **Developer:** | Boralex |
| **Utility:** | Hydro Quebec |
| **Project:** | 200 MW Wind |
| **Location:** | Côte-Nord, QB |
| **Project year:** | 2024 |
| **Ownership Model:** | General Partnership |
| **Details:** | All decisions taken jointly, ownership, profits split 50:50 |

**General Partnership: Indigenous – Developer**

Another common model is for an Indigenous community to pair up with a renewable energy developer and split the ownership of the project evenly between the two. In most cases, this means decisions are taken jointly and profits are split equally. The distribution of burdens for funding the project, construction, and operations and maintenance is negotiated on a case-by-case basis. Energy developed by the project is sold to a utility through a power purchase agreement with a fixed price and term. The Apuiat Wind Farm is a joint project between the Innu First Nation and Boralex, and all development will be carried out with respect for Innu values, preservation of flora and fauna, and traditional practices. The name Apuiat was chosen because it is the Innu-Aimun word for oar and represents moving forward in the same direction.[40]

These models offer Indigenous communities the opportunity to be in the driver seat on energy planning while still leveraging the capacity, expertise, and funding of private renewable energy developers. This can be critical in remote diesel reduction plans. For example, the Innavik Hydro project will cover 100% of the base energy load for the Inukjuak

### Innavik Hydro Project

| | |
|---|---|
| **Indigenous Partner:** | Pituvik Landholding Corporation |
| **Developer:** | Innergex Renewable Energy Inc. |
| **Utility:** | Hydro Quebec |
| **Project:** | 7.5 MW ROR Hydro |
| **Location:** | Inukjuak, QB |
| **Project Cost:** | $125 million |
| **Project year:** | 2024 |
| **Ownership Model:** | General Partnership |
| **Details:** | 40-year PPA |

Photo source: Innergex.com

[40] *About*. Apuiat. 2016

community and will replace diesel generation for electricity production.[41] Being partners on the project allows for the community to center their needs and values in the planning of the project. The Innavik project involves robust water quality monitoring and a focus on maintaining the fish habitat throughout construction and operation of the project. Despite the Pituvik Landholding Corporation taking on a significant debt to finance the project, the revenues guaranteed from the long-term power purchase agreement offer revenues in the tens of millions of dollars over the length of the PPA, which the Pituvik Land Holding Corporation will reinvest in the community.[42]

### Mesgi'g Ugju's'n Wind Project

| | |
|---|---|
| **Indigenous Partner:** | Mi'gmaq |
| **Developer:** | Innergex Renewable Energy |
| **Utility:** | Hydro Quebec |
| **Project:** | 150 MW Wind |
| **Location:** | Avignon Regional County Municipality, QB |
| **Year:** | 2016 |
| **Ownership:** | General Partnership |

Photo source: http://www.muwindfarm.com/gallery/#!

Many of the developers engaged in these 50:50 general partnerships with Indigenous communities have built a strong reputation for building and maintaining relationships grounded in trust and respect for community values and needs. Innergex has agreements with 35 Indigenous communities throughout Canada and cites "respecting the environment and balancing the best interests of the host communities" as central to the company's development strategy.[43]

The Mesgi'g Ugju's'n (MU) Wind Farm Limited Partnership is a partnership between the Mi gmaawai Mawiomi Secretariat (MMS), which represents three Mi'gmaq communities, and Innergex, where the 8-person board is split with 4 members each, and each party holding a 50% stake in the partnership. The project is expected to deliver $200 million in returns for the Mi'gmaq over a 20-year period and employ over 100 Mi'gmaq workers.[44]

McLean's Mountain Wind Farm on Manitoulin Island in Ontario is another project structured as a 50:50 partnership.[45] When financing and regulatory conditions permit such partnerships, they are quite effective and a popular model to build a strong and lasting relationship between a developer and a First Nation or Indigenous community.

