Powering Self-Determination:
Indigenous Renewable Energy Developments in British Columbia

by

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B.A., University of Alberta, 2008

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Abstract

Indigenous peoples are increasingly using renewable energy technologies to meet a variety of objectives. In so-called Canada, there has been a dramatic rise in Indigenous renewable energy projects due to economic, environmental, and legal trends. Nowhere are these trends more evident than in the province of British Columbia (BC). In the early 2000s, the colonial government privatized the electricity system, sparking a rapid expansion of run of river hydro projects on Indigenous lands. Over time, and with much effort, First Nations in BC began to participate in and ultimately benefit from the shift to independent power production. However, just as they increased their involvement in the renewable energy sector, the government withdrew its commitment to purchase private power for the foreseeable future. One way to understand the implications of this policy reversal is to examine it through the lens of energy justice. Using a justice framework, this research explores how First Nations are involved in renewable energy developments in BC as well as the significance of this involvement for Indigenous self-determination. Drawing from two case studies and survey data from First Nations across the province, I argue that the decline in power procurement programs is not simply a barrier but an injustice.

I first illustrate how provincial energy policies have shaped and been shaped by Indigenous renewable energy ambitions. While First Nations were not the intended beneficiaries of these policies, they nonetheless seized the opportunity to sell electricity to the grid. I also compare the approaches of two Indigenous power producers, Kanaka Bar Indian Band and Sts'ailes First Nation, arguing that they have generated important economic benefits by strategically navigating the private power industry. Lastly, I document how members of Kanaka Bar have leveraged the Kwoiek Creek hydro project to address the adverse impacts of colonization and further their aims of self-determination. Based on these findings, I conclude that Indigenous renewable energy projects are themselves forms of energy justice and as such, must be supported through a variety of means.

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Dedication

To the women of Kanaka Bar

Chapter 1: Introduction

Around the world, Indigenous peoples are involved in the development of renewable energy projects. This phenomenon is especially apparent in the land some people call Canada, where Indigenous participation in the renewable energy sector has risen dramatically in the last two decades. Recent studies suggest that there are over 150 commercial-scale Indigenous renewable energy projects across Canada and over 1,200 community-scale projects (Henderson & Sanders, 2018; Lowan-Trudeau, 2017). Collectively, these projects generate almost 20,000 MW of electricity through various technologies including hydro, wind, solar, and biomass (Henderson & Sanders, 2018). The growing presence of renewable energy projects on Indigenous lands has attracted considerable interest and support from Indigenous governments and organizations, environmental groups, and various levels of Canadian government.

A substantial number of Indigenous peoples are coming forward with success stories about the transformative potential of renewable energy projects (CBC News, 2018; Gilpin, 2017; Hernandez, 2017; Ireland, 2016; Kyle, 2016; Thomson, 2017; Wilt, 2018). Indigenous organizations and developers are supporting the movement by convening large-scale gatherings, conducting research, organizing learning events, developing funding streams, and lobbying colonial institutions. Prominent environmental organizations are also lining up to encourage Indigenous peoples with renewable energy ambitions. The World Wildlife Fund, the David Suzuki Foundation, Greenpeace, and the Pembina Institute have all recently launched a variety of initiatives designed to fund, build, and promote renewable energy projects in Indigenous communities (Frizzell, 2017; Lovekin, 2018; Miller, 2016; Suzuki, 2018b). Together, Indigenous leaders and environmentalists are calling upon colonial governments to do their part. The latest push comes from a collective of Indigenous and environmental activists called The Leap. The

Leap Manifesto, declares that “Indigenous peoples should be the first to receive support for their own clean energy projects,” and asserts that, “power generated this way will not merely light our homes but redistribute wealth, deepen our democracy, strengthen our economy and start to heal the wounds that date back to this country’s founding" (para. 9 & 10, “The Leap Manifesto,” 2015).

The majority of provincial and territorial governments have in fact made explicit commitments to support Indigenous participation in renewable energy generation. British Columbia and Ontario were among the earliest to enact legislation promoting First Nation involvement and other governments have subsequently introduced policies and programs of their own. In 2011, the government of Saskatchewan signed a memorandum of understanding with the Federation of Sovereign Indigenous Nations to advance Indigenous power projects, resulting in a 10-year agreement between the public utility and a First Nations-led non-profit developer. In 2016, the government of Alberta launched the Alberta Indigenous Solar program and Alberta Indigenous Community Energy Development Program (Graney, 2016). They have since launched additional programs including one designed to assist First Nations in developing commercial and community-scale renewable energy projects (Government of Alberta, 2017). Both the government of Yukon and government of Northwest Territories (GNWT) have recently released power procurement policies that prioritize Indigenous involvement in different ways. Whereas Yukon’s IPP (Independent Power Producer) policy requires some percentage of First Nation ownership in at least half of all new IPP projects, the GNWT’s community-owned renewable generation guidelines stipulate that such projects must be majority owned by a community or Aboriginal government (Government of Northwest Territories, 2018; Government of Yukon, 2015). At the federal level, the government has stated its commitment to working with

remote Indigenous communities on renewable energy projects as part of the Pan-Canadian Framework on Clean Growth and Climate Change (Government of Canada, 2016) and there is a considerable amount of new funding to support this work. Budget 2017 commits $220 million over six years to reduce reliance on diesel fuel, $75 million over four years for innovative technologies, $53 million over ten years for programming related to northern heat and electricity, and $400 million towards an arctic energy fund (Fitzgerald & Lovekin, 2018).

In other words, a curious consensus has emerged, in which almost everyone seems to agree that Indigenous renewable energy projects are a worthwhile idea. This agreement seems remarkable in a country with ongoing grievances between Indigenous peoples and the Canadian state, many of which are rooted in energy conflicts driven by the continued expansion of oil and gas production on Indigenous lands. However, Bargh (2010) argues that it is precisely this context that gives rise to Indigenous involvement in energy transitions around the world. They attribute the rise of Indigenous renewable energy projects to three key trends: economic, environmental, and legal. Economically, neoliberal policies and practices have encouraged Indigenous peoples to pursue particular types of economic development and influenced discourses around empowerment and self-determination. Environmentally, the impacts of climate change, along with growing energy demand, have generated significant interest in renewable energy and positioned Indigenous lands at the forefront of production. Legally, court cases and new laws recognizing the rights of Indigenous peoples have pushed state governments and companies to consult Indigenous peoples on energy development and share the revenues of these activities.

Nowhere in Canada are these trends more evident than in the province of British Columbia. In the early 2000s, the provincial government began to radically change the provision

of electricity in BC by restructuring the public utility, BC Hydro, and encouraging private renewable energy developments. This trend was later extended and reframed as part of the government's newly-instituted climate change mitigation policies (Cohen & Calvert, 2012; Dusyk, 2016). The shift to privately-owned generation proved controversial for several reasons, not least because it sparked a rapid expansion of independent power production on Indigenous lands, particularly run of river hydro projects (Calvert, 2007). Over time, and with much effort, First Nations began to participate in and ultimately benefit from many of these projects. Leveraging landmark court decisions affirming Aboriginal rights and title, they not only sought compensation for developments on their territories but they also initiated their own. However, just as First Nations increased their investment in renewable energy projects, the government reaffirmed the province's commitment to public power generation for at least another decade and withdrew their commitment to purchase private power. It is not yet known whether the provincial government will allow the public utility to once again procure power from independent sources but the rollback is already impacting First Nations with energy aspirations.

This unfortunate trajectory raises critical questions about how energy transitions can be better structured to serve the interests of Indigenous peoples. On the one hand, there is a tremendous amount of positive rhetoric around Indigenous renewable energy projects with support from all corners. On the other hand, there are currently very few opportunities for Indigenous power proponents in BC to sell electricity to the grid. The growing number of First Nations who hope to build both commercial and community-scale projects are encountering plenty of symbolic encouragement but few tangible ways to realize their goals. How are those interested in Indigenous power production to make sense of the rapid decline of power procurement programs? What is the best way to understand the contradiction between professed

support and actual opportunity? The emerging notion of energy justice offers a potential analytical framework through which to explore this problem.

Exploring Energy Justice

Energy justice is a new area of research but recent scholarship in this area has nonetheless demonstrated relevance to the study of Indigenous renewable energy projects. In this section, I review energy justice from the perspective of three scholars: Benjamin Sovacool, Shalanda Baker, and Maryam Rezaei. This review is not meant as a comprehensive overview of energy justice but rather an introduction to the works of scholars who have connected energy justice to Indigenous worldviews and experiences. I consider how these scholarly insights might contribute to an analysis of the problem identified above and help guide research into this topic. I argue that energy justice can be used to understand both the overall importance of renewable energy projects to First Nations as well as the current concerns of Indigenous power proponents in BC.

Benjamin Sovacool is among the most prominent scholars of energy justice, having theorized this term across several works. Two of his recent publications provide a foundational understanding of the field. Arguing that scholarly studies of energy have largely ignored the ethical dimensions of energy production, distribution, and consumption, Sovacool and Dworkin (2015) set out to demonstrate the value and importance of integrating justice into these conversations. As some of the first to comprehensively explore the meaning and implications of energy justice, they offer a very broad approach, characterizing energy justice as a conceptual tool, analytical tool, and decision-making tool.

Sovacool and Dworkin (2015) define the concept of energy justice as "a global energy system that fairly disseminates both the benefits and costs of energy services, and one that has representative and impartial decision-making" (p. 436). As a conceptual tool, energy justice integrates both distributive and procedural notions of justice, providing philosophers and ethicists with a way to consider these distinct ideas together. Sovacool and Dworkin note that their concept of energy justice mirrors recent scholarship on environmental justice. Drawing especially from the work of Gordon Walker (2012), they contend that energy justice involves the following key elements:

- Costs, or how the hazards and externalities of the energy system are imposed on communities unequally, of the poor and marginalized
- Benefits, or how access to modern energy systems and services are highly uneven
- Procedures, or how many energy projects proceed with exclusionary forms of decision-making that lack due process and representation (Sovacool and Dworkin, 2015, p. 437).

As an analytical tool, Sovacool and Dworkin argue that energy justice is useful in transforming how energy problems are explained. Using eight distinct energy problems, they demonstrate how such technical and economic matters can be reframed as justice themes. The result is a relatively diverse set of concepts, influences, applications, injustices and solutions. To avoid the philosophical conflicts that arise from these many conceptions of justice, they present a set of principles to guide decision-making. Their energy justice framework suggests that energy decisions ought to promote: 1) availability 2) affordability 3) due process 4) good governance 5) sustainability 6) intergenerational equity 7) intragenerational equity, and 8) responsibility. Sovacool and Dworkin contend that a synthetic framework of this kind - one that incorporates many aspects of justice - is necessary because distributive and procedural notions of justice are

interrelated, as are energy injustices. As I review next, Sovacool espouses an even broader approach in later works, recognizing that energy justice could be made much more inclusive.

