

Community Energy Planning as a Pathway Towards Reconciliation

By

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Abstract

There is a growing demand for renewable energy production to contribute to achieving emissions reduction targets in the face of global warming. Indigenous communities across Canada are being called to contribute to the renewable energy sector and participate in collaborative energy developments. While cross-cultural collaborations are not new to the natural resource sector, there is an increasing need for improved practices to collaborate with Indigenous peoples, especially in the renewable energy sector. In collaboration with Eagle Lake First Nation, this research sought to understand the challenges and barriers to engaging in collaborative natural resource management, and determine how to improve cross-cultural engagement processes, with applications in the renewable energy sector. A literature and document review, interviews and community engagements were used to identify challenges and barriers, identify ideal engagement scenarios, and develop recommendations for enhancing cross-cultural engagement processes.

This research contributed to developing the community perspectives portion of a community energy plan for Eagle Lake First Nation. In addition, the findings of this research indicate that cross-cultural collaborations in the renewable energy sector presents opportunity to address Reconciliation, while improving the standards and common practices to which engagements are held to. Recommendations for improved engagement practices are provided for First Nations communities, academics, industry and government collaborators.

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Chapter 1: Introduction

With the need to act on climate change, there is growing demand for rapid investment into renewable energy. In recent years, Canada has positioned itself as a global leader in renewable energy production (Environment and Climate Change Canada, 2016) and has demonstrated an active commitment to transition to renewables (Natural Resources Canada, 2017, 2021). The decentralized and remote capabilities of renewable energy sources place remote northern and Indigenous communities in a unique position to develop innovative solutions and advance Canada's long-term energy security. Collaborations with Indigenous communities are thus crucial to the future of renewable energy development in Canada. In natural resource management, collaborations involve diverse stakeholders coming together to address natural resource management affairs. As collaborations promote the incorporation of Indigenous knowledge and perspectives into resource management to challenge historical power imbalances, they offer governments alternative means to fulfill their obligations for consultation and accommodation, and re-envision what these obligations might look like as they strive to reconcile relationships (McDonald & Pearce, 2012; Shields, 2020; Usher, 2000). While there are successful frameworks and management approaches, such as co-management and partnership agreements, in the natural resource development sector, renewable energy development in the present political and social setting provides a unique opportunity for the emergence of new collaborative governance models that complement spiritual, cultural and social goals of Indigenous communities (Krupa et al., 2015).

There is much diversity in Indigenous communities across Turtle Island.¹ Indigenous communities are often characterized in the media as a singular interest group. However, there can be significant differences not only culturally but also in how Indigenous peoples govern themselves, their interests and their needs, and the influences of local community politics. Significant diversity can occur between and among communities and peoples. Yet, when entering collaborations, it is often assumed that a community has a shared set of values and goals, and this often goes untested (Armitage, 2005). Such assumptions can strain collaborations and their potential to enhance capacity, ultimately impacting collaborative effectiveness and outcomes (Armitage, 2005). Understanding local context is thus extremely important to producing successful outcomes in collaborations. As a result, community planning is a vital tool for Indigenous communities and territorial organizations to participate in natural resource development projects.

Community planning is a mechanism through which Indigenous peoples can exercise their treaty rights over their traditional territory and resources, and further participate in decision making processes. Community planning can enable local citizen participation in the development of long-term community visions and goals that can inform decision making about land and resource use projects. Community planning also enables adaptability as the needs and priorities of a community can shift over time. With the ability to engage in resource development planning Indigenous communities are taking back their land and resources and paving the way for community self-governance and self-determination.

¹ Turtle Island is another name for North America, which comes from various Indigenous creation stories in which a turtle holds the world on its back. For more information visit, www.thecanadianencyclopedia.ca/en/article/turtle-island.

Community planning can be broad or focus on an identified topic of interest. Community energy planning is emerging as a vital tool for Indigenous communities to better understand local energy demand and capacity, and develop goals and visions related to energy development. While community planning provides an entry point for First Nations communities to participate in natural resource management collaborations, many challenges persist for communities to engage in these spaces in an equitable manner. Best practices for natural resource sector collaborations do exist, however, there is a need to focus on how Indigenous communities can meaningfully participate in renewable energy development, and the literature has shown that this area of study is at a pivotal point in history (O'Neill et al., 2021). This case study research will focus on how renewable energy development could evolve in a manner that 1) is more equitable, 2) promotes Indigenous methodologies within the context of collaborations, and 3) contributes to policy recommendations that support local Indigenous collaborative planning and management..

1.1 Research Purpose

The purpose and objectives guiding this research emerged through collaboration with Eagle Lake First Nation (ELFN). A pre-established community-university partnership was developed in 2019 with ELFN and The University of Winnipeg (UW), which resulted in a formal memorandum of understanding (MOU). The MOU was developed to guide and facilitate collaborative research by the groups, and established a long-term relationship that serves the needs and interests of ELFN and various researchers and students at the UW. As a result, the research questions and objectives were developed collaboratively. A purpose of this research is to support ELFN and provide information on the potential barriers and opportunities that exist for their community as they work to build capacity to participate in renewable energy development on their traditional territory. Another purpose is to explore the potential of

Indigenous-led community energy planning to offer viable alternatives to western planning structures.

This research is guided by two central questions:

- Is there is an opportunity to contribute to work to remedy the dysfunctional relationship between the state and Indigenous peoples and advance Reconciliation through community-led renewable energy development?
- What spaces can be created for Indigenous communities to participate in energy development without mimicking colonial governance structures?

The research questions and objectives set forth in this project have been developed through careful consideration of the community goals and present affiliations ELFN has with various energy development projects.

1.1.2 Research Objectives:

1. Understand what colonial structures exist for community energy work, potential alternatives to these structures, and what must happen to enable alternatives;
2. Support ways to increase understanding of energy types and futures available to Eagle Lake First Nation;
3. Report Eagle Lake First Nation's community values, desires and priorities to leadership and community for future energy development plans; and

4. Develop constructive policy recommendations and/or guiding principles to support Indigenous participation and the use of Indigenous knowledge in energy development and decision making.

1.2 Research Context

1.2.1 Eagle Lake First Nation

Situated in northwestern Ontario in Treaty #3 territory along the shores of Eagle Lake lies the Ojibwe community of Migisi Sahgaigan. More commonly referred to by its English name, Eagle Lake First Nation gets its name from the large population of eagles that inhabit the region. The community is one of 28 others that fall under the Grand Council Treaty #3 Political Territorial Organization. The community exercises local governance through the band council system, while implementing various traditional values and laws into their everyday governance practices to help guide decision-making processes and uphold community rights and values. Among some of these laws is the Manito Aki Inakonigaawin resource law, which governs the relationships between the land and its inhabitants. This law is used across Treaty #3 territory and is an inherent law that is the backbone of all decision making in the region. The law is also a teaching and can be a challenge to convey within the English language, yet it is critical to understand. As stated in the Manito Aki Inakonigaawin Toolkit, “In Treaty #3, it is a promise to the land that the humans will take care of all beings, interconnected in a loop of respect, reciprocity, rights and responsibilities” (Grand Council Treaty #3, n.d.). ELFN recognizes the significance of this law, as it continues to shape decision making, especially around natural resource development. The ELFN Lands and Resources office is a main point of contact for industry, consultants and the federal and provincial governments. The office provides

information to Chief and Council regarding lands and resources and is actively engaged with industry partners in various energy development projects.

1.2. 2. Energy and Development in Treaty #3 Territory

Treaty #3 Territory holds vast natural resources. Forestry and mining dominate the landscape and are major economic drivers in the region. The Thunder Bay Community Economic Development Commission states that from 2021-2026, mining related activities in the northwest are anticipated to increase electricity demand by 180% (Thunder Bay Community Economic Development Commission (CEDC) & MNP LLP, 2021). Several hydro dams and power generating stations support present demand from natural resource development, with hydroelectricity as one of the dominant energy sources in the region. To add to this expansive

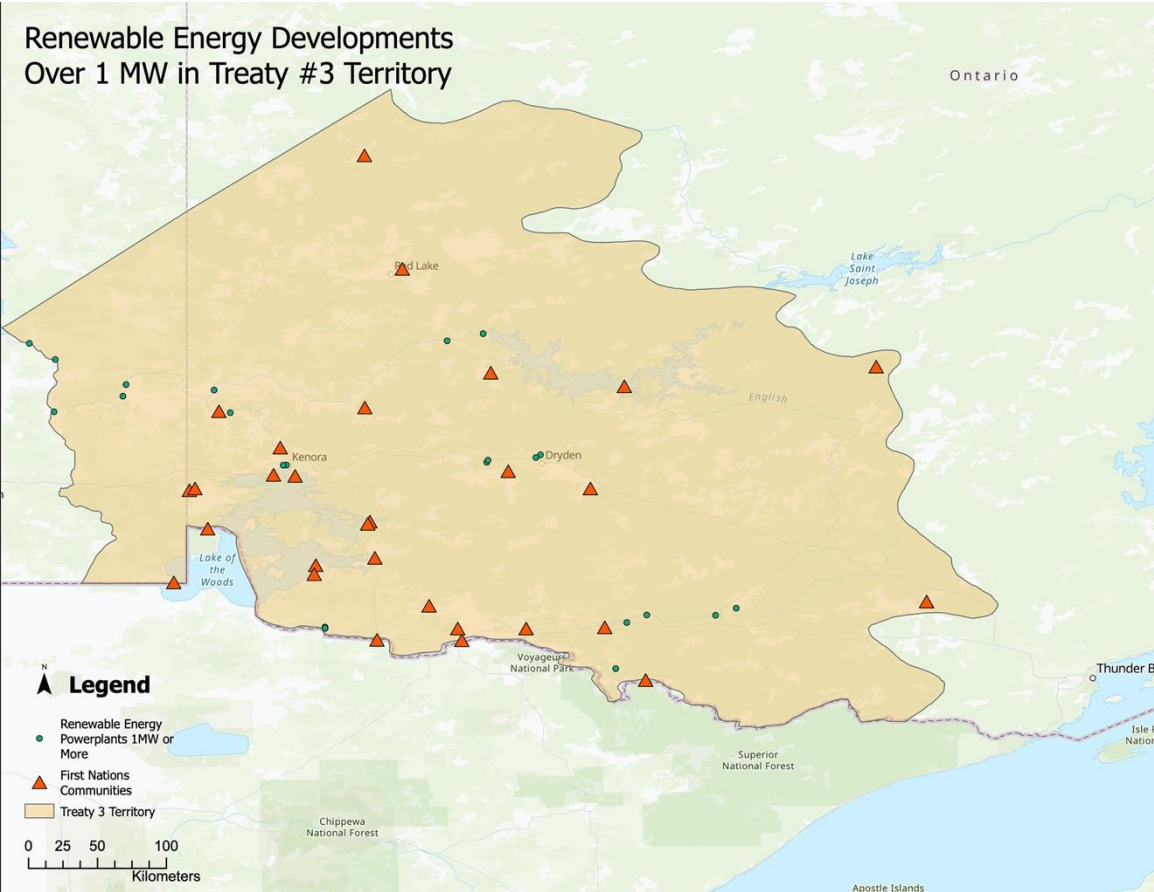


Figure 1: Map of Renewable Energy Developments in Treaty #3 Territory (Unger, 2023).

energy landscape, the Town of Ignace, which is located less than 130 kilometres away from ELFN, is presently being analyzed to determine its suitability to facilitate the disposal of the country's nuclear waste. The site selection process, facilitated by the Nuclear Waste Management Organization (NWMO) has been ongoing since 2010, and Ignace is one of two potential locations remaining in the selection process (Nuclear Waste Management Organization, 2022).

Due to the large number of natural resource developments in the region, power demand has increased, with a large focus on renewables. The Waasigan Transmission line is one renewable energy development project in active development to address increasing energy demands. The Waasigan Transmission line is proposed to expand on existing transmission line routes from Dryden to the shores of Lake Superior between Thunder Bay and Shuniah, as well as provide alternate routes to service additional areas (Hydro One, n.d.). The project is being undertaken by Hydro One, and will provide an additional 350 megawatts of power to northwestern Ontario to increase power supply and support economic growth (Hydro One, n.d.).

Natural Resource Canada's Clean Energy for Rural and Remote Communities (CERRC) program has also supported the region to explore bio-energy potential (Federal Economic Development Agency for Northern Ontario, 2022). Lac Seul First Nation has committed to participate in a bioenergy pilot project that will utilize biomass boilers to reduce reliance on diesel power, and provide a model that may be replicated by other First Nations communities (Federal Economic Development Agency for Northern Ontario, 2022).

As represented in Figure 1: a variety of energy sources beyond those mentioned exist in the Treaty #3 territory. The energy sources discussed are considered current major projects, in that they have widespread impacts to a large portion of the landscape and people that reside in

the territory, and are actively in discussion or development stages. Projects not discussed are still pictured in Figure 1: and are considered less critical developments on the territory in present-day. The diversity in natural resources and the rapid increase in demand for energy supply makes the Treaty #3 region a suitable location to explore the potential of renewable energy resources. In many cases First Nations communities have expressed an interest in participating in or leading many of these projects for economic, social, political and cultural reasons.

1. 2. 3 Eagle Lake First Nation's Involvement in Energy Development

Due to the vast renewable resources on their traditional territory, ELFN is well-positioned to participate in several proposed energy development projects. As of 2022, ELFN is one of eight First Nations active in the Gwayakocchigewin Limited Partnership (GLP). The GLP is an agreement that provides the opportunity for partner First Nations to engage in decision making and to invest an equity stake in the Waasigan Transmission Line project (Hydro One, n.d.). In addition, ELFN is actively involved in discussions concerning the site selection for the NWMO nuclear waste repository. ELFN has also shown an interest in mining developments on their territory, and signed an MOU in 2019 with Treasury Metals Inc. in relation to the Goliath Gold Mine project (Treasure Metals Incorporated, 2019). ELFN community members have shown an interest in acquiring further knowledge of renewable energy development and fostering community engagement in projects that have the potential to impact their traditional territory. In response to community interest, ELFN's Lands and Resources Department has sought out additional capacity to explore community opportunities with respect to renewable energy development. ELFN received funding from the Independent Electricity System Operator (IESO)

Community Energy Champion program² to hire a staff member to enhance their capacity to respond to this request. In addition, they utilized the pre-existing relationship with the UW to seek out a Master's student to further enhance capacity and support their goals of producing knowledge to inform the development of a community energy plan.

Through mobilizing different knowledges among community members, academics and industry, I have worked collaboratively with ELFN to conduct a case study to better understand the energy needs and current capacity of the community, as well as determine how Indigenous communities can participate more effectively in energy development. Taking a relationship-based approach to understanding renewable energy and related capacity needs, this research has assisted ELFN in identifying solutions that are in line with their natural resource laws, account for their rights, and align with their long-term goals.

1.3. Research Contributions

The research findings are beneficial to ELFN by informing the basis of a community energy plan, assisting in developing community goals to further enhance their adaptive capacity to respond to environmental and social changes, while improving their ability to meaningfully participate in renewable energy projects. The collaborative and participatory nature of the research process provided opportunities for and sought to empower community members to engage with planning and decision-making processes. Through continued engagement with community members, this research enables ELFN to continue to use their own values and knowledge to guide resource development that is in line with their traditional resource laws,

² The Community Energy Champion (CEC) program provides support and funding for a First Nation or Metis community to hire a local community member to take on the role of the CEC to support the planning, implementation and evaluation of local energy developments and related priorities.

contributing to their commitment to being a self-governed First Nation. This research also contributes to academic literature by filling an identified gap of best practices for cross-cultural collaborations in renewable energy development. Through bringing forth contributions from Indigenous and non-Indigenous actors in the energy sector, the research encompasses diverse perspectives to identify best practices for incorporating cross-cultural knowledge and practices. This information will advise solutions to balance competing objectives for engaging equitably in renewable energy development. While this study is reflective of the challenges and barriers at a specific time and place, it will provide suggestions for improvements into the future that may be implemented in policy, academic research and cross-cultural collaborations beyond the context of ELFN.

It is my hope that the research will serve a crucial role in understanding how incorporating cultural and spiritual components into resource development planning can enable meaningful partnerships and mutually beneficial collaborations between Indigenous peoples, government and industry.

1.4. Organization of Thesis

This thesis is divided into six chapters. Chapter 1 outlines the purpose and objectives of the research and situates ELFN in the context of the research and the broader scope of renewable energy development. It discusses the importance of the research and its contributions to both ELFN and to those involved in cross-cultural collaborations. Chapter 2 situates the research in the literature. It discusses the present significance of renewable energy development, the historical engagement of First Nations in energy development and barriers to collaborations involving actors from various backgrounds and sectors, and reviews various concepts that may

aid in the improved development of cross-cultural collaborations in the energy sector. Chapter 3 describes the research positionality and worldview and details the research approach and methods. Chapter 4 reviews the results while Chapter 5 discusses the results in relation to the research questions and provides additional insight into the findings. It also reviews applications of the findings, providing detailed recommendations for best practices for cross-cultural collaborations in renewable energy development.

Chapter 2: Literature Review

This chapter examines the need for renewable energy development, explores its role in Reconciliation, and provides a broad overview of the complicated relationship between First Nation's communities and the federal government. It further examines pathways forward, with a focus on collaboration. Two major barriers to successful collaborations are identified and further analyzed, and concepts to reduce these barriers, including just energy transitions and knowledge integration, are reviewed. The chapter concludes by discussing the potential of community energy planning as a means of approaching collaborations in the renewable energy sector and discusses its further relevance to the study.

2.1 Environmental Concerns and Energy Development Across Canada

Transitioning towards renewable energy is a crucial point of discussion when it comes to addressing climate change, and Canada is no stranger to utilizing natural resources for energy development. Canada is the fourth largest oil producer in the world, and much of the country's economy relies upon resource extraction and energy production (Natural Resources Canada, 2016). The federal and provincial governments have a longstanding history of providing incentives for fossil fuel development, commonly as large financial subsidies to private industry for continued fossil fuel extraction and new development projects (Corkal, 2021). In a 2020 report, Canada ranked last among all countries that are involved in both the Organization for Economic Cooperation and Development (OECD) and the G20 in phasing out supports for fossil fuels (Geddes et al., 2020).

The OECD is a forum where 38 countries with market-based economies promote sustainable economic growth, and provide policy recommendations and knowledge to enhance

global decision making (Organisation for Economic Co-operation and Development, n.d.). Thus, Canada is far behind countries with similar economies and industries in achieving emissions reduction targets to combat climate change (Geddes et al., 2020).

While Canada is not rapidly divesting from fossil fuels, it maintains that it is a global leader in energy development, and recognizes the pressing need to reduce greenhouse gas emissions to combat climate change (Canadian Intergovernmental Conference Secretariat, 2011; Global Affairs Canada & Dion, 2018). On the federal level, the country has shown an active commitment to emissions reductions and responding to climate change through implementing policies like federal carbon pricing, and participating in national and international efforts, including the formation of the Pan Canadian Framework, and joining the International Renewable Energy Agency (IRENA) (Geddes et al., 2020; Natural Resources Canada, 2017, 2021). Through IRENA Canada also reaffirmed its commitment to work with Indigenous climate leaders to transition remote communities towards clean energy while increasing local ownership and control of energy projects to enhance local capacity (Natural Resources Canada, 2021). In addition, the country has set lofty goals, including cutting emissions in half by 2030 and completely phasing out fossil fuels by 2040, with an overall goal to shift to 100% renewable energy consumption (Coalition for a Green New Deal, 2019). When it comes to responding to climate change, the energy sector is clearly a priority area.