### McLean's Mountain Wind Farm

| | |
|---|---|
| **Indigenous Partner:** | Mnidoo Mnising Power |
| **Developer:** | Northland Power Inc. |
| **Project:** | 60 MW Wind |
| **Location:** | Manitoulin Island, ON |
| **Project Cost:** | $175 million |
| **Project year:** | 2014 |
| **Ownership Model:** | General Partnership |

Photo source: https://www.manitoulin.com/mcleans-mountain-wind-farm-project-schedule/

[41] *Benefits*. Innavik Hydro. 2017
[42] *Project Team*. Innavik Hydro. 2017
[43] *Innavik Hydro: A project…* Innergex.
[44] *Mesgi'g Ugju's'n Partnership*. Mesgi'g Ugju's'n. 2016.
[45] *McLeans Mountain Wind Farm to be Powered by GE Turbines.* 2013

### Limited Partnership

Indigenous communities or their companies often join into limited partnerships with utility partners. This involves some pre-agreed upon distribution of ownership and responsibilities based on a foundational document negotiated before the project.

Limited partnerships are compatible with a wide range of ownership distribution, and the terms of each limited partnership can be adapted to the legal and regulatory conditions most favorable to development. Limited partnerships are often structured as companies created to help share liability and help define each party's responsibilities to the project. Limited partnerships are highly flexible models that can offer First Nations and Indigenous communities the opportunity to participate in the energy sector and shape the projects that are built on or around their territory.

#### Stirling Wind Project

| | |
|---|---|
| **Indigenous Partner:** | Paul First Nation |
| **Developer:** | Potentia Renewables Inc. |
| **Project:** | 139 MW Wind |
| **Location:** | Stirling, AB |
| **Project year:** | 2023 |
| **Ownership Model:** | Limited Partnership |
| **Details:** | Paul First Nation Renewable Energy Limited Partnership will have a minority stake in SRELP. |

The Stirling Wind Project, outside the village of Stirling in Alberta, founded the Sterling Renewable Energy Limited Partnership (SRELP), which is a special purpose entity that is a partnership between the Paul First Nation Renewable Energy LP and Potentia Renewables Inc, a subsidiary of the Power Corporation of Canada.[46]

Limited partnerships are often created to fund and manage projects between Indigenous partners and utilities or developers, however they are often used by First Nations and Indigenous communities to create coalitions among each other to maximize the development opportunities.


Photo source: sterlingwind.com

[46] *About the Stirling Wind Project*. Stirling Renewable Energy LP. 2020
*Stirling Wind Project Spring 2021 Newsletter*. Stirling Renewable Energy LP. 2021

### Limited Partnerships and Indigenous Coalitions

The Wataynikineyap (Watay) Power transmission line project is owned by a coalition of 24 remote Indigenous communities in Northwestern Ontario and is structured as a Limited partnership with FortisOntario as a minority owner.[47]

Watay Power was born in 2008 when chiefs of 13 First Nations in Northwest Ontario mandated a steering committee to investigate the establishment of an Indigenous owned transmission company. In the following 11 years, 11 other First Nations would join the partnership. Consultants found a "net present value of 1.15 billion in savings over 40 years for building and operating a transmission system" instead of continuing to use diesel generators.[48]

The coalition structure of the partnership, shown on the following page, allows for a clear distribution of responsibilities with project management services being provided by the Wataynikaneyap Power Project Manager Inc., which is wholly owned by FortisOntario, and services such as "community engagement, community readiness, education & training, business, readiness, stakeholder engagement, communications, and capacity building" handled by Opiikapawiin Services LP, another limited partnership corporation of the 24 First Nations.[49]

Watay Power represents an innovative partnership two major reasons. Firstly, it is a massive project with the highest budget of any case in this report. Accordingly, it is the

#### Wataynikaneyap Power (Watay Power)

| | |
|---|---|
| **Indigenous Partners:** | Bearskin Lake FN, Deer Lake FN, Keewayiwin FN, Kitchenuhmaykoosib Inninuwug, Lac Seul, Cat Lake FN, Kasabonika Lake FN, Kingfisher Lake FN, Lac des Mille Lacs, McDowell Lake FN, Muskrat Dam, North Spirit Lake FN, Poplar Hill FN, Sandy Lake FN, Wabigoon Lake, Wawakapewin FN, Mishkeegogamang, North Caribou Lake FN, Pikangikum, Sachigo Lake FN, Slate Falls, Wapekeka FN, Wunnumin Lake FN, Ojibway Nation of Saugeen |
| **Utility Partner:** | FortisOntario |
| **Project:** | 230, 155, 44 kV Transmission |
| **Location:** | Northwestern Ontario |
| **Project cost:** | $1.83 billion |
| **Project year:** | 2019 |
| **Ownership Model:** | Limited Partnership, Indigenous Coalition |
| **Details:** | 24 Indigenous communities form the 24 First Nations Limited Partnership (FNLP) - owns 51% of infrastructure<br>FortisOntario / Fortis Inc. owns 49% |