Sovacool, Burke, Baker, Kotikalapudi, & Wlokas (2017) critique Sovacool and Dworkin's (2015) treatment of energy justice, noting the reliance on western theorists and anthropocentric concepts. They identify ways to strengthen energy justice theory as well as tensions and opportunities for energy justice in practice. With regards to theory, they propose a deeper engagement with non-western and non-human-centered theories of ethics and justice. As part of this exploration, they highlight a few Indigenous perspectives, briefly exploring the relevance of Nuu-chah-nulth and Haudenosaunee traditions to energy justice. It is not clear, however, whether these theories compliment or contradict those more commonly employed in the literature so they suggest this area as a topic for further research. With regards to energy justice in practice, Sovacool et al. suggest modifying Sovacool and Dworkin's (2015) decision-making framework with two additional principles: resistance and intersectionality. They credit non-Western theorists for identifying the urgency of resisting injustices and recognizing the ways in which energy justice is intertwined with other social issues. This updated framework thus demands active and deliberate opposition to unjust energy projects as well as consideration around how energy injustices occur at the intersection of multiple forms of marginality.[1]

Baker examines energy justice in the context of energy reforms in Mexico, where the state is simultaneously introducing historical climate change legislation and paving the way for private developers to exploit the country's untapped oil and gas reserves. Rather than debate the merits of public vs. private power, Baker recasts the reforms as an opportunity to promote community-led energy projects among those who have been disproportionately impacted by

[1] Sovacool et al. (2017) focus on gender but also acknowledge marginality arising from race, nationality, caste, religion, and class.

energy developments. She draws from research with Indigenous communities in Oaxaca to argue that Mexico's energy reforms could increase community participation in the renewable energy sector. Employing the concept of energy justice, Baker identifies the ways in which the reforms currently render Indigenous communities vulnerable and how they can be remedied.

Baker defines energy justice as the combination of three areas of law: climate justice, environmental justice, and energy democracy. Climate justice, she explains, is the understanding that low-income communities and developing states disproportionately shoulder the impacts of climate change even though they are largely not responsible for its creation. Therefore, a critical component of energy justice, based on climate justice, is ensuring that energy developments do not increase vulnerability to climate change but rather enhance resilience among those most marginalized. Baker then describes environmental justice, characterizing the field's primary theme as a concern for the ways in which low-income and rural communities are burdened by development. Energy justice, informed by environmental justice, means preventing the damage associated with new energy developments as well as repairing harm from ongoing or past developments. Baker notes the potential for environmental impacts from renewable energy projects as well as carbon-intensive energy projects. Lastly, Baker includes energy democracy in her definition of energy justice. To her, this means allowing communities to make choices about the energy they consume, including the type and its distribution. She notes that energy democracy involves both procedural and distributional aspects of justice as it implies both the opportunity to participate in procedures involved in making energy decisions as well as a fair distribution of benefits.

According to Baker, combining climate justice, environmental justice, and energy democracy gives rise to a set of requirements: Just energy developments must be clean, pose

little impact on burdened and vulnerable communities, and provide both procedural and substantive benefits to communities. Baker applies this set of requirements to Mexico, identifying opportunities within the country's legal framework to support community-scale developments that respect Indigenous rights and land tenure systems. Baker concludes that if energy justice were systematically incorporated into Mexico's energy reforms, it could disrupt centralized energy generation and offer unprecedented opportunities for community-led renewable energy projects. Such projects would increase climate change resiliency among Indigenous communities and assist them in meeting their energy needs.

Rezaei (2017) explores the concept of energy justice in relation to how energy poverty is experienced by First Nations in BC. She does not attempt to define energy justice per se but contemplates its meaning as she develops a theoretical framework with which to analyze to energy poverty. She argues that a justice-based framework is helpful in both describing the experience of energy poverty as well as what can be done to address it. To develop the framework, she first draws from foundational theories of justice, summarizing three main categories: distributional / recognition-based notions of justice, procedural justice, and restorative justice. She then turns to literature on Indigenous self-determination, environmental justice, and energy justice. The result of all this theorizing is a highly adaptable framework with several key contributions to the emerging field of energy justice.

First, Rezaei argues that there is no need to agree upon a particular definition of justice in order to invoke the concept. Following in the footsteps of justice theorist Iris Marion Young, Rezaei explains that when people make claims about justice or injustice, they are suggesting that they have obligations to one another. Regardless of whether they can agree on the exact nature of these obligations, such claims presume a politics of togetherness, which is to say, mutual

responsibility. Rezaei writes, “the exact shape of that responsibility depends on the specific notion of justice invoked, but this vague notion of responsibility is at the heart of my invocations of justice” (Rezaei, 2017, p.19). This position, that particular notions of justice are secondary to the acknowledgement of mutual obligation, allows Rezaei to pull from diverse views on justice while creating a framework that is sensitive to Indigenous critiques of justice.

Rezaei’s second contribution to energy justice is the way in which she integrates various perspectives on Indigenous self-determination. In particular, she applies the work of Indigenous resurgence scholars to critically analyze recognition-based notions of justice and put forward a decolonial interpretation of energy justice. Recognition-based notions of justice are generally based on the idea that some people are not afforded the same respect or recognition as others and this lack of recognition leads to the unfair distribution of social goods and bads. Justice theorists of this ilk often emphasize the institutional and structural nature of injustice and thus suggest that institutions must change their practices. This body of work, although largely focused on remedying systemic oppression, also tends to prioritize recognition from the state. As Rezaei points out, many Indigenous scholars have rigorously rejected the politics of recognition due the way they uphold colonialism. Among the proposed alternatives to state-recognition are acts of self-recognition. Referencing the works of Leanne Betasamosake Simpson, Glen Coulthard, Taiaiake Alfred, and Jeff Corntassel, among others, she notes that acts of self-recognition involve honouring relationships to land, which are both kin and place-based. In order for Indigenous communities to engage in acts of self-recognition and to fulfill the obligations underpinning their relationships, they require access to their homelands and the ability to govern themselves. Rezaei concludes that, "work on (energy) justice in settler colonial contexts like Canada must, therefore, engage with the ways in which relationships with the land are

commoditized to create (energy) resources" (p.30). Rezaei specifically calls out the extractive nature of centralized energy planning paradigms, arguing that resistance to these processes is itself a critical component of energy justice. Resistance may involve halting capitalist colonial projects as well as investing in alternative energy systems that promote Indigenous self-determination. By integrating the work of Indigenous resurgence scholars, Rezaei offers a particularly nuanced treatment of energy justice.

Lastly, Rezaei provides a simple approach for making justice claims by adapting a framework that has been used to analyze environmental justice concerns. Borrowing from Walker (2012), Rezaei outlines three components to a justice claim: “a) a description of an inequality b) a discussion of why this inequality matters (how those who experience it are affected by it) and c) an analysis of how it has and/or continues to come about” (2017, p.31). In order to make a justice claim actionable, she then proposes a fourth element. Inspired by notions of restorative justice that emphasize repairing harm, the fourth element is an analysis of what can be done to address the injustice.

In addition to describing what a justice claim entails, Rezaei also discusses the need for a community of adjudicators. She notes that to talk of injustice is to appeal to a transcendental notion of community, one that acknowledges some connection between us all. Making a claim to justice therefore creates a “community composed of those who contend an injustice has occurred to them, and those who are deemed to be responsible (either directly, or through some notion of political togetherness) for rectifying an injustice” (p.30). For Rezaei, whose work focuses on energy access among First Nations in BC, this adjudicating community necessarily involves First Nations as well as settlers. Applying the notion of togetherness, Rezaei contends that settlers

have political responsibilities towards Indigenous peoples as well as specific responsibilities towards settler governments.

Applying Energy Justice

The above review of scholarly work by Benjamin Sovacool, Shalanda Baker, and Maryam Rezaei demonstrates promising connections between energy justice and the study of Indigenous renewable energy projects. All of these analyses are somewhat helpful in understanding the current reality of Indigenous power production in BC (i.e. declining power procurement opportunities) but it is worth examining their contributions and limitations in more depth to see how exactly they might be applied to the problem in question.

Sovacool and Dworkin (2015) spark a much-needed academic conversation about energy justice by combining a remarkable number of justice theories. As such, they offer novel analytical and decision-making tools to those who wish to study and practice energy justice. However, even with the added emphasis on Indigenous ethics by Sovacool et al. (2017), Benjamin Sovacool's overall approach to energy justice does not offer much guidance around researching Indigenous renewable energy projects in a colonial context like BC. Adding resistance and intersectionality to the decision-making framework provides some direction but these principles are not well developed. His work, therefore, highlights the need to investigate the relationship between resistance and energy justice in the context of Indigenous renewable energy projects in BC.

Baker (2016) provides a clear and compelling definition of energy justice and applies it a way that is highly relevant to the study of Indigenous renewable energy projects in BC. Baker wields climate justice, environmental justice, and energy democracy to analyze the implications of Mexican energy reforms for Indigenous peoples. By demonstrating how energy privatization

might be leveraged to strengthen Indigenous participation in the renewable energy sector, Baker provides an example of how to analyze the policy conditions that facilitated and now constrain Indigenous power proponents in BC. While Baker's legal approach to energy justice is clearly useful for policy analysis, this approach also has its limitations. Focusing on the role of state leads Baker to situate energy justice within the politics of recognition. Unlike Rezaei (2017), she does not engage with Indigenous critiques of recognition-based notions of justice. Although she references Indigenous traditions to describe the potential of community-led development, her vision of energy justice is narrower. For instance, Baker identifies climate change resiliency and increased access to energy as the primary outcomes of just energy development. Integrating reflections on Indigenous self-determination, and the larger conceptions of justice contained therein, would deepen Baker's notion of energy justice and broaden its relevance to understanding energy aspirations among First Nations in BC.

Rezaei's (2017) examination of energy poverty among First Nations in BC offers a nuanced exploration of energy justice as well as a useful framework with which to analyze injustices in colonial contexts. Rezaei's understanding of energy justice is exceptional in that it acknowledges Indigenous critiques of recognition-based notions of justice. Although the other scholars described above certainly include Indigenous perspectives, only Rezaei outlines the implications for energy justice, namely that it must examine with the way relationships to land are commoditized. Like Baker (2016), she points a finger at centralized energy systems and like Sovacool et al. (2017), she identifies resistance as a critical component of energy justice. Interestingly, however, she is able to connect these concepts by drawing upon previous work on renewable energy projects in remote Indigenous communities (Rezaei & Dowlatabadi, 2015). For Rezaei, energy justice does not simply entail resistance to the centralized energy-planning

paradigm but also involves creating alternative energy developments in keeping with visions of Indigenous self-determination. Rezaei considers Indigenous renewable energy projects as an important form of energy justice and this interpretation is very helpful to understanding Indigenous power production in BC. In addition to theory, Rezaei offers a straightforward way to analyze injustices by adapting Walker's (2012) framework for environmental justice claims. One of the benefits of this framework, beyond its simplicity, is that it seeks to understand what injustice feels like to those experiencing it. Rather than employing a set of pre-determined principles that have largely been developed and applied without Indigenous peoples in mind, Rezaei takes an inquisitive approach that is more appropriate to the study of power production among First Nations.

As mentioned, all of the above scholars offer interesting insights into energy justice that can help guide research into Indigenous power production in BC. Like Rezaei, who follows philosopher, Iris Marion Young, I do not think it is necessary to choose one conceptualization of energy justice over another. However, given the nuance and contextual relevance of Rezaei's work, I am inclined to apply both her perspective on energy justice as well as her framework for analyzing justice claims. What would this look like in the context of the problem I outlined at the beginning? In BC, there are very few opportunities for First Nations to develop sizeable renewable energy project because the state is no longer interested in purchasing this electricity. Recalling Rezaei's conclusion that renewable energy projects can be a form of energy justice for some First Nations, I believe the framework can be used to support the following claim: since Indigenous renewable energy projects attempt to remedy injustice, impeding these projects or removing the conditions that enable them, is unjust. However, to make this claim and use the framework as Rezaei does (which is to describe the inequality, why this inequality is unjust, how

it came to be, and what can be done about it), it is necessary to first describe Indigenous renewable energy projects, why they matter, and how they came to be. The framework is thus a helpful way to organize this research as well as make a justice claim. I begin by applying it to the current research context, examining how scholars have described Indigenous renewable energy projects in Canada and why they believe these projects matter.

Literature Review

What is happening?

