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Original Paper

Community Capacity Building for Energy Sovereignty: A First

Nation Case Study

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Abstract

Ontario's 2017 Long-Term Energy Plan has identified the Wataynikaneyap Power transmission line as a priority project. The line will connect seventeen remote, off-grid, diesel-dependent First Nation communities in northwestern Ontario, Canada to the provincial grid. The province's current energy mandates and policies commit program dollars to build the human capacities of the seventeen Wataynikaneyap Power communities through the Remote Electrification Readiness Program (RERP). This effort is part of growing interests, changing perspectives, and focus in the continuum of provincial strategies to encourage First Nations to meet their emerging energy transitional needs and to partake in the energy sector.

Capacity-building challenges are unique in the Wataynikaneyap Power communities because they experience higher levels of poverty and socio economic inequities, are subjected to antiquated and unjust institutional structures, are following a legal and self-governance status, and are maintaining distinct cultures and ways of life.

Capacity building as a concept is wide-ranging and offers a multitude of expressions and interpretations. For the Wataynikaneyap Power communities, capacity building has offered the opportunity to exert their inherent rights and to increase their participation in local and regional energy planning and development.

This community-based research is derived from grassroots ethnographic community observation. Through a case study of one of the Wataynikaneyap Power communities, Poplar Hill First Nation, the paper will: a) elucidate a working example of an Indigenous capacity-building process through the RERP; b) demonstrate that capacity development is a key building block for self-determination and to achieve energy sovereignty; and c) illustrate the broader scope of learnings and pathways to effective capacity building for Indigenous communities that will drive energy development initiatives and actions in Canada's expansive energy sector.

Keywords

aboriginal peoples, capacity building, energy transition, ethnographic research, northwestern Ontario

1. Introduction

Poplar Hill First Nation in northwestern Ontario, Canada is one among the 25 remote First Nation communities that currently generate some or all of their electricity from diesel (AANDC & NRCan, 2011). These First Nation communities are approaching their maximum diesel power generation capacity and this limitation is hindering their economic growth at all levels (Watavnikanevap Power, 2016). Therefore, there is an urgent need to minimize diesel dependency and load restrictions. A transmission line project for the remote First Nation communities has been identified as a priority project in Ontario's Long-Term Energy Plan 2016 (OMoE, 2017). The Wataynikaneyap Power Transmission line, a First Nation-owned and led company has been chosen by the province to construct and operate the new transmission line and connect seventeen remote First Nation communities in northwestern Ontario to the provincial grid. It was a historic milestone and a proud moment for the First Nation people of northwestern Ontario when, in the summer of 2016, Watavnikanevap Power, a First Nation-led transmission company in the province, was selected to connect remote First Nation communities and provide electricity to more than 10,000 people (Wataynikaneyap Power, 2016). The communities working together and controlling the development of infrastructure within their traditional lands is unprecedented and will hopefully act a catalyst for greater prosperity and economic self-determination. As Bill Sainnawap, Big Trout Lake First Nation says:

"This is the first time we can take part in a project of this size and importance. Developing this project will provide our community a sense of pride and self-esteem that we can leverage for other projects".

Once this idea of constructing and operating the transmission line was conceived and well on its way to development, the ensuing challenge was to discuss potential challenges. Community capacity, presently inadequate to non-existent, was soon recognized as one of the urgent concerns.

At this point, it is pertinent for all groups—academicians, policy-makers, investors, project proponents and other interested stakeholders involved—to have a collective understanding and clarity about what capacity building means in the context of Indigenous populations and their interactions and partnerships. This is also in recognition of and commitment to the legitimacy and primacy of community ownership, decision-making, and actions. Stevenson and Perreault (2008) show that Indigenous peoples view the issue of "capacity" as a two-way street emphasizing that both industry and government need to build their capacities for a broader approach and multiple perspectives.

In a World Bank study (Uquillas & Martinez, 1995), capacity building is a generic understanding comprised of four inter-related elements: human development; the restructuring of institutions; political

leadership, and an insight that begins to incorporate strong human elements (Woons, 2014). Eade and Williams (1995) suggest that capacity building is the basis for development that strengthens people's capacities to determine their own values and priorities and to organize themselves to act on them. Kusel (1996) considers "community capacity" as the collective ability of a community to respond to both external and internal stresses, to create and take advantage of opportunities, and to meet the needs of the community. Littlejohns and Thompson (2001) offer a similar viewpoint in that the degree to which a community can develop, implement and sustain actions allows greater control over its physical, social, economic and cultural environments. In principle, these variant viewpoints place the intended beneficiaries in the driver's seat (O'Shaughnessy et al., 1999). Building capacity is about social change—when effective, it is transformative and forms the basis for self-determination (Missens, 2008; Fletcher et al., 2008). Taylor (2003) asserts that capacity building is underpinned by principles of self-determination and is an important measure and step, especially in marginalized populations (Smith et al., 2003). Five Nations Energy Inc., founded in 2001, offers an example of a First Nation-owned licensed electricity Transmission Company (Chilton, 2012). Developing local capacities to operate the system today is the company's biggest strength. Missens (2008) asserts that capacity is the combination of people, institutions, resources, organizational abilities, authority, and practices that enable First Nation communities to reach their own goals. This leads to a discussion on a holistic approach to building capacities. Past research provides generic typologies of capacity resources that can be adopted for the energy sector, including:

- Human resources: skills, knowledge, education, leadership ability;
- Institutional resources: governance and management systems;
- Knowledge resources: databases, baselines, traditional knowledge systems;
- Social resources: community cohesion, partnerships and networks, interpersonal relationships, trust;
- Physical resources: infrastructure, buildings, technology, roads;
- Cultural resources: traditions and values, land ethic, lifestyle;
- Natural resources: land, forests, water, wildlife, ecosystems; and
- Financial resources: capital and project funding.