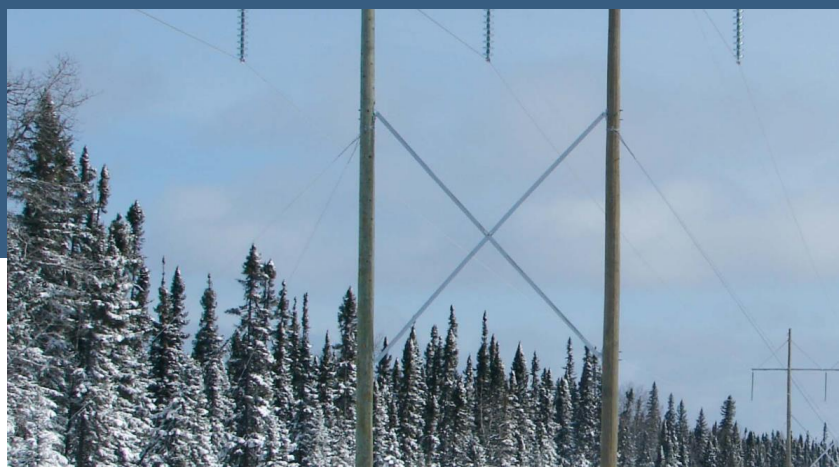


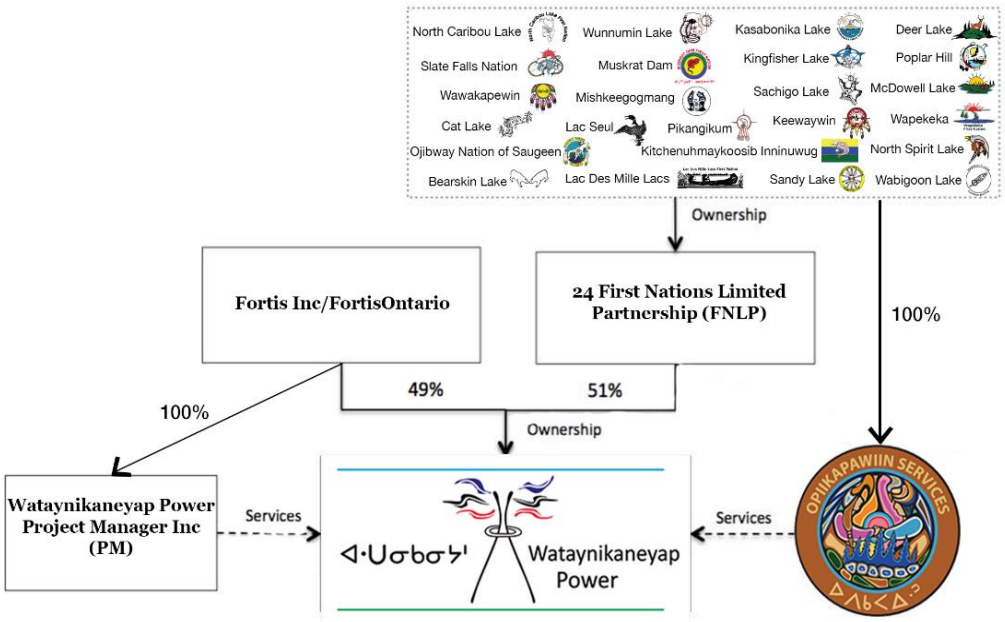
Photo source: https://www.wataypower.ca/

[47] *The Partnership*. Wataynikaneyap Transmission Project. 2019
[48] *Purpose & History*. Wataynikaneyap Transmission Project. 2019
[49] *The Partnership*. Wataynikaneyap Transmission Project. 2019
*Opiikapawiin Services.* Opiikapawiin Services LP.

largest Indigenous coalition of any project surveyed, quite possibly the largest Indigenous coalition in the Canadian energy sector.