Research into Indigenous renewable energy projects in Canada is relatively new, with almost all material on the topic emerging within the last decade. Until recently, most of the information on Indigenous renewable energy projects was contained in reports and toolkits (Campbell, 2011; Henderson, 2013; Lipp & Bale, 2018; Sayers, 2015a; TREC Renewable Energy Co-operative & Chiefs of Ontario, 2016). This grey literature largely contains recommendations for policy makers and Indigenous communities. While these documents are helpful guides for those in need, they are not meant to describe or assess the implications of a national phenomenon. Several new works, mostly scholarly, now offer a clearer picture of Indigenous involvement in renewable energy projects across the country.

Krupa (2012) argues that Indigenous peoples in Canada are well positioned to benefit from the rising demand for renewable energy but face several barriers. He remarks that grid-connected First Nations are involved in renewable energy projects but does not provide any details regarding the scope or nature of this involvement. Recent survey findings (Henderson & Sanders, 2018; Lowan-Trudeau, 2017) have attempted to fill this gap by detailing the number of projects with Indigenous involvement as well as their technology, capacity, and location. Although not an academic undertaking, Henderson & Sanders (2018) provide the most detail into

Indigenous renewable energy in Canada. They identify 152 medium-large scale projects across the country, the majority (52%) of which are located in British Columbia.[2] Their survey defines Indigenous participation quite broadly, including either:

> Indigenous ownership; a memorandum of understanding with economic benefits; royalty agreements; evidence of Indigenous financing; revenue sharing agreements; lease agreements; Impact Benefit Agreements (IBAs); and/or partnership agreements (p.7).

Henderson and Sanders do not identify the number of projects owned by Indigenous peoples but note that when Indigenous ownership occurs, it is usually around 25% per project. Lowan-Trudeau (2017) identifies 311 renewable energy projects (in various stages of development) across 194 Indigenous communities. Rather than describing what this participation entails, he notes some general trends. Observing, for instance, that many Indigenous power proponents are partnering with private developers as they move their projects into development, he raises critical questions about the implications of these arrangements for rights, profits, and ownership.

Karanasios & Parker (2018) also attempt to quantify Indigenous participation in renewable energy projects but focus on remote Indigenous communities that rely on diesel for electricity generation. Based on data from 133 communities, they identify 71 renewable energy projects developed between 1980 and 2016. Unlike Henderson and Sanderson's findings, these findings do not necessarily represent operational projects or projects with Indigenous involvement, only attempts to deploy renewable energy technologies in places where Indigenous peoples reside. The real objective of their work is to analyze what drives renewable energy uptake. Examining governance processes using a multi-layered approach, they note a distinct shift from utility-led generation to community-led generation around the year 2000. Karanasios and Parker conclude that, "remote indigenous communities now reject the role of passive

[2] They define medium-large scale projects as those that generate over 1 MW of electricity, enough to supply roughly 400-500 homes.

recipients of technologies promoted by non-aboriginal interests. Instead, active participation in transforming electrical systems is sought…" p. (169).

The above findings support what anecdotal and media accounts have reported for a while: Indigenous peoples across Canada are interested and involved in renewable energy projects. The findings also demonstrate the potential for more Indigenous involvement, both in terms of the number of projects in which Indigenous peoples are involved as well as the depth of their participation. However, the literature on Indigenous renewable energy projects has yet to explore what active engagement might entail, and what its implications might be. There is a need for more information about Indigenous leadership in this area, including what it means for projects to be Indigenous-driven and the significance of ownership in this regard.

In addition to the national perspectives mentioned above, there is also new scholarship on Indigenous renewable energy projects within specific regions. A fair amount of research has been done on Indigenous renewable energy projects in northern Canada compared to the rest of Canada (see for example: Cherniak, Dufresne, Keyte, Mallett, & Schott, 2015; Das & Canizares, 2016; InterGroup Consultants of Winnipeg, 2017; Lovekin & Dronkers, 2016; Navigant Consulting Ltd., 2017; Standing Senate Committee on Energy, the Environment, and Natural Resources, 2015; Touchette, Gass, & Echevarria, 2017). This research tends to focus on improving the technical and financial viability of renewable energy projects given the difficulty and expense of building in arctic and sub-arctic conditions. Apart from the North, the majority of scholarly studies about Indigenous renewable energy projects are based in BC and Ontario. The relatively large number of Indigenous renewable energy projects in these regions has allowed researchers to produce case studies of particular projects in addition to examining the conditions that foster renewable energy developments. Reviewing the literature in BC, however, reveals a

preoccupation with off-grid communities, which is curious given that most First Nations in the province are connected to the grid.

Inglis (2012) examines barriers to renewable energy development in seven remote Indigenous communities as part of a master's in public policy. She proposes changes to BC Hydro's Remote Community Electrification (RCE) program to increase access to renewable energy options. Similarly, Kennedy (2017) explores barriers to reducing diesel reliance through renewable energy and energy efficiency. Based on interviews with First Nations as well as representatives from the private, public, and non-profits sectors, Kennedy proposes four policy solutions meant to mitigate challenges across remote Indigenous communities. Karanasios and Parker (2016) provide a more general overview of energy provision in BC's 23 remote Indigenous communities, describing current electricity systems, past renewable energy projects, and potential resource development. They also highlight the influence of provincial energy policies, noting the role of certain targets and programs in promoting the development of local hydro, solar, and biomass projects. Relatedly, Rezaei and Dowlatabadi (2015) discuss BC Hydro's RCE program as a way of critiquing colonial narratives around Indigenous renewable energy projects - an important perspective which I revisit later. Apart from Rezaei and Dowlatabadi (2015), the above works suggest that mitigating the negative impacts of diesel is the main reason off-grid Indigenous communities are developing renewable energy projects. Given that grid-connected First Nations do not rely on diesel for electricity generation, there is a need to better understand what motivates them to pursue renewable energy.

There are a few case studies that focus on grid-connected renewable energy projects, but they are limited to the experiences of three First Nations. Ozog (2012) examines a renewable energy mentorship between T'Sou-Ke First Nation and Skidegate Band Council and outlines the

factors that contributed to the success of the partnership. Bhattacharya (2017) also focuses on T'Sou-Ke First Nation, documenting their involvement in solar energy and energy conservation. Lastly, Rodman (2013) examines community reactions to four proposed wind projects on Gixaala First Nation. While individually interesting, these studies are not designed to convey information about the overall scope of involvement in renewable energy among grid-connected First Nations. In order to explore the relationship between Indigenous renewable energy projects and energy justice in BC, more information is needed about how grid-connected First Nations are participating in the renewable energy sector. Additionally, there is a need to examine how BC energy politics affect this involvement so as to assess how Indigenous peoples might be better supported in their pursuits. The above research on off-grid Indigenous communities (Inglis, 2012; Karanasios & Parker, 2016; Kennedy, 2017; Rezaei & Dowlatabadi, 2015) reviews energy policies related to the uptake of renewable energy technologies[3] but the same has not been done for First Nations hoping to sell electricity to the grid.[4]

Why does it matter?

In addition to describing the nature and scope of Indigenous involvement in the renewable energy sector, scholars are also discussing why this involvement matters.
In doing so, the literature on Indigenous renewable energy projects, much like the literature on renewable energy more broadly, is shifting beyond a technoeconomic focus to include social and political concerns. As mentioned, a fair amount of research on Indigenous renewable energy projects focuses on increasing the technical and financial viability of renewable energy projects

[3] The research primarily notes the shortcomings of specific programs. Karanasios & Parker (2016) summarize a broad range of energy policies but do not assess the implications of these policies.

[4] Only Rodman examines provincial energy politics, exploring uncertainty within BC's renewable energy industry and the implications for First Nations with energy aspirations.

(see Arriaga, Canizares, & Kazerani, 2013; McLaughlin, McDonald, Nguyan, & Pearce, 2010; Thompson & Duggirala, 2009; Weis, Ilinca, & Pinard, 2008). These early studies, largely based on remote areas, tend to frame the benefits of renewable energy in economic and environmental terms. Most researchers rationalize their work by referencing the urgent need to displace diesel-based electricity generation, arguing that renewables can help address energy poverty, improve health outcomes, and decrease GHG emissions. This emphasis is shifting as a new generation of scholars examines what Indigenous peoples have to say about renewable energy projects.

Rezaei & Dowlatabadi (2015) critique academics and policy makers for characterizing remote Indigenous communities as "low-hanging fruit" in the move towards sustainable energy systems. They argue that the typical rationales given for integrating renewables in community energy systems (i.e. the financial, social, and environmental impacts of diesel) obscure Indigenous interests in renewable energy. Accordingly, they seek to understand 1) what Indigenous communities want from these projects and 2) the ways in which these visions contrast with those of colonial governments. Rezaei and Dowlatabadi find some overlap in motivations but note that Indigenous communities primarily view renewable energy projects as means to increase self-sufficiency. Similarly, Jaffar (2015) analyzes different visions for a sustainable energy transition in Canada by comparing the perspectives of environmental groups with the "Aboriginal Power Sphere" i.e. those involved in Indigenous renewable energy developments. She finds that environmental groups emphasize economic growth while the Aboriginal Power Sphere connects renewable energy projects to sovereignty. The works of Jaffar and Rezaei and Dowlatabadi not only highlight the importance of centering Indigenous narratives in examining Indigenous renewable energy projects but also point to an emerging discussion about the significance of these projects.

A number of scholars are beginning to characterize the transformative potential of Indigenous renewable energy projects. Despite their engagement with different literatures, they are using similar terms to describe the meaning of renewable energy projects to Indigenous peoples including: independence, autonomy, sovereignty, self-sufficiency, self-reliance, and self-determination. As mentioned, Rezaei and Dowlatabadi (2015) find that remote Indigenous communities are interested in renewable energy projects as opportunities to achieve self-sufficiency but self-sufficiency is a layered concept with both material and political implications. Materially, renewable energy projects can promote self-sufficiency by displacing diesel and increasing reliance on locally available resources. Politically, self-sufficiency is an expression of self-determination. Rezaei and Dowlatabadi identify several ways in which community renewable energy projects are tied to the pursuit of self-determination including reducing dependence on colonial institutions through economic development, promoting the development of intangibles such as pride and community empowerment, and correcting the historic injustices of colonialism by returning resource decisions to the community. Renewable energy projects are thus considered part of larger decolonization efforts, in which relationships to land are restored. Rezaei and Dowlatabadi emphasize that such projects are not valued for their economic benefits alone but rather their potential to disrupt capitalist-colonial systems.

Likewise, Jaffar (2015) observes that those in the Aboriginal Power Sphere, namely Indigenous power proponents and non-Indigenous energy consultants, generally view renewable energy projects as way of increasing Indigenous sovereignty and well being. She identifies two prominent narratives associated with sovereignty: 1) asserting independence and 2) honouring traditional values. Within the independence narrative, Jaffar highlights that renewable energy projects are appealing because they offer revenue-generating opportunities. Most importantly,

this revenue can be used to reduce dependency on colonial institutions and create economic self-sufficiency through reinvestment in other initiatives. Jaffar also highlights the way in which such undertakings promote pride, especially where ownership is involved. Within the narrative about honouring traditional values, Jaffar discusses how renewable energy projects enable Indigenous communities to uphold their responsibility to act as environmental stewards and sustain horizontal governance structures. She notes that many Indigenous power proponents see renewable energy as compatible with traditional ways of being on the land and as forms of resistance to harmful energy developments.