These resource types are inter-dependent and overlapping and require addressing gaps in all types of resources. Additional resources in the context of First Nation energy development include the foundational components of Aboriginal and treaty rights and title, leadership, community governance frameworks, and political will (Kepkey, 2007).

Community preparedness and building local capacities are required to maximize the opportunities that the Wataynikaneyap transmission line will provide. It requires the communities to be ready to take up employment openings, spin-off businesses, and entrepreneurial prospects. Ontario, through the Ministry of Indigenous Relations and Reconciliation, announced remote electrification readiness grants to assist the seventeen northwestern remote First Nations' plan for grid connection. The one million dollar per year Remote Electrification Readiness Program (RERP), covering the three-year period from 2014-2017, was then created to assess the employment, economic, business and training gaps of the seventeen communities (Wataynikaneyap Power, 2016). The RERP is part of the Ontario government's economic plan for supporting strong and healthy First Nation communities, by investing in people's talents and skills and creating a dynamic, supportive environment where the economy thrives. In the context of developing community capacities, it is important to acknowledge not just the end goal but also the process. The RERP, though a top-down framework, helps the remote First Nation communities develop their own readiness plans that include the following process: (i) identifying community resources, (ii) undertaking a gap analysis and prioritizing community needs, (iii) developing an action plan to leverage programs, services and community resources to address identified gaps/community needs, and (iv) implementation and ongoing monitoring. The effectiveness of the RERP in articulating the nexus between sustainable energy transition and enhanced capacities in fostering self-determination has yet to be analyzed.

This paper illustrates a working example of an Indigenous approach derived from a western RERP framework. Extensive participatory and collaborative grassroots methods assessing needs resulted in identifying the gaps in community capacity. The process allowed the communities to understand their own capacity strengths and weaknesses. The assessments were based on a community-driven preparedness approach in addressing local transitional emerging issues and in building their capabilities and confidence. Further, the knowledge and skills gaps identified as necessary for building the transmission line had the potential to be transferable to other infrastructure-related jobs. Although the outcomes and changes may not be measurable for several years after the implementation of a community project (Paradis et al., 2005), growth in community capacity can be documented throughout the community-based project (Smith et al., 2003).

The outcome of the paper demonstrates that developing capacities is a key building block for Poplar Hill's self-determination and energy sovereignty. The paper concludes by summarizing the broader scope of learnings and pathways to effective capacity building for remote Indigenous communities in driving initiatives and actions for local energy development and services and in the far-reaching landscape of the energy sector.

2. Methodology

Ethnography-based participant observation, the approach taken in this research, offers some guiding principles (Atkinson & Hammersley, 1998). These include: an emphasis on exploring and experiencing the energy transition process without deciphering theories; working with the flow of information and narratives generated and not with structured data formats and figures; and making a unique attempt to create ethnography-based knowledge that may potentially be not quantifiable or statistical.

DeWalt and DeWalt (2002) believe that participant observation as a research method helps to provide a holistic and objective understanding of the context and phenomenon under study. Finally, Krupa (2012)

affirms that such a process offers communities an opportunity to express their Indigenous Development vision, which can provide a possible template for other aspiring communities.

Northern Chiefs Council, Keewaytinook Okimakanak (KO) and Keewaytinook Okimakanak Research Institute (KORI), the research department of the Tribal Council and the Indigenous research partners for this study, acknowledge the benefits of grassroots, community-based research (KORI, 2012). In keeping with this, the Northern Chiefs Council enabled the research to access open houses held in Poplar Hill, attend capacity workshops, have informal discussions with a variety of community members and individuals holding energy files, and, finally, access a broad range of grey materials. This paper acknowledges the association and contribution of the Northern Chiefs Council, KORI and the Poplar Hill community.

A key element in the RERP process was collecting the community demographic baselines from Statistics Canada and community-wide surveys. A review of existing data was also undertaken to avoid duplication of efforts, identifying the data gaps, and also to validate the data received from the cross-section of sources. Statistic Canada data posed advantages and disadvantages. The data were readily available and inexpensive due to online public access; however; acquiring up-to-date census statistics was a challenge as the mandatory long-form census was replaced in 2011 with a voluntary National Household Survey, leading many to question the reliability of the census data (Hulchanski et al., 2013). Another problem was that many Indigenous communities, for various reasons, are improperly counted. This makes data analysis and comparisons from one census year to another difficult (Southcott, 2009). The community survey, on the other hand was found to be more reliable as they were done by "one among us" with localized information access. The surveys extended to beyond data collection. Ground-reality insights on motivational factors and challenges in acquiring employment skills were solicited.