It is also remarkable because in spite of its size and ambitious scope, it is an Indigenous majority owned project and was founded with the understanding that the 24 First Nations Limited Partnership can increase their ownership up to 100% over time.[50]

Current plans for transmission line will only connect 17 of these communities to the Ontario Power grid; seven of the communities are participating to strengthen the coalition and benefit from ownership of the infrastructure.




Watay Power exemplifies the importance of Indigenous-owned energy infrastructure and the opportunities for First Nations and Indigenous communities to advance their energy independence working as a coalition and in partnership with utilities.

*Figure 1:* Limited Partnership Structure of Wataynikaneyap Power
Source: https://www.wataypower.ca/ownership/partnership

### Equity Ownership

Another model of partnership is for First Nations or Indigenous communities to purchase equity ownership in the project, or for the project to be developed with the understanding that the First Nation partner will be part owner, generally stemming from a settlement. This is the simplest model with the Indigenous partner acting as a shareholder in the project and sharing proportionally in the returns but not necessarily involved in the planning or operation of the project. Often such partnerships are set up as limited partnerships; there is not really a clear delineation of the difference between equity ownership and limited partnership. For the purposes of this report, equity ownership is defined as the Indigenous partner owning 25% or less in a project.

[50] *The Partnership*. Wataynikaneyap Transmission Project. 2019

Photo Source https://www.snfuture.com/projects/nanticoke-solar-lp/

### Nanticoke Solar LP

| | |
|---|---|
| **Indigenous Partner:** | Six Nations of the Grand River Development Corporation (SNGRDC) |
| **Utility:** | Ontario Power Generation |
| **Project:** | 44 MW Solar |
| **Location:** | Nanticoke, ON |
| **Project year:** | 2019 |
| **Ownership Model:** | Equity Ownership |
| **Details:** | Six Nations Future (10%)<br>Ontario Power Generation (90%) |

Equity ownership is highly adaptable to the funding capacity of the Indigenous partner. In 2016 the sizable 350 MW, $800 million Rivière-du-Moulin wind farm majority owned by EDF Renewables, sold shares of ownership to local municipalities (5%), the Innu of Mashteuiatsh and Essipit First Nations (5)%, and the Huron Wendat Nation (5%).[51]

Another example of equity ownership is the Nanticoke Solar Limited Partnership, a massive solar farm on the site of the former Nanticoke coal plant, the largest coal-fired power plant and one of the largest air polluters in North America at its peak. The Six Nations of the Grand River Development Corporation (SNGRDC) represents the six nations of the Iroquois confederation living together at the Six Nations Reserve, the largest reserve in North America. SNGRDC invested in the Nanticoke Solar plant for a 10% equity stake in the project. Equity ownership in Nanticoke Solar is expected to generate at least $7 million in revenue for SNGRDC, and Six Nations representatives participated in the environmental assessment and community engagement for the project.[52]

Equity Ownership allows First Nations and Indigenous Communities to participate in economic development and reap benefits of ownership of energy infrastructure. Sometimes these partnerships are brought about by investments by First Nations or Indigenous communities. In other cases, partnerships are developed stemming from terms of grievance settlements for past harms, such as with the Lac Seul Hydro power station, known as Obishikokaang Waasiganikewigamig, where the Lac Seul First Nation has a 25% stake in the station, while Ontario Power Generation owns the remaining 75%.[53]

[51] *EDF EN Canada sells undivided Interests of the Rivière-du-Moulin Wind project*. Froese. 2016
[52] *Nanticoke Solar LP*. Six Nations Future. 2022
[53] *Lac Seul Hydroelectric Power Plant, Ear Falls, Ontario*. Renewable Technology. 2022

## Distribution of Responsibilities, Liabilities, Profits

Each ownership model has different distributions of responsibilities, liabilities, and profits with some flexibility within each type of ownership model. It is most important that partnerships are established with a clear definition of the distribution of responsibilities, liabilities, and profits, or a definitive pathway and timeline for negotiating those distributions.

### Responsibilities

Most often responsibilities for construction, operation and maintenance of the project falls on the utility partner. This would be expected, as it falls within the utility's business and technical expertise to build and manage these projects. Responsibilities for site planning, environmental assessment (EA), and ongoing environmental evaluation are often shared between the Indigenous partner and the utility partner.