Lowan-Trudeau (2017) also addresses the topic stewardship but warns against overly romanticized views of Indigenous environmental traditions, believing that such views can lead a false binary between protecting Indigenous sovereignty and participating in contemporary developments. Using Kevin Bruyneel's notion of "Third Space," Lowan-Trudeau argues that Indigenous renewable energy project are neither traditional, nor contemporary. Instead they occupy a space that is both within and outside established political systems. Consequently, he views these projects as "a potential source of political and economic sovereignty" and "a reclamation of land and environmental rights" (p. 602). Using different language but referencing similar ideas, Keyte (2015) finds that autonomy and self-reliance are critical factors in the energy decisions of northern Indigenous communities. He notes that these qualities are related to well being, pride in place, and enhanced resilience. Bargh (2010) also notes the importance of pride as both a motivation and outcome of Indigenous renewable energy projects in Canada and elsewhere. Even Rodman (2013), who documents negative associations to proposed wind turbines among members of Gixaala First Nation, acknowledges that these projects could

provide meaningful opportunities if conceptualized and implemented by the community rather than outside developers.

The above works demonstrate that there is a fair amount of conceptual overlap in how scholars are describing the transformative potential of Indigenous renewable energy projects. What is missing in the above discussion, however, is an exploration of outcomes, not just motivations or potentials. By emphasizing how Indigenous visions are distinct from other visions, the literature on Indigenous renewable energy is more aspirational than illustrative. While it is based on real projects and the experiences of successful Indigenous power proponents, it has yet to explore the processes through which significant transformations occur. There is a need, therefore, to comprehend not only Indigenous visions but how these visions are realized, connecting particular outcomes to specific aspects of project development. Only Bhattacharya (2017) focuses on outcomes and contributing factors. Noting a lack of comprehensive analysis regarding the impacts of Indigenous renewable energy projects, she assesses T'Sou-ke First Nation's solar initiatives. The results are organized along the lines of economic, environmental, and social benefits and while they are interesting, Bhattacharya does not draw out their political implications.

Research Questions

Taking into account the contributions and limitations of the emerging literature on Indigenous renewable energy projects, I offer my own research questions to better understand what is happening and why it matters. They are as follows:

1) How are grid-connected First Nations involved in renewable energy developments in British Columbia?

Although a good portion of the literature on Indigenous renewable energy projects in Canada is already based in BC, there is very little information about how grid-connected First Nations in the province are engaging with the renewable energy sector. The first research question is therefore meant to broaden the discussion about Indigenous participation to include First Nations who wish to sell electricity to the grid. It also meant to elicit more information about the conditions that drive and inhibit commercial Indigenous power production within the province. As with renewable energy projects in remote Indigenous communities, there is a need to examine the policies and discourses that affect the energy aspirations of grid-connected First Nations. To explore this topic, I examine the interplay between provincial energy policies and Indigenous power proponents. I also critique common discourses about First Nation involvement in the renewable energy sector by relying on survey data and in-depth examples to provide more detail about their participation.

2) What are the implications of Indigenous-owned renewable energy projects for self-determination?

Several scholars have described the overall significance of Indigenous renewable energy projects from the perspective of Indigenous peoples but few have examined the impacts of specific projects. To explore the second question, I therefore propose a case study approach based on the following three questions:

A) What motivated you to participate in the renewable energy sector?

B) How did you develop your project or projects?

C) What were the main outcomes of these developments?

By focusing on motivations, development processes, and outcomes, this research aims to go beyond the literature's current focus on Indigenous visions of transformation and examine whether and how these aspirations have been realized. Additionally, it aims to understand how particular aspects of project development contribute to self-determination. In this research, I focus on ownership because equity is becoming increasingly important to debates about the impacts of Indigenous renewable energy projects and few studies have focused exclusively on projects in which Indigenous peoples have equity. By exploring these research questions, I also hope to shed light on emerging dynamics within Indigenous power production that relate to energy justice. I am specifically interested in how Indigenous renewable energy projects might themselves be considered forms of energy justice. With these aims in mind, I conduct case studies with two First Nations who have equity in one or more projects and are selling electricity to the grid.

Scope

As the first research question suggests, this master's project is limited to an investigation of Indigenous renewable energy projects in the imaginary province of British Columbia (BC). I acknowledge that provincial boundaries are disputed colonial constructions but they nonetheless set the parameters for energy development. Natural resource development falls under provincial rather than federal jurisdiction, so each Canadian province manages its energy portfolio differently. BC is an ideal place to study Indigenous renewable energy projects for a number of reasons.

First, the province is home to the largest number of Indigenous renewable energy projects in Canada, almost double that of Ontario with the next largest number (Henderson & Sanders,

2018). First Nations in BC have also created some of the earliest and highest profile projects and are considered leaders by many across the country (Aboriginal Power Community, 2018). Despite the head start, Indigenous project proponents are now facing diminishing prospects due to BC's changing energy landscape (Sayers, 2016). The focus on BC thus provides important insights into just energy policies, both in supporting the rapid expansion of Indigenous energy projects and maintaining participation in the sector over time. BC is also a critical place in which to study First Nation involvement in the renewable energy sector due to active negotiations over Aboriginal rights and title. Unlike other jurisdictions in Canada that are already subject to treaties, the precise nature of Aboriginal title in BC is still being interpreted and applied. As a result, the development of renewable energy projects has the potential to intersect with land claim negotiations like no other province. Ongoing negotiations will influence the political and economic prospects of all BC First Nations, determining who controls the resources and processes to develop projects. The province therefore offers a unique opportunity to examine Indigenous renewable energy projects within the context of evolving legal terrain, providing insight into how such efforts are simultaneously shaping and being shaped by federal and provincial law.

It is also important to acknowledge that Indigenous peoples are using a diversity of renewable energy technologies to meet their energy demands and generate revenue for their communities. Hydro, solar, and wind are some of the most common renewables deployed, but Indigenous peoples are also investing in other technologies such as biomass, geothermal and tidal (Dimoff, 2016; Henderson, 2013). In BC, for reasons of climate and topography as well as profitability, the majority of Indigenous renewable energy projects to date are run of river hydro.

This research is not dedicated to examining any particular technology but the case studies feature First Nations who have primarily developed run of river projects.

Like others who have prioritized Indigenous voices in their explorations of Indigenous renewable energy projects (Bargh, 2010; Jaffar, 2015; Rezaei & Dowlatabadi, 2015; Rodman, 2013), my research centers the experiences of Indigenous peoples. In this case, I am particularly interested in First Nations who 1) are connected to the North American electricity grid; 2) have successfully completed one or more renewable energy projects and 3) own a portion of the renewable energy projects on their territories. Therefore, the findings in this research are primarily based on the experiences of Kanaka Bar Indian Band and Sts'ailes First Nation. Both have considerable experience with renewable energy projects but have taken distinct approaches to its development on their territories. Kanaka Bar spent several decades developing the Kwoiek Creek run of river hydro project. They also have four solar projects and are in the process of developing a small-scale hydro project. Sts'ailes First Nation is home to seven run of river hydro projects and they are in the process of developing an innovative pumped storage project.

Thesis Outline

This research in organized into six chapters. As demonstrated, Chapter 1 introduces the topic of Indigenous renewable energy projects, explores the analytical possibilities of energy justice, reviews the research context, and presents research questions along with notes on scope. Chapter 2 provides more detail about my research approach. Chapter 3 examines the relationship between provincial energy policies and First Nation involvement in BC's renewable energy sector. In this chapter, I demonstrate how energy privatization contributed to the rise of First Nation participation, arguing that although they were not the intended beneficiaries of these policies, they nonetheless made the most of the shift to advance their own objectives. I also

discuss the impacts of the provincial government's recent decision to once again rely on publicly owned energy generation. In Chapter 4, I further explore how First Nations are navigating the renewable energy industry in BC. Applying the experiences of Kanaka Bar and Sts'ailes, I explain how First Nations have adapted the IPP model to their benefit. I argue that they are neither respondents nor private developers, but rather Indigenous power producers. As distinct players in the renewable energy industry, they complicate energy analyses based on public vs. private benefit. Chapter 5 is a detailed case study of Kanaka Bar's experience developing the Kwoiek Creek hydro project. I document what motivated them to start the project, how they went about developing it, and what happened as a result. I analyze whether the community achieved what they set out to do and highlight the significance of the project beyond economic development. In Chapter 6, I conclude the thesis by integrating results from each chapter and once again discuss how Indigenous renewable energy projects in BC might be viewed as a matter of justice.

I am also thinking about the progression of this thesis in terms of Rezaei's (2017) adapted framework for making a claim to justice because it offers insights into Indigenous renewable energy projects generally as well as the recent conditions impeding their development in BC. Chapter 3 follows the framework by providing an overview of the injustice, describing the inequality, why it matters, how it came about, and what can be done about it. However, to really understand why it matters and what can be done about it, it is necessary to read Chapter 4 and 5, which detail what renewable energy projects have meant to Sts'ailes and Kanaka Bar.

Chapter 2: Approach to Research

How do you know what you know? Traditionally, scholars might call this a methodology chapter but since I did not begin the research with a specific methodology approach in mind, my intent here is to instead locate myself in this research, name key influences, and describe how I proceeded with the research.

Positionality

According to Carlson (2016), it is imperative for white, settler scholars to locate themselves in relation to colonialism and anti-colonial work. This practice is variously referred to as self-location or social location. Carlson names social location and reflexivity as one of eight principles for white settlers wishing to adopt an anti-colonial methodology. Self-location typically involves identifying oneself, one's provenance or heritage, and one's relationship to specific people and places. When one makes their subject position known, either implicitly or explicitly acknowledging the ways in which their perspectives are limited, they begin to undo the harmful academic tradition of the omniscient author. The practice of self-location makes authors more visible and counters the assumption that they are neutral authoritative figures but it does not make them the focus of the work.

It is thus important for me to identify myself as a white woman who currently occupies unceded Coast Salish territory. To the best of my knowledge, I have French and Irish ancestry but admittedly, I have not taken the time to explore these roots. My family has occupied Turtle Island for many generations and I have yet to fully understand my ancestors' arrival and the details of our unsanctioned stay. I grew up in Edmonton, Alberta without realizing I lived on Treaty Six territory until I attended university there. I then moved to Montreal, only somewhat

conscious of being on Mohawk territory. It was not until my recent move to pursue studies at the University of Victoria, which is situated on a Lekwungen village site (University of Victoria, n.d.), that I began to understand the extent of my ignorance. Like all of the places I have lived, I am a visitor here, inhabiting this area without invitation or permission. Now that I am aware of my lifelong imposition on Indigenous lands, I am in the process of identifying the ways that I have benefited from colonialism and continue to benefit in order to begin repairing the harm that I have caused and change these relations moving forward.

In addition to this ongoing work of locating oneself in relation to Indigenous territories and the ongoing processes of colonization, Carlson also argues that settler researchers must view their scholarship as collective work that builds from the wisdom of Indigenous scholars and community input. Too often, academia demands that scholars present their work as if it were the product of individual effort and not shared insights. Self-location, then, is not just about acknowledging one's particular worldview but about contextualizing the emergence of those ideas and giving credit where credit is due. So with this brief foray into the purpose of self-location, I describe some scholarly work that has shaped my thinking around research with Indigenous peoples.

Key Influences

Many scholars have documented the harmful, exploitative legacy of academic scholarship in relation to Indigenous peoples (Carlson, 2016; Castleden, Morgan, & Lamb, 2016; Kovach 2009; Tuhiwai-Smith, 2012). Reviewing the literature in geography and beyond, Castleden, Morgan, and Lamb (2016) note that academics have consistently misrepresented Indigenous peoples, appropriated their knowledge, and caused harm to participants. Research on Indigenous people has also disproportionately focused on dysfunction, thereby problematizing

them and paving the way for stereotypes. Yet academics across many disciplines continue to reap the rewards of studying Indigenous people, sometimes building entire careers off these activities.

