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**RECONCILIATION AND SELF-DETERMINATION
THROUGH RENEWABLE ENERGY? THE PERSPECTIVE
OF ECONOMIC DEVELOPMENT CORPORATIONS OF
GRID-CONNECTED FIRST NATIONS COMMUNITIES**

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Abstract

Indigenous ownership in renewable energy projects has the ability to generate local economic development and contribute to the low-carbon energy transition. These can address the economic and climate crises we are currently experiencing. This research sought to understand how renewable energy can contribute to reconciliation and self-determination for grid-connected First Nation communities in Canada. This topic was explored through a literature review, analysis of an existing dataset of Indigenous renewable energy projects in Canada, a survey and interviews with employees of First Nations economic development corporations. The findings indicate that partnerships and joint ventures between First Nation and non-Indigenous partners can be considered gestures of reconciliation because they honour what some participants called “the true intent of the treaties” and re-build the nation-to-nation relationship while generating own-source revenue. Reconciliation and self-determination mean decentralizing decision making over energy provision from the provincial government to the First Nation and increased energy security. For all energy and development plans by the government and industry, First Nations need to be included respectfully from the beginning. Policies that support meaningful First Nations ownership and control in renewable energy projects should be implemented and this can be achieved through the enhancement of policies and programs that have encouraged First Nations equity ownership and control of renewable energy projects on their traditional territories.

1 Introduction

Canada, along with the rest of the world, is experiencing multiple crises at the moment that need urgent attention. The novel COVID-19 virus has spread to almost every province and territory in Canada, including some First Nation communities (Government of Canada, 2020d, 2020c). It has already claimed the lives of almost 10,000 people in Canada and many regions are currently experiencing a second wave (Government of Canada, 2020d). This pandemic has triggered lockdown and physical distancing measures across the entire country, causing an economic disruption unlike anything seen in recent history (The Conference Board of Canada, 2020). On top of these health and economic crises that have deeply disrupted our way of life, the climate crisis has been looming and has already impacted communities in Canada, especially the Inuit in the Arctic (Nunavut Climate Change Centre, n.d.). Signatories have less than 8 years to meet the Paris Agreement targets until irreversible damage is made due to global warming (Allen et al., 2018). Indigenous people are more vulnerable to these triple crises of health, economy and environment, and have already experienced the effects. Therefore, more attention should be focused on Indigenous people, communities, and businesses in the government’s effort to a green economic post-COVID recovery.

Greater Indigenous ownership and control of renewable energy projects are one way to address the economic and climate crises in the post-COVID green economic recovery while contributing to reconciliation and self-determination. The low-carbon energy transition calls for greater generation and consumption of renewable energy (Greenblatt et al., 2017). Capturing the abundance of renewable energy will alter landscapes (Pasqualetti, 2012). Since renewable energy is more geographically decentralized (MacArthur et al., 2020), this also means that its development will take place on or near Indigenous traditional territories and communities (Hoicka, Savic, and Campney, forthcoming).

Generally, Indigenous Peoples' experiences and interactions with natural resource industries, including renewable energy, have infringed on Indigenous rights to the land, human rights, and have caused immense negative health and environmental outcomes (Carpenter and Jampolsky, 2015). Indigenous and non-Indigenous scholars suggest that these harmful impacts can be avoided during the low-carbon energy transition by recognizing Indigenous rights and jurisdiction to land which is respected through free, prior and informed consent from the Indigenous rightsholder for these projects to proceed (King and Pasternak, 2019; Stefanelli et al., 2018) and through Indigenous ownership and control of renewable energy projects on their land (Hoicka, Savic, Campney, forthcoming; K. Scott, 2020; Smith and Scott, 2018). Common motivations for Indigenous communities to pursue renewable energy projects are economic development, economic self-sufficiency, asserting autonomy and self-determination. and environmental impacts (Bargh, 2010; Brookshire and Kaza, 2013; Lipp and Bale, 2018; Rezaei and Dowlatabadi, 2016; Sanders, 2017; Smith and Scott, 2018; Stefanelli et al., 2018) There are, however, many barriers, the most common being a lack of internal capacity, such as understanding the regulatory process for renewable energy development, lack of financial capital, lack of supportive policies and laws, and mistrust of government and developers (Jones and Necefer, 2016; Krupa, 2012b; Rakshit et al., 2018). In recent years, more research has paid attention to how renewable energy can contribute to reconciliation and self-determination (Hoicka, Savic, Campney, forthcoming; Krupa, 2012a; Sanders, 2017; K. Scott, 2020; Smith and Scott, 2018; Stefanelli et al., 2018). Generally speaking, reconciliation is about re-building relationships between Indigenous and settler people, although their views on what that means may differ (McGregor, 2019; Truth and Reconciliation Commission of Canada (TRC), 2015b). Self-determination seeks to reclaim Indigenous People's inherent right to govern themselves and their land that has been taken from them through settler colonialism (TRC, 2015b) and is affirmed through the United Nations Declaration on the Rights of Indigenous People (UNDRIP) and through the enforcement of free, prior and informed consent by Indigenous people on their traditional land (United Nations General Assembly, 2008). Funding for Indigenous communities comes from a combination of the federal government and own-source revenue (Bains and Ishkanian, 2016). The main challenges with government funding for Indigenous communities is that it reinforces a paternalistic, "top-down welfarism" type of governance structure (Coates and Speer, 2016, p. 3) and the funding is often not enough to meet the community's needs. To deal with the challenges that this structure creates, many Indigenous communities are seeking economic development opportunities to create own-source revenue, which can include the generation of business income (Bains and Ishkanian, 2016). Economic development from Indigenous partnership or ownership in renewable energy is viewed as a pathway to self-sufficiency, creation of jobs and revenue for the community, and reducing community's dependence on colonial institutions is an important motivator (Bargh, 2010; Lipp and Bale, 2018; Rezaei and Dowlatabadi, 2016).

Within this context, the establishment of Indigenous economic development corporations (EDCs) is an emerging trend for Indigenous communities across Canada. EDCs are considered "the economic and business development arm of a First Nations, Métis or Inuit government, and are a major economic driver in Aboriginal communities" (Canadian Council for Aboriginal Business (CCAB), 2015, p. 3). There are 686 Indigenous communities across Canada (Assembly of First Nations, n.d.; Government of Alberta, 2020; Government of Canada, 2020a; Kanatami, 2020), and it is estimated there are at least 294 EDCs across Canada (CCAB, 2020). EDCs hold a

unique perspective as a community owned corporation that focuses on generating business and managing partnerships on behalf of the community members, with different governance options available to them. This study seeks to bring further understanding, from the perspective of EDCs involved in renewable energy projects, in addressing the following question: *how do renewable energy projects of Indigenous communities address reconciliation and self-determination?* This research was conducted in collaboration with the Canadian Council for Aboriginal Business (CCAB), an Indigenous-led not-for-profit which seeks to promote, strengthen and enhance business relationships and opportunities between Indigenous and non-Indigenous businesses.

Although much of the literature on Indigenous renewable energy in Canada have focused on off-grid Indigenous communities, in part because of their acute challenges, the majority of Indigenous communities in Canada are connected to the main grid. Of the 634 First Nations (Assembly of First Nations, n.d.), 53 Inuit (Government of Canada, 2019a) and 8 Métis (Government of Alberta, 2020) communities, there are approximately 544 grid connected Indigenous communities in Canada (Government of Alberta, 2020; Government of Canada, 2020a; Kanatami, 2020; Natural Resources Canada, 2018). In this study, grid connected communities are defined as communities that are connected to either the North American, Yukon or Northwest Territories power grids. Due to the likelihood of different motivations and needs related to renewable energy, as well as the previous lack of focus on these communities, the study focuses on grid connected communities.

To understand how renewable energy can contribute to reconciliation and self-determination for grid-connected communities, it is imperative to understand the ownership, relevant governance structures, and benefits from the renewable energy projects they participate in. A mixed-methods approach was employed that combined analysis of a pre-existing dataset of renewable energy projects associated with Indigenous communities (Hoicka, Savic, Campney, forthcoming), with additional desk research, followed by an online survey and telephone interviews with employees of Indigenous EDCs that were found in communities affiliated with renewable energy projects. This study centers Indigenous voices and perspectives as much as possible.

2 Literature and background

2.1 Terminology

The three recognized groups of Indigenous Peoples in Canada are First Nations, Inuit and Métis (Government of Canada, 2018b). Each group has its unique languages, cultures, traditions, and histories (Government of Canada, 2018b). The term ‘Aboriginal’ is written in the Canadian Constitution and is therefore most often used when referring to Constitutional Aboriginal rights, titles of organizations or reports, or in direct quotes. The terms ‘Indigenous’ and ‘Aboriginal’ are used to describe all three groups, however the term Indigenous is more commonly used and will be used throughout this paper unless referring specifically to either First Nations, Inuit, or Métis communities.

2.2 Energy development and environmental injustices

Renewable energy has not been inherently positive for Indigenous communities in what is now called Canada. Indigenous Peoples have been negatively affected by extractive and resource development economies, including renewable energy development, throughout the history of

colonization. Lianne Leddy, an Anishinaabe scholar, (2017) states that settlers have been extracting from Indigenous people since they arrived to what is now called Canada. Anishinaabe activist and writer Gilbert Oskaboose condenses the history of settler resource extractivism as follows: “First the white men came and trapped all the mink and otter and beaver, then they came back for the trees and all we had left were the rocks. Then the s.o.b.’s came back for the rocks [referring to uranium mining]” (Leddy, 2017, p. 91).