Energy is a rational entry point for the country to contribute to a more sustainable global future, as the energy sector is responsible for 81% of greenhouse gas emissions in Canada (Government of Canada, 2019). A substantial amount of research has been conducted on the potential that renewable energy poses for providing long-term solutions to global climate problems, and studies have confirmed that there is enough renewable energy potential in the

country to exceed current national energy demands and sustain the country well into the future (Hoicka et al., 2021). Thus, rapid investment into renewable energy is a highly promising path forward, and the country has made it clear that this is the next step towards a sustainable shared future (Natural Resources Canada, 2016).

2.1.1. Governance and Decision Making in Energy Development

Previous research has found that the decentralized and remote nature of most renewable energy projects has resulted in local regions being the most impacted by social, economic and physical implications that are associated with energy transitions (MacArthur et al., 2020). In addition, provincial and territorial governments hold most constitutional authority over the energy sector, which has resulted in a historically top-down management approach to energy development, often excluding local context and communities (MacArthur et al., 2020). As a result, Indigenous communities experience barriers to participating in renewable energy projects. Though there have been various policy changes that have required increased engagement with Indigenous communities in resource development projects on Indigenous traditional territories, Non-Indigenous energy proponents continue to dismiss these procedures and requirements. Whether it be fossil fuel development or renewables like hydroelectric development, there is ongoing construction of projects that are still deliberately dismissive of Indigenous rights, and actively seek to silence Indigenous voices (Simons, 2021). There has also been a lack of support from the public when it comes to including Indigenous peoples in a way that is meaningful and advocates for Indigenous rights. While on paper much of society is supportive of renewable

energy development ³ by Indigenous communities in Canada, many citizens withdraw support or turn a blind eye when the conversation encroaches on political and economic sovereignty for Indigenous peoples (Lowan-Trudeau, 2017). These perspectives are rooted in historically engrained colonial ideologies and must be addressed to remove barriers that inhibit Indigenous participation in renewable energy development. If the government's plan to combat climate change hinges upon a transition to renewable energy, there is significant work that must be done to reconcile relationships among government, industry, Indigenous peoples and the general public before this transition to renewable energy can move forward.

2.1.2 Indigenous Engagement in Energy Development

If renewable energy is the path forward for Canada, then it is vital to acknowledge where this development will occur. Much of the country's renewable energy potential exists on Indigenous traditional territory (Hoicka et al., 2021). Therefore, renewable energy development must concern itself with involving Indigenous peoples as it will have direct effects on Indigenous and First Nations communities.

Indigenous communities across Canada are embracing renewable energy as a way to reclaim their territory and reinstate political and economic autonomy, and Indigenous peoples are re-envisioning themselves as leaders when it comes to renewable energy development (Lowan-Trudeau, 2017). To date, Indigenous communities have participated in 197 renewable energy projects across the country that exceed 1 MW (Indigenous Clean Energy Social Enterprise,

³ There is broad debate among environmental and social scientists regarding what is defined as renewable energy, as some sources are not sustainable or environmentally friendly. For the purpose of this study, renewable energy is any energy source derived from natural sources that is able to be replenished on a human timescale. This includes solar, wind, bioenergy, nuclear, geothermal, marine and tidal energy sources. Nuclear energy is considered renewable for the purposes of this study. While the minerals needed to produce nuclear energy, including uranium are not a renewable resource, nuclear energy is recyclable at high rates, and the generation of nuclear power does not emit any greenhouse gases, argued to be more environmentally friendly than other major renewable energy sources.

2022). These projects provide various social and economic benefits to communities, including creating jobs and streams of revenue, and promoting community autonomy and sovereignty (Indigenous Clean Energy Social Enterprise, 2022).

Based on these facts, the direct involvement of Indigenous communities in energy development appears to be trending in a positive direction, however this has not always been the case. In fact most energy projects developed on Indigenous territory in the last ten years have limited Indigenous ownership (Hoicka et al., 2021). Energy is essential for the long-term growth and development of societies, and without access to reliable energy, progress becomes hindered.

During colonization most Indigenous communities were relocated from their traditional territory to federally designated reserve land. Many challenges arose from this relocation, as the reserve system was one of many actions taken by the government to erase Indigenous peoples from the country. One problem was that the majority of these new federally recognized reserve communities were not provided reliable and affordable connections to the power grid that urban and rural residents rely upon for their everyday life (Wilson, 2018). In addition, confining communities to small spaces and forcing them off their traditional territories opened entire regions of uninhabited land to resource development extraction. It is no coincidence that the reserve system presented the opportunity to permit large scale energy development projects to take place. These regions that entire communities were forced away from are presently being utilized to produce affordable and reliable energy for the rest of the country. Today, entire communities and significant cultural sites have been flooded to produce hydropower, and massive landscapes have been devastated to extract fossil fuels (Ballard & Thompson, 2013; Dunlap, 2021). At the same time, energy resources in many Indigenous communities fail to support an acceptable standard of living, and it is clear that Indigenous peoples have not had

access to the same resources and opportunities as the average Canadian (Kendall, 2001; Wilson, 2018). As Indigenous communities tend to experience the majority of the negative environmental and social costs associated with energy development, and in some cases are expected to live with inadequate energy sources like diesel, the cost of energy for these communities is inequitable based upon the social and environmental loads they take on. The country's pursuit of affordable energy for most of its citizens has been at the expense of the livelihoods and cultures of Indigenous peoples. Energy is not only a resource, but has radical political, economic, social, and environmental implications.

2.1.3 Historical Engagement of Indigenous Peoples in Energy Development

There is an extensive history of Indigenous engagement in energy development. This section provides broader perspectives as an entry point for the more nuanced analysis that will follow in later chapters. The history of Indigenous communities' engagement in energy development can be divided into three phases (Hoicka et al., 2021). The first phase (approximately 1867-1981) is a complete lack of recognition of Indigenous peoples. In this phase, there were no legal requirements to consult or engage Indigenous peoples so government and industry excluded them, while developing major hydroelectric and oil and gas projects on their traditional territories (Coates, 2016; Hoicka et al., 2021; Lorinc, 2016). Though this directly impacted their culture and way of life, Indigenous peoples were ignored and excluded from participating in planning and decision making (Coates, 2016; Hoicka et al., 2021; Lorinc, 2016). The second phase is where change began, as consultation was introduced. In 1982, Aboriginal Rights were acknowledged by the government in Section 35 of the Canadian Constitution Act, and the duty to consult and accommodate was recognized by the Supreme Court of Canada

(Coates, 2016; Hoicka et al., 2021). Governments became required to consult with Indigenous peoples and include them in some manner in the development of energy projects. Indigenous inclusion was mainly facilitated through Impact and Benefit Agreements, which became commonly utilized contractual agreements between the communities and developers (Hoicka et al., 2021). These agreements outlined project conditions and benefits and how the benefits would be delivered to communities (King et al., 2019; Moore et al., 2017). In addition, resource and revenue sharing agreements and increased equity ownership began, as some communities started to seek control over energy projects on their territory (*Indigenous Green Energy: Policy and Finance for a Sustainable Future*, 2020; Kielland, 2015). The third and present stage sees a focus on increased equity and ownership and progress on co-ownership models. This stage includes implementation of energy policies and programs across the country to support Indigenous involvement in renewable energy development. This phase also encompasses progress on co-ownership models not just for community energy projects, but also for generation with large crown corporate partners like Manitoba Hydro and Hydro Quebec. Third phase policies and programs represent a positive step forward for the future of energy development (Hoicka et al., 2021). While there has been a rapid increase in these policies and programs, many of them are temporary and limited by their short time frame (Hoicka et al., 2021; *Indigenous Green Energy: Policy and Finance for a Sustainable Future*, 2020). Indigenous involvement faces some uncertainty as many of these policies and program supports are in flux (Hoicka et al., 2021; *Indigenous Green Energy: Policy and Finance for a Sustainable Future*, 2020). While current policies and programs have removed many barriers to Indigenous participation in energy development, an unpredictable future offers both promise and wariness.

While the future of energy development may be uncertain, Indigenous peoples have made it clear that they will continue to be engaged. In fact, Indigenous communities have begun to lead the way in renewable energy development. Speaking on renewable energy and its potential to promote Reconciliation and Indigenous sovereignty, global sustainability leader Chief Gordon Planes (2018) of T'Sou-ke Nation stated, "It is appropriate that [Indigenous peoples] lead the way out of dependency and addiction to fossil fuels and to rely on the power of the elements, the sun, the wind, and the sea once again" (Pembina Institute, 2017). For Indigenous peoples, taking part in renewable energy development is a way to assert collective rights to land and self-determination (Hoicka et al., 2021). It is a way for Indigenous peoples to reclaim their political autonomy and exercise sovereignty, and pushes government and industry to address Reconciliation and create active change (Hoicka et al., 2021; Lowan-Trudeau, 2017). Indigenous communities desire to be involved in renewable energy development and will exercise their rights to political sovereignty and autonomy.

2.2 Pathways to Reconciliation

2.2.1 Linking Reconciliation and Energy Sovereignty

There has been a steady increase in the number of energy projects with Indigenous involvement, and renewable energy development presents a unique opportunity to advance Indigenous sovereignty and further Reconciliation (Hoicka et al., 2021). As previously stated, the capacity for renewable energy development is dependent upon utilizing Indigenous territory, therefore Indigenous participation is vital to progressing the nation's energy future. Renewable energy development is unique in that the remote and decentralized nature of projects can enable Indigenous communities to take control and ownership over projects on their own territory if

they desire. Whether it be majority ownership of a project, or varying levels of engagement, there is an opportunity to become involved in resource development in a way that respects and acknowledges the rights of and goals of both Indigenous and non-Indigenous peoples, promoting Reconciliation. Reconciliation and energy sovereignty are directly in line with one another, and it is nearly impossible to meaningfully address one without acknowledging the other. As explained by Schelly et al., (2020, p.110), “Energy sovereignty is about empowering communities to make decisions about energy systems.” If a community is not only participating in a renewable energy project, but holds majority ownership, the project is more likely to address Reconciliation (Hoicka et al., 2021). Thus, energy sovereignty and Reconciliation are complementary processes. Through undertaking energy development in a way that is meaningful and respectful to Indigenous peoples, energy development can help reconcile relationships and promote Indigenous rights and sovereignty.

Unfortunately, many acts of Indigenous sovereignty have been met with resistance or a lack of support from the general public, as Indigenous self-determination is often perceived as an attack on non-Indigenous people’s own rights, and romanticized perceptions of Indigenous peoples (Lowan-Trudeau, 2017; Willow, 2016). Development on Indigenous territory cannot move forward if it does not work towards reconciling historical relationships and finding a new way to move forward together. Reconciliation is a process that must take place by all involved parties. Reconciliation happens by balancing rights and traditional practices of Indigenous peoples against non-Indigenous interests and political and social structures, and incorporating these together (Stacey, 2018). Energy sovereignty cannot occur without Reconciliation, and vice versa.

While encouraging Reconciliation to take place may seem like a manageable goal in development projects, what it looks like in practice may be less clear. Thinking about energy sovereignty and Reconciliation as actionable practices rather than abstract concepts can enable the practices to be more easily incorporated into all aspects of development. When considered in this manner it is easier to incorporate sovereignty and Reconciliation at the policy level, creating potential to implement related practices during development of renewable energy projects (Schelly et al., 2020). Reconciliation and energy sovereignty thus become actions that are practiced regularly, rather than obscure concepts that are debated and translated into agreements. Through practicing energy sovereignty and Reconciliation, we can reformulate policy tools to centre community voices in decision making and ensure that communities have the opportunity to express their rights and shape their energy futures, altering the way that energy development is practiced (Schelly et al., 2020). Energy sovereignty is a complex, community-based endeavour. To reconcile the impacts of colonial energy policies, Indigenous communities must be provided the support to influence and shape energy futures in ways they see fit (Schelly et al., 2020; Thompson, 2022).

2.2.2 Collaborative Natural Resource Management

In many cases, collaborative resource management is gaining interest as a means to better work towards Reconciliation and sovereignty, and more meaningfully engage Indigenous communities in resource development. When it comes to energy development, collaborative arrangements offer diverse benefits for all involved collaborators. The participatory nature evokes bottom-up modes of governance that reflect the values and goals of local communities, while building their adaptive capacity to implement resource sovereignty (Krupa et al., 2015). In

addition, collaboration creates space for Reconciliation to take place among government, industry and Indigenous peoples, which is advantageous (Shields, 2020).

Collaborations can promote the incorporation of Indigenous knowledge and perspectives into resource management and challenge historical power imbalances, while simultaneously enabling government to fulfill its obligations for consultation. (McDonald & Pearce, 2012; Shields, 2020; Usher, 2000). Collaborations with Indigenous peoples are also an opportunity for government to re-envision what the duty to consult might look like as they strive to reconcile relationships and promote energy sovereignty (McDonald & Pearce, 2012; Shields, 2020; Usher, 2000). As suggested by Hoicka et al. (2021), energy projects that incorporate community level perspectives may be the way forward for renewable energy to address climate change and contribute to Reconciliation. While cross-cultural and community engaged collaboration is increasingly sought after, successful implementation faces numerous barriers.

2.2.3 Barriers to Equitable Participation in Energy Development and Collaborative Natural Resource Management

Through analyzing barriers to collaboration we can build capacity for successful collaborations to take place (Armitage, 2005). The relevant literature reveals two central themes with respect to barriers: the first is that understanding place-based approaches and local context is vital. The second is the role that power dynamics can play in collaborations. The following sections provide an analysis of these themes and the implications they may have for facilitating effective collaborations.

2.2.3.1 The Importance of Place-Based Approaches and Local Context

Analyzing previously employed collaborative frameworks can help inform the development of new collaborations. They can provide insight into potential challenges or barriers that may arise, as well as potential outcomes when specific methods are followed. However, previously developed frameworks are rarely suitable for meeting the needs of newly formed collaborations. Various local limitations are likely to inhibit the validity or efficacy of following a pre-developed framework, emphasizing the need for adaptive and flexible approaches (Armitage, 2005).

Most complex planning problems cannot be addressed by a single collaborative planning framework, and utilizing a variety of methods drawn from multiple frameworks is a better way to identify challenges and opportunities, and engage stakeholders meaningfully (Vacik et al., 2014). By analyzing forty-three collaborative planning methods, Vacik et al. (2014) determined that using a variety of methods is vital to developing an effective collaboration, and that no one framework or method is the most effective for all-around use. Although it is beneficial to analyze various frameworks to inform the plan of action when developing a collaboration, drawing from frameworks rather than replicating them in an identical fashion is likely to produce more satisfactory and mutually beneficial outcomes (Armitage, 2005; Vacik et al., 2014).

In addition, local context is a significant factor that can impact the success of collaborations, and which methods might be chosen (Armitage, 2005; Vacik et al., 2014). By understanding local challenges, dynamics and pre-existing relationships, we can identify the potential methods or frameworks to be utilized for a collaboration. In turn, we can gain a better understanding of what must take place to build capacity among

involved stakeholders to increase the likelihood of success for a collaboration (Armitage, 2005).

As previously stated, the assumption that collaborators hold shared goals and values often goes untested, especially when engaging with Indigenous communities (Armitage, 2005). This and other assumptions can put strains on the collaboration and its ability to build adaptive capacity, ultimately impacting its potential effectiveness (Armitage, 2005). Local context is thus extremely important to producing successful outcomes in collaborations. Addressing constraints and areas of weakness may help to develop appropriate ways to adapt and work through challenges. In the context of working with interdisciplinary collaborations involving actors from varying backgrounds or fields, relationships, assumptions about socio-economic status, culture and worldviews, and local politics all influence the ability of stakeholders to show up and meaningfully contribute to collaborations (Armitage, 2005). Developing an understanding of local barriers, especially social and cultural differences between stakeholders, provides opportunity for collaborations to be carried out more effectively and best meet the goals and needs of all those involved (Krupa, 2012). By understanding the local context and backgrounds of the involved actors in renewable energy developments, we can draw from pre-existing collaborative frameworks to inform the development of new collaborations that are best suited to the unique realities and needs of the collaboration.

2.2.3.2 Power Dynamics

Power dynamics impact virtually every aspect of collaborations. Power refers to the ability of an institution or actor to exert control or authority (Mantyka-Pringle et al., 2017). Although it can often be seen as negative, power is neither inherently good or bad, but how it is managed and utilized can produce scenarios that are subjectively deemed as positive or negative (Munduate & Bennebroek Gravenhorst, 2003). Power dynamics describe the complex relationships between actors, and their ability to influence or reshape these relationships. It is important to remember that all actors hold power, even marginalized groups, however the distribution of power among actors is rarely equal and is heavily embedded in historical structures and relationships between actors (Mantyka-Pringle et al., 2017; Shields, 2020). Power dynamics are inevitable when collaborations involve varying levels of government and marginalized groups. They can create barriers to effective and equitable participation of actors and can produce considerable conflict if unaddressed. If not managed, power dynamics can inhibit learning and reduce the success of collaboration. Thus, understanding and managing power dynamics within collaborative arrangements is arguably the largest challenge to successful collaborations (Mulrennan & Scott, 2005). When discussing power dynamics, understanding that collaborations are unique, and that in many cases equal power may not be the best way to describe a fair and mutually beneficial collaboration. Instead, focusing on equitable power in collaborations provides an opportunity to ensure that all involved actors are having their needs met, making the collaboration more likely to accomplish the desired outcomes set out by the collaborators (Zurba et al., 2012).

Understanding power dynamics among industry, government and Indigenous peoples is especially significant when it comes to collaborating on natural resource

projects. These dynamics are deeply rooted in historical contexts that have resulted in the creation and/or erosion of power for varying groups. Drawing on these histories is an appropriate entry point into addressing and determining how to manage power dynamics.

Top-down approaches and bureaucracy are historically implicated in Western politics and modes of governance. These modes of governance are largely responsible for limited collaborative and decentralized modes of managing natural resources in the past (Rakshit et al., 2018a; Usher, 2000). A case study conducted by McDonald & Pearce (2012) examined the challenges to expanding renewable energy networks in Nunavut and determined that one of the four main challenges to expansion was bureaucracy and institutions. Through interviews with policy makers and consultants, participants identified several major challenges resulting from bureaucracy (McDonald & Pearce, 2012). Two of these challenges were bridging of interests and values of various participants, and top-down approaches to decision making reliant on local politics and election cycles (McDonald & Pearce, 2012).