Carlson (2016) notes that white scholars who wish to pursue anti-colonial work must carefully examine our debts towards Indigenous people and ensure that we give as much as we take. In elaborating upon this principle of reciprocity, she highlights the central role of Indigenous scholarship to understanding and resisting settler colonialism. Indigenous resurgence activists and scholars are the heart of anti-colonial studies – they are the founders and visionaries of this work and they critique settler colonialism in a way that settlers cannot. I have been fortunate enough to attend the lectures of many Indigenous scholars over the course of this research including Lee Maracle, Leanne Betasamosake Simpson, Robin Wall Kimmerer, Sarah Hunt, Glen Coulthard, Taiaiake Alfred, Cliff Atleo, and Arthur Manuel. I am also indebted to my research collaborators at Kanaka Bar Indian Band and Sts'ailes First Nation, who have shaped my thinking throughout the research process. I owe particular thanks to Chief Patrick Michell for mentoring me over the course of innumerable conversations. Collectively, these experiences have taught me far too much to summarize succinctly. Overall, however, I have come to understand that white settlers may be able to support Indigenous methodologies but we must work at the margins, recognizing the limitations and perhaps the impossibility of meaningfully contributing to anti-colonial work.

White, anti-colonial scholars are also indebted to Indigenous people because our work is premised upon the historical and contemporary suffering of Indigenous peoples. Although my work aims to document successes stories among Indigenous communities, rather than pathologies, it nonetheless flows from the unequal relationship between First Nations and

Canadians and this must be addressed. As McCallum (2013) notes in a post-thesis blog post entitled "Making Thanks for a "Gift" Unwillingly Given," saying 'thanks' and 'sorry' are simply not enough. They argue that settlers must understand their thanks and apologies to Indigenous peoples as a promise to do better and to do differently. These acknowledgements are meaningless if they do not indicate an active commitment to identify oneself as a settler, to learn from Indigenous peoples, and critically, to repatriate stolen land. Without such a plan, self-location and reflexivity among settlers amounts to unproductive hand wringing and misplaced white guilt. McCallum's thoughts are no doubt shaped by Tuck and Yang's (2012) well known treatise "Decolonization is not a Metaphor," which asserts that, "decolonization is about the repatriation of Indigenous land and life; it is not a metaphor for other things we want to do to improve our societies" (p. 1). A master's thesis (or any other research project) that claims to support decolonization and anti-colonialism must seriously consider this statement. The following sections outline how I have interpreted the call to repatriate Indigenous lands and lives in the context of academic work. Every stage of the research process has presented interesting opportunities and challenges with regards to implementing decolonial research practices.

Research Design

At the outset of this research project, I was eager to apply my experience in community-based research. I had previously facilitated community-university research partnerships in a professional context and I was keen to prioritize community questions and concerns in my master's research. I had hoped to join an existing Indigenous research partnership or build new relationships and co-design a research project following the principles of community-based participatory research (St. Denis, 2004). However, given the timing, funding, and capacity constraints that characterize research at the master's level, this approach was not feasible.

Instead, I drafted research questions with input from my supervisor and thesis advisor and sought out research partners among First Nations with similar interests. I suggested that the research take the format of case studies because this seemed like the most flexible approach. In collaboration with a small research team, I later conducted a province-wide survey of First Nation involvement in renewable energy developments to contextualize the case studies.

In hindsight, the methodology that begins to describe my approach to the research is Atkinson and Hammersley's ethnography-based participant observation. Krupa, Galbraith, & Burch (2015) describe the tenets of this approach as follows:

1) a generally strong emphasis on exploring the nature of particular social phenomena, rather than a testing of hypotheses prior to fieldwork;
2) a trend towards using "unstructured" data;
3) investigation (of one case) in detail, where quantification and statistical analysis play a subordinate role (or none at all) (p.86-87).

Rather than entering this research with a strong desire to test a certain hypothesis, I have purposefully remained open and curious to whatever might arise. I have primarily used qualitative approaches and treated "data collection" and "analysis" as opportunities to engage in ongoing conversations with participants and think deeply about what they found most important to share. This approach also resembles what Gibson-Graham (2006) term "weak theory" which aims to reduce certainty and create room for new narratives through largely descriptive text. Applying "weak theory" to their own research, Bargh (2010) writes, that "this kind of methodology, providing examples but not judging them or prescribing them as models for other places, is intended…to allow an appreciation of Indigenous energy projects in particular time and

place" (p.10). These were certainly my goals in developing case studies. Rather than presenting models for other places, I aimed to share different examples of Indigenous renewable energy developments. As intended, the case studies ultimately demonstrate considerable variation among First Nation involvement in the renewable energy sector while speaking to common experiences in relation to provincial energy politics.

Case Study Development

Prior to contacting potential Indigenous research partners, I familiarized myself with Indigenous renewable energy projects across the province, identifying ten First Nations with operational projects. I then sought out individuals at the University of Victoria, especially within the School of Environmental Studies, who had professional or research relationships with these First Nations. After meeting with them to assess whether their contacts might be interested in the proposed research, I then requested introductions. I also attended conferences and gatherings about renewable energy to meet First Nation speakers and delegates in person. The following sections document the relationships I developed with Kanaka Bar Indian Band and Sts'ailes First Nation, along with the qualitative methods employed in this research.

Kanaka Bar Indian Band.

During the Assembly of First Nations Forum on Energy in February 2016, I met Chief Patrick Michell of Kanaka Bar Indian Band. I expressed an interest in learning more about the Kwoiek Creek hydro project and Chief Michell invited me to visit. In April 2016, I traveled to Nlaka'pamux territory with Dr. Nancy Turner for a tribal council event and stayed in the area to attend a band council meeting at Kanaka Bar. I then proposed a research partnership to Chief and Council, who agreed shortly thereafter. We worked on a research protocol together outlining the

intent of the research, deliverables, and compensation. After receiving ethics approval from the University of Victoria's Human Research Ethics Committee, I took up residence in the town of Lytton and traveled to the band office every weekday.

Over the course of a month, I participated in community and band council meetings, special events, and workshops. By working in the band office and volunteering to help with events, I had an opportunity to build relationships with many potential interview participants before conducting interviews, which increased my understanding of Kanaka Bar and facilitated recruitment. In some cases, I contacted people recommended by Chief Michell and in other cases people approached me as they became familiar with the research project. Interviews were conducted in a diversity of places including participant homes, public spaces, and the band office. I reviewed the consent form with participants before beginning their interview.

In total, I conducted interviews with 14 people including staff, council members, and community members. Shortly after the interviews were conducted, I gave participants an audio recording of their interview along with an invitation to suggest changes within a two-week time period. Since then, I have been back regularly for meetings and community events. Each visit has presented the opportunity to reconnect with participants and learn more about the community.

Sts'ailes First Nation.

I was introduced to Robert Lagassé, CEO of Sts'ailes First Nation's social development corporation, through my thesis advisor, Dr. Judith Sayers. I met with Mr. Lagassé in August 2016 and he provided me with an overview of Sts'ailes' renewable energy activities. I proposed a partnership, to which the nation agreed, and then worked with their research coordinator on creating a research protocol. They issued a research permit in September and I visited the administration office in October to conduct interviews. Over two days, I conducted interviews

with four employees who were suggested by the research coordinator. I then sent each participant a copy of their interview transcripts and invited them to suggest changes if desired. I returned to Sts'ailes the following year to provide a research update and conduct a follow-up interview with one of the participants.

Case Study Analysis

I transcribed, manually coded, and analyzed the interviews I conducted with participants from Kanaka Bar and Sts'ailes First Nation using NVivo software. I coded both sets of interviews for emergent themes as well as those present in the literature. Chapter 5 provides more detail on how I used this interview material. To make sense of the interviews, I sought out supporting documents from both First Nations and requested informal follow-up interviews with a couple of participants. As per my research protocols with both communities, I sent drafts of the thesis to both Kanaka Bar and Sts'ailes to ensure that my analysis was factually correct and representative of their views.

It is also important to note that, over time, many members of Kanaka Bar became generous research collaborators, contributing to the analysis of this research in direct and indirect ways. By repeatedly welcoming me back to the community and being available for conversations at a distance, they added incredible depth this thesis as well as my knowledge of community-engaged research. It is difficult to capture just how much these relationships have influenced my understanding of their experiences and the topic as a whole but it is clear that they have engaged in this research as much more than participants.

Survey Development

In addition to the case studies, I helped design and conduct a survey along with a small team of researchers to better understand First Nation involvement in the renewable energy sector. This research was requested by Clean Energy BC (CEBC), and partially funded through INAC (Indigenous and Northern Affairs Canada). The survey was divided into four sections: 1) Operational Projects, 2) Projects in Development, 3) Projects under Consideration, and 4) Capacity Building.

The research team invited 203 First Nations and several Tribal Councils to participate in an online survey requiring approximately 15-20 minutes to complete. We recruited respondents in person, by email, phone, and Facebook. We sent formal invitations to First Nation chiefs and called band offices to follow up. We also made presentations at two different conferences: "Generate" hosted by CEBC and "Links to Learning" hosted by INAC. We collected responses between October 2016 and February 2017 using an online tool called FluidSurveys. In most cases, participants completed the survey independently using the link provided by email. In some cases, we conducted the survey with respondents in person and over the phone. The majority of respondents were employees or elected representatives, with each First Nation deciding on the most appropriate person to complete the survey. We then reviewed each survey response for completion and consistency and frequently contacted respondents to clarify details of their involvement.

In total, we received responses from 102 First Nations and three tribal councils. We then analyzed the results using FluidSurveys built-in reporting capabilities and communicated the results in a report that was shared back with survey participants (Cook, Fitzgerald, Sayers, & Shaw, 2017).

Terminology

This research employs several terms that require attention. First, I mainly use the term renewable energy to describe energy derived from renewable resources rather than fossil fuels. When I mention renewables, I am broadly referring to the mix of technologies that harness bioenergy, direct solar energy, geothermal energy, hydropower, wind energy, and ocean energy. I generally avoid terms like clean, green, sustainable, and alternative to describe the above energy sources unless I am writing about a specific historical or political context.

Secondly, I use the terms Indigenous peoples, Indigenous communities and First Nations somewhat interchangeably throughout this research although I recognize that they are not identical in meaning. When I refer to Indigenous communities, I am referring to collectives with distinct political identities, not simply social groupings (Vowel, 2016). I only use the term Aboriginal when quoting another source or following colonial government usage (for example, Aboriginal rights and title), as this was the formal government terminology until recently.

When I refer to Indigenous renewable energy projects, I am typically describing projects that are affiliated with specific bands, nations comprised of several bands, or tribal councils. I also use this term in a broad sense, to indicate involvement in a project regardless of the ownership or benefit arrangement. It is also important to recognize that First Nations have been relying on renewable energy for a very long time so to speak of recent developments is not to dismiss past innovations or erase a long history of sustainable land use practices.

Like Vowel (2016), I use the term settler colonial, or settler for short, to refer to "the non-indigenous peoples living in Canada who form the European-descended sociopolitical majority" (p. 14). I use this term to describe myself and occasionally to describe institutions and processes. As Vowel explains, the term settler is relational in nature and therefore more useful than a racial

category, such as “white,” in describing those who benefit from the legacy and present reality of settler colonialism. That said, I am aware that some consider the term setter too gentle and prefer to use the term occupier.

Lastly, throughout this research, I mostly refer to scholars and participants as “they” instead of “he” or “she” unless I am aware of their preferred pronoun. I do this not only to protect the anonymity of participants but also because I do not wish to impose undesired pronouns on people.