For example, in the case of the Wuskwatim Generating Station, traditional ecological knowledge and community values played a major role in the EA phase and contributed to key planning decisions.[54] While the site for the Apuiat project was chosen for its optimal generating capacity, the Innu provided important input into the construction of the access road to minimize disturbances to the local environment.[55] In the Wataynikaneyap Power transmission line planning, Indigenous knowledge contributed to critical routing decisions to minimize and contain ecological impact.[56]

Depending on the partnership, responsibility for community engagement can fall either with the utility partner or the Indigenous partner. Often the Indigenous partner, already having the trust of their community, can lead much more effective engagement sessions than the utility partner while the relationship is being built.

### Liabilities

This report does not investigate the specifics of liability distribution as it is generally dependent on the jurisdiction, but the cases reviewed did highlight the importance of clearly defined liability distribution in any partnership agreement. In many cases, both the Utility and the Indigenous partners created an LLC or corporation to handle the liability associated with the project and separate it from normal operations.

In some cases, such as the Innavik Hydro Project, debt financing is used to support a First Nation's ability to advance financing on the project.[57] In these cases, it is important that debt financing is covered by a guaranteed stream of revenue, such as a long-term power purchase agreement with a fair purchase price. This ensures that changing financial or economic conditions do not strand the Indigenous partner with unsustainable levels of debt and an unprofitable project.

[54] *Wuskwatim. A New Way Forward.* Manitoba Hydro. 2014
[55] *About.* Apuiat. 2016
[56] *Purpose & History.* Wataynikaneyap Transmission Project. 2019
[57] *A 50-50 Partnership.* Innavik Hydro. 2020

### Profits

Profits are most often distributed along lines of ownership. General partnerships that split ownership and decisions 50:50 also tend to split profits 50:50. In other cases, such as with equity ownership or limited partnerships, profit is divided along lines of ownership. A key driver of robust and effective financial planning in these partnerships is Power Purchase Agreements (PPAs) with utilities or distributors. Long term power or electricity purchase agreements allow for partnerships to be built with an expected revenue stream, and for the distribution of profits to be well understood and planned for throughout the development of the partnership and the project.

## Funding and Regulatory Conditions

### Funding

Funding sources for many of the cases surveyed were not public. When the information was available, projects leveraged available federal and provincial initiatives to support Indigenous energy development and diesel reduction, such as the Clean Energy for Rural and Remote Communities (CERRC) program, the Northern Responsible Energy Approach for Community Heat and Electricity (REACHE) program, and Infrastructure Canada funding at the federal level. Provincial support for projects came in varying forms, from block grants to subsidies.[58]

All the cases surveyed took advantage of whatever funding opportunities were available. As a result, funding for projects often was a patchwork of Federal and Provincial grants, private investments, both from utilities or developers and third-party investors, and Indigenous investments.

Federal programs played a major role in funding many of the projects. For example, grants from programs like the Clean Energy for Rural and Remote Communities program through Natural Resources Canada helped to fund the Three Nations Energy Solar Farm. In addition, Alberta provided provincial funding as part of its 2016 energy planning and budgeting process.[59]

Beyond funding, there are many federal and provincial policies that play a significant role in either facilitating or hindering these projects. Province-wide energy planning policies that reserve quotas for Indigenous-led energy development, such as those used in Quebec, put Indigenous communities in the driver seat and paved the way for partnerships such as the Apuiat Wind Farm and the Mesgi'g Ugjus'n Wind project.[60]

[58] *Power Shift in Remote Indigenous Communities.* Pembina Institute. 2019
[59] *NRCAN News Release.* Three Nations Energy. 2019
[60] *Wind energy projects in Québec.* Ministère de l'Énergie et des Ressources naturelles. 2016

### Power Procurement Policies

Many of the successful projects were able to take advantage of regulatory conditions that enable private or independent power producers (IPPs) and that support power purchase agreements (PPAs). An analysis by the Pembina Institute on reducing diesel use in remote communities cites clear, transparent, and well documented power procurement policies as critical for the success of Indigenous led or partnered projects.[61]