Once the demographic baselines were collected, asset and business directory information was collected through surveys, meetings, and workshops from December 2015 to June 2016. K-NET² designed the online database and interface http://wataytraining.knet.ca for easy access and to complete the online surveys. The analysis of the data collated were downloaded in the CSV format and as Microsoft Excel sheets. The extensive data gathered provided a clear picture of the community's training needs and expectations (KORI 2017b). The results of the RERP process was as shared and discussed with the Poplar Hill community through a workshop in an open house

3. Why Build the Capacities of Poplar Hill First Nation?

Poplar Hill is an Anishinaabe (Ojibway) community http://poplarhill.firstnation.ca/ located approximately 120 km north of Red Lake by the Berens River near the Ontario-Manitoba border. The community is accessible year-round by air, with limited seasonal winter road access. The diesel-dependent community has been facing energy challenges for decades. The on-reserve population of 473 people (Statistics Canada, 2016) lives on a land base of 702 hectares in size with minimal and basic infrastructure facilities and services. The community experiences a high level of poverty (Note 3) due to remoteness, lack of economic opportunities, a shortage of trained workers, a unique legal status and self-governance that is consistent with their status; and very distinct cultural values and lifestyle. These distinctive aspects are different than those for non-First Nation communities and their governments. Poplar Hill, along with Nishnawbe Aski Nation (NAN) communities, is presently negotiating a form of self-government (Note 5) with the federal government. This is important to note as it has resulted in the community being proactive and taking responsibility for on-reserve operations. Jurisdiction over "Indians, and Lands reserved for the Indians" vests with the federal Crown by virtue of subsection 91(24) of the Constitution Act, 1867. According to the Act, energy and electricity are the responsibility of the provinces and territories. The Government of Canada is responsible for on-reserve governance, but the Province of Ontario is responsible for energy development on provincial Crown lands. Wataynikaneyap Power communities, including Poplar Hill, are taking the lead on the provincial 1,500 km new Wataynikaneyap Power transmission line indicated in Figure 1. Fifty-one percent of the project is owned by 22 First Nations (Wataynikaneyap Power, 2016).

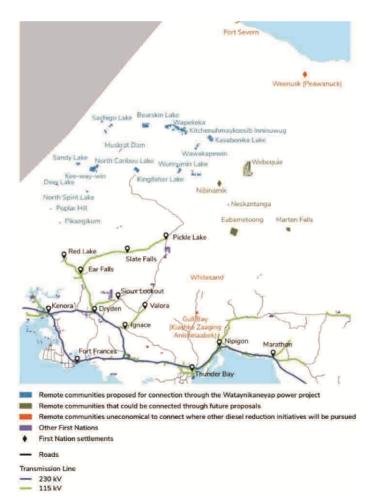


Figure 1. Watay Power Transmission Line Communities (Ontario Ministry Energy, 2017)

The project is expected to generate significant economic benefits for First Nations, northwestern Ontario, and the rest of Canada more broadly. During the construction period alone, roughly 261 jobs in northwestern Ontario and almost 769 across Canada are expected to be created (Pricewaterhouse Coopers LLP, 2015). Once operational, the project will help alleviate the load growth restrictions that hinder economic growth. Other significant socioeconomic benefits will include: lower cost of service; ongoing economic impacts from increased economic growth; increased energy availability and quality; decreased emissions; improved health outcomes; avoided diesel spills; and improved quality of life (Wataynikaneyap Power Project, 2015).

Poplar Hill, in preparation for the transition from the diesel-dependent energy systems to being connected to the grid, assessed employment, economic, business and training gaps through the RERP. The aim was to prepare the community for the transmission line construction, to ensure maximum employment and business benefits, and to enhance readiness for future energy and other development projects. The RERP pathway indicated in Figure 2 included:

1) Acquiring community baseline information and developing a resources/assets inventory;

- 2) Developing a community needs assessment and undertaking gap analysis;
- 3) Developing a community readiness action plan; and
- 4) Implementing and carrying out the readiness plan through hands-on training.

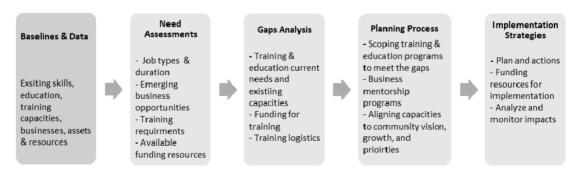


Figure 2. RERP Project Pathways (Wataynikaneyap Power, 2016; KORI, 2017b)

The RERP hired a community worker in Poplar Hill, who was provided with a range of information, resources, and tools to assist the community through the transition to the point of being "ready". Active dialogues and discussions ensued on emerging transitional issues including post-grid local operations, roles, responsibilities, expectations, billing, payments, and connections rates. Perspectives were shared on a wide array of socio-economic impacts and changes due to the transmission lines that called for urgent coordinated actions. The holistic and concerted approach by the community was a positive step forward towards sustainable post-transmission operations and management.

Through the RERP, Poplar Hill got the opportunity to deliberate on alternative energy solutions as well. They consulted relevant agencies including the service provider, Hydro One Remote Communities Inc. and the regulators (Note 6)—Indigenous and Northern Affairs Canada, Independent Electricity Systems Operator, and the Ontario Energy Board on the Ontario Electricity Support Program—on retrofitting, improving energy efficiency, promoting energy conservation, the adoption of renewable energy, and the mechanisms for energy planning decisions to support local economic development.

4. Key Findings

4.1 Community Baseline

The baselines established highlighted opportunities to explore where, why and how change and transition need to happen in Poplar Hill. This included general demographic characteristics such as population trends, labour force activity, the age structure of communities, and educational and income levels. Baselines articulated values and assessed current weaknesses/issues and their root causes. The process in spired a readiness action plan.

Demographics: Since the 1970s and earlier, the community has experienced tremendous growth, despite out-migration. Children between the ages of 0-15 make up 83% of the total population, reflecting a young population (Statistic Canada, 2016), a differing factor from the non-Aboriginal population, which, in addition to a declining population, is aging (Southcott, 2007).