The energy and resource development industry has perpetuated colonialism by displacing Indigenous Peoples from their land through countless environmental injustices. Renewable energy, specifically large-scale hydroelectricity, and ‘clean’ energy, such as uranium mining for nuclear, have violated Indigenous people’s rights to free, prior and informed consent to development on their traditional territories or near their communities (Amnesty International, 2016; Perkel, 2020) and caused other physical and social damages such as flooding of sacred sites, destruction of the environment, and forced relocation of families (Lorinc, 2016; Stinson, 2016). Some examples include large-scale hydro projects like Muskrat Falls (MacArthur et al., 2020), the Grand Rapids dam in northern Manitoba (Brake and Brandson, 2018), and toxic, nuclear waste associated with uranium mining and consumption in Saskatchewan (Committee for Future Generations, 2016) and Ontario (Perkel, 2020). These energy and resource development projects have or are projected to have devastating environmental, health and social consequences on or nearby Indigenous communities.

The history of energy development and Indigenous people in Canada can be divided into three phases in terms of levels of Indigenous participation in energy development projects. Until roughly 45 years ago, energy developers would never consult with Indigenous rightsholders of the land they were developing on (Coates, 2016). This was because there was no legal or political system that the Canadian government recognized that required governments or corporations to consult with Indigenous communities (Coates, 2016). Some examples of the catastrophic impact Indigenous Peoples at the time experienced in Manitoba, Labrador, and Ontario suggest that rivers and land were flooded by hydro dams without notice, destroying their traditional camps, canoes, and burial sites (Stinson, 2016), traditional economies were decimated, many communities plunged into poverty, and “hundreds of families” were displaced (Lorinc, 2016). Indigenous communities throughout the decades experienced negative environmental, cultural, and health impacts from large scale hydro projects and unfortunately some communities today continue to be threatened by new projects under development.

The second phase of Indigenous participation with renewable energy began in the 1970s when Indigenous people began to reclaim their political power through integral court cases and demanded the government to adequately consult and accommodate with Indigenous communities when an energy project may affect them in any way. A series of Supreme Court of Canada cases between 1970 and the early 2000’s were responsible for this change but the *Taku River, Tlingit First Nation v. British Columbia* and the *Haida Nation v. British Columbia (Ministry of Forests)* decisions in 2004 clarified the government’s “duty to consult and accommodate” with Indigenous Peoples before proceeding with development on their land (Coates, 2016). While the articulation of the duty to consult and accommodate was “one of the most important developments in Aboriginal law and jurisprudence to date” (K. Ritchie, 2013, p. 434), there are still barriers to meaningful consultation and reconciliation. This includes Indigenous communities’ capacity to participate in consultation, the delegation of this responsibility passed onto the private sector from the Crown (K. Ritchie, 2013), and the inability to “say no” to a

project (D. N. Scott, 2020). D. N. Scott (2020) explains that the duty to consult and accommodate with Indigenous people and communities typically happens after a project has already been approved by the colonial government, which ignores Indigenous jurisdiction to their land. D. N. Scott (2020) argues that consulting with Indigenous communities after the government has approved a project does not qualify as free, prior and informed consent. Instead, it is just a way to manage risks and benefits (D. N. Scott, 2020). D. N. Scott (2020, p. 278) describes the duty to consult and accommodate as "a spectrum of consultation and accommodation rights developed by the settler courts to manage areas on which Aboriginal and Treaty rights have been claimed or recognized" yet the Crown can justifiably infringe on those rights if the Crown deems necessary.

In summary, although there are severe limitations with Canada's fiduciary duty to consult and accommodate Indigenous Peoples, it has opened the door for increased consultation and negotiation but remains imperfect for some of the reasons mentioned. It can be argued that the duty to consult and accommodate symbolizes a positive step in re-building the settler-Indigenous relationship. Through increased opportunities to consult with Indigenous Peoples on projects that affect their lands and livelihoods, there has been an increase in project governance agreements such as impact and benefit agreements, revenue sharing agreements, and treaties and land claims that establish control, ownership, and benefits derived from projects (Coates, 2016).

Impact and benefit agreements (IBAs) are contracts between the Indigenous community and a private company where conditions and benefits from the proposed project are outlined (King and Pasternak, 2019; Moore et al., 2017). IBAs "are privately negotiated, legally enforceable agreements that establish formal relationships between Aboriginal communities and industry proponents. With a few exceptions, governments are not directly involved in the development or negotiation of these bilateral arrangements" (Kielland, 2015, p. 1). In IBAs, some of the typical benefits negotiated by the Indigenous community are hiring quotas, Indigenous input on project design, and procurement contracts for Indigenous-owned businesses (King and Pasternak, 2019). Although there are some good benefits within IBAs, they have been criticized by Indigenous communities, scholars and activists for a few reasons. First, the federal and provincial government's duty to consult with Indigenous communities when their rights are in danger of infringement has been downloaded onto the private sector as a way to deal with the uncertainty of Indigenous land rights (King and Pasternak, 2019; D. N. Scott, 2020). This is also a way to provide much needed social investment into often poor communities in exchange for social license to develop Indigenous lands (King and Pasternak, 2019, p. 39). In addition, IBAs do not challenge the power symmetries between the Indigenous community and the developer and they often include non-disclosure clauses which makes the details of IBAs confidential (King and Pasternak, 2019; Moore et al., 2017). The benefits that are delivered to communities tend to be small and temporary (Hickling, 2020). IBAs are private law contracts that do not rise to the legal standard required for consent at the public law or nation-to-nation level because they do not require collective decision-making (King and Pasternak, 2019). For these reasons, there is a trend away from IBAs and towards Indigenous equity partnerships in renewable energy projects (Hickling, 2020).

We are currently living in the third phase of Indigenous participation in renewable energy projects, where Indigenous communities are seeking equity and control in renewable energy projects on their land. This increase in Indigenous participation and ownership in renewable energy projects is largely because of federal and especially provincial/territorial government

policies that encourage and prioritize renewable energy projects with Indigenous partnerships (Hickling, 2020; Sanders, 2017, 2020). In British Columbia, the *Clean Energy Act* (2010) and the First Nations Clean Energy Business Fund are the driving policy tools that have been supporting Indigenous renewable energy development (Hickling, 2020; Lipp and Bale, 2018). In Ontario, the Feed-In-Tariff (FIT) program and Large Renewable Procurement (LRP) program included the Aboriginal Price Adder which offered above-market, fixed price contracts are directly responsible for the increase in First Nation equity in projects (Jaffar, 2015; Lipp and Bale, 2018). Independent power policies that support purchase power agreements across other jurisdictions in Canada “have played an important role in attracting financing for Indigenous power projects” (Fitzgerald and Lovekin, 2018, p. 5). Federally, the ecoENERGY for Aboriginal and Northern Communities Program supported Indigenous communities’ attempts to reduce greenhouse gas emissions by funding the integration of proven renewable energy technologies between 2007-2016 (Government of Canada, 2015). This program funded feasibility studies, design, and construction for over 110 projects between 2007 and 2011 alone (Government of Canada, 2015). These programs and policies across different levels of governments were critical to the rise of Indigenous ownership in renewable energy projects. However, many of these policies have been removed, become uncertain, or are time restricted. Future participation depends on the policy choices we make around electrification and energy sovereignty (Hickling, 2020).

During this phase of Indigenous participation in renewable energy, there have been landmark moments such as the first 100% Indigenous owned wind farm in Canada developed in 2012 called the Mother Earth Renewable Energy 4 MW windfarm owned and run by M’Chigeeng First Nation (Bailey, 2014).

2.3 Self-determination and reconciliation

From an Indigenous point of view, these environmental injustices created by the energy industry are due to the ongoing processes of colonialism, dispossession, and capitalism (Mcgregor, et al., 2020). “Colonialism is generally understood to be one group/society assuming control of another society’s territories and imposing its own systems of laws and governance” (Mcgregor et al., 2020, p. 36). Settler colonialism is defined by Potawatomi researcher Kyle Whyte (2018) as the complex process where one society seeks to permanently move onto land and water lived on by another society who had economies, cultures, and political self-determination directly tied to those land and waters that have been colonized.

The examples of renewable and ‘clean’ energy causing grave environmental injustices and perpetuating colonialism, means there can be skepticism of renewable energy by Indigenous people.

The call for reconciliation is a response to the destruction, assimilation and cultural genocide caused by colonization (TRC, 2015b). The Truth and Reconciliation Commission (TRC) of Canada was an outcome of the Indian Residential Schools Settlement Agreement, and they were mandated to reveal the “complex truth” of the history and legacy of residential schools (TRC, 2015b, p. 23). The TRC’s interpretation of reconciliation is a process between Indigenous people and institutions involved in residential schools, such as churches, government, and Canadians generally. The TRC process began in 2008, providing reports with recommendations in 2015. The TRC provided 94 calls to action for all levels of government, corporate Canada, and other

institutions. The Report endorses the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), where, by virtue of the right to self-determination, Indigenous people freely determine their political status and freely pursue their economic, social and cultural development (United Nations General Assembly, 2008). Reconciliation must begin with acknowledgment and apologies from the perpetrators but follow with social, political and economic change (TRC, 2015b). The Commission notes that reconciliation is viewed differently by the Canadian government and Indigenous people (TRC, 2015b). The Canadian government views their parliamentary supremacy in order to get on with business while for Indigenous people, reconciliation is an opportunity to affirm their own sovereignty in partnership with Canada (TRC, 2015a). For example, McGregor (2019) argues that Indigenous conceptions of reconciliation are based on Indigenous legal traditions, knowledges, protocols and practices. Therefore, the concepts of self-determination and reconciliation sometimes overlap and sometimes are mutually exclusive, depending on the perspective.

Call to action 92 from the Commission is important to the development of renewable energy (Stefanelli et al., 2018). It calls on Corporate Canada to adopt UNDRIP as a reconciliation framework and apply it to all activities involving Indigenous peoples, their land, and resources (TRC, 2015c). This includes meaningful consultation, relationship building, free, prior and informed consent, equitable access to jobs, training, opportunities and long-term sustainable benefits from economic development projects for Indigenous people and education of management and staff of the history of Indigenous people in Canada (TRC, 2015c).