Chapter 3: First Nation Involvement in Renewable Energy Projects in BC

British Columbia (BC) has the largest number of Indigenous renewable energy projects in Canada and almost twice as many as the province with the next highest number (Henderson & Sanders, 2018). Beyond this data point, however, not much is known about First Nation participation in BC's renewable energy sector, particularly when it comes to grid-connected First Nations. For instance, it is not clear from the literature why there are more Indigenous renewable energy projects in BC than anywhere else and what this participation actually looks like. This chapter aims to address this gap by presenting findings from a province-wide survey about First Nation involvement in the renewable energy sector and by exploring the conditions that contributed to this involvement. It reveals that First Nations in BC have gained an important foothold in the renewable energy sector and are now involved in diverse and substantial ways. Additionally, they are using renewable energy projects to secure a variety of benefits that are important to the well being of their communities. However, First Nations are also experiencing significant barriers in relation to the renewable energy sector, the primary barrier being a lack of opportunity to sell electricity to the grid.

In this chapter, I argue that the lack of opportunity to sell electricity to the grid is not simply a barrier to First Nation involvement in renewable energy developments but also an injustice. To begin reframing this set of circumstances as a justice issue, I take inspiration from Rezaei's (2017) adapted justice framework, which requires a description of the inequality, a discussion of why it matters, an analysis of how it occurred or continues to occur, and an exploration of how it can be addressed. I use this framework as a guide to understand both Indigenous power production as well as the decline of independent power procurement in BC.

Namely, I aim to describe First Nation involvement in the renewable energy sector, why it matters, and how it occurred as well as the present inequality, why it matters, and how it occurred. This dual analysis sets the stage for a discussion about what can be done to address injustice and promote energy justice.

The chapter proceeds in two parts: Part 1 focuses on Indigenous power production in BC and Part 2 details the decline of independent power procurement opportunities. In Part 1, I first contextualize the rise of Indigenous power production by introducing colonialism and energy injustice in BC. Then, I describe the scope of First Nation participation in renewable energy developments in BC using results from the First Nations Clean Energy Survey. Next, I trace how a series of government directives facilitated Indigenous involvement, exploring how the shift towards private power production impacted First Nations, and how they in turn responded to it. In Part 2, I review the provincial government's renewed reliance on state-owned generation by highlighting recent developments with the Site C dam and corresponding changes to BC Hydro's procurement programs. I then explore the implications of these changes for First Nations with renewable energy ambitions. Lastly, I discuss how the decline in power procurement opportunities might be viewed as an energy injustice.

In addition to providing a foundational understanding of Indigenous renewable energy projects in BC, this chapter offers important insights regarding energy transitions. Foremost among them is that transitions to distributed renewable energy cannot be expected to deliver just results unless there is an explicit commitment to redistribute political power. What follows is a somewhat unexpected example of energy injustice, one that raises critical questions about how energy transitions can be shaped to better serve Indigenous peoples and ensure that past injustices are not reproduced.

Part 1 – Indigenous Power Production

Colonialism and energy injustice.

The Indigenous peoples who inhabit BC are numerous, culturally diverse, and resilient.[5] They have endured countless cruelties and continue to resist destructive forms of colonialism that persist today. This shameful dynamic is too pervasive and complex to relay fully but some of the worst atrocities are now well known: 1) the reserve system, which forced Indigenous peoples onto small parcels of land to make way for settlers. This system, which inspired elements of the South-African apartheid, separated Indigenous peoples from their traditional livelihoods and excluded them from wider economic participation (Lutz, 2008); 2) the imposition of religious residential schools that tore over 150,000 Indigenous children away from their families from 1880s to the 1990s and created a legacy of intergenerational trauma that has only recently been recognized by the government (Jefferies, 2016); 3) thousands of Indigenous people removed from their families and communities during the sixties scoop; 4) The high number of missing and murdered Indigenous women and girls whose deaths and disappearances have gone largely unresolved; 5) the poor living conditions on reserve, leading to a host of related health crises including suicide epidemics among many First Nations; 6) the criminalization of Indigenous people, resulting in the disproportionate involvement of Indigenous people in the criminal justice system.

Despite the state's repeated attempts to dispossess, assimilate, and eradicate them, Indigenous peoples continue to defend their connection to their land through various means.

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[5] From a colonial perspective, there are three Indigenous groups in Canada: First Nations, Métis, and Inuit. This paper focuses on First Nations, using the terms First Nations and Indigenous peoples interchangeably, acknowledging that they are not identical in meaning. Many First Nations are still governed by the Indian Act, and are referred to as bands. BC counts 203 bands; some still go by the name of Indian Bands but many more use the term First Nations.

Since the 1960s, First Nations have launched and won landmark court challenges, gradually bringing about nationwide recognition of their rights along with obligations on the part of the Crown, including the duty to consult and accommodate.[6] Nowhere in Canada are these rulings more salient than in BC, where the vast majority of First Nations never entered into treaties.[7] Through numerous legal victories, First Nations in BC have steadily undermined the assumption of crown sovereignty over their lands, but enforcing their rights and title remains challenging. Given BC's colonial legacy and the ongoing extraction from lands over which Indigenous peoples have sovereignty, colonizers are indebted to Indigenous peoples. This debt and its corresponding duty to restore relationships with the land and Indigenous peoples are especially evident in provincial energy issues.

Since contact, colonizers have imposed their Eurocentric view of development on Indigenous territories and the same is true today in terms of energy production, transportation, and consumption. First Nations are disproportionately exposed to the risks and harmful effects of extractive industries,[8] but often possesses fewer resources than other communities to make their rights known and respected (Calder et al., 2016; Desbiens, 2014; Jefferies, 2016; McLachlan, 2014; Wiebe, 2016). Presently, First Nations in BC are engaged in a number of

[6] For a history of land politics in BC, see Harris (2002) and Tennant (1990).

[7] Many First Nations are now engaged in the modern treaty process but only two regions of the project are subject to historical treaties: Treaty 8 territory in northeast BC and the southern part of Vancouver Island, where the Douglas Treaties continue to be largely ignored by colonizers.

[8] Many First Nations who contend with the heavy impacts of energy production and transportation also struggle to access clean, affordable, and reliable electricity. Across Canada, there are approximately 175 remote communities, most of them Indigenous, who do not have access to North American electricity grid and thus rely on diesel generators for power. Diesel fuel is expensive and can result in electricity costs that are three to ten times higher than those paid by communities connected to the grid. Diesel is also known to negatively affect air quality and contribute to green house gas (GHG) emissions (Rezaei & Dowlatabadi, 2015).

legal and grassroots battles over the production and transportation of fossil fuels.[9] However, the conflicts extend beyond the oil and gas sector and implicate renewable energy infrastructure as well. Treaty 8 First Nations,[10] who are already heavily affected by shale gas production (Garvie & Shaw, 2016), are now stretched thin trying to protect their land from impacts of the Site C dam. The 1,100 MW project is the most expensive infrastructure project in the province's history. It has long been criticized by a diverse set of voices for its huge price tag, adverse environmental impacts, misuse of rich agricultural land, and the complete abrogation of treaty rights (Kassam, 2016; Lee, 2013). Many First Nations, including Doig River, Halfway River, Prophet River, and West Moberly, have strongly opposed the dam since the 1970s on the basis that it will cause significant cultural, ecological, and health disruptions (Treaty 8 Tribal Association, 2015). Concerns include damage to sacred sites and burial grounds, loss of hunting, fishing, and farming lands, and health impacts due to food shortages and contamination. The provincial government is well aware of these issues but proceeding with the dam anyway, perpetuating a long history of non-consensual resource development on Indigenous lands.[11] This brief description of energy injustice in BC provides some idea of the context in which Indigenous renewable energy projects are developing. The legacy of extractive projects informs Indigenous desires to create alternative energy projects.

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[9] Recent high profile battles include the Enbridge Northern Gateway pipeline project and the Petronas Pacific Northwest LNG project. Ongoing conflicts include the Trans Mountain pipeline project and the LNG Canada project.

[10] Specifically, West Moberly and Prophet River First Nations

[11] Opposition to large hydro projects runs in deep in BC due to a long history of displacement and injustice flowing from the construction of the province's so-called heritage assets. In the 1960s, BC Hydro destroyed the lands and livelihoods of the Tsay Keh Dene and Kwadacha by flooding their territories to build the W.A.C. Bennett Dam. Four decades later, after a long period of litigation, the provincial government finally agreed to a settlement. For this reason, among others, BC Hydro is often met with distrust by First Nations and viewed as an extension of the capitalist-colonial state (Rezaei & Dowlatabadi, 2015).

Scope of involvement.

First Nations participate in renewable energy projects in a variety of ways, depending on the community's profile, the technology involved, and whether or not the community is connected to the grid. Until recently, however, very little published information has been available regarding their participation. As detailed in chapter 2, Approach to Research, the First Nations Clean Energy Survey sought information from First Nations across BC about their involvement in the renewable energy sector. The survey team invited 203 First Nations and tribal councils to participate in an online survey and received 105 responses in total. The survey results reveal a high level of interest in renewable energy developments, with 98% of respondents indicating existing involvement in the sector or a desire to be more involved. Nearly half of survey respondents (49 out of 105) reported having operational projects or projects in development. These projects can be found in almost every region of the province, with a concentration in the southwest. Projects vary in size, technology, and application. Some are designed to power local buildings and residences and others are intended to generate revenue through the sale of electricity. While we surveyed both off-grid and grid-connected First Nations, nearly 80% of respondents are connected to the provincial energy grid. Not all respondents are in a position to sell power to the grid, but the majority of them are vulnerable to energy policy changes in so far as these policies affect BC Hydro's procurement processes. BC Hydro's procurement processes have shifted substantially over the years so it is helpful to review them before examining the survey results further.

At the time of the survey, BC Hydro had four main programs through which they could purchase electricity: 1) periodic calls for power, 2) the standing offer program, 3) the micro-standing offer program, and 4) net metering (BC Hydro, 2016). Only the net-metering program

is still active. First, BC Hydro used to seek proposals from private power producers to meet certain acquisition targets, usually measured in gigawatts, through periodic calls for tender, more commonly referred to as calls for power. In addition to calls for power, BC Hydro had a standing offer program (SOP) that accepted submissions for mid-sized renewable energy projects (over 100kW up to and including 15 MW). By contrast, their micro standing offer program accepted proposals from community groups and First Nations for projects between 100kW and 1MW in order to target. Lastly, through the net-metering program, BC Hydro purchased surplus energy from their residential and commercial customers with small-scale (under 100kW) renewable energy projects. Aside from these four programs, First Nations have also secured energy purchase agreements (EPAs) from BC Hydro through bilateral agreements with the provincial government but these arrangements have never been part of the utility's formal procurement processes.[12]

The survey inquired about operational projects, projects in development, and projects under consideration. We counted 78 operational projects with a total generating capacity over 1,800 MW.[13] The majority of operational projects are run of river hydro and 42 of them are supplying electricity to the grid in response to BC Hydro's various calls for power. Operational projects developed in response to a call for power account for 96% of electricity produced by respondents. In addition to operational projects, many First Nations are developing new renewable energy projects. Respondents (32) indicated that they are involved in planning or building 48 projects. These projects have moved beyond the feasibility stage and in some cases, are already under construction. For some First Nations, these projects represent their first foray

[12] These bilateral agreements are usually due to an accommodation agreement, reconciliation agreement or final agreement with the provincial government.

[13] 1, 836 MW

into renewable energy generation, while for others, they represent increased investment in the sector. Lastly, a high number of respondents (77) reported that they were considering projects that had not yet moved ahead. Collectively, respondents identified nearly 250 projects in the pre-planning phase, as well as projects in the planning phase that have been stalled.

Most importantly, the survey found that renewable energy projects are delivering a multitude of interrelated benefits. Many respondents commented that they value renewable energy projects for social, economic, political, and environmental reasons. Those with operational projects indicated that they are receiving resource royalties, training and employment, project equity, and other benefits.[14] These economic benefits are strongly associated with utility-scale projects that sell power to the grid. For many First Nations, utility-scale projects have become essential to the well being of their communities. To understand how First Nations began leveraging these projects to their benefit, it is necessary to review the advent of independent power production in BC.