Labour Force: A proper understanding of the existing labour force conditions came from the RERP Community Survey. The current "official statistics" were recorded from the 2006 Census and so must be assessed with caution. The job situations vary considerably and are seasonal. The labour force data collected do not account for seasonal variations or rapid shifts in employment. This is especially problematic for Poplar Hill and other Indigenous communities in northern Ontario where seasonal wage-labour positions are common (KORI, 2017b). As such, census labour force data for employment and unemployment rates have many problems associated with them. It is advisable to avoid generalizations about unemployment rates based solely on census rates. Participation rates, which include those working and those unemployed, are more reliable as they are less likely to be affected by seasonal variations.

As is the case for occupations, community readiness can be partially assessed by a knowledge of the industries in which people living in the community have experience. Table 1 lists the five most important industry categories in Poplar Hill. The largest single source of employment is public administration, followed by health care and social assistance.

Governance/Band	Educational	Health	care	Tikinagan	Police	MTO
Office	services	and	social	Child	&	Airport
		assistance		Family		
				Services		
80	22	25		6	2-4	2

Table 1. Employment Breakdown by Industry in Poplar Hill (KORI, 2017a)

There is potential to extend this industry base to community energy projects as there is unused labour available, especially the young population in Poplar Hill and the Wataynikaneyap communities. As Jacob Strang, Deputy Chief, Poplar Hill First Nation says: "The Wataynikaneyap Power project provides a future for our community's youth with job creation".

Education: The data presented in Table 2 refer to levels of education in Poplar Hill. The experiences of many community members in residential schools has led to a widespread rejection of established formal institutions of education. Statistics Canada 2016 census record 92% of non-Indigenous young adults (pp. 20-24) having at least a high school certificate compared to only 48% living on reserve (Richards, 2017). Given this history, it is not surprising that the levels of formal education are low. Commito (2015) asserts that Aboriginal education continues to be a primary concern for the province at large.

 Table 2. Formal Education Level in Poplar Hill (Statistics Canada, 2016)

Total p	opulation	No	certificate,	High	school	Appren	ticeship or	University degree
15 and ov	ver	diplom	na or degree	certificate	or	trades	certificates	
				equivalent		or diploma		
285		260		10		15		0

Resource and Asset Inventory: Poplar Hill did a very detailed data collection about their assets that was compiled into a local business directory. It was identified that there will be business opportunities to fill some of the sub-contract employment positions during the construction phase of the project. These business opportunities will be addressed in a complementary initiative on business readiness support. This initiative will assist individuals and the community to expand or start businesses, providing them the training and tools needed to capitalize on opportunities and, as well, identifying structures of partnerships or joint ventures businesses.

4.2 Needs Assessments

The needs analysis identified the employment opportunities for the construction of the transmission lines. This included all the positions, their responsibilities, and requirements.

Power Tel Utilities Contractors Ltd., chosen by Wataynikaneyap Power in 2017 to build the first stage

of the transmission project, developed the Power Line Employment Needs report identifying a number of requirements for prospective employees of the powerline company, as well as for sub-contracted positions. Additionally, some of the identified positions offered "on-the-job training", supporting the job types that includes DZ Driver's License, Workplace Hazardous Materials Information System (WHIMS), First Aid and CPR, MOL Safety Awareness, rescue techniques, on-site orientations, chainsaw training, and environmental management. Job qualifying requirements included a minimum age of 18 years, formal education with minimum Grade 10, Grade 12/GED requirements, language proficiency, a driver's license, trade certifications, and previous experience.

4.3 Gap Analysis

The baselines, community survey responses, and the needs analysis identified the gaps and the resources needed in Poplar Hill, specifically identifying:

- employment opportunities;
- potential benefits to be gained in terms of business by the communities;

• recommended means such as schooling, training, and investment to close the capacity and resources gaps;

- location of potential employers and business operations; and
- community support infrastructure needed, including programs and physical assets.

Community survey results indicate:

Unemployment Level & Basic Education: 34% of survey respondents of all age groups are unemployed and 39% are seeking employment.

Basic education upgrades will be required for Poplar Hill to capitalize on the Wataynikaneyap construction opportunities. To be eligible for the majority of the employment opportunities, Grade 10 is mandatory. More than 18% of the workforce population will need to upgrade to Grade 10 and for some of the higher-level jobs, Grade 12/GED is required to be eligible for direct employment opportunities.

Language Skills: English language skill was not a survey topic so the overall oral and written English language level could not be assessed, nor how those levels might relate to the PowerTel language requirement. It can be assumed that the Grade 10 requirement is closely associated with English language skills and so will be a minimum requirement.

Driver's license: The majority of the identified employment opportunities require an Ontario driver's license. Only 15% of people surveyed indicated that they have their driver's license. Obtaining a driver education course and testing will directly increase an individual's employability.

Training Courses Completed: Some community members identified completing PowerTel listed "on-the-job training courses". These certifications area step ahead, although some may need re-certification to update their certification.

Trade Certifications: For the transmission construction and sub-contracted specialized positions there are certain trade certifications that are required to gain employment: project managers, powerline technicians, crane operators, equipment operators, and mechanics. The sub-contracted positions

requiring a trade certification are equipment rental, civil works, right-of-way clearing, feller buncher operator, skidder operator, chainsaw operator, logging, camp operations manager, camp cleaning staff, camp maintenance, camp food preparation, camp food services supply, heavy equipment haulers, and helicopter services. Many community members have identified having related past work experience in an outdoor setting indicating comfort on the land or "bush" type positions. For such mature members, Prior Learning Assessment & Recognition (PLAR) could be considered a more meaningful way to recognize life experience.