“Call to Action 92 – We call upon the corporate sector in Canada to adopt the United Nations Declaration on the Rights of Indigenous Peoples as a reconciliation framework and to apply its principles, norms, and standards to corporate policy and core operational activities involving Indigenous peoples and their lands and resources. This would include, but not be limited to, the following:

- Commit to meaningful consultation, building respectful relationships, and obtaining the free, prior, and informed consent of Indigenous peoples before proceeding with economic development projects.
- Ensure that Aboriginal peoples have equitable access to jobs, training, and education opportunities in the corporate sector, and that Aboriginal communities gain long-term sustainable benefits from economic development projects.
- Provide education for management and staff on the history of Aboriginal peoples, including the history and legacy of residential schools, the United Nations Declaration on the Rights of Indigenous Peoples, Treaties and Aboriginal rights, Indigenous law, and Aboriginal–Crown relations. This will require skills-based training in intercultural competency, conflict resolution, human rights, and anti-racism.”

2.4 Treaties and land claim agreements

Historic and modern treaties define the relationship between Indigenous Peoples, the Crown, and the land, which is very important for reconciliation and resource sharing. Treaties were used by the European colonizers as a way to dispossess Indigenous Peoples and their land while legitimizing European settlement, but the terms of the treaties were unfair and the consent was not informed nor freely given (Asch, 2019). Indigenous people interpret the treaties differently

than the Canadian government, and state that Indigenous people did not sign the treaties to give away their land, but instead to share the custodial duties to the land with the newcomers (Asch, 2019). Although these historic treaties have problematic, colonial origins, they are the source of Aboriginal treaty rights. When the Canadian Constitution was patriated in 1982, it recognized and affirmed “Aboriginal and treaty rights” which were undefined but have since been interpreted by the courts as activities that are integral to Indigenous culture, which include the right to fish, hunt, practice one’s own culture, and other social, political, and economic rights (Indigenous Foundations, 2009; Borrows, 2002).

After these historic treaties were signed, there was still vast land areas unceded and without treaties. After the 1973 Supreme Court of Canada decision *Calder et al. v. Attorney-General of British Columbia* which recognized Aboriginal rights to pursue title for the first time, modern treaties began to be signed with Indigenous nations on unceded lands (Coates, 2016; Government of Canada, 2018a). Since 1975, there have been 25 additional modern treaties signed, sometimes called comprehensive land claim agreements, as a way to resolve outstanding issues over land and governance (Government of Canada, 2018a). Modern treaties “define the land and resource rights of Indigenous signatories, and are intended to improve the social, cultural, political, and economic well-being of the Indigenous peoples concerned” (Land Claims Agreements Coalition, 2020). Some, but not all, of these treaties include self-government which means the Indigenous community would no longer be politically governed by the *Indian Act* (Government of Canada, 2018a, 2019b). These self-governing agreements are one way towards greater political self-determination and nation building (Joseph, 2019). The different types of treaties guarantee different rights such as resource development opportunities and royalty revenues is explicitly stated in modern treaties but not in historical treaties (Coates, 2016). Although most of Canada is covered with historic and modern treaties, some lands still remain unceded. In addition, treaties are constantly broken by many different actors of the Canadian state including the renewable energy industry, such as large scale projects such as Muskrat Falls and Site C, which are deemed by the Crown a justifiable infringement on treaty rights (King and Pasternak, 2018).

2.5 Economic development and self-determination

One important motivator for Indigenous partnership or ownership in any renewable energy project is the revenue generated for the community (Bargh, 2010; Lipp and Bale, 2018; Rezaei and Dowlatabadi, 2016). For a long time, Indigenous communities relied solely on the money distributed to them on an annual basis by the federal government as part of their fiduciary duty to Indigenous Peoples, creating a paternalistic relationship uncondusive for self-determination. The Crown, represented by the Government of Canada, has a fiduciary responsibility to Indigenous people and lands which sets a legal obligation for the Crown to act in the best interest of Indigenous Peoples (TRC, 2015b). The Dominion of Canada assumed this fiduciary obligation under Section 91(24) of the *Constitution Act, 1867*, which gave Parliament legislative authority over “Indians, and lands reserved for Indians (TRC, 2015b, p. 212).

Funding for Indigenous communities now comes from either the federal government or own-source revenue (Bains and Ishkanian, 2016). The decisions of how to spend that money are regulated in different ways. The recipient of the government transfer payment, the elected political body of the community called the “Indigenous political organization” in this study, is responsible for ensuring the money is spent appropriately under the terms of the agreement

(Government of Canada, 2020b). Every year, the Indigenous political organization conducts financial reporting to the Canadian government to prove “whether funds provided are spent on the purposes intended, that terms and conditions of funding agreements are met, and that the recipient's financial situation is sufficiently stable in order to assure continued delivery of funded programs and/or services” (Government of Canada, 2020b). This means that the federal government decides how the Indigenous community can spend its money. Breaking colonial and paternalistic relationships between the state can be extremely challenging for communities that financially depend on the federal government and struggle with systemic issues such as poverty, poor health, and discrimination from years of colonial law. To deal with these challenges, many Indigenous communities are seeking economic development opportunities to create own-source revenue, which is the revenue received from either levying taxes and resource revenues, or by generating business income (Bains and Ishkanian, 2016). However, the *Indian Act* also creates barriers for First Nations economic development because it restricts the seizure of property on reserve land which “undermines First Nation borrowers’ ability to offer collateral that is vital for accessing commercial loans” (The Public Policy Forum, 2016, p. 11).

Federal First Nation self-determination policy has changed in order to encourage Indigenous communities and businesses to seek market solutions to social and economic inequalities caused by years of colonial law and oppression (Slowey 2008). The government’s intentions to open up the market to Indigenous participation is not out of benevolence, but to facilitate the accumulation of capital and please the resource development industry (Slowey, 2008). This shift of Indigenous dependence from the government to the marketplace (Slowey, 2008) can be seen as problematic (Coulthard, 2014). However, without a strong source of capital or own-source revenue there continues to be dependence on government funding which greatly undermines Indigenous political autonomy (Cornell, 2006).

Indigenous communities that pursue economic development initiatives or market-based solutions should be viewed as utilizing the tools and resources disposable to them that can potentially improve the quality of life for their people. Many Indigenous communities have had positive, measurable success from economic development. For example, Slowey’s (2008) book describes Mikisew Cree’s journey towards self-government through treaty land entitlement (TLE) and how the Mikisew Cree Group of Companies became the single largest employer for Mikisew members in Fort Chipewyan.

2.6 Governance and legal forms for renewable energy projects with Indigenous involvement

Renewable energy projects associated with Indigenous communities can occur in three ways: 1) ownership: an Indigenous community wholly owns and governs a renewable energy project; 2) partnership/joint-venture: an Indigenous community partially owns and governs a renewable energy project with either an Indigenous or non-Indigenous legal form; 3) participation: a non-Indigenous legal form wholly owns a renewable energy project but the Indigenous community receives some benefits and or is involved in some governance of the project.

2.6.1 Legal forms

On behalf of the Indigenous community, the most common legal forms that engage in renewable projects are the Indigenous political organization, the EDC, and not-for-profits (Hoicka, Savic,

Campney forthcoming). The non-Indigenous legal forms that may engage with these projects are the private sector, public utilities, or the federal, provincial, municipal and territorial governments. These different legal forms can participate in different governance structures dependent on the nature and authority of the legal forms.

2.6.2 *Governance structures*

Understanding the different governance structures of renewable energy projects is essential for self-determination and reconciliation. There are a range of legal, political, and business governance structures that impact the development and control of renewable energy projects associated with Indigenous communities. In resource extraction industries, contractual agreements, economic benefits agreements, early exploration agreements and framework agreements are employed (D. N. Scott, 2020). Bullock et al. (2019) analyzed the strengths and challenges of legal, political and economic governance structures (that are not mutually exclusive) used in Indigenous natural resource partnerships in Canada. They examined their associated benefits, capacities, controls or other avenues for Indigenous Peoples to exert influence (Table 1). Jurisdictional, sectorial and traditional institutions shape Indigenous stakeholder relations, therefore the interplay of these different institutions bring different governance arrangements (Bullock et al., 2019).