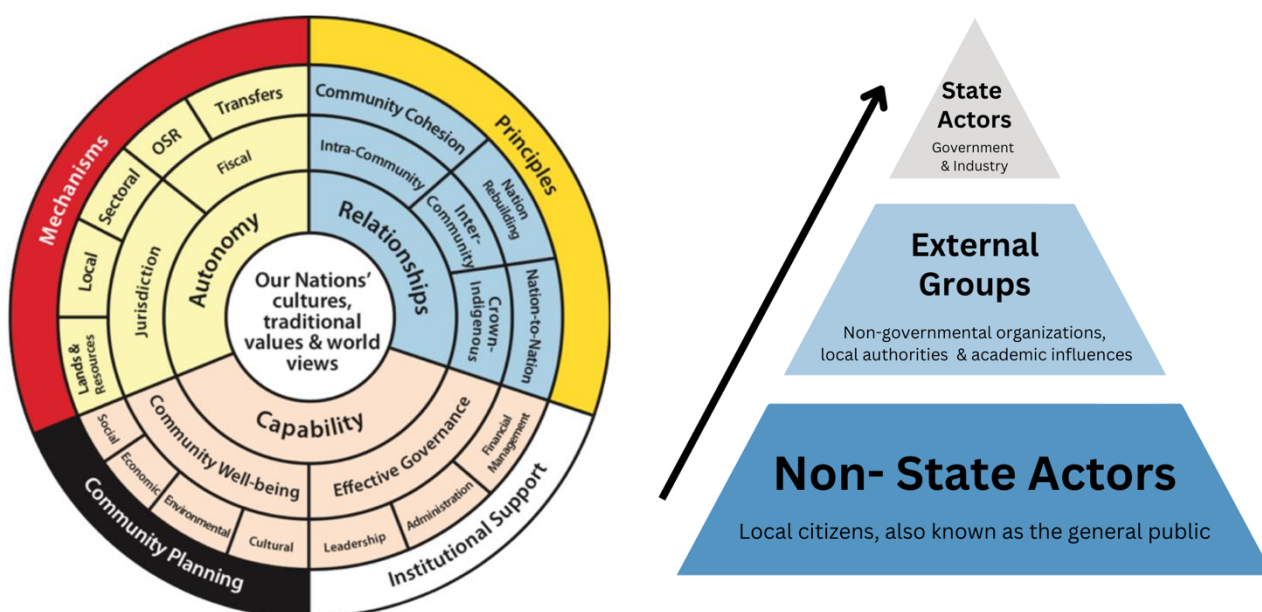


Figure 2: Western adapted approach to bottom up governance structure (Unger, 2023).

Figure 3: Indigenous Self-Determination and Governance Framework (First Nations Financial Management Board & The Institute of Governance, 2018)

Confusion among governing bodies regarding who holds what responsibilities was also apparent, and was identified to be a result of a lack of collaboration among departments within institutions on renewable energy projects (McDonald & Pearce, 2012).

Several other authors also cited the challenges of bridging various perspectives and values among actors in collaborations, and determined that top-down approaches fail to adequately address power dynamics, ultimately pushing actors further away from mutual understanding of their respective perspectives and goals (Alessa et al., 2016; Krupa et al., 2015; Rakshit et al., 2018a). Top-down approaches are a hierarchical governance structure, where decision making power is held by actors at the apex of the structure, and power decreases as you move down the hierarchy. In this structure, non-state actors, also known as the general public, are located near the bottom of the hierarchy, and government and industry make up the top levels.

Newig and Fritsch (2009) provide insight into participatory and bottom-up modes of governance, and their potential effectiveness in successful policy implementation. Through comparing participatory policy outputs to various top-down scenarios, their research determined that political interests and values directly influence policy outcomes, and that participation of non-state actors in policy has the potential to lead to better compliance with decisions than top-down approaches to decision making (Newig & Fritsch, 2009). Using collaborative frameworks, local citizens participate in decision making, achieving a bottom-up approach that enables more support and compliance with decisions from the local population (Newig & Fritsch, 2009). In Figure 2, a bottom-up governance structure can be seen, where power and influence flow from the bottom towards state actors, rather than from the top-down. In comparison, Figure 3 portrays the

Indigenous Self-Determination and Governance Framework, embodying a cooperative approach where there is no top or bottom and the systems work in tandem with one another (First Nations Financial Management Board & the Institute on Governance., 2018). This model enables enhanced citizen participation in governance processes, and is reflective of Indigenous culture, worldviews and values (First Nations Financial Management Board & The Institute of Governance, 2018). While this framework is not reflective of one singular Indigenous community, it was developed in tandem with an advisory board made up of Indigenous government representatives and is grounded in research and theory. The framework presents a generally agreed upon ideal approach to governance for Indigenous and First Nations peoples in Canada (First Nations Financial Management Board & the Institute on Governance., 2018).

Top-down frameworks and approaches are a clear barrier to equitable collaborations, as they mimic in-place power structures, and often fail to challenge existing power imbalances. Although not all collaborations take a bottom-up approach to achieve success, through innovation and community involvement there are ways to work around challenges of power imbalances that result from top-down approaches. Rakshit et al (2018) examine the impacts of a top-down framework developed by the federal government to assist First Nations communities in developing readiness plans to connect to the electrical grid (Rakshit et al., 2018a). The framework was initially well-received, and fifty-five First Nation communities benefitted from the programs, however the lack of consideration of individual community needs and capacities led to high costs, dependence on consultants and reporting that was not useful or beneficial to the community (Rakshit et al., 2018a).

While the overall effectiveness of the federal community energy framework has yet to be determined, Rakshit et al. (2018) provides analysis on a First Nations community that brought pieces of this framework into their own hands to develop a collaborative approach to determine and assess their community needs. In this case, the top-down framework provided a base for the community, but was ultimately not followed, as participatory and collaborative methods emerged as more desirable ways for the community to assess their needs and build the capacity essential to participating in energy development (Rakshit et al., 2018a). The community took what was helpful from the framework to develop their own way of doing things and left other pieces behind that did not serve their goals. They restructured the approach through seeking community input, which offset or complemented the top-down structure of the framework, creating a hybrid approach. In this case, through taking a hybrid approach the community was able to draw from previous frameworks, while also considering local context. This worked especially well for them and is an approach that has proven successful in other collaborations involving Indigenous communities, and places where unique cultural influences will impact the collaboration.

It is apparent that alternatives to top-down structures are more likely to promote equitable collaborations. In their research, McDonald and Pearce (2012) conducted several interviews with hopes of determining solutions to dealing with bureaucratic and top-down barriers to resource management. Participants provided suggestions to reduce barriers and work towards effective implementation of renewable energy policies and programs in Nunavut. Notable suggestions from participants included developing partnerships, providing opportunities for community engagement and community

development, and providing educational resources (McDonald & Pearce, 2012). Their research found that renewable energy projects that involved community partnerships and incorporated collaborative elements were more successful in implementation than projects that did not consider local perspectives or utilize a collaborative approach (McDonald & Pearce, 2012). These authors also determined that collaborations are essential to successfully develop and implement renewable energy projects in Nunavut.

Working under top-down approaches can be especially difficult for Indigenous communities who have been constrained by top-down modes of governance, which have adversely affected Indigenous peoples and their territories for decades. Historical inequities go beyond governance models and control mechanisms, and are especially present in government representation and access to education (Krupa, 2012). As a result of historical injustices, Indigenous peoples are less likely to be involved in decision-making roles in government or industry. This reality further results in a lack of equitable inclusion in decision-making processes that often have the most direct impact on Indigenous peoples (Krupa, 2012). In addition to a lack of representation in decision making, historical injustices have also placed Indigenous peoples steps behind their non-Indigenous counterparts when it comes to their ability to build capacity to respond to environmental and socio-economic changes (Krupa, 2012; Shields, 2020). Low capacity makes it difficult for marginalized groups to enter collaborations on a level playing field with their counterparts. It is a setback rooted in historical injustice and inequities. Consequently, scholarship on collaborative natural resource management practices finds that collaborations that employ top-down approaches are less impactful, and can enable

historical assumptions to persist and continue to perpetuate historical trauma (Krupa, 2012; McDonald & Pearce, 2012; Newig & Fritsch, 2009).

2.2.4 Central Concepts and Approaches to Facilitating Equitable Collaborations

Collaborations provide a unique opportunity to reshape relationships and restructure power dynamics among stakeholders (Shields, 2020). Through creating space for varying viewpoints and cross-cultural understanding, collaborations can promote relationship building (Krupa et al., 2015; Zurba et al., 2016). By building relationships, there is an opportunity to promote meaningful interactions throughout the process, and achieve more meaningful and agreeable outcomes (Zurba et al., 2016).

Through involving Indigenous peoples in decision making through collaborations, especially when it impacts their traditional territory, top-down bureaucracy that often hinders collaborations can be reduced. This, in turn, would allow for more space for new relationships and opportunities to be developed among all involved actors. Through deconstructing power dynamics by the removal of top-down approaches and allowing space for local perspectives and participation, collaborations can facilitate cross-cultural learning to produce effective solutions in environmental and natural resource management (Njoroge et al., 2020 p.18).

Although determinants of success may look different for everyone, it is clear that finding ways to incorporate differing values and develop mutual understandings is essential to successful collaboration (Marttunen & Hämäläinen, 2008). Traditions and culture, as well as capacity building, are identified as important factors in the planning process when working with Indigenous communities (Indigenous Services Canada, 2018). By developing an understanding of the unique values, differences and needs of other participants, collaborations can reduce

power imbalances and successfully develop mutually beneficial goals and outcomes, advancing the capacity of all those involved.

2.3 Working Towards Just Energy Transitions Through Community Energy Planning

While it may be the most valuable to allow all community members to be engaged with every energy development project, that approach would be time consuming and likely draining for everyone involved. A more effective way to gather community perspectives is to undergo a community planning process. Similar to how industry and government prepare themselves to enter into development projects, community planning is a valuable process that can be undertaken by Indigenous communities to prepare themselves to engage in collaborative energy development projects and decision-making processes. This process can complement bottom-up approaches and satisfy the need for community input to be included in decision making, while still being mindful for projects to be carried out in a timely manner. Community planning also enhances a community's adaptive capacity, that is their ability to respond to change, and contributes to their self-determination through enabling communities to more effectively participate in decision-making processes (Rakshit et al., 2018a).

Community planning is a bottom-up process that allows communities to define their collective values and goals and develop a vision for the future of their community. Considering how collaborative development might incorporate the long-term goals and vision of a community is important to ensuring that collaborations are truly inclusive (Krupa et al., 2015). Community planning processes are essential to developing long-term goals and visions. As stated by Indigenous Services Canada (2018), community planning is the best way that external actors can support Indigenous communities to build their capacity. Undertaking a community planning

process prior to engaging in collaborative arrangements that involve outside partners or actors is beneficial, as it enables the community to enter into collaborations with a well-defined understanding of what their purpose is and what they hope to achieve. Organizations and industry typically have these laid out in their company mission and vision statements, and government is directed by leadership as to what their objectives are when entering a collaboration or undertaking a project. Undergoing a planning process to determine their long-term vision, goals and needs can be just as beneficial for Indigenous communities, especially as developmental pressures increase in their territories and they are called on to participate in collaborative processes.

In a case study completed on a geomatics toolkit provided to First Nations of the Mushkegowuk Territory in northern Ontario, communities identified the potential that community planning provided in enhancing their capacity to engage effectively in community-based land use processes and respond to changes associated with developmental pressures (Armitage, 2005; McCarthy et al., 2012). This research highlighted the ability of community-based planning in natural resource management to build adaptive capacity and enable more effective engagement in natural resource management collaborations (McCarthy et al., 2012). Though frameworks and resources to develop adaptive capacity for Indigenous communities have been developed and successfully remodelled, Rakshit et al. (2018) suggests that in the context of energy planning, these resources are generic and lack vital considerations for Indigenous communities. Thus, a localized bottom-up approach that utilizes community energy planning is recommended (Alessa et al., 2016; Krupa et al., 2015; Kythreotis et al., 2019). By having communities focus their planning on more specific sectors, like energy development, communities develop a better understanding of their needs and the ability or capacity they have

to meet those needs, as well as develop a long-term vision and goals (Rakshit, 2019).

Community energy planning embodies community planning processes and principles, and applies them to developing long-term plans to guide future decisions and outcomes for energy resources and developments for a community. As best explained by Rakshit et al., (2019:189), “A long-term community energy planning vision is a vision of community-level capacity.” By focusing on community energy planning, we can better understand the need for local bottom-up approaches, and how starting from the ground up can enable more engaging and effective resource development.

By incorporating community into the energy planning process, it is more likely that the methods used in collaborations, as well as the outcomes will be relevant and culturally appropriate. If communities do not know what their collective long-term goals are, they will be unable to respond effectively to environmental changes, as well as requests from government and industry (Alessa et al., 2016). By developing a community energy plan, communities recognize themselves as the ‘first responders’ to changes, which provides them more control over decision making by affording them the opportunity to make decisions on their own terms through the community, rather than through centralized government structures (Alessa et al., 2016). By ensuring that the planning process is community driven, a community energy plan will have meaningful and long-term impacts for the community, reflecting their needs and desires and enabling them to build capacity to lead decision-making processes themselves (Indigenous Services Canada, 2018). This also boosts community buy-in to take part in collaborations involving external actors. Community energy planning recognizes the importance of community knowledge and values and determines what skills and knowledge community members can bring to the table when they are called upon to collaborate with government and industry, or when they

themselves call upon industry and government with new proposals. Community planning enables broader recognition, validation and reclamation of Indigenous knowledge (Alessa et al., 2016). This can be a healing experience for many Indigenous communities, as it enables the recognition of valuable knowledge and experiences that have been appropriated or lost through Western colonial practices (Mustonen, 2012; Smith, 2021). Reclaiming knowledge and strengthening community ties enhances the social and cultural wellbeing of a community, thus directly improving their adaptive capacity. By undergoing a community energy planning process, Indigenous communities equip themselves with a collective vision and an understanding of their abilities and needs, enabling them to participate more effectively alongside their counterparts in resource development and reclaim their rights and power over their territory, culture and traditions.

2.3.1 What are Just Energy Transitions?

As countries transition away from fossil fuels and towards renewable energy developments, there is a need to consider the social implications of such transitions. The energy industry is at a pivotal point in history, where the human and social impacts of energy use are more significantly considered in development projects than ever before. The potential for industry to consider human elements speaks to the concept of a 'just energy transition.' The Paris Climate Agreement discusses the importance of incorporating a just transition into addressing climate change and moving towards development that is sustainable (United Nations Framework Convention on Climate Change, 2015). The International Institute for Sustainable Development explains that a just transition is a process-based approach where industry, governments and additional actors develop a shared agenda that considers their individual geographical, political cultural and social contexts and enables them to move forward collaboratively (International

Institute for Sustainable Development, n.d.). They further outline the significance a just transition can have on energy, stating that “Energy transitions are about people: the ones who make the decisions and the ones affected by those decisions. A ‘just transition’ approach ensures that the affected people are considered by those making decisions” (International Institute for Sustainable Development, n.d.). As stated by Hoicka et al., (2021, p.1) “Although renewable energy has not been inherently positive for Indigenous peoples, Indigenous communities in Canada have been participating in renewable energy production, which presents a potential pathway to Reconciliation, climate change mitigation and a just energy transition.” Through adopting just transition goals, it is apparent that integrating Indigenous peoples’ perspectives and knowledge is an essential part of Canada’s transition towards renewable energy.

2.3.2 Bridging Knowledge Gaps through Two-Eyed Seeing

For a just energy transition to take place, we must find a way to incorporate Indigenous knowledge and perspectives into energy development. We must recognize First Nations, Inuit and Metis governance systems and legal traditions through partnering with communities. Historically, Western and Indigenous knowledges have been viewed as being in opposition of one another due to their different approaches to scientific inquiry. Western science focuses on experiments to prove or disprove assertions or hypotheses and provide information that can be used as data and analyzed systematically, while Indigenous science focuses on lived experiences and generational knowledge. While these two modes of discovery are very different, they are both valuable, and when combined can provide a vivid understanding of the world. Over the years, however, Western governance has not often placed high value on Indigenous knowledge. However there have been recent attempts to formally identify ways in which Western and

Indigenous knowledges and modes of doing things can co-exist equally to identify and solve complex issues.

Two-Eyed Seeing is a concept that was developed by Mi'kmaq Elder Albert Marshall and describes a collaborative approach to working with multiple knowledge systems. Marshall states that, "Two-Eyed Seeing refers to learning to see from one eye with the strengths of Indigenous ways of knowing and from the other eye with the strengths of Western ways of knowing and to using both of these eyes together" (Bartlett et al., 2012, p.335). This integrative approach is beginning to be directly applied throughout resource development and consultation processes as it has been valued as a pathway towards Reconciliation. Two-Eyed Seeing encourages Indigenous Knowledge to be recognized as its own distinct and complete knowledge system (Bartlett et al., 2012; Iwama et al., 2021). Moore et al. (2017) state the need for integrative concepts like Two-Eyed Seeing to inform decision making in the context of water quality and degradation. Their research, which highlights the many challenges with data collection and scientific information as it pertains to water governance is applicable to other resource developments. They argue that collecting more scientific data will not help us answer complex problems, but rather accepting Indigenous knowledge and values, and adopting these different ways of doing things could benefit present day Western processes (Moore et al., 2017).

According to Bartlett et al. (2012), to effectively integrate concepts like Two-Eyed Seeing in a meaningful way, those utilizing the concept must acknowledge the need for engagement with different knowledge systems, be inclusive and able to place their values and knowledge up for examination, and be action oriented. While knowledge integration is valuable, through exploring alternatives through integrative lenses like Two-Eyed Seeing, we can identify if there are ways that a just transition can be achieved. There is a need for resource management

and development processes to be reconfigured to incorporate Western and Indigenous knowledge systems, however there is still little understanding of how to best reconfigure these systems (Bartlett et al., 2012; Moore et al., 2017; Stefanelli et al., 2018). It remains uncertain if there is a way in which Indigenous ideologies can inform renewable energy development without adopting Western protocols or standards, nevertheless there is value in exploring alternative ways of doing things. Through utilizing community energy planning, we can utilize a bottom-up approach to begin to understand how to lay the groundwork for reconfiguring our systems to better incorporate multiple knowledge systems as separate and equally valuable entities.

2.4 Conclusion

Community energy planning is a valuable approach for industry, government and First Nations communities to explore the potential for engaging in just energy transitions. Community energy planning seemingly provides an opportunity to promote Reconciliation and engage all actors in a way that previous natural resource development collaborations have not necessarily found success in. Through utilizing a bottom-up approach that accounts for differences in values and systems, collaborations that involve community energy planning processes present an alternative way to engage actors and develop shared goals and visions for a project. Through exploring alternative modes of doing things, we can enhance our adaptive capacity, something all actors will benefit from. Community energy planning, along with support from industry and government for communities to conduct these plans, remains a next formal step for many First Nations communities to be successfully engaged in a just energy transition.

For ELFN, laying the foundation to develop a community energy plan remains the next formal step to engaging effectively in renewable energy development on their territory. This

study was intended to gather information and connect knowledge in ELFN to provide the initial groundwork necessary to support the development of a community energy planning process.

Through undergoing this process with the community, the research also sought to understand how community planning processes can better support and recognize Indigenous and Western knowledge as separate yet equal entities. It also sought to provide recommendations for policy makers to improve best practices for working with Indigenous and First Nations communities as we enter a fast-paced transition to renewable energy developments.

Chapter 3: Research Design and Methods

Throughout this section I discuss my positionality and worldview, as well as my research paradigm to provide transparency as to my position as the researcher and my engagement with collaborators and participants in the study. This is followed by a description of the research design and methods used for data collection and analysis in the study. The discussion of the methods provides an understanding of how the objectives outlined in Chapter 1 were satisfied and provides an entry point for the presentation of results in subsequent chapters.