Previous Work Experience: A high number of community members identified food preparation services, including catering traditional food and selling food plates. These skills may translate into employment opportunities in camp food preparation and camp food service supply. "Security" and "guard" work done in the past will translate well into security employment in a Wataynikaneyap construction camp. Training location is important to consider in relation to childcare options, travel costs, and time away from family. These considerations are also relevant when looking at job site locations for designing training action plans. Local in-community training was indicated as the easiest and most popular option.

5. Case Study Discussions: Capacity Building and Energy Sovereignty

The central theme of education and skills for the economic, social, and cultural base has been through their traditional subsistence activities, a foundation laid over thousands of years upon which Poplar Hill exists. In the past, there were few incentives for the community to obtain industrially-related skills and formal education. However, over time, there is an increased interest in developmental activities. New opportunities have emerged with local energy development projects.

Throughout the culturally-grounded RERP process and an intensive community engagement process, a wealth of information was collected to prepare the community for continued actions. Many of the dynamics, strengths, weaknesses, critical gaps, and preferences of Poplar Hill and Wataynikaneyap communities emerged. This is most evident as the RERP was mobilized in, by, for, and with the communities. The communities' pursuit of self-determination emphasized their stand in addressing energy challenges through their own priorities and agenda. Leadership and local champions at various level shave played a key role. Community Elders, tribal councils, community chiefs and band councils, and Wataynikaneyap Power's governing board in spired all involved to take responsibilities and actions.

The RERP initiative will result in tangible benefits. However, the case study on Poplar Hill provides a number of recurring themes on capacity building that will need attention for sustained energy transition:

a. **Develop a community technical pool:** The lack of training on energy-related themes within the community will continue to remain a limiting factor for increased and sustained professional

participation in the energy sector. The RERP needs to address vocational, hands-on skills development and formal technical training in community energy planning.

b. **Build institutional capacities:** Human resources emerge as a central theme of the capacity literature in general and specifically in the RERP process. However, the focus is on the individual. The thinking is that if members of the community get the training, skills, and acumen they need, they could improve their lives and also become part of the local energy development. However, little or no attention is given to the larger collective or social context in which the individual resides. This calls for appropriate institutional support and conditions to entrench individual capacities into community institution capacities. Human capacities need to align with the overall development of physical resources such as infrastructure, technology, telecom, and internet that are linked to energy operations and management. These are additional areas of capacity needs for Indigenous communities.

c. **Integrate transferable skills:** Energy-related opportunities can be integrated with various sectors in the community, including transportation, land use, and resource and economic development. It is beneficial to build transferable capacities to integrate in to broader comprehensive community development plans.

d. **Towards sustained funding programs:** The population in Poplar Hill is young and growing and is comparable to the Indigenous population in the rest of Canada. Capacity building programs for these populations are grossly underfunded. Access to capacity funds is obtained via a competitive, proposal-driven process whereby funding is limited in scope and duration. Budgets and the flexibility of programs, though being increased substantially, have to be commensurate with the need of communities to participate in the energy sector economy in a sustained manner. Further, accessing government funding is a two-way street. Implementing energy actions will require understanding of governmental funding landscapes that come with a range of existing institutional barriers. The RERP needs to include financial acumen.

e. **Be receptive to formal work cultures:** Traditional subsistence economies are increasingly giving way to formal employment and business opportunities. Potentially, there will be different sources of income generation and schedules of work. The RERP, while incorporating Indigenous values and orientations, must prepare, or "culturally train" community workers to effectively manage the challenges that come with regulated workplaces, including accepting responsibility or accountability.

f. **Include cultural and territorial contexts:** Finally, part of developing human capacities is to consciously integrate Indigenous rights for community identity, self-determination, and energy sovereignty.

6. Pathways to Effective Capacity Building for Indigenous Communities for Local Energy Actions

First Nation people and their governments position their developments within their aspirations for sovereignty and jurisdiction. Their capacity building is focused on meeting sacred, customary and legal responsibilities associated with their sovereignty (Missens, 2008). Thus, understanding the relationship between a community energy project, such as Wataynikaneyap Power, and sovereignty is not simply a matter of defining and measuring tangible indicators or factors. This was evident throughout the RERP process at Poplar Hill. The relationship in its contemporary manifestation requires one to see the historical context that provides a foundation for understanding both this relationship and the continued existence of Indigenous marginalized communities in Canada. It allows us to see how the destruction of local capacity building has affected the community's ability to make decisions and address their current energy insecurities. Any well-intentioned actions and initiatives will fail if they do not support and align with the cultural development of the community by deliberately building on the specific values and preferences of the communities. In conclusion, the RERP process provided a broader scope of learning and pathways for Indigenous capacity building in the energy sector, as follows:

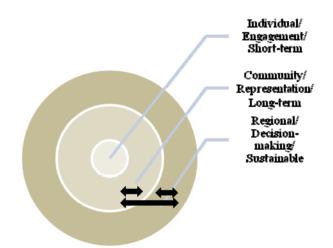


Figure 3. Relationship of Core and Broader Capacities Required for Indigenous Empowerment and Sustainability (Adapted from Stevenson and Perreault, 2008)

• **Looking internally**: Recognizing the existing capacities is a critical first step. New capacities are to be built on the foundations of prevailing capacities and acknowledging life experiences.

• **Sustained outcomes**: A long-term community energy planning vision is a vision of community-level capacity. Figure 3 illustrates that current capacity building efforts, no matter how successful, target only a limited number of the capacity requirements in the energy sector. The issue of capacity in this context and collective responses, actions, and relationships need to consider dimensions such as scope (e.g., engagement, representation, decision-making), scale of sustainability (individual, community, regional), and duration of engagement (short- and long-term).