Privatization.

Major shifts occurred in BC's electricity system with the 2001 election of the Liberal government under Premier Gordon Campbell. Overall, the Campbell government ushered in an era of deregulation (Hoberg, 2017) and privatization (Calvert, 2007) that both expanded and constrained First Nation participation in the renewable energy sector. Although the previous government created the conditions for a private power lobby to emerge, the Liberals truly opened the door to Independent power producers (IPPs). Cohen and Calvert (2012) analyze their

[14] These benefits are consistent with those reported by Henderson and Sanders (2018) from Indigenous renewable energy projects across Canada. They highlight nearly 170 million in Indigenous net revenues, approximately 1.8 billion in Indigenous equity investments, over 15,000 person-years of direct Indigenous employment, and over 840 million in employment income for Indigenous people.

privatization efforts by reviewing three main government policy directives that dramatically altered BC's electricity system: Energy for Our Future: A Plan for BC in 2002, BC Energy Plan: A Vision for Climate Energy Leadership in 2007, and the Clean Energy Act in 2010. I adopt their analysis in order to trace the rise of First Nation participation in the renewable energy sector. By reviewing these measures with First Nations in mind, I hope to demonstrate that the Liberal government did not foresee their involvement but eventually came to recognize it in a limited way.

The 2002 Energy Plan: unexpected uptake.

Soon after the Liberals were elected, they introduced a number of significant changes, including a new energy plan to promote private investments. The government first convened the Energy Policy Development Task Force to consult those who might be affected by major changes to the energy sector. The Independent Power Producers Association of BC, representing the interests of small-scale hydro and wind energy producers, submitted a comprehensive set of recommendations. When "Energy for our future: A plan for BC" was released in 2002, many of its sixteen policy actions flowed directly from the input of IPPs, including a dramatic prohibition: BC Hydro was no longer permitted to build new generating facilities. With the exception of Site C, the third and final proposed dam on the Peace River, BC Hydro was mandated to purchase all new electricity from IPPs. This was a notable departure from past provincial policy, in which BC Hydro was responsible for generating the majority of the province's electricity. It was also a turning point for private power producers who set up shop in the 1980s but never before had the opportunity to secure lucrative energy purchase agreements in such large numbers. The Liberal government's new agenda introduced big changes to the

renewable energy industry, enabling many new projects and rapid expansion into remote areas, with unintentional and unexamined implications for First Nations. It simultaneously intensified encroachment on Indigenous lands and created an opening for First Nations to sell power to the grid.

The Liberal government introduced the 2002 Energy Plan without much thought as to how it would impact First Nations and did very little to solicit their involvement. Only one First Nation, Hupacasath First Nation, submitted feedback to the committee drafting the 2002 Energy Plan. Although there is scant mention of First Nations in the Plan, many First Nations were already interacting with private power developers and seeking ways to leverage renewable energy projects to their benefit. [15] IPPs had begun to encroach on Indigenous territory by purchasing water licenses, often without First Nation knowledge. Many First Nations nonetheless saw the appeal of renewable energy projects and sought ways to participate in the industry. Their efforts were bolstered by the BC Court of Appeal's 2002 ruling, Haida Nation v. Minister of Forests and Weyerhaeuser regarding the duty of the Crown and third parties to consult with First Nations who have asserted Aboriginal rights or title (Bull, Housser, & Tupper, 2002). As the IPP industry gradually integrated consultations into their business practices, several First Nations used the consultations to negotiate project equity.

BC Hydro evidently took note of Indigenous interest in renewable power generation and established a formal consultation process in the lead up to the 2005/2006 call for power. In their report on the process, BC Hydro describes 3 distinct opportunities for comments on the call (BC Hydro, 2006). Calvert (2007) contends that these consultations were largely designed to meet the needs of non-Indigenous stakeholders who desired more certainty regarding land claims or other

[15] There are only two mentions of First Nations, and they suggest increased cooperation to facilitate resource development without implying Indigenous initiative.

issues that might arise in conjunction with projects on Indigenous territories. Likewise, Hoberg (2013) asserts that the Campbell government did not give much credence to Aboriginal rights and title until it became necessary to allay investor fears over land ownership. Regardless of the intention behind the consultations, several First Nations ultimately participated in the 2005/2006 call for power, and several of them were awarded contracts (BC Hydro, 2006). Like the majority of projects considered in this call for power, First Nations largely submitted applications for river diversion hydropower projects, more commonly known as run of river.

To summarize, the 2002 energy plan was not intended to benefit First Nations but it nonetheless catalyzed their involvement in the renewable energy sector by creating substantial opportunities for IPPs. Many First Nations involved themselves in the sector in response to private encroachment on their lands and out of interest in renewable energy as a means to sustainable development. BC Hydro eventually acknowledged their renewable energy ambitions and solicited their input and involvement in the 2005/2006 call for power.

The 2007 Energy Plan: expansion and struggle.

The next big leap in privatization occurred in 2007 with the introduction of "The BC Energy Plan: A Vision for Clean Energy Leadership." Among other things, the plan created energy self-sufficiency requirements, introduced new consultations for Site C, and streamlined the process for small power projects by introducing the standing offer program (SOP). The most impactful of these measures was the mandate that British Columbia become energy self-sufficient. The province aimed to generate all of its own power (rather than buying it on the open market) by 2016 and set a buffer of three thousand extra gigawatt hours to be secured by 2026. To achieve this, BC Hydro would have to purchase large volumes of power from private suppliers, as the crown corporation was no longer permitted to build any new generating

facilities. This was another major win for IPPs, already on the rise after the 2006 call for power, during which BC Hydro purchased more than triple the amount of energy originally requested (Calvert, 2007). The introduction of the SOP was also a boon to private energy producers as it established a continuous way to sell power at set rates.

All of these measures had significant implications for First Nations. By re-initiating consultation on Site C, the government set the course for considerable conflict with Treaty 8 First Nations.[16] Additionally, the self-sufficiency and SOP provisions fuelled the growth of the private energy sector, in which First Nations were newly acknowledged players. The self-sufficiency requirement justified buying more power and the SOP provided BC Hydro with an additional mechanism through which to buy it. In addition to submitting bids through calls for power, proponents could now put forward small projects on an ongoing basis, which was particularly appealing for First Nations with less access to capital. Tla-o-qui-aht First Nation was among the first Indigenous power producers to take advantage of the SOP, securing two EPAs (BC Hydro, 2017).

Calvert (2007) argues that the government recognized the strategic value of Indigenous participation in the renewable energy sector and began emphasizing the ways in which First Nations benefitted from independent power projects. This strategy is particularly evident in the 2007 energy plan. Unlike the previous plan, which made no mention of First Nations, the 2007 plan connected First Nations to controversial independent power projects. It highlighted the involvement of Squamish First Nation in the Ashlu Creek hydro project, which had been the

[16] Many First Nations, including Doig River, Halfway River, Prophet River, and West Moberly, have strongly opposed the dam since the 1970s on the basis that it will negatively impact their treaty rights and cause significant cultural and ecological disruptions (Treaty 8 Tribal Association, 2015).

focus of a long battle between locals and developers (Shaw, 2011). This project was the flashpoint for broad concerns about run-of-river hydro, which had been mounting for some time.

By 2008, resistance to run of river hydro had reached a fever pitch in BC. That year, the B.C. Union of Indian Chiefs called for a moratorium on all private power-facility development on rivers and streams until a transparent consultation process could be established (West Coast Environmental Law, 2009). First Nations were not uniformly or categorically opposed to private power projects, but were deeply frustrated with how projects were being developed. Grand Chief Stewart Phillip argued that IPPs were building projects on Indigenous territory without proper consultation and therefore infringing upon Aboriginal rights and title (Burrows, 2007). IPPs, who had already secured a large share of water licences on Indigenous lands, were not only neglecting to share the benefits of hydropower development with First Nations, but failing to consult with them altogether. Thus, First Nation opposition was not against renewable energy projects per se, but rather against developers who did not consult with them and the provincial government who did not enforce consultation. The 2008 Clean Power Call that followed attempted to address some of the growing concerns from First Nations and foster increased participation. BC Hydro held two engagement sessions for First Nations and reviewed the First Nation consultation records of Clean Power Call proponents prior to issuing EPAs (BC Hydro, 2010). These changes went a long way towards ensuring that private power developers worked with First Nations at the outset of project development and generally improved relations between First Nations and the private sector.[17]

This period marks an important shift from scant mention of First Nation involvement in private power projects to endorsement on the part of the government and BC Hydro. Public

[17] My thanks to Judith Sayers for this observation.

resistance to run-of-river projects arguably motivated the government to promote First Nation interest in renewable energy as a means to augment its privatization agenda. After this period of growth and backlash, Indigenous renewable energy developments became more commonplace and framed by many as important economic development opportunities.

The 2010 Clean Energy Act: business as usual.

Cohen and Calvert (2012) identify the 2010 Clean Energy Act as the third and final directive in the push towards privatization. This act increased the required amount of clean energy generation in BC from 90% to 93% and shortened the time frame for energy self-sufficiency from 2026 to 2020. It also introduced export as a core objective, reinforcing the government's previously announced intention to become a 'Clean Energy Powerhouse' (Hoberg, 2017). The overall impact of these inclusions, like those in previously policy directives, was to open the door to new energy developments.[18] Calvert (2010) calls the Act a "dramatic escalation" (para 1) in privatization and the "next major step in the government's long term agenda of restructuring BC's electricity system" (para 2), while Hoberg (2010) views the Act as a reassertion of government ownership over the majority of the system. Despite their differing views on the subject, both commentators agree that the Act retained a large role for IPPs, including a growing number of Indigenous communities.

Unlike other key directives reviewed earlier, the Clean Energy Act explicitly addressed First Nation interests in the renewable energy industry and allocated funding to facilitate First

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[18] The Act also removed BCUC's ability to review BC Hydro's major programs including the SOP and Site C. Shortly afterwards, the 2011 BC Hydro Review called into question the definition and timeline of self-sufficiency and the Government later dropped the mandated three thousand-gigawatt hour surplus. However, the Review did not return cost-intensive projects to BCUC's oversight, which critics of Site C are quick to mention (Lee, 2013).

Nation involvement. One of the stated objectives in the Act is "to foster the development of first nation and rural communities through the use and development of clean or renewable resources" (Clean Energy Act, 2010). And part 6 of the Act sets aside five million dollars to launch a First Nations Clean Energy Business Fund. Designed to be self-replenishing, the fund is administered through the Ministry for Aboriginal Relations and Reconciliation and provides funds for equity, capacity-building, and feasibility studies. As of May 2018, it had supported 140 First Nations across the province with approximately $10.5 million in funding (L.Wood, personal communication, July 10, 2018).

Although the wording of the 2010 Clean Energy Act and the creation of the Clean Energy Business fund could be interpreted as important gains for First Nations, these advances did not go far enough according to many. Nearly fifty First Nations expressed opposition to the bill, signing a joint statement asking the government to delay adoption until amendments could be made (Union of British Columbia Indian Chiefs, 2010). They contended that the government had ignored almost all of the recommendations put forth by the Green Energy Task Force in 2009. The government had convened this task force in the lead up to the new legislation, and First Nations representatives had hoped it would address a wide array of issues including the need for access to capital and revenue-sharing agreements with the province (Cayo, 2010). Instead, the Act pre-empted the possibility of revenue sharing from Site C and Heritage Assets and included only the fund, which some considered an inadequate amount to support Indigenous participation. Judith Sayers, the former Chief of Hupacasath First Nation, expressed that it would not be enough funding once distributed among the many First Nations who wanted to develop projects (Cayo, 2010).