3.1 Positionality and Worldview

Reflecting on my position as a researcher is critical to undertaking collaborative research with an Indigenous community, and to limiting personal bias (Holmes & Gary, 2020). While it is impossible to completely eliminate bias, engaging in reflexivity to understand ones ontological and epistemological assumptions can lead to improved engagement with the research topic and allow for understanding of how I as the researcher may influence the outcomes and results of the study (Holmes & Gary, 2020; Rowe, 2014).

Growing up I have seen myself as someone who cares deeply about the environment and people. As a white settler, I was born and raised on Treaty #1 Territory, and grew up on the outskirts of Winnipeg. I spent much of my childhood immersed in nature. Many memorable experiences from my childhood revolve around camping with family in the Whiteshell Provincial Park on Treaty #3 Territory, or spending time in my own backyard, which held a garden, and is connected to a forest and farm fields. I formed a relationship with the land I grew up on from a very young age. This interest led me to pursue a university degree in environmental studies, where I began to form a deeper interest into the political contexts associated with land and

resource management and human rights. It was here that I learned about the history of Indigenous peoples, and my responsibilities as a direct beneficiary of the dispossession of Indigenous territory by treaty agreements. I learned a great deal from Indigenous and non-Indigenous scholars through coursework and extracurricular activities, and further went on to receive a minor in native studies.

During my undergraduate degree I had the opportunity to work as a research assistant, where I engaged in collaborative research on the impacts of hydroelectric development in Manitoba. The research was part of a larger community alliance called Waniskātān. The alliance and all its activities were guided and shaped by First Nations communities. Numerous research projects, conferences, policy engagements, and community events emerged from the alliance and provided opportunities for involvement. While I was able to support community members involved in the alliance, it was crucial that I began to acknowledge that I was a direct beneficiary of this work. This work was valuable and positive changes came from it; however it did not negate what community members had gone through in the past and are still experiencing. For many of those involved, the work goes beyond the changes we made and the awareness we raised. This was and continues to be a fight for their treaty rights and recognition as Indigenous peoples. My time working for Waniskātān led me to learn, unlearn, reflect and support the involved communities. Throughout this experience, I have formed life-long relationships with people from across Turtle Island. I have had invaluable experiences that I have learned from and have deeply shaped my worldview. I continue to carry these experiences with me on my lifelong journey of learning and unlearning my Westernized worldview and colonial assumptions, and my responsibilities as a treaty person. It is a privilege that I am able to continue both this work around energy development and the personal learning process as a master's student through

participating in this research project with ELFN. I have been graciously provided with support from ELFN to collaborate and be a part of the process of sharing resources and amplifying community perspectives to support a sustainable a future for their community.

3.2 Research Approach and Methodology

Through understanding my positionality and worldview, I can reflect on the research paradigm that informed this study. It is important to address the fluidity of research paradigms. As humans evolve, so do their worldviews and the paradigms they might use (Holmes & Gary, 2020). As a researcher I have a responsibility to the partners. As my partners in this work are from a First Nation community it is essential that the research supports Indigenous worldviews and paradigms. Indigenous knowledge and research paradigms have a longstanding history of not being accepted as equally valuable in Western institutions, and only recently are developments like Indigenous research ethics and Two-Eyed Seeing creating space for Indigenous paradigms to be utilized (Cajete, 2000; Held, 2019). While I have been educated on and immersed in Indigenous culture through ceremony and community activities, and been accepted by ELFN to do this work, I acknowledge that as a non-Indigenous researcher, it is impossible for me to fully carry out this research from an Indigenous paradigm. As stated by Walker (2015, p. 162), “ Nonindigenous researchers will find it very difficult to develop meaningful relationships with and understandings of Indigenous people if they are working solely from within nonindigenous worldviews, which may blind them to ontologies, epistemologies, and axiologies that are in some ways radically different to their own.” While it is important to acknowledge my relationship to the research, it would also be unproductive for me to carry out this research fully under a Western paradigm. As suggested by Held (2019), to

ensure that research is done in a way that best supports the community and the researcher, paradigms should be co-developed between the researcher and the community. It is therefore best that I understand my approach and worldview and develop the research paradigm collaboratively with ELFN.

Collaborative research that incorporates Indigenous and Western knowledges offers diverse benefits and promotes Reconciliation through challenging historical power imbalances, and its participatory nature further supports bottom-up modes of governance that can reflect the values and goals of local communities (Krupa et al., 2015; Shields, 2020; Usher, 2000). In addition, collaborations with individual communities can create space to incorporate local perspectives and participation, and such spaces can facilitate cross-cultural learning to produce effective solutions in environmental and natural resource management (Njoroge et al., 2020 p.18). Rather than attempt to follow a specific Western or Indigenous paradigm, this research utilized a collaborative community-based participatory approach that incorporated all involved parties' knowledge and expertise to develop the research goals, objectives and methodology. Community-based participatory research (CBPR) is an approach to collaborative research through which decision making and ownership is reciprocal for all parties, and is increasingly being recognized as an appropriate practice for engaging in research with Indigenous communities (Castleden et al., 2012; de Leeuw et al., 2012). While this approach was highly suitable for the community and researcher, there were challenges, including advancing the research while in a pandemic. While CBPR best practices include allowing considerable time and space to develop relationships and establish trust, the partners recognized the barriers imposed by the pandemic, and utilized CBPR principles as guidelines for the research to take place. CBPR principles enabled continued guidance in the research process, while also allowing

for flexibility in the realities of unpredictable situations. Decisions were made collaboratively based upon these realities as they arose.

3.3 Research Methods and Methodology

The methodology was developed through several conversations, where ELFN and myself identified our requirements for the research to take place, as well as any concerns, and areas we might be able to provide support to one another. Throughout this discussion, it became clear that we were able to support one another in our relationship, and we together came up with the preferred ways to do so. The community agreed to support this research through providing knowledge and expertise through interviews, as well as sharing contacts, and enabling me to engage with the community and its members. In return, I worked with community members to develop and deliver educational workshops and the development of the community perspectives portion of a community energy plan.

The research methodology was co-developed through engagement with the ELFN Lands and Resources department, and further inspired by Rakshit's (2019) conceptual methodology framework on community energy planning from their dissertation, *Community-powered local energy planning and transitioning in off-grid northwestern Ontario First Nation communities*. Figure 4 displays Rakshit's (2019) framework which focuses on the incorporation of community participation and engagement to produce a bottom-up approach that provides context and directions for moving forward in a way that also considers external stakeholders, while remaining culturally appropriate. In the following sections, I outline the individual methods. The specific objectives and their corresponding data collection methods are also outlined in Table 1.

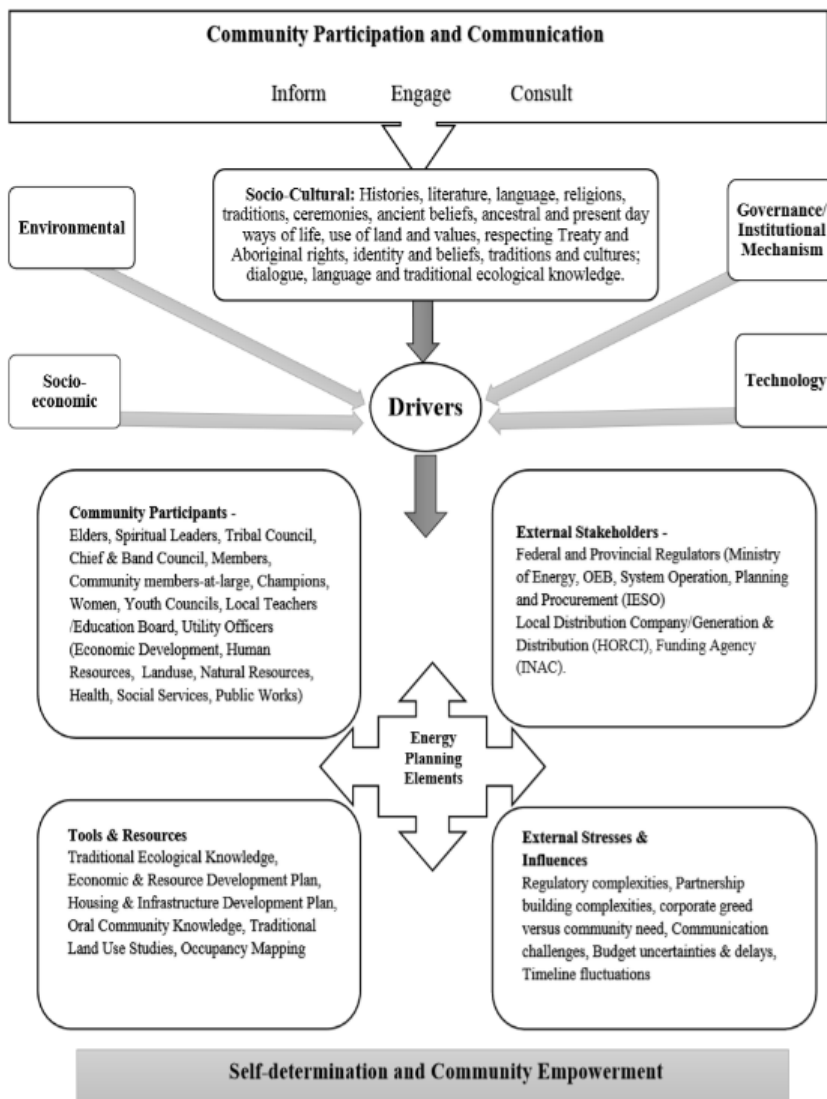


Figure 4: Community Energy Planning Framework (Rakshit, 2019).

3.3.1 Literature and document review

To provide background information and historical context, I reviewed institutional reports and documents from Eagle Lake First Nation and Grand Council Treaty 3, as well as grey literature, including community energy plans from First Nations in Canada, and government documents and reports.

Since literature on community energy planning in First Nations is limited, a scan for literature relevant to remote and rural community natural resource planning and renewable energy planning was conducted from the years 2000 to 2022 using the Web of Science and Google Scholar databases. The search used key words such as ‘renewable energy,’ ‘community energy planning,’ ‘Indigenous energy,’ ‘collaborative natural resource management,’ ‘collaboration,’ ‘co-management,’ ‘just energy transitions,’ ‘Reconciliation,’ ‘Ontario,’ and ‘Remote First Nation.’ Document titles, abstracts and full texts were screened to select those most reflective of community energy planning processes and concepts. These documents were then reviewed, which identified emergent themes and provided theoretical knowledge of frameworks, concepts, and approaches that were used to develop interview and coding frameworks and informational community engagement sessions. The literature review also helped to inform the analysis, as it provided points of reference to confirm or refute the research findings, which can be seen in the results and discussion sections.

3.3.2 Semi-structured Interviews

Semi-structured interviews were a main method of inquiry for this study. In keeping with objectives two and four, participants from different backgrounds were recruited through email and word of mouth to speak about their experiences and provide their recommendations and future visioning for renewable energy development. Participants were identified through their specialized knowledge and experience related to energy, community planning, renewable energy development, and natural resource management, and in some cases referrals to additional participants with relevant expertise were provided through snowball sampling (Mahin Naderifar et al., 2017). The semi-structured approach gave participants flexibility in their responses, and

allowed for discussion of other relevant topics based on the participants' area of expertise. Ten interviews with twelve participants were conducted, with participants being divided into several categories based upon their affiliation with industry (n=6), government (n=3), Grand Council Treaty #3 (n=2), and Eagle Lake First Nation (n=1). Interviews took a conversational approach and were guided by open-ended questions (see Appendix 1). Participants were selected based upon their specialized knowledge and experience related to the energy sector, community planning, renewable energy development and natural resource management. A previous study ELFN had conducted on their community in 2019 identified that community members were experiencing interview fatigue and that band members would like to be engaged in research in other ways. This led to the decision to focus interviews on community members with specialized knowledge and also gather information externally from partners and collaborators, as well as from subjects with no affiliation to the community. The sample size is also reflective of the challenging nature of conducting research during a global pandemic, and ensures that quality of interviews was the main priority, with quantity still being a consideration.

Prior to the interviews, participants were provided with written informed consent forms (see Appendix 2) as well as the interview questions. Verbal consent was gathered from each participant. The interview documentation and consent procedures were approved through the University of Winnipeg ethics board in May 2022. Interviews were conducted from June 2022 through December 2022 using video conferencing software and were recorded if permission was granted. Several interviews were not recorded due to employer restrictions, and in-depth supplementary notes on participants' responses were taken. Interview transcriptions were given random codes to ensure responses remained anonymous and protected. Interviews were transcribed and further coded in NVivo 12 using an combined deductive and inductive coding

process (see Appendix 3). The analysis of the qualitative coding, which is presented in Chapter 4: Results, took into account the frequency of themes, as well as let single voices stand to account for a wide array of perspectives. Participants were provided the opportunity to review their transcripts to provide supplemental information and retain a copy of their own interview.

3.3.3 Community Engagement

Two events were hosted in ELFN to inform community members, encourage discussion, and gather information and perspectives. Both events were open to all community members and were advertised in the community by tabling at a community pow-wow as well as in the band office and by word of mouth. Honoraria and lunch were provided to encourage participation.

The first event took place on September 20, 2022, and was co-hosted by Grand Council Treaty 3, ELFN's community energy coordinator, and me. This event gathered fifteen community members and focused on providing background information on renewable energy types available to the community, some of the associated benefits or challenges associated with the types of energy available, and local context pertinent to anticipated future changes in the energy market in Ontario.

The second engagement session took place on November 22, 2022. The session had twelve attendees and built upon the first, where ELFN's community energy coordinator and I hosted a discussion circle with guided questions to inform the development of a community energy plan. This aided in determining what community members' priorities were when it came to energy development. From this discussion, a community energy guidebook was developed for the lands and resources department to distribute to community members. The guidebook provided community members additional detailed information and resources on renewable

energy development types available to ELFN, and reflections on previous attempts by the community to acquire renewable energy technologies. This guide is a public document intended to aid community members in making an informed decision at a future planned community vote. At this event, community members will come together to vote on and provide additional information on what they would like to see leadership invest their resources into. In addition, a document comprising of the suggestions and major points of discussion from the informational sessions was developed. This document was provided to the community energy coordinator to provide further guidance in their role, and aid them in informing leadership on renewable energy developments. While this portion of the project was beneficial to further my understanding of local context and challenges, the findings and report produced from this workshop will remain in the community, and not be directly utilized as data in my research. This is important to mention, as the knowledge gained from this experience is likely to inform my study, however, the report was developed as part of the reciprocal relationship with ELFN and not as part of the thesis *per se*.

3.4 Chapter Summary

This chapter provides a detailed discussion of the research design and methodology used to develop a community-based case study to inform policy recommendations, and aid in the development of a community energy planning process for ELFN. This study utilized collaborative and participatory research processes to promote the integration of various knowledges and methods of inquiry and build adaptive capacity for ELFN. Through using this approach to satisfy the research objectives, this research was able to gather a more complete understanding of local contexts and power dynamics that impact the energy sector in the ELFN

region. The outcomes, including policy recommendations and additional discussions are outlined in the results section.

Table- 1: Research objectives and corresponding data collection methods to satisfy each objective are outlined.

Research Objective	Data Collection Method
Objective 1: Understand what colonial structures exist for community energy work, potential alternatives to these structures, and what must happen to enable alternatives	Literature and Document Review
Objective 2: Support ways to increase understanding of energy types and futures available to Eagle Lake First Nation	Literature and Document Review
	Community Engagement
	Semi-Structured Interviews (with professionals and practitioners working in relevant institutions)
Objective 3: Report Eagle Lake First Nation's community values, desires and priorities to leadership and community for future energy development plans	Community Engagement
	Semi-Structured Interviews (with community members and Grand Council Treaty #3)
Objective 4: Develop constructive policy recommendations and/or guiding principles to support Indigenous participation and the use of Indigenous knowledge in energy development and decision making	Semi-structured interviews

Chapter 4: Results

This chapter presents an analysis of current barriers as well as wise practices and alternatives for engaging in renewable energy development. In doing so, the analysis provided here addresses objectives 1 and 4 (see page 47- 48). Results will inform the development of recommendations for wise practices for cross-cultural collaborations in renewable energy development (see Chapter 5). In addition, results will inform the development of a guidebook of best practices for First Nations community members and industry partners to engage in renewable energy development collaborations in a manner that is considerate and respectful of one another.

4.1 Challenges and Barriers to Interdisciplinary Collaborations in Energy Sector

Interview participants were asked to reflect on their experience and to indicate whether there were any recurring barriers to engaging in effective energy development collaborations. Five major themes were identified from interview data: 1) cultural awareness, 2) recognition of community priorities, 3) education, 4) finances, 5) politics and power dynamics. These themes, presented in Table-2, provide further understanding of the difficulties of cross-cultural and cross-sectoral renewable energy development engagements. Each major theme is discussed in detail.

Table- 2: Barriers to engaging in meaningful energy development collaborations

Major Themes	Sub-themes
1. Cultural Awareness	<ul style="list-style-type: none"> ● Disconnect between Western and Indigenous knowledge systems, worldviews, and cultural and societal protocols ● Limited cultural sensitivity training opportunities ● Limited opportunities to engage with Indigenous peoples before entering into a formal working arrangement ● Historical distrust of consultants ● Limited time for investing in relationship building and mutual respect

2. Recognition of Community Priorities	<ul style="list-style-type: none"> ● Not understanding the capacity of communities, including the values and needs of individual communities ● Inability to maintain long-term community participation in energy development ● Need for capacity building that is in line with community abilities ● Understanding contextual information about individual communities, not just Indigenous peoples as a whole
3. Education	<ul style="list-style-type: none"> ● Language barriers, including technical jargon and English as a secondary language ● Limited energy literacy ● Limited opportunities for advanced learning and participating in training and skilled labor ● Navigating differing business practices and legal systems ● Indigenous Knowledge not being viewed equitably
4. Finances	<ul style="list-style-type: none"> ● Lack of adequate equity partnership models ● Inappropriate funding models for First Nations communities ● Industry targets and economic opportunities rarely supportive of Reconciliation ● Lack of financial literacy
5. Politics and Power Dynamics	<ul style="list-style-type: none"> ● Historic and ongoing unfavorable power dynamics between First Nations, government and industry ● Political entities involved with energy development in flux ● Limited Indigenous involvement in province/country-wide decision making ● Power dynamics between First Nations communities ● Limited upholding of long-term cumulative effects assessments and Impact Benefit Agreements

4.1.1 Cultural Awareness

The importance of cultural awareness was the most frequently documented barrier to working together effectively in cross-cultural collaborations. Cultural awareness was referenced fifty-seven times, and addressed by every interview participant as a barrier. Cultural awareness refers to the ability to provide both awareness and respect of other cultures and cultural identities (Quappe & Cantatore, 2005). This definition fits with characteristics of cultural awareness brought out by interview participants. In interdisciplinary environments, incorporating cross-

cultural dialogues is a relatively new expectation (Trebitz et al., 2021). While discussions and awareness of other cultures in natural resource collaborations are becoming an expectation for engagement, undergoing a process to enhance one's cultural awareness is a new activity and requirement for some. Indigenous participants stressed that they felt their culture was misunderstood, and other non-Indigenous participants stressed that they have experienced difficulty engaging with Indigenous people due to a lack of cultural understanding. Thus, participants expressed the importance of all parties engaging in cultural awareness to see improved engagements. The majority of participants, regardless of their background, expressed that there is a *disconnect between Western and Indigenous knowledge systems, worldviews, and cultural and societal protocols*. The following two quotes exemplify participants' overall concern:

Working with proponents that typically come from a Western, science, academic or business approach on a project, they tend to have more of an economic or business type approach to things, which results in a disconnect between their mode of doing things and the way of life in First Nations communities, and their practices and ways of doing things. (Participant # 12)

You may have a colleague who doesn't have a background in working with Indigenous communities, and this can have implications if you go into a meeting with a colleague who doesn't have an understanding or experience. (Participant #11)

Worldviews are how we make sense of and understand the world around us. Worldviews are personal, but deeply engrained in the societal and cultural structures that influence human development. Through engaging in reflexivity and cultural awareness processes, individuals are able to understand their own worldviews, and create an opportunity for engaging with worldviews that differ from their own (Ferland et al., 2021). One of the ways we can enhance our cultural awareness is by being open to differing worldviews and engaging with them to the best

of our ability. If we are unable to understand differing worldviews, we must still be willing to engage with and respect them, if equitable collaboration is the goal. Participants indicated that understanding and incorporating differing worldviews into engagement activities is complex.