• A stakeholder-wide approach: Building Indigenous capacities and creating effective institutional arrangements are inextricably linked. Creating integrated and adaptive institutions of knowledge and practice will not happen by themselves: "They require motivated people, with awareness of their own standpoints and biases, a commitment to find common grounds" (Wilkinson et al., 2007). Thus, building capacities will have to be a commitment for both Indigenous and non-Indigenous players involved in new institutional barriers have to be minimized or removed for Indigenous communities to take responsibilities for building their own capacities. Policies and procedures must adequately finance and resource Indigenous communities to create their own energy-related programs.

• Holistic capacities: The capacity building process should integrate other potential areas of focus in the energy sector including financial management, institutional arrangements, infrastructure resources, social capital, natural resources capital, and knowledge systems. A holistic approach is essential in the context of Indigenous communities.

• **Respect cultural diversity**: Indigenous communities are distinct and unique. Each community will likely differ with respect to their viewpoints on social, cultural, and economic sustainability. A one-size-fits-all approach will not be effective. Also, it is worthwhile to note that different people within those communities present distinctly different opportunities and challenges for capacity building. It is important to understand, respect, and account for "culturally appropriate" approaches in capacity-building initiatives. Cultural fit is a key component in any capacity-building initiative, especially so for Indigenous peoples. Integrating cultural capacity as a resource in local energy planning is imperative and should not be ignored.

• **Collective benefits**: Finally, it is important to acknowledge that building Indigenous capacities in the energy sector is in the collective interests of both the Province of Ontario and the Government Canada for long-term sustainable ecological, social, and economic outcomes. Strong, vibrant Indigenous communities are a winning solution for all Canadians.

Community-based initiatives such as the RERP direct attention to collective impacts on both individual and community well-being. Enhancing community capacities through resource mobilization, organization and frameworks of actions contribute to self-determination. This paper informs researchers, grassroots development practitioners, and policymakers about the enterprise of Indigenous capacity building and how it holds the key to broader goals and out comes in breaking down barriers to employment, for fair chances, and for creating opportunities to participate in the pan-Canadian energy sector.

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References

- [AANDC & NRCan] Aboriginal Affairs and Northern Development Canada and Natural Resources Canada. (2011). Status of Remote/Off-Grid Communities in Canada. In *Government of Canada*, *Ottawa*, *ON* (p. 44). Retrieved October 11, 2017, from https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/canmetenergy/files/pubs/2013-118 en.pdf
- Alfred, G. T. (2009). Colonialism and state dependency. Journal of Aboriginal Health, 5(2), 42-60.
- Allan, B., & Smylie, J. (2015). First Peoples, Second Class Treatment: The Role of Racism in the Health and Well-being of Indigenous Peoples in Canada. Wellesley Institute, Toronto, ON.
- Atkinson, P., & Hammersley, M. (1998). Ethnography and participant observation. In N. Denzin, & Y. Lincoln (Eds.), *Strategies of Qualitative Inquiry* (pp. 248-261). Sage, London.
- Commito, M. (2015). Making the Grade? Education Trends in Northern Ontario. *Northern Policy Institute*. Retrieved February 10, 2018, from http://www.northernpolicy.ca
- Chilton, E. (2012). Five Nations Energy Inc. In *A Success Story*. Retrieved April 3, 2017, from http://www.nan.on.ca/upload/documents/energy2012-pr-ed-chilton---fnei-a-success-story.pdf
- DeWalt, Kathleen, M., & DeWalt, Billie, R. (2002). *Participant Observation: A Guide for Fieldworkers*. AltaMira Press, Waltnut Creek, CA.
- Eade, D., & Williams, S. (1995). *The Oxfam Handbook of Development and Relief* (Vol. 1). Oxfam, Oxford, UK.
- Fletcher, F., McKennitt, D., & Baydala, L. (2008). Capacity building: An Aboriginal exploratory case study. Pimatisiwin. A Journal of Aboriginal and Indigenous Community Health, 5(2). Retrieved April 15, 2017, from http://www.pimatisiwin.com/uploads/842173554.pdf
- Hulchanski, D., Robert, M., Alan, W., & Larry, B. (2013). Canada's voluntary census is worthless. Here's why. *Globe and Mail*. Retrieved January 13, 2018, from https://www.theglobeandmail.com/opinion/canadas-voluntary-census-is-worthless-heres-why/pape r14674558/
- Hydro One. (2009). *Remote Community*. Retrieved January 15, 2018, from http://www.hydroone.com/ourcommitment/remotecommunities/Pages/home.aspx
- Kepkay, M. (2007). Building capacity of aboriginal peoples in Canada's forest sector: Rationale, models, and needs. In *National Aboriginal Forestry Association in association with Thematic Team 3 of the National Forest Strategy Coalition*. Retrieved November 16, 2017, from http://www.nafaforestry.org/forest_home/documents/CapacityDisc-final-30mar07.pdf