Table 1 Governance structures

Governance Structure	Definition
Legal governance structures	
Impact and benefit agreement (IBA)	<ul style="list-style-type: none"> • “[P]rivately negotiated, legally enforceable agreements that establish formal relationships between Aboriginal communities and industry proponents. With a few exceptions, governments are not directly involved in the development or negotiation of these bilateral arrangements” (Kielland, 2015, p. 1). They are meant to address the multitude of adverse socio-economic, environmental and health impacts from resource development projects (Fidler and Hitch 2007). • Can outline the parameters of the project, the commitment and responsibilities of both parties, and how the community will share in benefits of the operation.
Revenue sharing agreements	<ul style="list-style-type: none"> • Agreements “between governments and Aboriginal groups, which share public revenues, such as royalties and taxes, generated from resource development” (Kielland 2015, 1).
Treaties and land claim agreements	<ul style="list-style-type: none"> • “Treaties are agreements made between the Government of Canada, Indigenous groups and often provinces and territories that define ongoing rights and obligations on all sides. These agreements set out continuing treaty rights and benefits for each group” (Government of Canada 2018a). • Modern treaties are also called comprehensive land claims, or self-government agreements.
Political governance structures	
Indigenous political organization	Political organization of the Indigenous community. Usually it is the organization defined by the Indian Act, treaties and land claim agreements, or the Constitution, such as the Band Council, Band Administration, Tribal Council or self-governing arrangement. Tribal councils are a way for many Indigenous communities to pool resources together and create a council to advocate for their collective political needs and provide services to their member nations (Government of Canada 2015).
Memorandum of Understanding (MOU)	Addresses the rights and responsibilities of each party in a specific situation, such as hunting practices or harvesting of a particular area (Bullock, Boerchers, and Kirchhoff 2019; Wyatt et al. 2013).
Land use strategy/ regional planning	Indigenous land use planning and management, occurring when Indigenous organizations hold full responsibility for the full range of management activities, including goal setting, planning and implementation (although some activities may be delegated to non-Indigenous organizations) (Bullock, Boerchers, and Kirchhoff 2019; Wyatt et al. 2013).
Environmental assessments	<ul style="list-style-type: none"> • A process to predict environmental effects of proposed initiatives before they are carried out. • A planning and decision-making tool. • Objectives are to: minimize or avoid adverse environmental effects before they occur; and incorporate environmental factors into decision making (Bullock, Boerchers, and Kirchhoff 2019; Government of Canada 2019c).
Advisory committee	Advisory multi-party committees and round tables enable stakeholders to participate in discussions about management, but without decision-making powers (Bullock, Boerchers, and Kirchhoff, 2019; Wyatt et al., 2013).
Economic governance structures	
Business joint venture	“[T]he relationship that subsists between two persons who carry on, in common and with a view to profit, a business venture established by contract for a discrete project undertaking or for a series of discrete business projects or undertakings” (Alberta Law Reform Institute 2012). The ownership breakdown between the two parties can vary.
Partnership	<p>A general partnership is a business established by two or more owners with no formal legal requirements, but the owners will usually work out a partnership agreement that outlines the respective powers, ownership shares, capital contribution, profit distribution, and so on (Business Development Canada, n.d.). This is to differentiate between Indigenous non-equity ‘partners’ that may have been consulted with or engaged in the project but have little to no control or ownership in the project.</p> <p>An active partner (or general partner) invests in the partnership and participates in day-to-day operations and is liable for debts and lawsuits of the partnership (Murray 2020). A passive partner (or limited partner) invests in the partnership that does not participate in day-to-day operations and does not usually have liability (Murray 2020).</p>
Indigenous EDC	A for-profit business set up by the political organization and community (CCAB, 2015).

2.6.3 Legal forms and their available governance structures

Table 2 outlines with an ‘X’ the types of engagement that the Indigenous political organization and Indigenous EDCs can enter into. The Indigenous political organization of the community is the legal form that can engage in IBAs, revenue sharing agreements, MOUs, treaties, and land claims. Not all governance structures are equal in terms of outcomes and Indigenous decision-making. Some governance structures secure greater and more sustainable benefits and Indigenous control over the project. Governance structures that cater to Indigenous *participation, but not ownership*, in renewable energy projects are impact and benefit agreements (IBAs), revenue sharing agreements, memorandum of understanding (MOUs), and potentially treaties, land claims, and land use strategies. Typically, when a renewable energy project is owned by a non-Indigenous company or public utilities company, the Indigenous community *participates* in the project through consultation, potentially providing consent, and then engaging in one of the governance structures mentioned. Governance structures that cater to Indigenous *ownership* are when Indigenous EDCs and political organizations wholly own and control a project, or when they are engaged in partnerships and joint ventures. *Ownership* of the project offers a greater position of power and control.

For example, in Canada, renewable energy generation is undertaken predominantly by public utilities (MacArthur, 2016), such as Hydro-Quebec, and companies in the private sector, such as Innergex. The energy generated from these predominately large-scaled projects is sold to local grids through a power purchasing agreement (McMurtry and Tarhan, 2019). These utilities or the private sector may partner with an Indigenous community if the project may impact the particular Indigenous People’s rights, as prescribed in the duty to consult and accommodate. The role of the federal or provincial government in any of the three scenarios is less direct but still relevant for renewable energy generation and ownership. In some instances, the federal government may have signed a land claim or treaty that governs the land where the project will be built which has specific provisions around land management and energy development, such as the James Bay and Northern Quebec Agreement. In other instances, a provincial or territorial government may have signed a revenue sharing agreement where an Indigenous community receives payments as part of the negotiation between the community and public utilities.

Table 2 The legal forms and governance structures involved in renewable energy projects with Indigenous participation

			LEGAL FORMS				
			Indigenous community		Non-Indigenous legal forms		
			Indigenous Political Organization	Economic Development Corporations	Private company	Public utilities	Government
GOVERNANCE STRUCTURES	Legal	Impact benefit agreement	X		X		
		Revenue sharing agreement	X			X	X
		Treaties/Land claims	X			X	X
	Political	Memorandum of understanding	X		X	X	
		Land use planning	X		X	X	
		Environmental assessment	X		X	X	
		Advisory committee	X		X	X	
	Economic	Partnership		X	X	X	
		Joint venture		X	X	X	
		Wholly owned	X	X			

2.6.4 Indigenous Economic Development Corporations

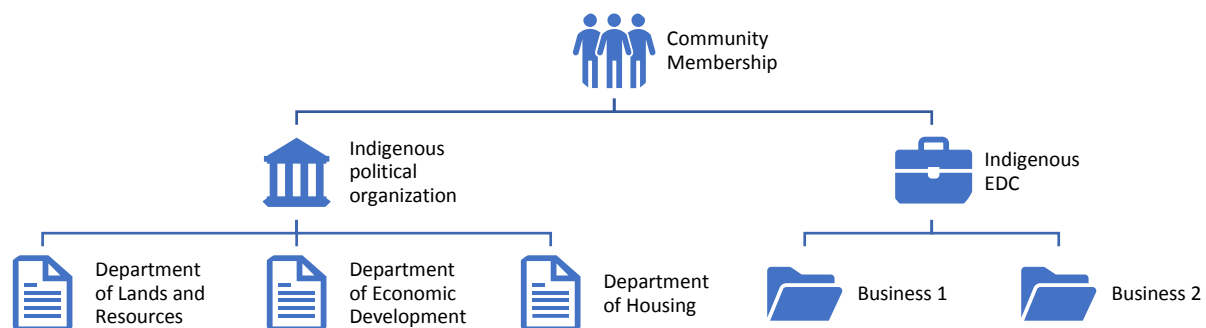
Across First Nation, Inuit, and Métis communities, the elected leaders, under settler colonial law, can be called an Indigenous political organization. This study focuses on First Nation communities as no Métis projects are contained in the dataset and no Inuit projects were located in grid connected communities. In the context of a First Nations community governed by the *Indian Act*, the Economic Development department is part of the Band Administration which is mandated by and reports to Chief and Council. Their role is typically to search for economic development opportunities in the community. If an Indigenous political organization is interested in an equity ownership project, they would have to set up a business entity to be involved in the project that may or may not be arms-length from the Indigenous political organization. However, with approval from community members, the political organization can also establish an economic development corporation (EDC) as a separate for-profit business entity. As a for-profit business entity, the EDC can own renewable energy projects or enter into partnerships and joint ventures. The CEO, depending on the stage and size of the EDC, is hired by either the political organization, in the case of First Nations, Chief and Council, or by the board of directors, if one exists. The CEO reports to its board of directors. The board of directors is usually a mix of Indigenous and non-Indigenous people, that may include an elected community leader, and

directs the business in the interests of its shareholders, which is the community membership. The shareholders do not have shares in the company like a public trading company would. Different than other businesses, the community's members are the only shareholder of the EDC which means the EDC is directly responsible and reports to the community, its board of directors, and the Indigenous political organization. EDCs "invest in, own and/or manage subsidiary businesses with the goal of benefiting the Aboriginal citizens that they represent" (CCAB, 2015, p. 3).

Every First Nation, Inuit and Métis community recognized by the Canadian government will have an elected Indigenous political organization under settler colonial legal structures, but not all communities will have an EDC. Tribal councils can also establish an EDC to benefit their member nations.

For some, EDCs are viewed as a way to assert influence on economic development projects on their land while also directly benefiting the community. EDCs are interested in a portfolio of opportunities that will contribute to own-source revenue for the community. EDC roles include drawing business investment interest into their community by networking, engaging local industry and actively seeking partners, and supporting small business owners in the community, with preferred supplier relationships, and by mentoring and providing financial assistance (CCAB, 2015). Indigenous peoples comprise, on average, 72 percent of EDCs' employees (CCAB, 2015). EDCs create own-source revenue, reduce the reliance on the Canadian government, and reinforce the Indigenous community's autonomy (CCAB, 2015).

Figure 1 – Example of an organizational chart of an Indigenous community (own elaboration)



EDCs across Ontario have financially supported sports teams and facilities, health services, community centres, youth and senior programs in their communities (CCAB, 2015). EDCs can be considered as a type of social enterprise (Hotte et al., 2018).

3 Methodology

The study focused on understanding, from the perspective of EDCs from grid-connected communities involved in renewable energy projects, how do renewable energy projects Indigenous communities address reconciliation and self-determination, and what are the governance structures EDCs consider important to these goals. Studies at the national and provincial scales can produce findings from the perspective of an overview of the entire population to understand how widespread an issue is. A national dataset of 194 renewable energy

projects across Canada with Indigenous involvement that was compiled for an earlier study (Hoicka, Savic, Campney forthcoming) was employed. A survey was sent to 48 EDCs associated with these projects. Interviews were conducted with some of the survey respondents.

3.1 Partnership with Canadian Council for Aboriginal Business

This research was conducted in partnership with the Canadian Council for Aboriginal Business (CCAB). The CCAB is an Indigenous-led non-profit with over 1000 business members from the Indigenous and non-Indigenous business community. Their mission is to foster sustainable business relations between First Nations, Inuit and Métis people and Canadian business. As part of this mission, CCAB has been conducting research on Indigenous privately-owned businesses and EDCs for 10 years and are considered leading experts on economic development data for Indigenous communities. CCAB contributed to this project by providing access to their proprietary list of Indigenous EDCs in Canada, which includes contact information for EDC leadership. The CCAB has in depth data on EDCs and has fostered relationships within the Indigenous business community based on mutual trust and respect. Partnering with this membership-based organization increased the chances of a successful research project.