It is important that power procurement policies offer rates that reflect the true cost of diesel for remote communities and not just the marginal cost. Cost benefits analyses that compare the cost of energy for a new renewable energy project in a remote community may undersell the economic potential of renewable energy by only considering the marginal cost of diesel fuel. The marginal cost of diesel does not include the costs of operation and maintenance or capital costs of diesel generation infrastructure, nor does it include the distorting effects of fuel subsidies, or the harmful environmental, health and social costs of continuing to burn diesel fuel in remote communities.[62]

Many of the cases highlighted in this report leverage IPP opportunities and secure returns for the profit through long term PPAs. In Alberta, the electricity market is deregulated, so utilities do not have a specific IPP policy, and all generators are considered IPPs.[63] This has allowed projects like the Fort McMurray West transmission line and the 3NE solar farm to register as producers with the Alberta Electricity System Operator (AESO) and negotiate long term power purchase agreements directly with ATCO, the main operating utility in Northern Alberta.

Most other provinces have vertically integrated electricity systems dominated by crown corporations, such as B.C. Hydro, Manitoba Hydro, Hydro Quebec, and SaskPower.[64] While there are clear on-grid benefits for publicly owned utilities, specific policies are often required to enable partnerships with remote First Nations and Indigenous communities, such as allowing Indigenous-led projects to operate as IPPs and sell to the grid or microgrid, offering PPA rates comparable to the real avoided cost of diesel fuel, and freely sharing historical energy use data with project proponents.[65]

[61] *Power Shift in Remote Indigenous Communities.* Pembina Institute. 2019
[62] *The True Cost of Energy In Remote Communities.* Pembina Institute 2019.
[63] Ibid.
[64] *Electricity regulation in Canada: overview*. Christian & Shipley. 2020
[65] *Power Shift in Remote Indigenous Communities.* Pembina Institute. 2019

## Evaluating Ownership Models

The different ownership models presented in this report have been developed in response to a wide range of financial and regulatory conditions. The most successful partnerships are united by a common purpose: to increase First Nations' and Indigenous communities' participation and agency in the energy sector. Thus, the choice of ownership model is made based on both the nature of the relationship between the First Nation or Indigenous community and the utility partner and the financial, economic, and regulatory conditions within which the project is being built.

The long history of racism and exclusion of Indigenous peoples in Canada's energy sector must form a backdrop for future partnerships rooted in reconciliation of past harms. In some cases, grievance settlements shape and or mandate Indigenous partnerships, such as with the Wuskwatim Power Limited Partnership, the Lac Seul Hydro station. In most cases, however, this means proceeding in a way that does not continue to propagate the harmful status quo. This can be done by structuring projects and partnerships so that First Nations and Indigenous communities are in the driver seat of their own energy planning and development.

Partnerships must be rooted in trust and respect. The onus is on the utility partner to accommodate the needs of the First Nation or Indigenous partner in how to direct energy development, and the partnership needs to be rooted in aligning the First Nation's energy aspirations with the available possibilities for financing and regulatory approval to get renewable energy projects built.

Many of the important factors in determining the success or failure of a project are not inherent to the ownership model but doing them well in whatever ownership model will help maximize the chances of a successful project. They are as follows:

- Clarity of ownership structure and associated documentation
- Clear delineation of responsibilities, timelines, and financial obligations
- Community buy-in, both from project proponents and the wider First Nations or Indigenous community
- Respect for Indigenous cultural values and traditional knowledge, and integration of these values and knowledge into the project planning

There are several important trends that emerge from the case study that can help to clarify which ownership models are most compatible with advancing energy sovereignty for Indigenous communities. These are the size and cost of the project, how profits are distributed, the level of funding burden on the First Nation or Indigenous Community, and whether or not the First Nation or Indigenous community is empowered to make decisions in the planning and community engagement phases of the project. These and an overall compatibility with the principles of UNDRIP and reconciliation are evaluated at a high level in **Table 1**.