Two participants with differing worldviews elaborate on this conundrum:

It can be challenging to explain the spiritual relationship to the land to someone who has not grown up in a culture with those values. And also peoples who have grown up in urban spaces as they may not have ever had that relationship building with the land. Conceptualizing spiritual relationships with the land cannot be done in a boardroom over eight hours, but rather, it is a way of life and living in harmony with all things living. So that's a big barrier. (Participant #1)

Natural scientists, social scientists, they have their own, you know, thought process in doing their work. And sometimes they do not align. And we go back to that educational point, that, you know, just understanding the community, understanding where they come from, some context, some information and background about the community, building that relation. (Participant #6)

Participants from industry and government also described the importance of opportunities for *engaging in cultural sensitivity training* and personal decentering processes prior to engaging with First Nations communities:

I mean, your own process of decolonization, of understanding your privilege, and what that means, especially in the work around resource development, and things like that, especially if you are someone with a scientific background. More even so if you're coming into community, in a position of sort of authority. You know, "I am a trainer, I am a leader, I am, you know, the authority in this area." Yeah, checking all of that baggage before is really just personal work that I don't think watching a bunch of your own slideshows, no matter how many videos on Reconciliation, or no matter how many, you know, orange shirt day marches you've attended like that, that real understanding of your own self and what your position is, is super important. (Participant # 2)

Non-Indigenous participants shared that opportunities to take part in personal work prior to engaging with Indigenous people are sometimes limited. They expressed that there is a need for more resources and encouragement for engaging in personal reflexivity and cultural

awareness. Participants felt opportunities for enhancing their cultural awareness are limited, and expressed there are few *opportunities to engage with Indigenous peoples before entering into formal working arrangements*. Despite this, participants discussed the improvements they have seen throughout their careers. They shared about their personal experiences with increasing recognition of the importance of cultural awareness, and opportunities to engage in it, especially by their employers:

We've started having sessions for settler researchers, non-Indigenous researchers. We have orientations for them as to what is the responsibility when they want to work with Indigenous people, what onus lies on the settler researchers, you know, not only to understand the historical context and ways of doing things, ways of knowing... a little bit of academics, a little bit of literature, a little bit of discussion, a little bit of engagement... those orientations are happening... I mean, it's so much better from the time I had started... when I had to go out into the field, I had to start several steps behind my actual study interview questions because it was a lot of education by itself... But those things have changed dramatically, substantially over the years today, there is a lot of awareness. (Participant #6)

Navigating cultural awareness requires a process and time to build awareness, understanding, and mutual respect. *Previous historical distrust of industry and external consultants*, along with solutions that are not considerate of community needs and capacity limited motivations for engaging with industry partners, especially by Indigenous peoples. Four participants reflected on their experiences in a manner that represents the challenges they faced in their experiences navigating cultural awareness processes:

It's the age-old problem of, sort of, a colonial imposed solution to a problem that doesn't really exist. Right. And, also where the solution isn't developed in collaboration with the communities and has no buy in from the communities. (Participant #5)

External consultants can be beneficial to aid in applications, however being able to afford and secure them, and ensuring that the community is comfortable with consultants is a barrier, often a result of previous historically negative interactions with consultants. (Participants #7 & 8)

There's just time and time again these past things that [industry] done that they need to hold themselves accountable for... If you still want to help, help us out... Since you know, you're causing so much damage and so much land loss to a reserve every year. Why don't you [industry] invest in some housing for our people, then. If you [industry] don't want to sign an equity agreement, or our revenue sharing, then invest and give us something. (Participant #1)

To conclude, *participants expressed the importance of taking the time to build relationships*, and that some of the most effective ways for engaging in cultural awareness are spending time together and learning about and understanding one another, in order to humanize one another:

Yeah, it's honestly, like, it's investing the time in the relationship upfront. You know, if you have a good relationship, and the communities know you, and they know your face, and they know, your, your integrity, you know, that's the main strategy--having that in place. You know, spending time in the community is one way to do that. (Participant #4)

4.1.2 Recognition of Community Priorities

Ensuring that collaborations work to center the needs of individual communities was identified as a high priority item by participants. Collaborations often fail to acknowledge the unique differences of First Nations communities and the barriers that individual community members may face to participating (Armitage, 2005; Rakshit et al., 2018a). While Indigenous communities often face the same barriers, an individual community's capacity and needs can be unique which should be accounted for. By failing to acknowledge and address the capacity and needs of communities individually, collaborations are less likely to be undertaken in a manner that supports equitable participation and contributions (Hoicka et al., 2021).

One of the major barriers to addressing community priorities is not understanding the capacity of communities, including the values and needs of individual communities. Community capacity, or the ability to participate, depends on numerous factors (Wyse & Hoicka, 2019).

While efforts to enhance capacity building opportunities have increased, many collaborations fail to acknowledge that capacity varies among communities (Wyse & Hoicka, 2019). Some communities have more funding, resources and supports than others to be able to maintain long-term focus on energy planning. Many industry partners and academics stated that due to limited capacity and lack of recognition of unique community priorities, they have *challenges engaging communities to participate long-term in energy development*:

Keeping energy as a priority or focus area is a challenge. Often communities have other priorities that come up and take precedent over energy development, and things get put aside or on the back burner, making it difficult to make consistent progress. Overall, we would say maintenance and consistency in First Nations communities is a large barrier. (Participants # 7 & 8).

When I say challenges, I'm talking about all kinds of resources, it's financial, sometimes it's not a priority. Sometimes, you know, there is a natural disaster in the community. There are suicides happening, the social issues happening in the community, teenagers taking their life. So now you tell me what would be a priority for that community? Is it going to an open house on energy or getting mental health professionals coming into the community? (Participant # 6)

Community members, industry and academics all expressed that *there is a need for capacity building that is in line with community abilities*, and considerate of individual communities' unique values and needs. *It is important to understand contextual information about individual communities, not just Indigenous people as a whole.* An industry representative shared their perspective on this:

Capacity building should be a priority, however it's important to ensure that the targets set by industry are complementary of a community's capacity. While it is nice to say you can provide a certain percentage of employment opportunities from the community, perhaps they are unable to provide that number of workers, or perhaps that is not their focus or something they need, and [they] are further interested in other types of capacity-building opportunities. For instance, certain targets, or Impact Benefit Agreements may have set asides or preferential clauses for Indigenous communities but there have been times when communities weren't able to capitalize on such opportunities due to lack of relevant resources e.g. jobs may be seeking a specific training and there may not be qualified candidates. Or companies may not meet requirements for bidding on RFP. As

such, community involvement at early stages can help bridge some gaps through facilitation of establishment of training programs, establishment of suitable joint ventures etc. (Participant #11)

4.1.3 Education

The renewable energy market has seen both drastic structural changes and technological advancements in the last few years, especially in Ontario. Keeping up with these changes is time consuming and is especially difficult for those who may not have a background in renewable energy development technologies. All participants expressed that inadequate education was a barrier to participating in renewable energy development collaborations. Several sub-themes arose under this theme, with language being a commonly expressed barrier. Participants from all categories expressed that *documents are typically written in complex technical jargon, which can be a barrier for many, especially those whose first language is not English, and who may not have post-secondary education*. This impacts a large range of people in industry, government and First Nations communities. One participant outlined these challenges especially well:

In government and even in academia, anywhere I've worked, you know, you catch yourself that you just assume your audience speaks the same language as you do... Realizing that sometimes the materials and products and things that proponents share about a product or a project rather than the language, it isn't conducive to good relationship building and getting your message forward properly if not everybody has that same level of understanding of what you're talking about. It just needs to be straight plain English. Too much technical jargon loses everybody. (Participant #2)

In addition, some participants expressed that *energy literacy is a challenge for proponents who do not have formal training in renewable energy*. This is especially common for employees and representatives of First Nations communities, who often have limited technical capacity and are expected to be the main point of contact for a variety of environmental issues affecting their community:

I think the biggest barrier, one of the things that's been coming up in my conversations

lately with a lot of planners is energy literacy. So I think that's an important factor. There was an energy paradigm that we've lived with for a long time. And I think that whole paradigm is shifting on us. There was a lingo or a language or literacy around the current paradigm, and there's a new literacy evolving, so some people aren't even up to speed with current literacy information. (Participant #3)

First Nations participants also expressed that they felt there was *limited opportunities for advanced learning and participating in training and skilled labor*. This is a barrier, as it does not enable them to expand their capacity for their community to participate in skilled positions:

A lot of companies even just with housing and stuff, we're always contracting outside sources. It's never our own people on these projects, again, because of lack of training. And then we need to make sure businesses and developers are also educated, so that anything they create or want to sell will actually be of benefit to the communities. (Participant #1)

Another commonly cited barrier was the *lack of understanding of and the need to navigate differing business practices and legal systems*. All proponents may anticipate navigating Western and Indigenous systems, however Indigenous people are more frequently held to a standard of having to fit their knowledge and practices into Western structures. This produces *inequity in knowledge valuation, typically placing Western knowledge and practices as the primary acceptable standard, devaluing Indigenous knowledge* (McGregor, 2021; Nadasdy, 1999). One participant effectively conveyed this challenge:

Western languages, concepts, policies, laws, educational institutes, etc., can all be challenging for Indigenous peoples, because of such a diversity in ways of life. Therefore, having to navigate two systems is a challenge for many and so is accessible Western law language. (Participant #1)

Education on renewable energy technologies is just as important as understanding how to navigate legal and governance structures and read and process documents and agreements.

Overall, inadequate education on various subjects was considered a barrier for equitable and effective engagements.

4.1.4 Finances

Money is a major motivation for resource development and has implications for project feasibility and outcomes. The finances theme covers several sub-themes including funding opportunities, funding models and financial literacy. There was also notable overlap between the themes of finances, and politics and power dynamics. Participants stated that not being able to develop equitable financial agreements is a barrier to engaging in collaborative renewable energy developments, and shared that they felt there are a *lack of adequate equity partnership models*. Equity partnership models are financial agreements where involved parties come to an agreement as to how to best split the profits from a project. Historically, there has been great inequities when it comes to financial profit sharing in natural resource development, and communities have had to advocate to be awarded equity participation (Hoicka et al., 2021, p. 20). While equity sharing models have been around in natural resource management for a while, these agreements have historically been considered inadequate as they rarely honour the principle of equity, often providing more benefits to industry and government proponents than to communities most impacted by developments (Buckland & O’Gorman, 2017; Mahanty et al., 2006). This viewpoint was validated by participants who mentioned that benefits were not often distributed in a way that communities feel are adequate or address principles of fairness. However, participants are hopeful that equity partnership models in renewable energy development may be a vehicle to produce positive change. One participant highlighted an example of a recent equity partnership model that is more representative of the types of equity sharing opportunities that participants would like to see in the future:

Organizations, like Hydro One for example, have been providing equity participation opportunities in projects – historically this has been community-led. These models are not new and are now becoming a baseline for moving forward. For instance, Hydro One voluntarily just announced a First Nations Equity Partnership model, which is a great

step forward and is based on feedback we received from communities – we heard and understood that First Nations want equal partnership – that is why our model allows for up to 50% equity participation opportunities on greenfield transmission line projects that meet a certain threshold. (Participant #11)

In response to expectations to adopt Western financial models, some First Nations are creating community economic development companies to manage their finances. Representing their community, these companies can apply for loans and financial incentives for which the First Nation may be ineligible. While this has proven beneficial, it speaks to the fact that many communities have difficulty accessing funding opportunities that are designed to be supportive of First Nations capacity and long-term goals. One participant expressed that these companies have been forced to act in a colonial manner that involves exercising top-down structures and reinforcing power imbalances, which further speaks to the fact that many *funding models are inappropriate for First Nations communities*. Two participants further discussed this challenge:

I've been working with them because they have economic and technical know-how and you know, recognize economic development opportunities are good and are good at implementing them. So, the unfortunate thing is while we've come up with some really great solutions with the economic development arm, it hasn't included community-level collaboration, and involvement, even though the business is owned by the First Nations. So, we've developed solutions, or I've helped to develop solutions in collaboration with the First Nations Economic Development Company, but that company has almost become another colonial power outside force. (Participant #5)

Yeah, you know, financial capacity is one of them... Let's say, I was going to do renewable energy development, you have to have equity, you have access to financing... You have to be able to present your business plan, and meet all the requirements of the banks, or whoever the lenders are. So those are two big challenges, because it is a very bureaucratic system, getting a loan. (Participant #4)

These findings confirm what previous research has identified, that is, in addition to funding models, *the funding targets and additional economic opportunities provided by industry are rarely supportive of Reconciliation* (Hoicka et al., 2021). Participants expressed that funding is difficult for communities to access, and rarely support community priorities or contribute to

building long-term community capacity. One participant shared that collaborations frequently seek to cater towards those with investing power, which does not enable First Nations to get ahead or so much as get on equal footing with other proponents:

Funding opportunities and training programs within communities are reoccurring gaps that have presented themselves in energy developments. This is a huge challenge in collaborations, as the other party then has more benefits from the project development while the Indigenous communities are left on the sidelines. (Participant #1)

Lack of financial literacy in First Nations communities is a recurring barrier. As communities typically have limited internal capacity, their leadership and representatives must become versed in many subjects rather than an expert in one area, as expressed by Participant #4:

General understanding of some of the technical components of these projects, like for me, I'm not an engineer, I have a hard time understanding a lot of them. So, you're trying to engage with community members or even council members that, you know, a lot of them just have a high school education. So, you start getting into some of the technical components or even the financial components in terms of financial structures, return on equity, balance sheets, income statements, all these things, you know, there's many concepts that are just sometimes difficult to grasp. (Participant #4)

4.1.5 Politics and Power Dynamics

Politics and power dynamics was the second most frequently documented barrier, being referenced forty-two times among nine participants (1, 2, 3, 4, 5, 7, 8, 9, 10). Politics and power dynamics refers to the formal and informal relationships between proponents in a collaboration. The distribution of power among different actors and how they use it dictates outcomes and the overall success of collaborations. Historically, First Nations communities have had challenging relationships with energy and resource extraction, largely resulting from power imbalances and political influences (Coates, 2016; Hoicka et al., 2021; Lorinc, 2016). *Historical power dynamics between First Nations, government and industry have produced unfavorable dynamics that live*

on into the present. One participant reflects on how these dynamics frequently play out in the present:

You know, with First Nations, as a developer or a partner, you have to go in and build a relationship first and build trust. And, you know, you have to work through a process. And if you don't do that, you're never gonna get anywhere working with the First Nation as a partner. I think that's typically misunderstood, because one thing you'll probably hear from First Nations is their phones are always ringing with opportunities... And because they have so many opportunities, and there's naturally a mistrust within First Nations communities based on historic issues, that's one of the barriers. The approach that partners take really needs to be considered. You're not just calling everyone up and saying, "Hey, here's a great opportunity, it's going to make you millions of dollars, let's do it," you know, that's not the approach to take. It's a much more slow, patient, thoughtful, and respectful process. So that's another barrier is not just anyone can go in and do this. It's finding the right partners is challenging someone that will respect the community's needs and timelines and requirements. (Participant #4)

The energy sector is experiencing rapid changes as the country is called to transition to renewables. This has resulted in a great deal of *shifting in political entities involved with energy development*. Some participants expressed that there were numerous challenges as a result of the rapidly changing energy sector. Participants expressed that the energy sector is complex, and operates differently than other natural resource sectors. They explained that having different actors carry out consultation processes in different projects, along having different consultation processes than other industries creates confusion and can lead to miscommunication. For example, industry proponents may carry out significant aspects of consultation processes on one project, and on another project government may carry out the significant aspects of a consultation process. Participants expressed that this can lead to inconsistencies and confusion for those involved in consultation:

So often we don't know what's going on in the background. And all of that is being controlled by the powers that be. And it's hard enough to learn what's happening currently, never mind historically and going forward and how it's changing. So, it's been a real education, you're watching how those decisions get made shape what our world is going to look like, and who's got agency in those new systems. So, for Indigenous

communities to have agency in those new systems, such as renewable energy at a community level, for energy sovereignty, and energy security, they've got to operate within the system that exists, and what it's morphing into. And to do that you have to have that energy literacy. And that's what's so challenging about what's happening right now. (Participant #3)

One of the ways that historical power dynamics play out in the present is the *lack of involvement of Indigenous communities or Indigenous political entities in provincial or country-wide decision making on energy development*. Indigenous communities are highly sought after for their ability to contribute knowledge and resources to the transition to renewable energy resources. However, they are frequently excluded in vital discussions regarding changing energy landscapes and decision-making processes on the future of provincial and country-wide investments. One participant expressed their frustrations and sheds light on the fact that Indigenous knowledge is not viewed equitably in decision-making processes. They further contribute to a discussion on Indigenous peoples being frequently tokenized rather than seen as valuable proponents in contributing to expanding our knowledge of renewable energy developments:

... They don't change their stripes or their spots they keep on in the background. Okay, well, how can we increase our profits?... We'll play this game of Reconciliation, but in the background, we're going to set it up for our control and our profit. (Participant #3)

When discussing power dynamics, it is important to acknowledge that power dynamics do not only exist between government, industry and Indigenous communities. There are also complex historical *power dynamics that exist between First Nations communities*. While many First Nations experience similar challenges, disparity and unique contexts can produce tensions and inequities between communities. Communities can vary in terms of leadership, resource availability, geographic context (i.e., location and proximity to other settlements, amenities, services and infrastructure), for example, which can produce different opportunities and

disparities in capacity. Power dynamics impact the relationships First Nations have with one another, and can especially be challenging when developing a project that may span multiple traditional territories or result in multiple communities being impacted:

And then the other complicating factor is, First Nations politics. You know the politics on these reserves is always very complicated, and yet very, very important. And there seems to be a disconnect at times between Chief and Council and what the communities want or need, as well. And of course, it's very complicated political situations in the communities as well, where you have different groups within communities supporting different political agents, I guess you could say, and sometimes agreeing or disagreeing with certain initiatives strictly on the basis of their political alliances. (Participant #5)

In addition, getting support from leadership to undertake a project can also be difficult at times:

Funding and leadership buy-in are also major challenges. Being able to secure funding to carry out projects to completion, hire and maintain long-term staff, conduct events like info sessions in communities, etc. is not easy. In addition, getting buy-in from leadership can be difficult, even when there is a well-developed and researched proposal provided to leadership. (Participants #7 & 8)

Power dynamics also impact the way that long-term cumulative effects assessments are conducted and Impact Benefit Agreements (IBAs) upheld. Determining who is responsible for upholding and enforcing the standards of an agreement is important for collaborators to agree on. Unfortunately, in some instances there is no formal requirement for engaging in a long-term cumulative effects assessment. While the legal requirements for ensuring IBAs and cumulative effects assessments depends on the nature and jurisdiction of the project, participants expressed that they would like to see these more frequently included in agreements. In addition, four participants (1, 9, 10, 12) said that they feel there is no way for them to *ensure that industry and government uphold IBAs and manage the long-term cumulative effects of projects*. IBAs are legally enforceable agreements that have been used to address regulatory and environmental risks, and typically outline some sort of equity sharing, to ensure Indigenous communities see

benefits from resource development projects (Hoicka et al., 2021). Even though these agreements are legal, Indigenous participants expressed they face challenges holding industry partners accountable for these agreements for aspects such as emergency management, environmental monitoring and mitigation processes, and economic and employment opportunities. Little control and accountability further strains the relationship between Indigenous peoples, government and industry, which one participant outlined clearly:

The government has not determined how to deal with long-term cumulative effects yet in terms of obligation and delegating responsibilities of duties for projects. (Participant #9 & 10)

Through analysis of the above five major barriers (cultural awareness, recognition of community priorities, education, finances, politics and power dynamics) and their interconnections, we can better understand the challenges to successful cross-cultural collaborations and begin to discuss pathways to potential alternatives. Below I will reflect on participants' experiences and identify how the challenges and barriers can contribute to developing pathways to successful energy development collaborations. I will illustrate how knowledge integration, training opportunities, accounting and reporting and community collaborations can help build adaptive capacity, which is vital for improving the ability to participate in collaborations and contribute to processes that produce positive change.