The primary researcher on this project (Katarina Savic) was both a master's student at York University in the Faculty of Environmental Studies and a Research Associate at CCAB. For this project, the roles and responsibilities between York University and the CCAB were formalized in a non-disclosure agreement between the two institutions. The researcher played both roles as the primary investigator for a degree-based research paper as well as the CCAB staff member responsible for conducting the online survey and phone interviews. The data collected for this research through the online survey and in-depth phone interviews was done by CCAB and shared with the social exergy + energy lab at York University. Through her work experience, the primary researcher received training from Environics Research Group on how to conduct an interview and experience interviewing Indigenous and non-Indigenous businesspeople through work in the Research department at CCAB. She also completed the Tri-Council's module for Research with Aboriginal People and a Master's level course at York University called "Reshaping Research with Aboriginal Peoples", facilitated by First Nations Professor Deborah McGregor. This contributed to understanding the difference in culture and practice for interviews with Indigenous people. This includes more time for relationship building and story telling in interviews compared to traditional interview practices.

3.1.1 Dataset and coding

At York University, the social exergy + energy lab's Indigenous renewable energy project dataset was previously compiled by researchers using publicly available information (Hoicka, Savic, Campney forthcoming). This dataset contains 194 active renewable energy projects which includes projects that supply, manage, or distribute renewable energy. Projects under development were not included in the analysis. The list of projects were drawn from Hoicka and MacArthur's (2018) combined with publicly available information from the Indigenous Clean Energy Social Enterprise website (Indigenous Clean Energy Social Enterprise, 2020). Some of the data collected identified the Indigenous communities involved, locations of projects, grid-connectivity of the community, owners of the project, and function or size in megawatts (MW).

Through online desk research, the following variables were either updated or added to the dataset:

- EDC names;
- Relevant governance structure of renewable projects that are outlined in Table 1. Online desk research was used to find this information such as EDC websites, Indigenous community websites, project websites, press releases, and news articles. As described in Table 2, governance structures are not mutually exclusive.

3.1.2 Survey

Between April and July 2020 the semi-structured online survey was sent to 48 First Nation EDCs via email. These EDCs were from grid-connected communities associated with at least one renewable energy project. The purpose of the survey was to identify additional active renewable energy projects with First Nation involvement, to collect information about motivations and governance structures for renewable energy projects, and perspectives on how renewable energy can contribute to reconciliation and self-determination (Appendix 1). Survey data was used to either validate or update the data in the renewable energy project dataset. The EDCs were identified by cross-referencing the list of 194 projects with the CCABs internal list of 294 EDC across Canada and online desk research.

From April 15 to May 15, 2020 the survey was conducted online in order to capture a larger sample more effectively than calling or in-person surveying. On March 11, 2020 the World Health Organization declared the outbreak of COVID-19 a global pandemic and by March 17, several provinces declared a state of emergency (Vogel, 2020) which severely restricted travel and closed non-essential stores and offices. At the time of writing, several provinces are still under a state of emergency and many people are working from home or unemployed. Likely due to the COVID-19 pandemic, after one month of surveying and sending four reminder emails, only seven EDCs completed the entire survey. Originally there was ethics approval to only contact the EDCs by email therefore an amendment was requested to allow to call the EDCs to invite them to participate in the survey. This amendment was approved in late June and the EDCs who did not complete the survey were called using the contact information from the internet and CCAB's list of EDCs from mid June until mid July. Only one more survey and interview were completed after the ethics amendment.

3.1.3 Interviews

Interviews were conducted to learn more about the relationship between renewable energy, reconciliation and self-determination, and how EDCs are engaging with the range of governance structures in Table 1. The interview guide was informed by the literature review and the original dataset (Appendix 2). At the end of the survey, participants had the option to enter their name and contact information if they wanted to do a follow up in-depth interview. Understanding perspectives on this relationship better suits a qualitative instead of quantitative methodological approach. The questions were standardized and open-ended. The standardized interview guide allowed for the responses to be more easily analyzed and compared. Due to COVID-19, as well as budget considerations, in-person data collection was not possible. In-depth interviews by telephone or video conference calls were used. They allow for the contextualization of the results

from the quantitative analysis and include First Nations people's beliefs and opinions to answer the research question.

It is important to include as many Indigenous voices as possible in research about Indigenous communities. Six survey participants indicated that they wanted to participate, however only four were conducted. The other two respondents did not respond to emails. The interviews were conducted over the phone or Zoom between mid April to mid July 2020. Interview responses were recorded in bullet points, not verbatim, using Microsoft Word. The audio from the interview was securely recorded and saved on a laptop in order to refer back to the responses during the analysis stage.

3.1.4 Thematic analysis

Thematic analysis was chosen to analyze the interview data. This approach is typically used for contextual research that seeks to unpack issues and understand how they are connected (Ritchie et al., 2014). The thematic framework was built into the interview guide as they include the four main themes of the entire research project: 1) reconciliation, 2) self-determination, 3) how renewable energy can contribute to reconciliation and self-determination, and 4) governance structures for renewable energy projects.

Once all the interviews were completed the researcher familiarized themselves with the data through indexing and sorting the findings into one of the four themes. A cross-sectional approach was applied to index and sort the data which means that the thematic labels were applied across the whole interview data set (Spencer et al., 2014). For example, if a participant began speaking about reconciliation during their response to the very first question, the key finding from that response would be labelled under the reconciliation theme.

Following this, categories or sub-themes were developed. The sub-themes became the main findings and are reported in the results. The main points of each sub-theme were summarized and written into the paper. Once the themes and sub-themes were reported, thematic linkages were made by and comparing the findings to the literature review.

4 Results and discussion

This research has uncovered the following findings from the data set, survey and interviews.

4.1 Sample description

Based in analysis of the dataset, 115 grid-connected First Nations are involved in 157 renewable energy projects. Most First Nations have one project, but some have up to 10 projects. These projects are located in every province and territory except for Nunavut (Table 3).

Table 3 Sample description

Provinces/ Territories	Grid- Connected Indigenous Political Organizations (communities) (n)	Economic Development Corporations (n)	Grid- connected communitie s involved in projects (n)	Projects associated with grid- connected Indigenous communities (n)	Economic Development Corporations involved in projects (n)	Indigenous Political Organizatio ns involved in projects	Unknown legal form of project
British Columbia	171	58	54	64	5	50	5
Ontario	108	60	30	48	10	12	7
Quebec	33	40	9	14	4	4	4
Alberta	53	17	5	11	1	3	1
Manitoba	59	23	4	3	1	3	0
New Brunswick	15	3	3	3	0	3	0
Saskatchewan	69	23	3	3	1	2	0
Yukon	10	15	3	6	1	3	0
Nova Scotia	13	3	1	2	0	1	1
Northwest Territories	7	35	2	2	1	1	0
Prince Edward Island	2	1	1	1	0	1	0
Nunavut	0	12	0	0	0	0	0
Total	544	294	115	157	27	83	18

Table 4 - Number of projects by Indigenous legal form

Indigenous legal form	Number of projects
Indigenous EDC	45
Indigenous political organization	89
Both forms	3
Non-profit	1
Unknown	19
Total	157

27 EDCs are involved in the 45 projects (Tables 3 and 4). Most EDCs have ownership in only one renewable energy project, but some EDCs have ownership in up to six. However, the Indigenous political organization is involved in more projects than EDCs (Table 4). That the Indigenous EDC would be the Indigenous legal form most likely involved in a renewable energy project was not found to be the case. The first project with the Indigenous EDC involved was in 1993. All projects before that were associated with the Indigenous political organization of the community.

The interview and survey results are presented together, and as they relate to the connection between Indigenous participation in renewable energy, reconciliation and self-determination.

4.2 Survey and interview results

Eight out of 48 EDCs responded to the survey, and they are involved in 22 active renewable energy projects. The survey response rate out of the total population of EDCs from communities associated with renewable energy projects was very good (8/48, or 17%). The survey and interview data are statistically representative of all projects in communities that have EDCs, but not representative of all projects with grid connected First Nations (Table 3 compared to Table 5). All interviewees agreed that renewable energy projects can contribute to reconciliation and self-determination in different ways and for different reasons. These include increasing their sense of ownership and control over their lives and territories, building capacity within the community, generating own-source revenue which reduces their financial dependency on the federal government, emphasizing their role in regional planning and energy provision which asserts their jurisdiction to the land, and building their energy resilience in the event of a natural disaster.

Table 5 Location of survey respondents

Province/Territory	Number of survey participants
British Columbia	3
Ontario	3
Saskatchewan	1
Yukon	1
Total	8

4.2.1 Land rights

When asked about what reconciliation means to them, the participants whose communities have treaties mentioned honouring the treaties. Honouring the treaties is important for reconciliation from both personal and business perspectives because it re-distributes the land and resources back to the First Nations, which can help with their healing process. This is important because, generally speaking, the treaties state that the resources of the land would be shared between the signing nations and those agreements have not been upheld. Using their resources from the land reduces First Nations' dependency on the state and helps heal the multi-generational trauma many First Nations people experience. One participant said that the members of the band are so traumatized from residential school that "they don't even know the traditional food systems anymore". As one participant said, the government is responsible for the psychological damage onto Indigenous people, but only Indigenous people are the ones who can heal themselves. The healing process is long but necessary for reconciliation. Honouring the Indigenous interpretations of treaties is an important step in the healing and reconciliation process.