**Trends among ownership models, relative performance in advancing Indigenous Energy Sovereignty**

The following table conveys these trends with respect to the different project ownership models. The table has cells colored advancing the relative strength or weakness of a given ownership model in advancing energy sovereignty for Indigenous communities, with green cells representing relatively strong performance and red cells representing relatively weak performance, and yellow representing a middle ground.

| Ownership Model | Project Size / Cost Implications | Profit Distribution | Funding burden on Indigenous partner | Indigenous led planning | Indigenous led community engagement | Compatibility with UNDRIP and Reconciliation |
|---|---|---|---|---|---|---|
| **Utility Owned** | Small - Large | Utility | None | Limited to no influence | Limited to no influence | May not advance energy independence or reconcile past harms |
| **Equity Ownership** | Small - Large | Split along lines of ownership | Relatively low | Limited to no influence | Limited to no influence | Source of revenue and minor involvement in the project. |
| **Limited Partnership: Indigenous Minority** | Small - Large | Split along lines of ownership | Low-high | Limited to high influence | Limited to high influence | Source of revenue and involvement in the project. |
| **General Partnership** | Small - Large | Split evenly | Relatively high | High influence | High influence | Indigenous partner empowered to advance energy goals |
| **Limited Partnership: Indigenous Majority** | Generally limited to smaller projects except in cases of Indigenous colations | Split along lines of ownership | Relatively high | Full control | Full control | Indigenous partner empowered to advance energy goals |
| **Indigenous Owned** | Generally limited to smaller projects | Profits to Indigenous partner | High | Full control | Full control | Indigenous partner empowered to advance energy goals |

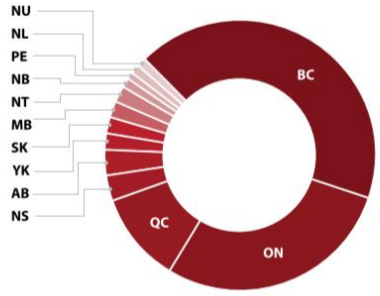
*Table 1: Trends in Ownership Models: evaluated based on advancing energy sovereignty for First Nations and Indigenous Communities*

## Conclusion

Throughout Canada, First Nations and Indigenous communities are entering into partnerships with developers and utilities to take control of their energy futures and become active players in the Canadian renewable energy industry. This report has offered a scan of case studies in 6 different provinces, highlighting particular cases as exemplifying different ownership arrangements to facilitate the most effective partnerships. The cases surveyed do not represent a complete picture of all partnerships between Indigenous communities and utilities or developers throughout Canada. The Indigenous Clean Energy (ICE) network cites 197 medium-to-large renewable energy projects in operations or in the final stages of construction, and over 2,000 small or micro renewable energy systems in place.

The full case list includes a non-representative sample of the distribution within Canada. Since this report was prepared for the B.C Ministry of Mines, Energy, and Low Carbon Innovation, projects In BC were largely not reviewed, even though B.C. does lead Canada on Indigenous involvement in renewable energy projects.

Provincial & Territorial Distribution of Medium-Large Indigenous Renewable Energy Projects




Source: ICE Accelerating Transition 2020

This report chronicles and categorizes different levels of Indigenous ownership through cases exemplifying different ownership models. While certain trends can be used to categorize the project ownership models, many of the projects owe their success and their ownership model to a strong, long-lasting, trusting relationship between the utility partner and the Indigenous partner. If the utility partner and the Indigenous partner can come together to support Indigenous led energy planning and community engagement, the proper ownership model will emerge based on the context, such as the regulatory conditions, the capacity of the Nation, the availability of funding.

Ultimately, the onus is on the utility to commit to finding innovative ways of operating to support Indigenous self-determination in the energy sector. The utility partner must acknowledge and make amends for past harms done to Indigenous communities, both in direct dealing and indirectly through the legacy of colonialism, racism, and residential schools, and commit to working towards finding pathways to support and enable Indigenous leadership, ownership, and control of their own energy sources. Building partnerships based on shared ownership models that put the First Nation or Indigenous community as equal partners or in charge of a project, is a powerful and important strategy for utilities tasked with aligning Canada's energy sector to UNDRIP and advancing reconciliation, in addition to reducing reliance on diesel fuel for electricity generation in remote communities.

Note: A table containing all cases evaluated in this study is included at the end of this report.