4.2 Enabling Ideal Alternatives - Building Adaptive Capacity

During the interviews, participants were asked to reflect on their positive experiences in cross-cultural collaborations, and further discuss what changes they would like to see proponents make when engaging in renewable energy developments. This opened a great deal of discussion for moving forward and working in a better way. Participants were eager to share their

experiences of knowledge integration, and how Two-Eyed seeing or similar concepts could benefit collaborations. In addition, three other themes emerged on how to develop a successful cross-cultural collaboration, as shown in Figure 5. Participants also expressed several ideas, falling under the themes of training opportunities, accounting and reporting practices, and community collaboration.



Figure 5: Pathways to developing successful collaborative energy agreements, as based on participant knowledge (Unger, 2023).

4.2.1 Two-Eyed Seeing

The integration of Western and Indigenous knowledge systems has been proven to achieve more meaningful outcomes in natural resource management than those that do not incorporate Indigenous knowledge (Mantyka-Pringle et al., 2017; Michele-Lee et al., 2018;

Peltier, 2018). While there has been progress to move towards cross-cultural collaborations that incorporate Western and Indigenous knowledge, there is still a clear divide in the valuation of knowledge systems, and Indigenous knowledge is still being called to fit into Western frameworks (Nadasdy, 1999). Two-Eyed seeing is an Indigenous research framework developed to promote knowledge integration and provide guidance for values-based approaches to cross-cultural collaborations (Bartlett et al., 2012). First described by Mi'kmaq Elder Albert Marshall, the approach involves seeing with “two eyes,” one with a Western lens, and another with an Indigenous lens (Bartlett et al., 2012). The approach respects both Indigenous and Western knowledge systems and calls for them to mutually co-exist and be valued equally (Bartlett et al., 2012; Iwama et al., 2021).

Five interview participants (1, 2, 3, 11, 12) discussed this topic, and all had an understanding of the concept, having used it before in cross-cultural engagements. Participants expressed that this approach was directly linked to enhancing opportunities for community collaboration and cultural awareness. Two participants (3, 12) said that there was no formal requirement or process for engaging in Two-Eyed seeing or similar knowledge integration practices, and all expressed in some manner hope for seeing knowledge integration practices more formally used in projects in the future. When asked if they felt this approach was working, one participant stated:

*It's hard to say if processes like Two-Eyed seeing are working. They raise awareness and create space for vital conversations. But in terms of actual changes or benefits, it is hard to comment on as we are right in the mindset shift right now. We are living the process, so it's hard to really say if its beneficial, time will tell. Regardless, we know that there has to be a true wanting/willingness of all parties to work together to make these things work. Communities need an opportunity to get involved in these processes.
(Participant #12)*

Some participants also shared that they felt that while integration is a positive step towards placing more value and weight on Indigenous knowledge, integration still demands Indigenous knowledge conform with Western systems and structures. One participant explained the importance of striving for knowledge harmonization, rather than integration, further:

We understand that [Indigenous knowledge] can't really be fit into the Western world, nor do we want it to be... We recognize the difference and instead of seeing implementation of Manito Aki Inakonigaawin [Treaty #3 Resource Law], we want to see a harmonization of the two, so that our two approaches are stronger together. We, as Indigenous people, know that Indigenous knowledge is as important as Western [knowledge] and therefore must be considered and respected in all processes. (Participant #1)

Another participant expressed that there is cause for concern when discussing knowledge integration, and that even concepts like Two-Eyed seeing still expect Indigenous knowledge to conform with Western frameworks. They worry that if not done for the right reasons, such as developing collaborative solutions to environmental and societal problems that account for Indigenous worldviews and values, but rather undertaken to check a box or increase the public perception of a proponent, knowledge integration is another way to tokenize Indigenous peoples, and does not alone effectively address cross-cultural challenges:

What comes up for me is that these are colonial concepts that are kind of necessary to introduce non-Indigenous people into the culture. And to me, it's elementary in a way. It's very elementary to what the real work is all about.... So, often it's tokenism... it's about tokenism and acknowledging, but then just moving on with Western science. And it's elementary for non-Indigenous people to really start to accept that there's Indigenous science that's very valid, that should have equal sway in the decision making. So, it's elementary to get the discussion started, but there's so much depth beyond that point. And it takes some walking those roads to understand what they are and there's no shortcuts, and we have to move beyond the tokenism for sure. (Participant #3)

Despite it being an imperfect system, all participants who discussed Two-Eyed seeing expressed that there is value to developing alternative approaches to knowledge valuation. They were of the view that concepts like Two-Eyed seeing are positive steps in the right direction that

can contribute to relationship building processes, in that it contributes to developing ways to understand and value one another's knowledge. One participant summed up this continuous journey of knowledge valuation thoroughly:

I do think that it is of value to work towards developing those alternative approaches. How it works as far as you know, addressing some of the wider, more systemic barriers behind how knowledge is viewed as equity, and how is it understood and shared equally and things like that... I'm not sure if we're quite there yet. I feel that a lot more of the heavy lifting, as far as Two-Eyed seeing has to go is again, born by those of us who don't identify as Indigenous... We've come up in a system where we very much apply a lot of our authority in science. And for good reason we do have all of the proof of, don't pour this into this because this will happen, or don't cut down this tree because this will happen. But I think beyond Two-Eyed seeing and the idea of being able to meld two ways of looking at a project, there's also the deeper understanding that I think those who are going to work with Indigenous communities need to do some of that self-work as well, first. Whether it's taking some cultural training, whether it's doing a bit of research on Reconciliation, your own personal decentering process. All of that work has to happen before I think you can really make Two-Eyed seeing happen. Forcing scientific knowledge and Indigenous knowledge to go together ... making sure that you're addressing each is one thing, but actually finding a way to really weave. That comes on a personal level that I'm just not sure we're there yet systematically, but maybe the next generation will do us one better. (Participant # 2)

Through embodying unique knowledge systems, we can produce a more holistic understanding of the world and one another. Participants found that utilizing knowledge integration concepts like Two-Eyed seeing were valuable to ensuring that collaborations embody Indigenous and Western values and are more representative of the needs and values of society as a whole. By utilizing community guided approaches, knowledge harmonization can better take place. Participants identified that knowledge integration is a positive step in the right direction, which should not be discounted. Participants believed that utilizing knowledge integration to collaboratively develop projects is something collaborators are doing well and should continue to strive towards making it a requirement to include equitable contributions of Indigenous and Western knowledge in cross-cultural collaborations and decision making. As we continue to develop better processes for moving forward, participants suggested that we should strive for

knowledge mobilization that moves beyond integration and towards harmonization. In other words, researchers and advocates should continue to promote the bringing together of different knowledges but focus now on developing actual processes and practices that support harmonization.

4.2.3 Training Opportunities

Providing opportunities for growth and development are valuable in that they enhance the capacity of communities to participate in collaborations. These opportunities enable continued and long-term community participation in energy developments, ultimately leading to improved collaborative outcomes (Rakshit et al., 2018b).

Eight participants (1, 2, 4, 6, 7, 8, 11, 12) discussed the need for opportunities for training for proponents from all sectors involved in energy collaborations. Different suggestions for what this training might look like were made, including cultural sensitivity training and skills-based training for community members. There was consensus that training is always valuable, and collaborators should be supporting one another to ensure there are equitable opportunities and time for training within collaborations.

Cultural sensitivity training involves participants learning about cultures different from their own, and ways in which they can support and create spaces for inclusivity. This was suggested in response to the barrier of lack of cultural awareness, and the need to improve cross-cultural understanding. This was also referred to by some participants as equity, diversity and inclusion (EDI) training. All eight participants (1, 2, 4, 6, 7, 8, 11, 12) who discussed training suggested both formal and informal opportunities for engaging in cultural awareness were beneficial, and might contribute to humanizing one another (i.e., viewing and relating to others

as people). One participant shared a recent experience where cultural awareness training provided project proponents an understanding of one another, which in turn led to better engagement between collaborators:

So, my first day of work was X months ago. And we met with the proponents... and the chiefs and we did ceremony with them. And we shared songs, and we all did a sharing circle. Everyone spoke and there was about 80 of us in that room. It was intense. It was a long day. And we had proponents crying. We did the blanket exercise with them. It was very intimate. And things like that are what is going to really help. Because sometimes these people aren't bad people. This is the world that they grew up in. This is their normal, right? And so having that team building and those intimate spaces to just be human with each other, I think is really important. (Participant #1)

Participants also identified a need for providing opportunities to train equity deserving groups, specifically Indigenous community members, to enhance their ability to collaborate more effectively and efficiently. Participants suggested that providing opportunities to participate in skilled labour and trades, as well as learn about the finance and business aspect of projects would increase community-level participation and create a sense of autonomy for communities. It would enable community representatives to have better engagement and achieve more meaningful outcomes for their community. Such training would also provide more enhanced opportunities for community members to work directly on projects that impact their traditional territory, and enter into future collaborations with the tools and knowledge they need to thrive. One participant provided some clear suggestions for how this might look in practice:

We need to have more opportunities that span beyond skilled manual laborers. Opportunities for more management and supervisory type roles is important. These opportunities would help improve internal capacity, increase knowledge in communities, and improve a community's capacity for participating in future projects. For example, many projects now have an Indigenous relations advisor. Why not have an internship opportunity, where community members can learn how to take on this role, so that in future projects they could hire the Indigenous relations advisor internally from the community, or a community member can go on with the skills and knowledge to apply for this position in future projects, whether those projects take place in their own community or other communities. (Participant #12)

Another participant communicated the need for opportunities to enhance community-level capacity. They expressed that these opportunities would provide immediate benefits and could contribute to sustained capacity to enhance community participation in multiple sectors well into the future:

I feel that training and development and capacity building of the communities are equally important to be energy ready in coming into the community. If there are consultants coming in or if you have to have any negotiations with the government or any levels of governance structures, you will need people who are informed, educated, experienced, if possible, and to respond and do these negotiations in the community. (Participant # 6)

Participants who recommended formal and informal training thought that training opportunities are often not a requirement, but rather the responsibility often falls on consultants. They shared the view that there is a need for this to become a requirement, whether that be formal or informal, and collaborative proponents should all be engaging in these opportunities as they will improve the experiences of everyone involved. There is mutual benefit to these opportunities, which should be enough to encourage us to move forward with this, regardless of if it is formally required. Participants would like to see training opportunities for all proponents become standard practice.

4.2.4 Accounting and Reporting

In most instances, accounting and reporting standards and processes are set out by provincial and federal governments. All collaborative proponents are held to certain standards of practice, which has implications on various aspects of collaborations including funding, project timelines, and upholding or enforcing formal agreements. Many suggestions arose related to project development and improved accounting and reporting practices. Participants (1, 2, 4, 5, 7, 8, 9, 10, 11, 12) expressed that through enhancing accounting and reporting processes and their

enforcement, there would likely be more trust among project partners moving forward. Suggestions to improve reporting discussed the importance of community involvement in reporting processes as a way for communities to see long-term benefits of projects. Some of the suggestions include involving community in long-term planning beyond the lifespan of an individual project, developing IBAs, using equity sharing models, and long-term cumulative effects assessments.

Four participants (1, 9, 10, 12) thought that IBAs are a valuable way to enhance reporting processes, as they can formalize reporting requirements and provide sanctions if requirements are not met. In addition, IBAs can contribute to long-term capacity building through incorporating capacity building components like monetary compensation, and employment and training opportunities into the agreements. Through incorporating capacity building components into IBAs, communities may be able to more fully participate in joint ventures in the long-term. Participants suggested that communities push for this to be included as part of the development of formal agreements between communities and industry and government proponents. One participant expressed that IBAs are valuable for long-term community capacity building, as well as mitigating environmental risks associated with projects:

I just feel like IBAs are really important... because it provides a document of accountability for mitigation processes and upholding environmental protection once a project is done....Ensuring IBAs are established, securing training for community members to ensure employment and benefits stay within the nation. Aiming for self-sufficiency, emergency management is a really big one...Through IBAs you could really focus on mitigation processes. And that, again, falls into that sustainability category. And so I think that's also important to think about--the after effects. (Participant #1)

Participants also suggested producing more formal documentation, including success management models, technical guiding documents, governance frameworks, and memorandums of understanding. These documents are effective for conflict management and resolution because

they establish and legitimize a formal process agreed to by the parties. In this way they are a form of organizational memory that builds capacity. One participant elaborated on the benefits of guiding documents:

The changes I would like to see is the development of some sort of guidance for technical of experts when working with remote communities on energy planning processes that would provide a set of guidelines and recommendations for addressing power imbalances and cultural differences, and making sure that the objectives, first of all of the energy development program are well understood and agreed to by all the parties, and that the development of the solution respects those objectives, and that the implementation of the solution is fully supported by the community, is operationally viable, and is economically viable in the long run. So, you know, specifically what changes need to be made to make that happen? I'm not really sure. Although the development of guidelines for consultation and planning and collaboration would be very helpful. It's not necessarily a one size fits all sort of situation. (Participant #5)

A commonly expressed sentiment, outlined well by Participant #12, was ensuring bottom-up, community participation in collaborations in the beginning, middle and end of a project:

The government is held to a certain standard of operating. And every government has its own priorities and ways of doing things. This has to flow from the top. That being said, there are ways we have been working to reduce barriers....Clear and open communication on the long-term planning objectives. Involve First Nations in discussions around future opportunities, allow them to provide input into what projects are suitable for the community, and ensure they are developed in partnership with the community. Ensure that the community is involved from start to finish, and then after as future opportunities are discussed. (Participant #12)

Finally, most participants frequently expressed the need to allow time to develop relationships and capacity in communities and contribute to long-term community planning rather than one off project approaches. It was suggested that this could be achieved through being considerate of the time it takes to build relationships and awareness, being flexible among government priorities, and participating in active and long-term community engagement. Regardless of who proponents must report to or what their standards and expectations are,

participants emphasized that creating meaningful and long-term relationships enables community members to participate in projects and produces more impactful outcomes over the long-term.

4.2.5. Community Collaboration

No specific framework can be developed that is reflective of how to best engage all Indigenous communities in energy developments, as supporting communities requires more than a one size fits all approach (Vacik et al., 2014). Regardless, participants did recommend some experience-based considerations that should (and could) be implemented and which they felt could be broadly applicable.

Ten participants (1, 2, 4, 5, 7, 8, 9, 10, 11, 12) identified time as a vital component to successful cross-cultural collaborations and engagements. Time for all collaborative partners was necessary. Time constraints set by funders and demanding project timelines are a recurring barrier to relationship building. In addition, participants expressed that time is needed for communities, especially due to their often-limited capacity. Limited staff and ability to engage due to constantly shifting community priorities, as well as keeping up to date with education on new technologies and operating under Western systems all takes time. This is well summed up by participant #4:

Honestly, it's just communicating consistently, that, you know, these projects are going to happen on the First Nations timeline. Because like I said, a lot of times, the corporate organization has all these goals and milestones to meet, like, 'oh, this study has to be approved by this date. And if it's not done by this date, then you know, we're gonna be in trouble, because that's what we told everyone we're going to do.' But a lot of times it's like, 'well, listen, those are your timelines. But you know, the First Nations have their own and, you know, you need to be respectful of that process.' So, a lot of times it's breaking your own perception of, 'we have to do this, by this date. Otherwise, everything's lost...' Changing that to, 'if you don't do this the right way, even though it might take longer, you're going to lose everything.' So, you can either push the timelines and end up with nothing, or you can be a little more patient, respectful, and recognize

that things aren't going to happen as quickly as maybe you'd hope, but you have a greater chance of success and in getting support. (Participant #4)

All participants indicated that they would like to see more opportunities for collaboration and engagement between First Nations communities and all other project proponents. Building partnerships and relationships between all collaborative partners was seen as valuable.

Participants (3, 4, 7, 8, 11) also stated that supporting communities and encouraging them to take leadership roles in projects leads to more mutually beneficial collaborations. By ensuring communities have representatives in leadership roles on projects they are able to engage in decision making and build their long-term community capacity to participate in a meaningful way in future projects. Seeing community members develop committees and take on leadership roles where they are representing their community has led to successful collaborations, for example:

Developing community advisory boards would ensure more success in projects, enabling community voices and local representation to aid in project development and direction. (Participant # 7 & 8)

While these changes are all necessary and beneficial, the key is to ensure a collaborative approach is used - ensuring there is not only participation but leadership from community in projects is essential to moving forward, and a change I would like to (continue to) see. (Participant #11)

As discussed above, community collaboration is considered essential to building long-term community capacity to participate in renewable energy developments. Through enhancing collaborative opportunities for bottom-up community member participation, relationships between all proponents are likely to improve, and may lead to the development of more equitable and beneficial outcomes for all proponents.

4.3 Chapter Summary

This chapter presented the results from the interviews, fulfilling research objective one and supporting research objective four. The results highlight varying knowledge from academics, industry professionals and Indigenous community members, drawing attention to the commonalities between participants' personal and lived experiences participating in natural resource management collaborations. These results provided a comprehensive understanding of barriers and challenges and inform best practices and opportunities for transitioning towards more equitable and effective collaborative engagements. In the next chapter, I build upon the emerging perspectives and suggestions from the literature and interviews to conceptualize an enhanced engagement process and provide recommendations for best practices for engaging in cross-cultural energy development collaborations.