Two participants described self-determination as First Nations reclaiming control over their land. Land is sacred and central for Indigenous beliefs, practices, traditions, and their futures. As one

participant said, everything is tied to the land and this “can never be removed from the equation”. Another participant elaborated that self-determination would mean that the federal government would no longer have jurisdiction over their land.

Participants explained the tension between the desire to reduce dependency on the federal government but also honouring the treaties and Canadian law that protect Indigenous people’s lands and rights. One participant mentioned that although the *Indian Act* is a colonial and oppressive legislation, it is “in some cases a hinderance, but in some cases an advantage” because it controls Indigenous peoples lives and land while also securing their rights recognized by the Canadian government. Their band does not have a treaty with the Crown and therefore their land is unceded. They expressed that the *Indian Act* is actually protecting their land and that the band does not want to pursue the self-governing route and surrender their land to the Canadian government. Therefore, they are protecting their land and their community’s self-determination by avoiding any modern treaty agreement with the Canadian government. Although the *Indian Act* and treaties were used to displace and dispossess Indigenous people, there are also some protections written in them which must be respected by the Canadian government.

All participants acknowledge that there will always be a relationship between First Nations and the Canadian government, however it is important to make that relationship less paternalistic and improve First Nation communities’ ability to be self-reliant. When First Nation communities are self-reliant and have control over their land and futures, this will improve the nation-to-nation relationship. The only way to work towards a future free of dependency is if the land and resources are properly shared between the nations and First Nations have ownership and control over their lives and land.

For some participants, being completely self-sufficient is their vision of self-determination. For others, they can reduce their dependence on the government through better partnerships and relationships where knowledge, land, and expertise can be shared and exchanged between Indigenous and settler societies. Self-sufficiency was mentioned by 7 out of 8 survey participants as an important motivation for pursuing renewable energy projects (Table 6).

Table 6 Survey respondent's motivations for pursuing renewable energy projects

Motivations	n
Own-source revenue	8
Economic self-sufficiency	7
Job creation	6
Environmental reasons	4
Autonomy/self-determination	3
Knowledge and skills development	3
Increased local support for renewable energy	3
Energy literacy	3
Government policies	3
Social capital	2

Access to affordable energy	2
Empowerment	2
Energy self-sufficiency	3
Transition off diesel	1

All interview participants stated that self-determination from both personal and business perspectives is when the community has the ability to design their own futures and reclaim their power back; this includes building capacity within the community, employment, wealth, and enforcing Indigenous law. This is impaired by the barriers created from colonialism which created First Nations' dependency on the federal government. In essence, self-determination is when the community, and by extension the EDC, is able to provide the services, opportunities, and choices to their own community members instead of relying on the federal government to deliver these necessities. Self-determination also means being in a position where the community or EDC can bring their ideas forward instead of waiting to be approached by a government or industry partner. When the community or EDC has ownership in designing their own futures, this creates an immense sense of pride for the community. In order to design their own futures, the community needs to have various forms of internal capacity which can be difficult to develop due to barriers. One participant said that if they were able to build business capacity within the community, they wouldn't have to rely on hiring consultants to work on the community's behalf in business development. But for small communities with few education and career opportunities, once someone leaves the community to get educated it is hard to bring them back to work in the community.

4.2.2 *Ownership and control over lives and land*

First Nations participation and ownership in renewable energy projects create a sense of ownership and control over their lives and land. As one participant said, this sense of control has been lost over the years and finally they are re-claiming it back. The participant shared the example of when a provincial utilities company built a largescale hydro dam without the consent of the First Nations community decades ago which flooded their traditional territory and deeply disrupted their way of life. This was during the time where Indigenous consultation and consent was hardly ever considered in an energy project. Now, times have changed and all energy generation projects not only need explicit consent from an affected Indigenous community but the norm is that the Indigenous community will more actively participate in the project and perhaps even own a portion of it. Ownership in renewable energy projects not only brings financial benefits, but also an affirmed sense of pride to be recognized as the rightsholders and custodians of the land. The participants agreed that ownership is much better than benefits without ownership in renewable energy projects because it allows for greater control over development on their land, generates own-source revenue, provides more sustainable benefits to the EDC and community, and is more aligned with honouring the treaties and rights, as stated by most participants.

They also discussed different types ownership and governance structures that are necessary for Indigenous ownership and control in renewable energy projects. One participant clarified that a significant share of ownership in the project is very important because it is more lucrative and

sustainable than an IBA. Once the government or industry partner fills the requirements of the IBA, they are not obliged to engage further with the Indigenous community. When the Indigenous EDC has a significant share of ownership in the project, they experience greater benefits such as having a seat at the decision-making table, business capacity building and relationship building, on top of the wealth and job creation. Job creation was mentioned by 6 of 8 survey respondents as important (Table 6).

As defined in Table 1, EDCs are both active and passive partners in renewable energy projects (Figure 2). While many examples of benefits agreements (and the number is assumed to be low as they are confidential) rather than ownership were found across the wider dataset, of the 8 surveyed EDCs, most were involved in joint ventures, partnerships, and whole ownership, and few benefits agreements (Table 7).

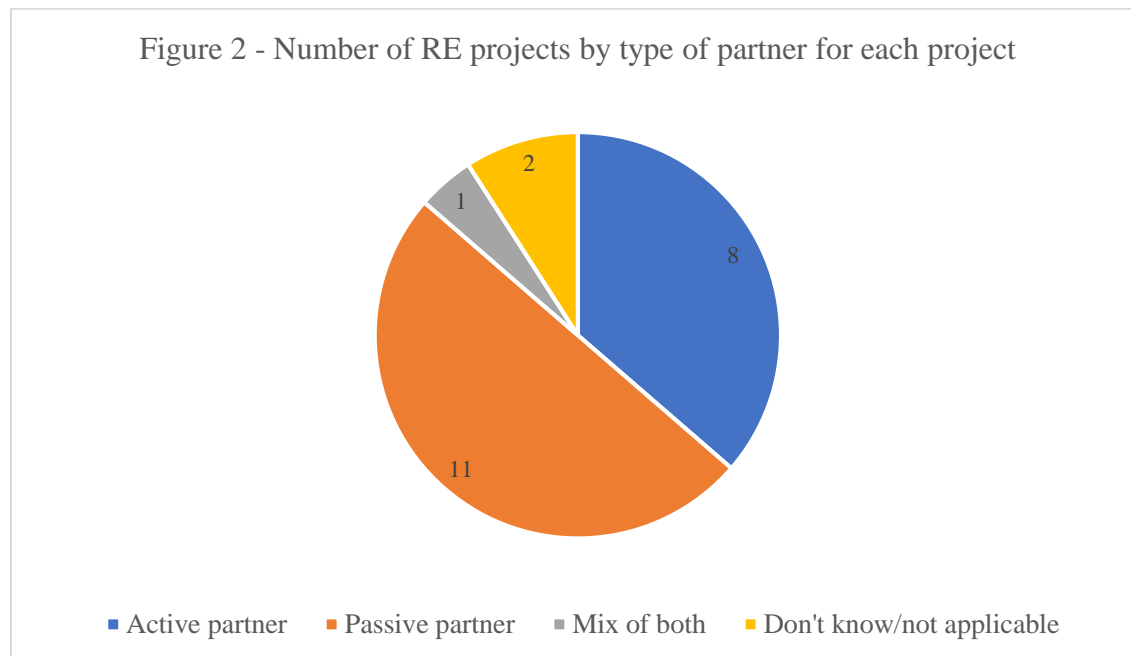


Table 7 Survey responses on governance structures used

Governance structures	n
IBA	1
Revenue sharing agreement	1
MOU	1
Land use strategy/regional planning	1
Environmental assessment	0
Business joint venture	6
Partnership	8
Wholly Indigenous owned	3
Unknown	0
Total	21

Table 8 - Number of project governance structures by Indigenous legal form

Governance structures		Indigenous legal forms					Total
		Indigenous EDC	Indigenous Political organization	Both EDC and Political Organization	Non-profit	Unknown	
Legal	IBA	0	17	0	0	0	17
	Revenue sharing	0	14	2	0	0	16
	Treaty or land claim agreement	0	2	0	0	0	2
Political	MOU	1	1	0	0	0	2
	Land use strategy/regional planning	1	1	0	0	0	2
	Environmental assessment	0	0	0	0	0	0
Economic	Business joint venture	12	0	0	0	1	13
	Partnership	20	8	3	0	8	39
	Wholly Indigenous owned	12	19	0	1	0	32
	Unknown	1	27	0	0	10	38
	Total	47	89	5	1	19	161

One participant said that limited partnerships “work fine” but that they would like to see in the future more community-controlled trusts and cooperatives being used as instead of the EDC of a community. A community-controlled trust has the ability to sustainably manage profit from the EDC and land for current and future generations. They also explained that the cooperative model is more community-focused than the EDC model. In a previous study, Hoicka, Savic, Campney (forthcoming) found no cooperative legal forms in renewable energy projects associated with Indigenous communities. They also found that equity ownership, which is one indicator of reconciliation, has risen over time and 41 projects are controlled (greater than 50% ownership) by Indigenous communities. However, most projects that are located on traditional territories and Indigenous communities have minority or no ownership. One case-study of a community-controlled trust is described in detail in Smith and Scott (2018). Smith and Scott found that in the case of Batchewana First Nation, while the Nation is governed by Band Council, the community was able to assert principles deriving from its own legal order into the approval process. They did this for example by having more stringent environmental regulations than settler legislation required. Despite having a Band Council arrangement to set up the project, they were able to arrange a less hierarchical legal structure by developing a community trust, the structure and spending were based on participatory community consultations.