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## Table of Case Studies

| Project Name | Province | Category | Size | Project Cost | Indigenous / First Nation Partner | Utility / Developer | Ownership structure | Status of Project | Remote | Project Year |
|---|---|---|---|---|---|---|---|---|---|---|
| Fort McMurray West Transmission Line | AB | Transmission | 500kV | $1.6 billion | 7 Area First Nations / Indigenous Communities | ATCO | Equity Ownership | Operational | y | 2019 |
| 3NE Solar Farm | AB | Solar | 2.2MW | $7.76 million | Three Nations Energy GP Inc. | ATCO | Limited Partnership | Operational | y | 2020 |
| Oldman River Hydro: | AB | Hydro | 32MW | $34 million | Piikani Tsi Nii Ka Sin (Piikani Nation) | ATCO | Equity Ownership | operational | n | 1991, 2003 |
| Akamihk Energy Inc. | AB | Solar | 4.6 MW | $12 million | Montana First Nation | Akahmik, Green Arrow Energy | Indigenous Owned | | n | |
| Stirling Wind Project | AB | Solar | 113 MW | | Paul First Nation Renewable Energy LP | Potentia Renewables Inc. | Limited Partnership | Planning | n | 2023 |
| Skidegate - Haida Gwaii Solar | BC | Solar | 100 kW | | Haida Nation | BC Hydro | Indigenous Owned | Operational | y | |
| Wuskwatim Generating Project | MB | Hydro | 200MW | $1.3 billion | Nisichawayasihk Cree Nation | Manitoba Hydro | Limited Partnership | Operational | n | 2012 |
| Lutsel K'e Dene | NT | Solar | 35 kW | $330,000 | Lutsel K'e Dene First Nation | Northwest Territories Power Corporation | Indigenous Owned | Operational | y | 2015 |
| Wataynikaneyap Power | ON | Transmission | 230kV, 115 kV and 44 kV | $1.83 billion | 24 Area First Nations | FortisOntario | Limited Partnership | In construction | y | 2016- |
| Lac Seul Hydro Obishikokaang Waasiganikewigamig | ON | Hydro | 12 MW | $47 million | Lac Seul First Nation | Ontario Power Generation | Equity Ownership | Operational | n | 2009 |
| Fort Severn Solar | ON | Solar | 300kW | $1.8 million | | Hedgehog Technologies | Indigenous Owned | | y | 2021 |
| Grand Bend Wind Project | ON | Wind | 100 MW | $384 million | Aamjiwnaang First Nation, Walpole Island First Nation | Northland Power | General Partnership | | n | |
| Bow Lake Wind Facility | ON | Wind | 60 MW | | Batchewana First Nation | Blue Earth Renewables | Limited Partnership | Operational | n | 2015 |
| Mclean's Mountain Wind Farm | ON | Wind | 60 MW | $175 million | United Chiefs and Councils of Mnidoo Mnising | Northland Power / GE Renewable Energy | General Partnership | Operational | n | 2014 |
| Yellow Falls | ON | Hydro | 16 MW | | Taykwa Tagamou Nation, Mattagami First Nation | Boralex | | | n | |
| Niagara Region Wind Farm | ON | Wind | 230 MW | | Six Nations of the Grand River Development Corporation | Boralex | General Partnership | Operational | n | 2016 |
| Nanticoke Solar LP | ON | Solar | 44 MW | | Six Nations of the Grand River Development Corporation | Ontario Power Generation | Limited Partnership | Operational | n | 2019 |
| Grand Renewable Energy Park | ON | Wind, Solar | 149 MW, 100 MW | | Six Nations of the Grand River Development Corporation | Samsung Renewable Energy Inc. | Limited Partnership | | n | 2014 |
| Innavik Hydro Project in Inukjuak, Quebec | QB | ROR Hydro | 7.5 MW | $125 million | Pituvik Landholding Corporation | Innergex | General Partnership | Planning | y | 2024 |
| Apuiat Wind Farm | QB | Wind | 200 MW | - | Innu Nation | Hydro Quebec | General Partnership | Planning | n | 2024 |
| Rivière-du-Moulin | QB | Wind | 350 MW | $800 Million | Huron-Wendat Nation | EDF Renewables | Equity Ownership | Operational | n | |
| Mesgi'g Ugju's'n Wind Farm | QB | Wind | 150 MW | | Mi'gmaq | Innergex | General Partnership | Operational | n | |

*Table 2: Case Study Directory and Overview*