Chapter 5: Discussion and Conclusion

This chapter discusses the research results presented in Chapter 4 and links them back to the main research questions and objectives, provided in Chapter 1. Insights into the emerging priorities are provided, which inform enhanced engagement practices. Recommendations for best practices for engaging in renewable energy collaborations are provided for all proponents in three different categories: 1. First Nations communities; 2. Industry, government and academia; and 3. All proponents. The importance of the research and how it informs a dialogue on Reconciliation is broadly addressed. Finally, I discuss the contributions to literature and provide recommendations for future areas of study, policy and practice.

5.1 Conceptualizing an enhanced engagement process

The two questions that this research sought to answer contribute to a broader discussion on how those engaged in renewable energy development can improve engagements. The research found that while there is opportunity to implement changes within existing structures, there is also opportunity to alter structures. It is apparent that collaborative proponents must utilize both opportunities to implement positive change. Through initial engagements with ELFN, it became clear that if we were going to focus this research on best practices for cross-cultural and cross-sectoral engagements, we must ensure the process we undertook together honoured this to the best of our abilities. Thus, the collaborative development of the research goals and objectives was an exercise in engaging in equitable energy development. Through reflecting on this experience, it is apparent that we were able to embody many of the practices and recommendations provided throughout the interviews and literature.

Research objectives were developed to accommodate the needs of ELFN and UW, and ensure that the outcomes were beneficial for everyone involved. Research objectives two and three focused on supporting ELFN. Contributions towards this included delivering two informational sessions to inform community members on available renewable energy technologies in their region. In addition, informational sheets, and a renewable energy guidebook were provided and distributed throughout the community. The informational sessions built upon the knowledge distributed throughout the community and provided a space for further discussion and development of ideas for investing in renewable energy development at ELFN. These sessions enabled collaboration with ELFN's Community Energy Champion (CEC), in which we developed a guiding document that provided community perspectives, concerns and future visioning. This document is presently held by the CEC and ELFN's Lands and Resources Department. It will be utilized for their internal purposes and is intended to further guide and provide justification for decision making.

In keeping with the First Nations research principles of OCAP, and the arrangement that was developed with ELFN, the specifics gathered from the info sessions will remain in the community and are not mine to share. Nonetheless, the first-hand experience engaging with community members did inform the research. This experience provided a comprehensive understanding of the barriers and challenges faced by First Nations communities from the perspective of ELFN. Many of these barriers were aligned with those expressed by interview participants and in the literature, all of which provided information on how to enhance engagements and collaborate more effectively. In working with ELFN on this research, we were contributing to developing an understanding of how to enhance engagement processes, both in

research and in practice. This experience provided an opportunity to discover effective ways to work within present structures, while exploring alternatives and changes to these structures.

Upon review of the results, the challenges and barriers discussed by participants, including cultural awareness, recognition of community priorities, education, finances, and political and power dynamics were aligned with the findings of previously published studies (Alessa et al., 2016; Armitage, 2005; Krupa, 2012; McDonald & Pearce, 2012; Mulrennan & Scott, 2005; Vacik et al., 2014). Participants acknowledged that while there are many challenges, there was an overall sense of optimism in the opportunities that the emerging renewable energy sector brings forth. Participants were generally optimistic when discussing the development of new standards and best practices for engaging in cross-cultural collaborations in renewable energy development. In addition, participants shared their hopes for the future, and how we might be able to engage in best practices moving forward.

Ultimately it became clear that there is an opportunity to work within structures to create effective change, but there is also immense opportunity for structural changes to be made to cross-cultural engagement processes. There is not only a need, but a willingness expressed by participants and their peers for this change to develop. ELFN has been involved in a recent attempt at change, which came about throughout the time this research was being conducted. ELFN is one of eight partnered First Nations communities that make up the Gwayakocchigewin Limited Partnership (GLP). The GLP was developed to promote with Hydro One collaboration with and representation of First Nations impacted by the proposed Waasigan Transmission Line project. The partnership is also striving for shared benefits and outcomes from the transmission line (Hydro One, n.d.). In September of 2022, Hydro One announced that they will offer a 50% equity stake in all major transmission line developments to First Nations communities (Hydro

One, 2022). This opportunity is a real example showcasing the shared beneficial outcomes for all proponents willing to work towards effective cross-cultural collaboration. Through taking time to establish a relationship, addressing financial and capacity barriers through equity sharing, and incorporating community collaboration throughout the project, the outcomes of this equity sharing model demonstrate the potential for overcoming barriers and challenges through exploring alternatives, as discussed in Chapter 4.

The Hydro One equity sharing model is one of hopefully many future opportunities in the transition away from historical energy relations, towards enhanced collaborations and a more equitable future with shared benefits for all. This sentiment was shared by many involved in the collaboration, and was well articulated by one proponent:

"Today's announcement by Hydro One is a major step toward true and meaningful economic Reconciliation with Indigenous Nations impacted by electricity transmission projects in Ontario. First Nations Major Projects Coalition is pleased to be supporting our members Chippewas of the Thames First Nation and Aamjiwnaang First Nation whose treaty lands are impacted by these projects. We are appreciative of the collaborative approach taken by Hydro One in establishing this historic precedent – it is one that should be emulated by other transmission infrastructure providers across Canada."

- Niilo Edwards, Chief Executive Officer of the First Nations Major Projects Coalition.

Participants in my research were hopeful to see opportunities like this, and some expressed their excitement when this equity sharing model was announced publicly. While there was optimism and shared will to engage with such opportunities, participants consistently expressed that they had a lack of support or understanding of how to initiate forward motion for the collaborations in which they are engaged. Recommendations for how to begin this process are further discussed in the following sections. As cultural awareness was such a frequently cited

challenge and potential solution to produce pathways forward, knowledge integration presents an opportunity to lay the foundation for this discussion.

5.1.1 Moving beyond knowledge integration

Developing ways to integrate cultural and community knowledge into engagements is becoming a more commonly recognized practice for engaging in research and resource development agreements. As previously discussed in Chapters 2 and 4, knowledge integration concepts like Two Eyed Seeing and Ethical Space are contributing to more well-rounded perspectives and improved outcomes (Bartlett et al., 2012; Iwama et al., 2021; Moore et al., 2017; Tengö et al., 2014). It was widely accepted by participants and well documented in academic literature that knowledge integration advances our understanding of complex human-environmental problems, and improves the outcomes of collaborations and engagements (Moore et al., 2017; Tengö et al., 2014). Efforts to incorporate Indigenous knowledge may be well intentioned, however the standards and procedures for formalized decision making processes in the renewable energy sector require Indigenous knowledge to fit into Western systems (McGregor, 2021; Nadasdy, 1999). While there is a need to bridge Indigenous and Western knowledge in collaborative ventures and forums, there has been limited success in doing so (Nadasdy, 1999; Tengö et al., 2014). By placing requirements for dialogues to fit into Western models and frameworks, proponents' ability to communicate and build cultural awareness, as well as establish common goals, trust and respect is limited (Gibson, 2021).

Participants expressed varying levels of dissatisfaction with existing approaches to knowledge integration due to the inability of such approaches to provide appropriate and equitable valuations of Indigenous knowledge in decision making but were uncertain about a

possible remedy. While there is a growing body of research addressing best practices for knowledge integration, there is no singular framework or application yet developed to mitigate this challenge (Tengö et al., 2017). While this research was unable to determine if there is a way in which Indigenous ideologies can inform renewable energy development without adopting Western protocols or standards, it is apparent that there are ways to mitigate this under present structures. In addition, there is growing interest by all proponents to engage in practices that incorporate knowledge mobilization techniques and promote the equitable valuation of Indigenous knowledge in collaborative engagements. There is a slight but important distinction between knowledge integration and knowledge harmonization. Knowledge integration calls upon Indigenous and Western knowledge to become integrated, much like the commonly used melting pot analogy, where knowledges are blended together and considered cohesively as one whole piece of information (Mantyka-Pringle et al., 2017). Knowledge harmonization goes one step further by calling upon the two knowledge systems to be considered as separate entities, and equally valuable (Martin-Hill et al., 2022). It became apparent that through addressing knowledge integration and promoting knowledge harmonization we can begin to produce new collaborative energy planning processes and forums that are designed to enable Indigenous people to participate, while working to limit colonial governance structures and Western influences. Through utilizing multiple knowledge systems, we can strengthen our existing understanding of things, and improve our ability to respond to them, which leads to building more resilient systems and structures into the future (Berkes and Folke, 2002). Tengö et al., refer to this as a multiple evidence-based approach, when Indigenous and Western knowledge are utilized to produce new knowledge and expand our understanding of complex issues, leading to new insights that have not been previously gained when knowledge has been viewed in isolation

(2014). Knowledge integration and knowledge harmonization practices are multiple evidence-based approaches, as they work to determine different ways to synthesize diverse knowledges to increase our understanding of complex challenges, and develop innovative solutions that are respectful and considerate of all knowledge users. By supporting methods that enhance cross-cultural collaborations, we can mobilize different knowledge systems to improve decision making processes. By participating in tasks that work to bridge knowledge systems, we can produce more equitable environments for engagement. We can also enhance Indigenous participation in renewable energy development by integrating improved practices for engagement into collaborative and interdisciplinary research, regardless of whether they are formally required. By leading the way, others will follow, which is likely to lead to the development of these best practices into standard requirements in the future.

Participants expressed a desire to enhance the overall experiences of everyone involved in collaborations, but many were unsure how to act themselves. Many felt confined by institutional barriers and historical legacies and were uncertain what they could do to make positive advancements. When compared with research findings from related studies, it was found that best practices to support interdisciplinary research are still evolving, and there is uncertainty by researchers, especially at early career stages on how to best engage in collaborative and interdisciplinary research (Charnley et al., 2017; Kelly et al., 2019). Despite this apprehension, participants in this study reflected on their positive experiences in cross-cultural collaborations and discussed what changes they would like to see when engaging in renewable energy developments. Participants expressed a need for improved guidance, and felt that the development of best practices, as well as standards and procedures would be beneficial for moving things in the right direction for future engagements. These findings were presented in

Chapter 4 and have contributed to the development of guidelines for three specific groups: First Nations communities; industry, government and academia; and all proponents. These recommendations have been developed through integrated knowledge and recommendations from research participants, the literature, and first-hand personal experiences.

5.1.2 Recommendations for First Nations communities

Despite barriers and challenges, many community members desire to be more engaged in renewable energy developments from their inception to project completion, and sometimes beyond project completion. Based upon the stated barriers and idealized view of engagements provided by participants, five recommendations for First Nations communities engaged in cross-cultural collaborations are:

1. Engage Early, Engage Often

Communities could engage with potential external proponents as early as possible. Early engagement helps to establish their interests, improve the likelihood of long-term engagement, increase knowledge to enhance solutions, integrate participation from local community members, and advance local sustainability (Wiber et al., 2009). Initiating engagement opportunities rather than being approached by external proponents can empower communities in dictating the terms of a project, and can provide more beneficial outcomes for First Nations communities. If communities wish to initiate their own in-house projects, like outfitting new or existing homes with solar panels and connecting to the existing grid for net-metering opportunities, they could engage early on in project development with distributors. This will help them to determine what

their anticipated energy load is, what the grid capacity is, and contribute to the development of long-term planning for future growth.

2. Advocate for yourself

By advocating for themselves, communities can express their unique needs, and seek out ideal outcomes for themselves. Participants expressed that oftentimes communities do not realize the power that they hold in relationships with paid consultants, and they would like to see more communities begin to advocate for themselves in these situations. Some examples of what communities may advocate for are training opportunities, equity sharing, incorporation of Indigenous knowledge, and IBAs.

3. Know what your capacity is and communicate it

One of the frequently cited barriers both in the literature and by participants was an overall lack of community capacity. As discussed in Section 4.1.2, First Nations communities' ability to participate in collaborations is often hindered due to their limited capacity, with each individual community having differing capacity outputs. Participants expressed that there is a need to develop solutions that are in line with individual community capacity. To be able to achieve this, communities must be aware of their capacity, and work within it. It is important to be mindful that capacity can change over time, for example when potential energy committees are formed, funding is received or ends, or different priorities arise within the community. Community capacity can fluctuate, and being aware of their general ability to participate can help communities determine what their role may look like in engagements. Understanding capacity can also better determine what their needs may be, and aid in the development of

methods for enhancing their participation into the future. By communicating their capacity, Indigenous communities can better work with external proponents to develop collaborative opportunities that enhance community capacity and participation now and into the future.

4. Create space for bottom-up community member participation

Encouraging community members to participate and creating opportunities for them to engage honours Indigenous worldviews and governance systems and may be more reflective of community needs as a whole. Community members generally have a willingness to participate and have their voices heard, and creating space for community representation improves the outcomes of projects (Krupa et al., 2015). Due to capacity differences, some communities may have more opportunities for their members to participate than others. Developing advisory committees and boards, and internal ad hoc groups to tackle challenges and decision making can enable more holistic and realistic representation of a community's values and goals (Bullock et al., 2020). For instance, many Indigenous communities have developed Elders councils and youth councils, while others have specific planning committees in energy, health or education utilizing internal and external resources. It is up to a community to determine if they have capacity for long-term committees to gather, or shorter single day engagement sessions. Regardless of what a community determines, these types of bottom-up community participation activities have been encouraged to provide the best outcomes for communities when they enter collaborations with external proponents.

5. Engage in resource sharing and partnership development

While first-hand lived experience is beneficial, there is something to be said for the opportunities to learn and grow from others' experiences. By engaging with other Indigenous communities, there is opportunity to learn from their past challenges and successes, and potentially apply them to future engagements. Information and resource sharing between communities can enable communities to work together and assist one another in navigating recurring challenges and barriers. For instance, a resource sharing bank for funding opportunities may help communities access opportunities they may have never come across, or provide resources for navigating unfamiliar Western institutions and the rapidly changing energy landscape. This also has the potential to result in strong partnerships between communities, such as the GLP. Communities that partner with one another can pool resources in some instances, leading to better collective community actions and outcomes. They can also advocate with a unified voice and vision (Bullock et al. 2020).

5.1.3 Recommendations for industry, government and academia

Proponents who are from industry, government and academia have a challenging role when engaging with Indigenous peoples as they are representatives of institutions that have long histories of exploitation of Indigenous people (Ferland et al., 2021). As stated by Bullock et al. (2020, p.10), "There is also a recognized need for non-Indigenous peoples and institutions to engage in hard thinking and challenging work to reframe their own institutions if they hope to decolonize relationships with Indigenous peoples." Proponents who fall into this category carry with them a responsibility to challenge historical wrong-doings and create better outcomes. It is vital for these proponents to address the historical implications and power imbalances that they

represent if they wish to improve collaborative outcomes. The following six recommendations were developed with these challenges in mind, and work to address them:

1. Do the work before the work

Engaging in cultural awareness and personal reflexivity processes is one of the initial steps all individuals can take towards enhancing collaborative experiences. By taking the time to understand and engage with other cultures and experiences, people are able to better acknowledge and accept other modalities of being and doing in the world. This provides individuals with the opportunity to challenge themselves, as well as the personal historical relationships they or the entities they are representing portray, and it provides more opportunity to address and remedy power imbalances. Individuals can willingly engage in this personal work and could also encourage their peers and employers to provide opportunities for such activity. In addition, learning more specific information about the history of a community that individuals may be working with can also enhance people's understanding of a situation, allow for more complex understanding of one another, and lay the groundwork for building relationships with other collaborators.

2. Be flexible with timelines

Understand that capacity greatly affects the ability of Indigenous communities to participate in collaborations. While advancing project work may seem of utmost importance to an industry proponent or consultant, communities frequently shift priorities due to limited capacity and differing standards. Collaborators must be as flexible as possible with timelines, and understand that sometimes things must take longer, especially when there is a need to begin

an engagement with a relationship building process. Funders or decision makers must also be flexible with timelines to allow for these processes to take place.

3. Use clear, plain language to convey information

Communicating information in plain language whenever possible is considerate of all collaborators involved in an engagement. While the work an individual is engaging in may be their area of expertise, there is a possibility that other collaborators may not be experts in this field. Technical jargon is rarely effective in getting one's point across when working on collaborations. Clear, concise, plain language documents are easier to navigate and are more considerate of other collaborators who may face additional comprehension challenges, including not having English as a first language, or not having advanced education on the topics being discussed. In addition, plain language makes it easier for the general public to also engage and understand the work that is being completed. This is especially valuable if any of the work will need to be disseminated to public audiences. In addition, plain language reduces the possibility of getting hung up on technicalities in agreements and creates more opportunities for local community participation in engagements.

4. Invite First Nations to the table

It is important to open conversations from the very beginning of a project. Early invitations to be involved can help mitigate future challenges and barriers in project development and can enhance project success. For an emerging collaboration to have a chance to be fair, all participants must have an equal voice at the table, and First Nations people need to be consulted not only because it is a requirement, but because they have valuable knowledge and input,

especially on their traditional territory. Making First Nations communities partners on projects provides long-term commitment to include communities in project planning, implementation and project benefits. Despite what is formally required for consultation, engaging First Nations communities throughout the lifecycle of a project has been proven to lead to better outcomes for everyone involved (Rakshit et al., 2018a)(Rakshit et al., 2018b).

5. Develop ways to support community proponents

Indigenous people tend to take a more relational approach to their work than Western individuals. Reciprocity is a commonly shared principle that is valued by many Indigenous cultures. Reciprocity has been referred to as one of the 4 R's of Reconciliation, and is achieved by taking and giving in a two-way manner (Kirkness & Barnhardt, 2001). Working in Good Ways: a Framework for Indigenous Community Engagement describes reciprocity as “ensuring that communities experience mutual benefit, ownership, and relational accountability, beyond basic remuneration, project resourcing, and following community protocols” (Ferland et al., 2021). Reciprocity can be practiced through developing ways to support community proponents. It is important for all proponents to contribute to building long-term capacity in communities that spans beyond a project and its lifespan. Providing economic opportunities such as, equity sharing, employment, and workplace training improves the ability and ways in which the community can participate in future projects. To ensure reciprocity is authentic and meaningful, industry, government and academic proponents must refrain from imposing preordained solutions onto communities. Rather, they need to work directly with individual communities to determine how they can best be supported.

6. Apply community engagement process to energy processes

While there is plenty of research on best practices for community engagement processes in natural resource management (Bullock et al., 2020; Zurba et al., 2019; Proulx et al., 2021; Wiber et al., 2009), there are few papers that focus on the renewable energy sector. While renewable energy research is likely to grow over the years to come, non-Indigenous proponents could use the existing knowledge in other fields. Many of the concepts and practices for community engagement are cross-sectoral, meaning they can be applied to most collaborations that engage community proponents regardless of the field of study. While there is no one-size-fits-all approach for how to best engage in cross-cultural collaborations, there is a great deal of information that can be applied to most sectors. Through analyzing and understanding various models and frameworks to support Indigenous participation in collaborative spaces, collaborators are able to make more informed decisions to apply appropriate structures that align with collaborations on a case-by case basis (Bullock et al., 2020). There is no better starting point than to work within the knowledge and resources that are readily available.

5.1.4. Recommendations for all proponents

1. Create space and time for relationship building

The educational components of cultural sensitivity and cultural awareness should not fall solely on the First Nations partners or on consultants, as participants expressed it often does. It is work that should be completed and encouraged by everyone. Some participants expressed that this should be a formal requirement for entering into cross-cultural engagements and would have exponentially greater benefits than the present engagement requirements of consultation, which were characterized as inadequate. As stated by Ferland et al., “Relationship is the heart of

Indigenous community engagement” (2021, p.36). Relationship building is not a one-time activity that can be checked off a list; it is a long-term process. And planning for this in project timelines is necessary for meaningful relationships to have an opportunity to develop. Creating both formal and informal spaces for this to occur are equally valuable, and can produce enriching outcomes and mitigate barriers and challenges (Ferland et al., 2021).