4.2.3 Build capacity

Interviewees expressed that EDCs involved in renewable energy projects not only build a collective sense of pride and ownership, but also build capacity amongst individual community members through goods jobs and training. A problem identified by a participant was the lack of community capacity and ability to retain educated people within the community. In renewable energy projects, there are opportunities for meaningful employment and skill development across all levels. In the event when the renewable energy project is governed by a partnership between Indigenous and non-Indigenous proponents, the Indigenous proponent often negotiates for some

form of capacity building which can result in job opportunities for community members. By training young people in high paying jobs, this builds their experience, skills, and encourages them to stay in the community instead of leaving to find work elsewhere. One participant also explained that their experience sitting on the board of directors for a hydro project provided meaningful leadership experience and grew their professional network. Building capacity and experience among First Nations staff and directors puts First Nations in a strong position to pursue more renewable energy projects.

4.2.4 Generate own-source revenue

Renewable energy projects are one way for EDCs to generate own-source revenue which will improve the community's ability to govern and provide for themselves. This was the most prevalent reason in the survey to pursue renewable energy projects (Table 6). One survey participant shared that “[the EDC’s] strategic priorities include stimulating job creation, pursuing investment opportunities, and promoting revenue generation within the community - with the long term of [*sic*] goal of assisting our community in achieving economic sovereignty. Renewable energy is one sector that has enabled us to move towards our goal”. Renewable energy is one of many industries that the EDC can participate in to generate wealth and jobs for the community. All survey and interview participants agreed that renewable energy projects are a way for the community to generate own-source revenue and wane off their dependence on the provincial and federal governments. Through own-source revenue, the EDC and Indigenous political organizations can decide for themselves how to spend their profits without needing permission or approval from the federal government. As one interviewee said, Indigenous ownership in renewable energy is part of “economic reconciliation”, which is defined by the Truth and Reconciliation Commission as “working in partnership with Indigenous people to ensure that lands and resources within their traditional territories are developed in culturally respectful ways that fully recognize Treaty and Aboriginal rights and title” (TRC, 2015a, p. 305). Therefore, First Nation participation and ownership in renewable energy projects contributes to economic reconciliation because it asserts their rights and title to their land, builds partnerships with industry and government, while generating own-source revenue and increased self-determination.

4.2.5 Breaking down barriers

First Nation communities are not only being encouraged by external actors to participate in the market economy, they also recognize the significant economic benefits from doing so. However, participants said that reconciliation from a business perspective should include breaking down systemic and attitudinal barriers caused by colonialism and the deliberate exclusion of First Nations from Canada’s developing economy. Breaking down barriers means improving relationships and partnerships and shifting power from incumbents to communities.

4.2.5.1 Improving relationships.

Interviewees mentioned the lack of trust between Indigenous communities and government because of the history of colonialism generally and hydro projects specifically. Interviewees expressed that the energy injustices of the past have stained their relationships with government. However, some government partners are ready to change. When one participant explained the

origin of a hydro project their EDC is involved in, they said “you know how industry was a long time ago, they did whatever they wanted, wherever they wanted. They didn’t need permission. It’s a new world now”. Similarly, when asked about whether the EDC or nation would participate in a new hydro project, another participant said that “there hasn’t been fantastic experiences with hydro in the Yukon”. The history of energy development in Canada and the negative consequences it caused Indigenous Peoples cannot be ignored. Government and industry partners need to acknowledge the intertwined legacy of colonialism and energy development in Canada, especially large-scale hydro, and rebuild their relationships with First Nation communities.

It is contested whether an IBA would suffice call to action 92 because contractual agreements between unequal power holding parties are not an expression of consent (D. N. Scott, 2020). IBAs do not represent meaningful reconciliation because they offer short-lived benefits and do not challenge the power dynamics between First Nations and industry. For any activities on traditional territories, it is important that the nations are recognized and meaningfully included from the beginning. Seeing the improving relationship between First Nations, energy developers and the government has been empowering and encouraging for some First Nations people, although there is still more work to be done. One participant shared their poor experience working with a public utilities company on regional energy planning, calling it “the most condescending meeting ever”. For all energy and development plans by the government and industry, **First Nations need to be included respectfully from the beginning**. It is time to bridge the gap in the planning conversations between the federal and provincial governments and First Nations.

Interviewees provided concrete examples of ideal partnerships for renewable energy projects. One mentioned that the ideal governance structure would be when two limited partnerships created a joint venture, as with this structure there is a high potential for return on investment, and job and wealth creation for the EDC and community by extension. Another participant mentioned 50-50 ownership structures between the Indigenous EDC and the energy developer as an ideal breakdown because “when you share [between two nations] it should be half and half. That’s my logic”. This 50-50 ownership structure reflects what the treaties promised and shows that Indigenous people and their EDCs are valid and important business partners.

Some participants expressed that projects wholly owned and controlled by either the Indigenous EDC or political organization can be considered gestures of self-determination because the Indigenous community does not have to depend on or work with industry or government. However, in the business world, interviewees expressed that partnerships are very important especially in renewable energy development. Each partner brings their own skills, expertise, and financing to the table.

4.2.5.2 *Shifting power from incumbents to communities*

Not only do First Nations demand to be included in planning and development conversations, but one interviewee said that they also want to take part of the provincial government’s role and become energy providers. The provincial and territorial energy providers are too centralized and “are far too powerful”. First Nation communities should not just receive energy, but also become providers to themselves and the non-Indigenous population. One way to encourage First Nation energy providers is by **redirecting “all the subsidies** that have gone to the big centralized

colonial providers [...] there should be some sort of subsidy to be able to empower First Nation communities to be the provider of energy solutions”. **A more decentralized approach to energy provision is therefore aligned with reconciliation and self-determination because it decentralizes the power of energy provision from the provincial government to the First Nation.**

Indigenous ownership is important for renewable energy projects but so is control. Another important governance structure mentioned is having at least one First Nations person from the EDC or community **on the board of directors of the project**. The board of directors guide decision making for companies involved in projects and therefore it is important that the First Nations partner is able to assert their decision-making authority over the project and their land. Participating on a board builds capacity, skills, and allows the person to expand their network and relationships with different people. One participant said that the board of directors should only include business-minded people who understand the community needs but also know how to run a business.

Although not explicitly mentioned in the interviews, according to Scott (2020) free, prior and informed consent would provide the legal structure for consent to be treated as equal partners in economic development projects on their land. There is a growing body of literature on energy democracy as a means to reclaim power from incumbents and elites that could be explored in its application to Indigenous involvement in renewable energy (Brisbois, 2019, 2020; Brisbois and Sovacool, 2019; Burke and Stephens, 2017; K. Scott, 2020) .

4.2.5.3 *Leveling the playing field*

First Nation EDCs are starting on an uneven playing field when trying to enter new industries or grow their business for a variety of reasons. Two interviewees expressed frustration about the inequitable access to financing from mainstream banks for First Nation EDCs. First Nation communities and their EDCs face barriers to accessing capital because of “archaic” legislation in the *Indian Act* that limits the First Nation’s ability to raise revenue through borrowing private investment because they are unable use their land as property and collateral (The Public Policy Forum, 2016, p. 7). Because of this institutional barrier, the Indigenous political organization, typically called the band, has to be the guarantor when the EDC is seeking to access capital from a bank which puts the entire community “on the hook for a lot more debt than anyone else would be”. Even when communities create EDCs as a way to generate wealth and jobs for the community and stimulate the local economy, they experience barriers that non-Indigenous companies do not face. These barriers to renewable energy development have been known for a long time (Krupa, 2012b), and unfortunately have not changed. This holds the EDC back from growth and opportunities. In addition, since Indigenous EDCs don’t have “respect as a business entity” from their non-Indigenous counterparts, they sometimes aren’t included in important conversations for proposed resource development projects until the very end. In these situations, because of the systemic barriers Indigenous EDCs experience, when they are finally consulted, they are usually in a position where they are “not able to say no” to a development project. Indigenous EDCs want to be involved in the “meaningful” parts of the project such as the design and planning process where they can bring forward their own ideas and visions. Overall, reconciliation means the government and industry must acknowledge the traumas they inflicted from the past, take responsibility for them, work to break down the systemic and attitudinal

barriers and create solutions to level out the playing field for First Nation communities and their EDCs.

In some industries such as forestry, there are long established businesses which makes it hard for First Nation-owned businesses to enter the market. The participants explained that the government can do more to support Indigenous-owned businesses in these well-established and dominated fields. To reconcile the injustices of the past, the government and industry partners can work with First Nation communities in meaningful ways and use their abilities to level out the playing field for First Nation EDCs.

Government policies are needed to encourage First Nation participation and ownership in development projects. Some federal and provincial policies in British Columbia and Ontario that encouraged greater Indigenous ownership in renewable energy projects are contributing to leveling the playing field. One participant shared that the British Columbia government is making good steps forward in reconciliation by ensuring that private sector consults with First Nations and that there is an opportunity for some benefits or ownership in the project, although there is more to be done. The Aboriginal Price Adder set up by the Province of Ontario specifically encouraged equity ownership by “as the *Green Energy and Economy Act* explicitly countered some of the barriers to Indigenous ownership, by providing access to capital, by guaranteeing returns, and by creating statutory incentives for industry to seek out partnerships with Indigenous communities” (Smith and Scott, 2018, p. 27). Most projects are located in British Columbia and Ontario, provinces that had supportive policies and have the largest populations of Indigenous communities (Table 3). Some supportive policies are identified in the Figures 3 and the sharp increase in projects after their introduction is an indication of their importance.