- Kendall, J. (2001). Circles of disadvantage: Aboriginal poverty and underdevelopment in Canada. *American Review of Canadian Studies*, *31*(1), 43-60. https://doi.org/10.1080/02722010109481581
- [KORI] Keewaytinook Okimakanak Research Institute. (2012). *Community Research Planning Guidebook*. Retrieved January 15, 2018, from http://research.knet.ca/?q=node/121
- [KORI] Keewaytinook Okimakanak Research Institute. (2017a). Community Asset Inventory for Poplar Hill First Nation.
- [KORI] Keewaytinook Okimakanak Research Institute. (2017b). Draft Final Report, Remote Electrification Readiness Project, Wataynikaneyap Power, Hoshizaki Development.
- Krupa. J. (2012). Blazing a new path forward: A case study on the renewable energy initiatives of the Pic River First Nation. *Environmental Development*, 3, 109-122. https://doi.org/10.1016/j.envdev.2012.05.003
- Kusel, J. (1996). Well-being in forest-dependent communities, Part I: A new approach. In Sierra Nevada ecosystem project: Final report to congress: Vol. II. In Assessments and scientific basis for management options (pp. 361-374). University of California, Centers for Water and Wildland Resources, Davis, CA.
- Littlejohns, L. B., & Thompson, D. (2001). Cobwebs: Insight into community capacity building and its relation to health outcomes. *Community Development Journal*, *36*(1), 30-41. https://doi.org/10.1093/cdj/36.1.30
- MacLellan-Wright, M., Anderson, D., Barber, S., Smith, H., Cantin, B., Felix, R., & Raine, K. (2007). The development of measures of community capacity for community-based funding programs in Canada. *Health Promotion International*, 22(4), 299-306. https://doi.org/10.1093/heapro/dam024
- Missens, R. (2008). National Center for First Nations Governance. Research Paper for the National Centre for First Nations Governance. Sovereignty, Good Governance and First Nations Human Resources: Capacity Challenges. Retrieved December 14, 2018, from http://fngovernance.org/ncfng research/richard missens.pdf
- [NAN] Nishnawbe Aski Nation. (2018). Nishnawbe Aski Nation/Canada Governance and Education Jurisdiction Negotiations. Retrieved February 12, 2018, from http://www.nan.on.ca/paper/governance-secretariat-355.asp
- O'Shaughnessy, T., Black, L., & Carter, H. (1999). *Capacity Building; A new approach? Principles and Practice*. World Vision, Melbourne, Australia.
- [OMoE] Ontario Ministry of Energy. (2017). Ontario's Long-term Energy Plan (LTEP). Retrieved December 4, 2017, from https://www.ontario.ca/document/2017-long-term-energy-plan/chapter-7supporting-first-nation-and-metis-capacity-and-leadership#section-1
- Paradis, G., Lévesque, L., Macaulay, A. C., Cargo, M., McComber, A., Kirby, R., ... Potvin, L. (2005).
 Impact of a diabetes prevention program on body size, physical activity, and diet among Kanien'keha: Ka (Mohawk) children 6 to 11 years old: 8-year results from the Kahnawake Schools Diabetes Prevention Project. *Pediatrics*, *115*(2), 333-339.

https://doi.org/10.1542/peds.2004-0745

- [KORI] Keewaytinook Okimakanak Research Institute. (2017). Community Asset Inventory for Poplar Hill First Nation.
- Pricewaterhouse Coopers LLP. (2015). Wataynikaneyap Power Financial Feasibility Study for Electrical Grid Connection of Northwestern Ontario Remote Communities. Retrieved March 25, 2017, from http://www.wataypower.ca/sites/default/files/Watay%20Business%20Case%202015% 2009Jun15[Executive%20Summary%20Only%20Version].pdf
- Richards, J. (2017). *Census 2016: Where is the discussion about Indigenous education*? The Globe and Mail. Retrieved February 20, 2018, from https://www.theglobeandmail.com/opinion/census-2016-where-is-the-discussion-about-indigenous -education/article37313434/
- Smith, N., Littlejohns, L. B., & Roy, D. (2003). Measuring Community Capacity: State of the Field Review and Recommendations for Future Research. *Final Report of Health Policy Research Program Project*. Retrieved November 25, 2017, from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.196.1786&rep=rep1&type=pdf
- Southcott, C. (2007). #3—Aging Population Trends in Northern Ontario. 2006 Census Research Paper Series. Prepared for the Local Boards of Northern Ontario. Retrieved November 12, 2017, from http://awic.ca/documents/assets/uploads/files/en/3_aging_population_trends_in_northern_ontario. pdf
- Southcott, C. (2009). #12—The Aboriginal Population and the Economy of Northern Ontario. 2006 Census Research Paper Series. Prepared for the Local Boards of Northern Ontario. Retrieved November 12, 2017, from http://www.ntab.on.ca/wp-content/uploads/file/Microsoft%20Word%20 -20Aboriginal%20Report%202006.pdf
- Statistics Canada. (2016). Census Profile. Retrieved November 11, 2017, from http://www12.statcan.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?Lang=E&Geo1=C SD&Code1=3560067&Geo2=PR&Code2=35&Data=Count&SearchText=Poplar&SearchType= Begins&SearchPR=01&B1=All&GeoLevel=PR&GeoCode=3560067&wbdisable=false
- Stevenson, M. G., & Perreault, P. (2008). Capacity for What? Capacity for Whom? Aboriginal Capacity and Canada's Forest Sector. In *Sustainable Forest Management Network, Edmonton, Alberta* (p. 64). Retrieved October 15, 2017, from

https://era.library.ualberta.ca/files/c41687h63m/Stevenson_Perrault_Capacity_Synthesis.pdf