2. Collaboratively develop documents and agreements

When entering a collaboration, producing formal agreements to resolve conflicts and ensure transparency helps to resolve future disagreements, dissect power imbalances among proponents and develop a safer space for engaging with one another. Participants expressed the need for living documents to be developed to aid in conflict resolution, and shared values and goals. Some ideas include a governance framework, communications agreements, success measurement models, and a model to harmonize cultural differences. The process of developing these types of documents can contribute to relationship building and encourage equitable participation throughout collaborations. These documents can also be reflected upon when making decisions, and aid in providing transparency and accountability.

3. Practice the 4 R's of Reconciliation

It is important that collaborators exercise patience. Being open minded and patient with one another enables growth to take place. All collaborators may be challenged, and their worldviews are likely to be called into question by others. By being open-minded, collaborators provide space for other engaged parties to challenge themselves and allow others to feel seen and valued. Collaborators may encourage others to hold themselves to a higher standard of practice

and allow personal growth to occur. An effective way to do this is by engaging in the 4 R's of Reconciliation. In a paper published on decolonizing educational practices, Kirkness and Barnhardt (2001) describe the 4 R's of Reconciliation: respect, relevance, reciprocity and responsibility. These four R's have been widely cited by scholars of natural resource management and community engagement, and for good reason. The 4 R's are a simple way to begin engaging in better practices in collaborations and engagements. Individuals can show respect for others, their worldviews, cultures, experiences, knowledge and ideas (Kirkness & Barnhardt, 2001). Individuals can practice relevance by ensuring that our work is culturally relevant and embodies the values and signifies the importance of differing cultural perspectives. Individuals can practice reciprocity in their relationships by supporting one another (Kirkness & Barnhardt, 2001). Finally, all individuals have a collective responsibility to show up and act in a manner that uplifts each other and produces valuable shared outcomes (Kirkness & Barnhardt, 2001; Wilson-Raybould, 2022). By embodying these principles, proponents enable themselves and their peers to show up to collaborations with their best foot forward.

4. Make it mandatory

Many participants expressed that they would like mandatory processes to be developed, including long-term IBAs, equity sharing, cultural awareness, and adopting relationship building processes. While this may make sense in some collaborative environments, it may not in others. As previously discussed, one-size-fits-all approaches rarely work, however the principles discussed throughout this research are likely to benefit most collaborations. While certain processes are not (yet) mandatory, they can still be undertaken, and arguably could be mandatory if they are going to prove beneficial. While best practices for collaborative engagements may not

be required, individuals can advocate for them to be required in the collaborations they take part in.

5.2 Advancing Reconciliation through renewable energy development

Society is beginning to understand that renewable energy development is a potential pathway towards Reconciliation (Henderson & Fontaine, 2013; Scott, 2020). While the potential to perpetuate colonial structures is still present, through engaging in better practices collaborators can collectively work to mitigate colonial influences and promote equitable Indigenous participation. Community energy planning, equity ownership, and community capacity building, have all been cited as ways to support renewable energy development while simultaneously contributing to Reconciliation (Hoicka et al., 2021). This is consistent with the research results and recommendations that have been outlined in Chapter 4 and Section 5.1.

As previously discussed, participants expressed a desire to engage in better practices, and are uncertain as to where to start. As stated by Jody Wilson Raybould:

“The fact that you are asking this fundamental question- *What can I do?*- reflects how much has accelerated and demonstrates that we are in a critical moment of transition and transformation...I understand this moment as one in which we have finally recognized that confronting the legacy of colonialism in Canada, and building a future, is our shared work. This is a moment with significant transformative potential, a moment here we recognize that we all have a role to play, and that we need to increasingly and urgently, act,” (Wilson-Raybould, 2022).

As Canada works to transition to 100% renewable energy consumption and has committed to achieving net-zero fossil fuel emissions by 2040, renewable energy development represents a pathway to address Reconciliation and climate change (Coalition for a Green New Deal, 2019; Hoicka et al., 2021). Energy development relies on cross-cultural collaborations to work with Indigenous people to address energy shortages and improve supply and load for the

general population. As argued by Anishinaabe scholar McGregor (*McGregor, 2019*), climate change policy cannot be successful if it does not “*result in the genuine restructuring and transformation of contemporary relationships between the state and Aboriginal peoples*”. As a society we need to acknowledge that Indigenous worldviews we sought to remove are going to be needed if we hope to reduce emissions and care for the environment. Collaborating with First Nations communities is necessary; thus it is in everyone's best interest to develop pathways to successful collaborative energy development. It would be a shortcoming to discuss this transition without addressing Reconciliation as a driving force for producing equitable changes.

To better understand how to incorporate Reconciliation into renewable energy development we need look no further than the National Centre for Truth and Reconciliation (NCTR). The NCTR is an archival space for documents on residential school survivors and their experiences. It is also a place of learning and research and has produced various reports, formal recommendations and resources, all with the “goal of fostering Reconciliation and healing,” (National Centre for Truth and Reconciliation, 2023).

The TRC defines Reconciliation as “establishing and maintaining a mutually respectful relationship between Aboriginal and non-Aboriginal Peoples in this country. For that to happen there has to be awareness of the past, acknowledgement of the harm that has been inflicted, atonement for the causes, and action to change behaviour” (The Truth and Reconciliation Commission of Canada, 2015).

In the 2015 report released by the TRC they outline five principles to follow for Reconciliation to take place in Canada:

1. The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) is the framework for Reconciliation at all levels and across all sectors of Canadian society.

2. First Nations, Inuit, and Métis peoples, as the original peoples of this country and as self-determining peoples, have Treaty, constitutional, and human rights that must be recognized and respected.
3. Reconciliation is a process of healing of relationships that requires public truth sharing, apology, and commemoration that acknowledge and redress past harms.
4. Reconciliation requires constructive action on addressing the ongoing legacies of colonialism that have had destructive impacts on Aboriginal peoples' education, cultures and languages, health, child welfare, the administration of justice, and economic opportunities and prosperity.
5. Reconciliation must create a more equitable and inclusive society by closing the gaps in social, health, and economic outcomes that exist between Aboriginal and non-Aboriginal Canadians.

These principles are valuable for anyone engaged in natural resource management collaborations to reflect on and incorporate into their professional and personal lives. With respect to renewable energy development, all five of these recommendations can be incorporated into collaborations. Principles one and three are becoming more commonly addressed, and UNDRIP is being more frequently adapted as a framework to support equitable renewable energy development collaborations (MacKinnon & Winstanley, 2022). Principles two, four and five call on all proponents to ensure that they acknowledge Indigenous rights, knowledge and worldviews, and to reflect on one's place in history while actively working to develop a more equitable future for all. These principles are in line with the recommendations provided in Section 5.1, as well as Figure 5, discussing strategies for pathways to successful collaborative energy engagements, which further confirms the findings of this research.

To engage in best practices in collaborations, all proponents must be aware of the importance of Reconciliation, and willing to actively engage in processes that embody principles of Reconciliation. While community engagement is becoming more frequently required, acceptable levels of engagement differ from individuals, communities, organizations and government. It is apparent that obligations to uphold these standards of practice vary, and there is no guarantee that collaborations will all uphold acceptable levels of engagement.

All stakeholders and rightsholders are connected in that we all carry a collective responsibility to protect the natural environment, as it is the only thing that keeps us all alive. Thus, we all have a duty to act in a way that ensures we carry forward our collective responsibility to protect the environment, regardless of whether it is difficult or required. As stated by Judy Wilson Raybould, “We all hold a collective responsibility to do better, and engage in enhancing more meaningful practices that benefit everyone: “We have to think about our “actions,” and not an “action.” We need to understand that true Reconciliation is realized through multiple acts, over time, that build on what has already happened and lead to what is next,” (Wilson-Raybould, 2022). Personal participation is vital to moving forward. Making changes takes time and energy, but by acting in a way that embodies principles of Reconciliation, individuals can slowly change societal standards and build a shared future that embodies principles of equity and reciprocity.

5.3 Recommendations for future areas of study

Based upon the values elaborated upon in this thesis co-research, it is evident that incorporating requirements for cultural awareness processes and relationship building opportunities is desired by proponents from all backgrounds. While there is a great deal of

literature on best practices for community engagement in natural resource management collaborations, there is limited research that specifically focuses on renewable energy development collaborations. Similarly, there is a great deal of research on community planning, and limited but emerging research on community energy planning. In addition, there are resources for First Nations on how to engage in and develop their own community energy plans, however the majority of these resources were scattered over multiple documents or inaccessible due to journal or funding paywalls, and often written in complex technical language. These were all barriers faced when assisting ELFN in developing portions of their community energy plan.

Three recommendations for future areas of study and work are provided:

1. New research could add value by evaluating various collaborative natural resource management frameworks and applying them to collaborations in the renewable energy sector to help understand whether these frameworks are effective to address equitable Indigenous participation in the field and further lead to the development of best practices for community engagement processes in the renewable energy sector.
2. Developing a plain language step-by-step community energy planning guidebook that is specific to First Nations and Indigenous communities would be valuable. While this may be considered more an act of knowledge mobilization than a specific area of research, this may encompass literature and previous research, and has the potential to engage new knowledge through utilizing interviews and focus groups to develop this resource. This document could be universal to First Nations and Indigenous communities across Canada where applicable, as many of these communities are bound to the same federal policies and restrictions, while

also providing region specific information, accounting for the various provincial and territorial restrictions and institutional differences. Through providing a general and broad overview, while also encouraging communities tailor to their local needs whenever possible, this document could serve as a valuable entry point for communities engaging in community energy planning.

3. Finally, one unsolved yet recurring issue was developing ways to advance integration of Indigenous and Western knowledge into the realm of knowledge harmonization. Thus, through research and practice, developing ways to bridge knowledge systems holds the potential to produce innovative and holistic solutions to address energy development and the climate crisis, through equitable acknowledgement of Indigenous and Western worldviews.

5.4 Summary

The findings and recommendations from this research contribute to the growing body of literature on knowledge mobilization and provide recommendations for engaging in interdisciplinary collaborations. The research draws upon the benefits and challenges associated with collaborative engagements and contributes to best practices for collaborations between Indigenous and non-Indigenous actors in the rapidly emerging research area of renewable energy development. Through this research numerous recommendations emerged for those engaged in renewable energy development collaborations. This thesis contributes to a broader ongoing discussion in the literature on how renewable energy development provides a valuable opportunity to contribute to Reconciliation.

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Appendix-1: Interview Questions Framework

The following questions are guided by the research questions and objectives. The two objectives they will fulfill are as follows:

1. Understand what colonial structures exist for community energy work, *potential alternatives to these structures, and what must happen to enable alternatives;*
2. *Develop constructive policy recommendations and/or guiding principles to support Indigenous participation and the use of Indigenous knowledge in energy development and decision making.*

The research questions for this project, in which these interviews will seek to provide more context to, are provided below:

1. *How can we remedy the dysfunctional relationship between the state and Indigenous peoples through building renewable energy projects?*
2. *What spaces can be created for Indigenous communities to participate in energy development without mimicking colonial governance structures?*

Interview Questions:

- What elements would you deem important to consider in energy development?
 - Prompts: generation, conservation, cost, security, efficiency, self-sufficiency, partnerships, education, long term planning, education, etc..
- Previous research provides context for the importance of cross-cultural collaborations and social learning in collaborative natural resource management projects and developments. Think about a time when you had to work in a diverse group to make decisions. In your previous experience, what are some of the barriers or challenges that you have most frequently encountered in working with a diverse group of people (or stakeholders) from various backgrounds?
 - More specifically, what are some of the barriers you have encountered in working with groups from different backgrounds or cultures on renewable energy development?
 - Prompts: In working with western and institutionalized settings, or in working with Indigenous or First Nations peoples
 - Are any of these barriers you may have encountered reoccurring? Are there any reoccurring gaps or challenges that have presented themselves in working on cross sectoral and cross cultural collaborations?
 - Are there any tools or resources that you think may have helped to reduce these barriers and challenges? What would you have done differently if you could?
 - When you think of an ideal cross-cultural/ cross-sectoral collaboration, what does that look like? What does a successful collaboration look like to you? Or.. reflecting on your previous experience, what are some things that have worked

really well to reduce conflict and create a positive working environment in cross cultural and cross sectoral collaborations?

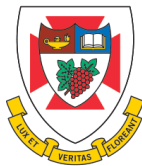
- Indigenous and First Nations communities face a great deal of additional barriers to participation in natural resource management. Some of the challenges they face include language and accessibility of information, the style of meetings and presentations, cultural and societal norms and ways of interacting, etc. What other challenges or barriers do you think exist for Indigenous and First Nations communities when participating in collaborative resource development projects that involve external actors?
- Various concepts, like Two-Eyed Seeing have been developed for involved stakeholders to better understand one another and facilitate social learning in these engagements. While these have opened up space and time for approaches that may have not otherwise been possible, they still require Indigenous and First Nations Peoples to participate under western structures and systems. These approaches seek to attempt to combine knowledge under a western framework rather than focus on their unique differences. Do you think that there is value in working towards developing alternative approaches that are able to see the value in these knowledges as separate, but equally valuable?
 - If no, why not?
 - If yes, why?
 - If you have worked on a cross cultural collaboration that utilized approaches like Two Eyed Seeing, did you feel that knowledges were still viewed as equal, and that everyone was equally represented and valued throughout the process?
 - Do you have any ideas for other strategies that could be utilized to ensure that all cultures and voices are shared and understood equally?
- In working on cross-cultural collaborations, many people forget to build a foundation and establish relationships while working with Indigenous and First Nations peoples. They forget to do personal work before engaging in collaborative work, including engaging in self-reflection, building long lasting relationships, and engaging in and learning about Indigenous cultural customs. This leaves a large portion of the labor of educating others on their culture and ways of doing things to Indigenous participants in the collaboration, and creates an unbalanced dynamic.
 - In your previous experience, have you done the personal work before engaging with Indigenous and First Nations peoples?
 - If yes, were you encouraged to by your employer/peers, or was this work self-motivated?
 - If no, why not? Were there barriers for you in doing this? Did you feel as if this perhaps wasn't as important?
 - Do you think that doing this personal work should be standard practice for engaging with Indigenous and First Nations peoples?
 - Can you think of other strategies or tactics that helped you to better prepare yourself to enter cross-cultural or cross-sectoral collaborations

- What sort of changes would you like to see with respect to energy development and your experience in working with Indigenous and First Nations communities?
- Do you know of any opportunities available to communities to help address energy related challenges?
 - Prompts: the Indigenous Guardians program, the Community Energy Champions program, etc..
 - Can you think of other gaps that may exist, and opportunities you would like to see perhaps to fill these gaps?
- When you think about your past experience, what does an ideal cross sectoral and cross-cultural project look like to you? Have you experienced this before?
- What do you think could be done to ensure understanding and success in collaborative energy development projects?
 - What could be done differently?
 - What works and should remain the same?

Debrief/Summarizing questions:

- Is there anything else you would like to share today regarding this subject matter?

Appendix-2: Informed Consent Form



THE UNIVERSITY OF
WINNIPEG October 21st,
 2022



Eagle Lake
 First Nation

Dear (insert name here),

This study is a collaborative research project being conducted by Eagle Lake First Nation and the University of Winnipeg. We are interested in perceptions and experiences with renewable energy development among Indigenous communities. This letter provides information about the project and what your involvement would entail if you decide to take part.

The goals of this study are to:

- a. Determine how community led energy initiatives can advance Reconciliation between Indigenous communities, government, and industry
- b. Determine if and how communities might build and participate in energy development without mimicking colonial governance structures
- c. Support ways to increase understanding of energy types and futures available to Eagle Lake First Nation, and report Eagle Lake First Nation's community values, desires and priorities to leadership and community for future energy development plans
- d. Develop constructive policy recommendations and/or guiding principles to support Indigenous participation and the use of Indigenous knowledge in energy development and decision making

Findings will be shared in a report to Eagle Lake First Nation, which will outline the understanding and attitudes towards energy development on Treaty 3 territory, and produce guiding policy recommendations to improve Indigenous experiences in engaging with renewable energy development projects.

We would like to invite you to participate in a conversational interview. If you choose to participate, the interview will ask questions regarding your knowledge of renewable energy types available on Treaty 3 territory, your attitudes towards renewable energy development, the risks and benefits associated with renewable energy development, as well as problems and solutions. With your permission, the interview will be audio recorded to facilitate the collection of information. All information you provide may remain confidential if you wish, and self-identifiers including your job, position, or affiliation will not be used in any final reporting documents, unless requested, in which case additional verbal consent will be obtained. You will have access to the findings once the report is complete. Participation in this interview is completely voluntary. You may decline to answer any questions you prefer not to answer, stop the interview at any time, or decide to withdraw from this project by advising the researcher or the university ethics department up to one week after the draft report has been released.

Participating in this survey will not affect your relations with Eagle Lake First Nation or the University of Winnipeg, and may increase your awareness of potential opportunities and challenges with renewable energy development. Your perspectives will contribute to the development of a community energy plan for Eagle Lake First Nation, and will aid in the promotion of relevant and respectful Indigenous inclusion in renewable energy development. The researchers would like to acknowledge that COVID-19 pandemic is still a risk, and in person interactions will follow guidelines laid out by Eagle Lake First Nation and the University of Winnipeg. Please review the attached COVID-19 Safety Plan for more information on how the research will be conducted to ensure participants' safety.

If you have any questions regarding the project, or would like additional information to assist you in reaching a decision about participation, please contact any of the research partners listed below. The University of Winnipeg Human Ethics Review Committee has approved this research. If you have any comments or concerns about this study you may contact any of research partners or the University Human Research Ethics Board at 204-786-9058 or by email at ethics@uwinnipeg.ca.

If you are willing to participate in this interview please contact Emily Unger using the information provide below, or indicate your consent verbally now.

Circle: YES / NO

Thank you,

Ms. Emily Unger, unger-e@webmail.uwinnipeg.ca, 204-290-8493

Dr. Ryan Bullock, r.bullock@uwinnipeg.ca, 204-988-7594

Daniel Morriveau, landsandresources2@migisi.ca, Ph: 807-788-1003 ext.203

Appendix-3: Coding Framework

Initial Codes	Subcodes	Secondary Subcodes
What Colonial Structures Exist	Challenges and Barriers	Cultural Awareness
		Community Priorities
		Education
		Finances
		Politics and Power Dynamics
Exploring Alternatives	Two-Eyed Seeing/ Knowledge Integration	Science
		Sovereignty
		Community Guided Approach
		Relationships
	Collaborations and Partnerships	Committees and Community Representatives
		Leadership
		Working with Communities
	Adaptive Capacity, Training and Development	Adaptive Capacity
		Training
		Equity, Diversity and Inclusion
		Time
	Accounting and Reporting	Development of Guidelines
		Impact Benefit Agreements
		Planning
		Simplifying Processes
		Time
	Additional Alternatives to Explore	Communication
		Engagement
		Progress and Positive Change
		Relevant Resources and Supports
	Generation	Conservation
		Efficiency
		Net Metering
		Nuclear