Figure 3 Number of active projects by start date of operations

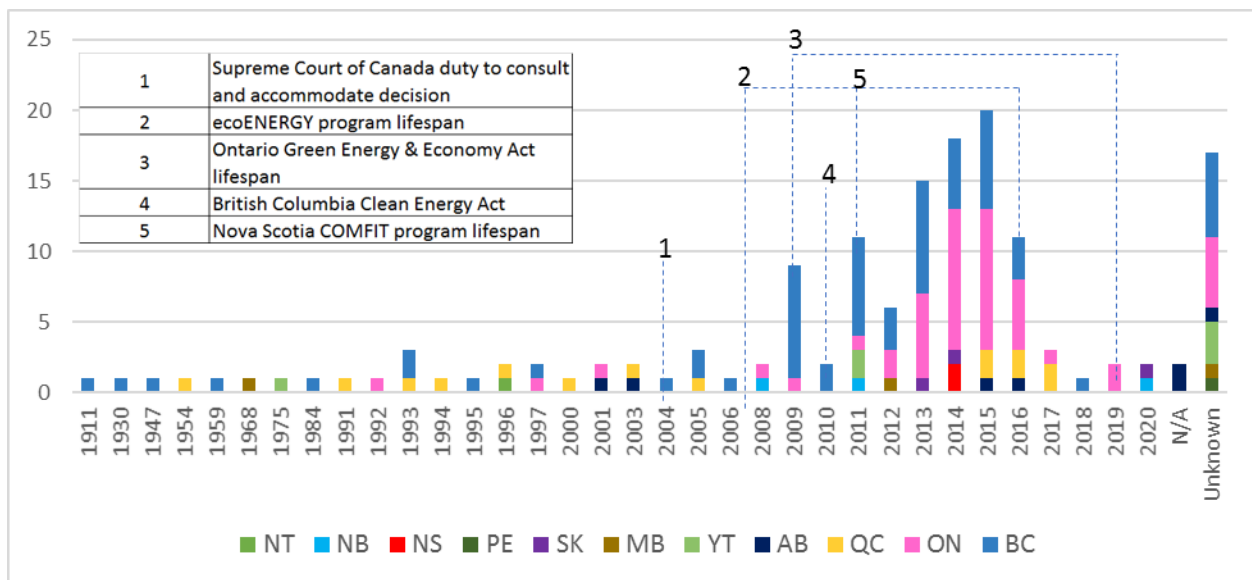
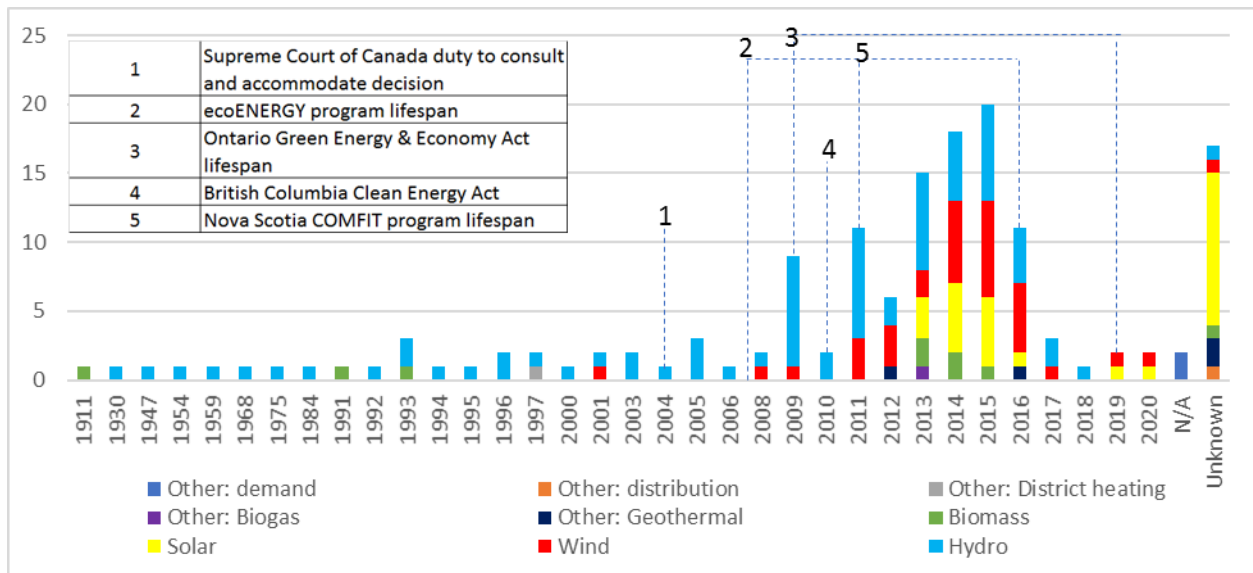


Figure 4 Number of active projects by technology and date of operation



4.2.6 Energy security and resilience

Although all the participants were representatives of EDCs of grid-connected First Nations, two participants expressed that First Nation participation in renewable energy development can contribute to their communities' energy security and resilience. One participant explained that the community is trying to prepare itself for the future earthquake that will happen along the coast of British Columbia. The community wants to be prepared in the event that the power will cut out when an earthquake or other natural disaster happens. Their renewable energy project is already storing excess power in a battery system which will be able to provide some power to the community if the main grid goes down. Another participant also expressed their concerns over the level of energy security in a centralized system in the event of a natural disaster so they are looking into off-grid and micro-grid solutions because it is "critical to the security of the country and power for the community". For both participants, decreasing their dependence on the provincial government for a reliable source of energy is part of self-determination.

Historically, Indigenous communities were primarily only involved in hydro, but in the last decade there has been a sharp increase in wind and solar renewable energy sources (Figure 4). Throughout each time period, hydro projects with Indigenous participation and ownership were being built.

4.3 Limitations

There are limitations to gathering information on governance structures using desk research, so some of the gathered results on governance structures in Table 8 must be interpreted with caution. However, this limitation was addressed through the use of surveys and interviews to provide more detailed information about experiences with these governance structures and their importance to renewable energy projects. Another limitation was contacting EDCs for research during the COVID-19 pandemic and the spring and summer which may have negatively impacted the response rates. 91% of Indigenous businesses have been negatively affected due to

COVID-19 (CCAB, 2020a). During the warmer weather more people tend to go on vacation. Although this is a small sample size, this can be an entry point for an area of future research.

5 Conclusion

This research explored how renewable energy projects could contribute to reconciliation and self-determination from the perspective of Indigenous economic development corporations. Our findings show that own-source revenue and capacity development created through renewable energy projects are important steps to reinforce First Nations decision making authority over their land and decrease their dependency on the federal government, which is imperative to their right to self-determination. Renewable energy projects not only build a collective sense of pride and ownership, but also build capacity amongst individual community members through jobs and training. Renewable energy can contribute to energy security and resilience for First Nation communities. Partnerships, joint ventures, Indigenous EDCs, and Indigenous political organizations as governance structures for First Nations ownership in renewable energy projects suit different interpretations and applications of reconciliation and self-determination. Based on the interview data, partnerships and joint ventures between Indigenous and non-Indigenous partners can be considered gestures of reconciliation because they honour what some participants called “the true intent of the treaties” and re-build the nation-to-nation relationships while generating own-source revenue.

However, in order for these benefits to occur, there are required changes in governance. A more decentralized approach to energy provision has been mentioned by participants. This aligns with reconciliation and self-determination because it decentralizes the power of energy provision from the provincial government to the First Nation. Furthermore, it is time to bridge the gap in the planning conversations between the federal and provincial governments and First Nations. For all energy and development plans by the government and industry, First Nations need to be included respectfully from the beginning.

Provincial, territorial, and federal government should enhance the policies and programs that have encouraged Indigenous equity ownership and control of renewable energy projects on their traditional territories as one of their duties to reconciliation. By acknowledging how renewable energy development of the past has negatively impacted Indigenous communities, policies and programs like these are one way that the government can do its part in reconciliation.

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7 Appendices

7.1 Appendix 1

Table 3 Survey questions

Questions	Pre-coded answers	
1. What is the name of the renewable energy project?	Open ended	
2. What type of renewable energy is generated?	Hydro	Biomass
	Wind	Hybrid
	Solar	Other
	Geothermal	
3. What type of business is it?	Sole proprietorship	Incorporation
	Partnership	Unsure
4. How much ownership does the EDC have over the project?	0%	Greater than or equal to 51% but less than 100%
	Less than or equal to 49%	100%
	50%	
5. What type of partner is the EDC in the renewable energy project?	Active partner - participating in the day-to-day operations	
	Passive partner - not participating in the day-to-day operations	
	Both	
6. Who are your business partners?	Open ended	
7. What type of governance agreements do you have with your partner(s)? <i>Select all that apply.</i>	Land use strategy/regional planning	Business joint venture
	Impact and benefit agreements	Environmental assessment
	Memorandum of understanding	Revenue sharing agreements
	Indigenous business	Advisory committee
8. What were the main reasons why the EDC is participating in renewable energy? <i>Select all that apply.</i>	Own-source revenue	Empowerment
	Job creation	Economic self-sufficiency
	Knowledge and skills development	Autonomy/self-determination
	Social capital	Environmental reasons
	Increased local support for renewable energy	Transition off diesel
	Energy literacy	Government policies
	Access to affordable energy	Other
9. From the EDC's point of view, is there a relationship between Indigenous participation in renewable energy, self-determination and reconciliation?	Open ended	

7.2 Appendix 2

Table 4 Interview questions

1. Can you explain the history of the EDC and how the company began working in renewable energy?
2. What were the primary reasons/motivations for engaging with renewable energy? [this question was to affirm their survey responses and explore their reasoning]
3. What does reconciliation mean to you from both a personal perspective?
4. What does reconciliation mean to you from both a business perspective?
5. What does self-determination mean to you from both a personal perspective?
6. What does self-determination mean to you from both a business perspective?
7. How does Indigenous participation in renewable energy play a part in reconciliation and self-determination?
8. In your experience, are there certain governance structures that are better suited for greater Indigenous self-determination?
9. Would the community ever consider getting off the North American grid and directly consuming the energy they produce? Why or why not?