- Taylor, R. (2003). Indigenous Community Capacity Building and the relationship to sound governance and leadership. Australian Indigenous Leadership Centre. In *National NT Conference*. Retrieved November 25, 2017, from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.607.1931& rep=rep1&type=pdf
- The Royal Commission on Aboriginal Peoples. (2010). Highlights from the Report of the Royal Commission on Aboriginal Peoples. Retrieved February 15, 2018, from

http://www.aadnc-aandc.gc.ca/eng/1100100014597/1100100014637

- Uquillas, J. E., & Martinez, J. (1995). Capacity Building for Indigenous People's Development in Latin America. The World Bank Technical Department, Latin America and the Caribbean, place of publication. Retrieved November 28, 1995, from http://documents.worldbank.org/curated/en/7934 11468201257840/Indigenous-Peoples-Leadership-Capacity-Building-Program-For-The-Andean-C ountries
- Wilkinson, K. M., Clark, S. G., & Burch, W. R. (2007). Other Voices, Other Ways, Better Practices: Bridging Local and Professional Environmental Knowledge. Yale University of Forestry and Environmental Studies Bulletin 14.
- Woons, M. (2014). Restoring Indigenous Self-Determination: Theoretical and Practical Approaches. In *E-International Relations, Bristol, UK.* Retrieved April 4, 2017, from http://www.e-ir.info/wp-content/uploads/2014/05/Restoring-Indigenous-Self-Determination-E-IR. pdf
- Wataynikaneyap Power Project. (2015). Socioeconomic Impact Analysis of Building Grid Connection to Ontario's Remote Communities. Retrieved April 6, 2017, from http://www.wataypower.ca

Wataynikaneyap Power. (2016). Retrieved April 2, 2017, from http://www.wataypower.ca

Yee, J. Y. (2015). Whiteness, white supremacy, and social work. In J. D. Wright (Ed.), *International Encyclopedia of the Social and Behavioral Sciences* (2d. ed., Vol. 25). Oxford: Elsevier. https://doi.org/10.1016/B978-0-08-097086-8.28099-9

Notes

Note 1. There are several terms in usage to describe Indigenous peoples in Canada. "First Nations" are those Status Indians governed under the Indian Act and residing on federally-owned reserve lands set aside for First Nations. "Aboriginal" is the term used in section 35 of the Constitution Act, 1982 inclusive of "Indians, Inuit and Métis". "Indigenous" is commonly used in the international arena as in the United Nations Declaration on the Rights of Indigenous Peoples, but is also becoming more popular as a term preferred by Indigenous peoples and acknowledged now by the federal government in its renaming of the ministry responsible for Aboriginal affairs to Indigenous and Northern Affairs Canada (INAC).

Note 2. K-Net is a unique First Nation-owned and operated ICT Service Provider leading the way for rural and remote First Nations of Ontario into the ever-growing world of information communication technologies. Based out of Sioux Lookout, Ontario, K-Net materializes a wide range of capacity building services visualized by First Nations, such as cellular service, broadband connectivity, and online applications (http://knet.ca/).

Note 3. The Indigenous Peoples in Canada has been and continues to be impacted by colonization with on-going process of deliberate displacement, cultural aggression, and systemic oppression. The continued exploitation, marginalization, and colonization has resulted in current day consequences

(Yee, 2015). The creation of early treaties between European and Indigenous Peoples promising land and educational, financial, and infrastructural resources were never delivered (Alfred, 2009; Allan & Smylie, 2015). Countless attacks on land, community, and identity are at the root of the plight facing many Indigenous communities today, including housing shortages, lack of clean water, lack of access to education, and inadequate health care (Allan & Smylie, 2015).

Note 4. Nishnawbe Aski Nation (NAN), a political territorial organization representing 49 First Nation communities within northern Ontario, including Poplar Hill First Nation is negotiating self-governance agreements under the 1995 Inherent Rights Policy (IRP). The return to self-government is seen as foundational to nation building and critical to communities that want to contribute to and participate in the decisions that affect their lives (NAN, 2018).

Note 5. Canada's Aboriginal Peoples had their own established political systems and institutions before the arrivals of the Europeans. They were self-governing, an inherent right given to them by the Creator and not granted by any government. The Indian Act, 1876 dismantled these traditional systems of governance and imposed federal bureaucracy (now Indigenous and Northern Affairs Canada) on individuals and communities. Further, the Canada's first constitution in 1867, The British North America Act (repatriated in 1982) gave the federal government the authority to apply Euro-Canadian ideals, policies and laws on Aboriginal societies (Missens, 2008). These acts hinders the Indigenous peoples' ability to make their own decisions. The report of the Royal Commission on Aboriginal Peoples (2010) sketches the social, health, economic and governance problems that confront many Indigenous communities in their internal management. This single theme dominates hundreds of RCAP recommendations: "Aboriginal Peoples must have room to exercise their autonomy and structure their own solutions. The pattern of debilitating and discriminatory paternalism that has characterized federal policy for the past 150 years must end. Aboriginal people cannot flourish if they are treated as wards, incapable of controlling their own destiny ...".

Note 6. Canada's main federal energy regulatory agency is the National Energy Board. Other federal departments or ministries involved in the energy sector include Natural Resources Canada and Indigenous and Northern Affairs Canada, now split into two departments: Indigenous Services Canada and Crown-Indigenous Relations and Northern Affairs Canada. In the Province of Ontario, the Ministry of Energy oversees the electricity sector and issues directives to the Independent Electric System Operator (IESO) for generation, transmission, management and conservation. The Ontario Energy Board is the regulator of the electricity sector. Ontario Power Generation—a Crown corporation—owns and operates more than half of Ontario's electricity generating assets. The local distribution company providing electricity utility service to remote communities is Hydro One Remote Communities Inc., a subsidiary of the Hydro One Inc., that manages and enforces a variety of

regulations pertaining to electricity supply and distribution, upgrades and maintenance, reliability, safety, accessibility, conservation, and billing services (Hydro One, 2009).