In sum, the Clean Energy Act was a relatively hollow victory for First Nations. It formally recognized First Nations as renewable energy producers but its commitments fell short of expectations. The tokenism would become more pronounced in the years to follow as the provincial government's energy priorities shifted and they proved unable to honour the Act's objectives. As the next section demonstrates, the government has continued to publicly acknowledge Indigenous renewable energy projects but failed to meaningfully support the growing number of First Nations who wish to develop projects.

Part 2 – Decline of Independent Power Procurement

Renewed reliance on publicly owned power.

The 2013 Integrated Resource Plan: reviving the proposed Site C dam.

Not long after making commitments to First Nations in the 2010 Clean Energy Act, the government signalled its intent to move away from distributed, independent power production with the 2013 Integrated Resource Plan (IRP). The IRP is a 20-year planning document published by BC Hydro and approved by the Ministry of Energy and Mines. The IRP dictates how BC Hydro will meet provincial energy demand, including targets for both energy conservation and generation. The 2013 IRP marked a significant downturn for IPPs because it revived the proposed Site C hydroelectric dam. BC Hydro argued that the province needed more power and Site C was the most cost-effective option for meeting long term demand. This moved the 1,100 MW dam closer to reality and set the stage for an environmental review and consultation with First Nations. As mentioned, the dam has been widely opposed by First Nations, environmental NGOs, and members of the public since its inception. The provincial government and BC Hydro have attempted to justify the dam's construction in many different

ways over the years. When the 2013 IRP was released, the government claimed that it was necessary to fill an electricity gap created by the closure of the Burrard Thermal Plan and the province's objective of energy self-sufficiency. Since then, there has been considerable debate about the conditions under which power from the dam will be needed. Many have observed that there is no clear need for the electricity generated by Site C in the absence of a big new load and in 2013, the big new load on the horizon was the liquefied natural gas (LNG) industry (Ducklow, 2017; Lee, 2013; Parfitt, 2016; Rezaei, 2017; C. Shaw, 2014).

Previously on the sidelines of the clean energy agenda, LNG became a major political focus when Christy Clark succeeded Gordon Campbell as premier in 2011. That year, the Clark government pledged to build an LNG pipeline and terminal by 2015 and another three by 2020. Then, in 2012, the government issued two natural gas strategies: the first marketed natural gas as a transition fuel to a low carbon economy and the second claimed that BC's LNG exports could help Asian jurisdictions lower their GHG emissions (Dusyk, 2016). The government's zeal for LNG initially generated optimism for renewable energy developers, including some Indigenous power producers (Simpson, 2012). They hoped that an increase in industrial demand, specifically the massive amount of energy required to liquefy natural gas, would result in BC Hydro purchasing more energy from the private sector (Morrow, 2012). However, the government quickly quelled this possibility with two main announcements. First, they changed the definition of a clean resource in the Clean Energy Act to include natural gas, stating that when natural gas was burned to meet the demands of new LNG facilities, it would be considered clean (Dusyk, 2016). Then, the government announced that it would not require natural gas producers to use renewable energy in their operations, breaking an earlier promise to host the world's first clean-energy-fuelled natural gas plants (Dembicki, 2013). In sum, natural gas supplanted small-scale

renewable energy projects as the favoured "clean energy" option for powering LNG facilities, and Site C was deemed the best solution for meeting long-term growth in demand. These changes meant that BC Hydro would no longer rely on independently produced power for new generation, including renewable energy supplied by First Nations.

Fearing that they would no longer be able to develop new projects that would sell power to the grid, First Nation leaders publicly called upon the government to reaffirm its commitments in the Clean Energy Act and asked BC Hydro to revise the IRP (Sayers, 2013). In response to this call and other lobbying efforts, BC Hydro added a Clean Energy Strategy to the IRP. The strategy raised the eligible project size for the net metering program from 50kW to 100kW, introduced the micro-standing offer program for projects in the range of 100 kW to 1 MW, increased the annual SOP target from 50 GWh/year to 150 GWh/year (including the micro-SOP stream), and lastly, removed co-generation facilities from SOP eligibility and redirected this volume to clean energy projects. The Clean Energy Strategy also directly addressed First Nation interest in clean energy development and committed to maximizing First Nation participation in the SOP and future competitive bid processes as well as prioritizing relationships with First Nations when downsizing, deferring or terminating EPAs before they reach operation. However, as the next section demonstrates, these inclusions have become somewhat meaningless now that First Nations with renewable energy ambitions are unable to sell electricity to the grid.

2017 Site C dam approval: new government, same old story.

Since the 2013 IRP, BC Hydro has committed itself fully to the construction of the Site C dam and withdrawn its independent procurement programs. However, there was a brief moment around the provincial election of 2017 where many hoped that a new government would cancel the dam and halt the province's return to centralized energy production. The details of the past

five years are instructive in that they reveal how First Nations have had to contend with a great deal of uncertainty (and political hypocrisy) in their pursuit of renewable energy.

In May 2017, after sixteen years of Liberal reign, the NDP formed a minority government with the support of the Green party. Initially, it was not clear what an NDP government might mean for the provincial electricity system. Many hoped that they would put an end to Site C because several newly elected NDP leaders had previously spoken out against it.[19] During their campaign, they also promised to send the project to the British Columbia Utilities Commission (BCUC) for review because it had been exempted under the 2010 Clean Energy Act (Stuek, 2017). Shortly after forming government, the NDP government (via the Lieutenant Governor) did indeed ask BCUC to conduct a review but limited the scope of the inquiry. The Commission was tasked with assessing the financial implications of three possible outcomes: 1) completing the Site C project by 2024, as planned; 2) suspending the Site C project, while maintaining the option to resume construction until 2024; 3) terminating construction and remediating the site.

In November 2017, the BCUC released a report that seemingly provided ample justification for cancelling the dam. Among other things, it highlighted that the Site C dam was likely to run over budget and behind schedule (British Columbia Utilities Commission, 2017). The report also stated that Site C was based on "excessively optimistic" energy projections and suggested that the province could meet its demand in other ways (Shaw, 2017). Many onlookers interpreted the report as "the final nail in Site C's coffin" and hoped that it would provide BC Hydro with the evidence it needed to continue purchasing distributed renewable energy (Kurjata, 2017). However, a month after the release of the report, in December 2017, the government

[19] Before the NDP formed a minority government, both Premier John Horgan and Minister of Energy, Mines, and Petroleum Resources, Michelle Mungall said they believed Site C should be cancelled (Kehler, 2017; MacLeod, 2015).

announced their approval of the dam. In a public statement, Premier Horgan reasoned that cancelling the project would increase electricity rates and leave less money for other capital projects (McElroy, 2017 aka CBC). He acknowledged First Nation opposition but argued that Indigenous consent was not required because the decision to build the dam had been made by a previous government (Sayers, 2017).

In March 2018, shortly after the Site C dam was approved, BC Hydro stated that they would not be issuing any energy purchase agreements beyond five projects with significant First Nations involvement (Shaw, 2018). This decision was no real surprise to IPP observers because BC Hydro had already indicated their intention to move away from private power a year earlier. First, they announced a review of the standing offer program (SOP), explaining that they were reconsidering the volume and price beyond 2020 (BC Hydro, 2018b). They stated that they would continue to receive and review applications but a mere six months later, reversed their position, saying the review was taking longer than anticipated and that they were suspending the receipt of applications indefinitely. The suspension also applied to the newly introduced micro-SOP, under which only three applications had been submitted (BC Hydro, 2018a). Shortly after applications were suspended, it was revealed in the provincial budget update that BC Hydro planned to reduce rates for IPPs as their energy purchase agreements came up for renewal (MacLeod, 2017). In other words, recent developments suggest that BC Hydro is not just pausing to consider momentary changes to their procurement decisions but also the long-term role that IPPs will play in the province.

In short, First Nations with renewable energy ambitions have witnessed BC Hydro steadily withdraw the commitments they made in the 2013 Clean Energy Strategy. There was

momentary hope that a newly elected provincial government might cancel the Site C dam and allow BC Hydro to continue purchasing private power. Instead, the government reversed the trend towards privatization and returned to the province to an earlier era in electricity planning: large-scale, publicly owned hydroelectricity. The full impacts of this policy change are not yet known but many First Nations have identified the corresponding lack of procurement programs as a significant barrier.

Impact of downturn.

The provincial government's decision to proceed with Site C and BC Hydro's corresponding withdrawal of energy procurement programs has already begun to impact First Nations with projects in development, and will continue to affect their plans for the foreseeable future. In our survey of First Nations and Tribal Councils across the province, the majority of respondents (75) indicated that they have renewable energy projects in mind that they have not yet pursued or been able to pursue. The survey also found that respondents are experiencing multiple barriers as they attempt to bring these projects to fruition. Out of the 86 grid connected First Nations who participated in the survey, 70% said that they are considering new projects, and 64% said they would be interested in selling power to the grid. However, 43% of grid-connected respondents indicated that "lack of opportunity in BC Hydro programs" is a barrier to project development, making it the most commonly cited barrier ahead of community readiness and difficulty securing financing.[20] Notably, 61% of undeveloped projects (projects not yet pursued or stalled) are being considered by First Nations without experience in the sector. This

[20] This barrier would likely rank even higher now because all procurement programs beyond net-metering have been indefinitely suspended. At the time of the survey, BC Hydro had not formally withdraw the SOP or micro-SOP but First Nations were still feeling the effects of the downturn as BC Hydro had just announced that the targeted acquisition volume had been met up until 2019 (BC Hydro, 2018b).

suggests that the lack of opportunity in BC Hydro's procurement programs is limiting First Nations who have not yet had the chance to use renewable energy projects to their advantage.

Lost opportunity.

For those who are just beginning to investigate their renewable energy options, the prospects are grim. With no opportunity to sell power to the grid, there is little point in trying to secure funding for pre-feasibility studies. The pre-feasibility steps for a renewable energy project are similar across different technologies. This phase usually involves investigating the costs of grid connection, tracking applicable environmental laws, regulations, and assessments, understanding technical demands, assessing social licence for the project within and outside the community, and determining whether the project is commercially viable (Sayers, 2015b). In short, there is considerable work involved, making it no wonder that survey respondents cited "community readiness" as the second most common barrier to developing renewable energy projects. First Nations, who often experience capacity constraints induced by colonization, must decide whether to allocate resources to these activities among many other competing priorities. By rolling back their procurement programs, BC Hydro has signalled to First Nations that they should not invest time or money to figure out whether they can generate revenues through renewable energy. Unfortunately, this withdrawal comes at a moment where many First Nations have already completed considerable pre-feasibility work and planned projects right up to the point of construction. These communities are now finding themselves without a way to move forward and facing uncertainty about whether they can reap the rewards of their investment.

Lost investment.

The survey data suggests that certain First Nations risk losing substantial investment dollars. Most respondents have not dedicated much money in their pre-feasibility and feasibility work, reporting under $10,000 in investments. However, 18 respondents reported having invested between $10,000 and $250,000 and 6 respondents said they had invested more than $250,000.[21] The stakes are highest for those who have completed all of the major tasks associated with planning a renewable energy project on their territory but cannot proceed with construction until they finalize an agreement with BC Hydro.[22] Since the survey, Clean Energy BC has identified fourteen shovel-ready projects that are now on hold until BC Hydro has completed a review of their operations (Shore 2018). Totalling over 130 MW, the proposed projects were approved under the SOP and micro-SOP and many of them involve First Nations. As BC Hydro undergoes a comprehensive review, which is not scheduled to conclude until the fall of 2019, First Nations with renewable energy ambitions are left in limbo (Government of British Columbia, 2018). In other words, renewable energy projects are now becoming a liability for some First Nations even though they initially appeared to offer a multitude of benefits.

Lost momentum.

It is difficult to gauge the long-term impacts of the government's decision to proceed with Site C on First Nations renewable energy ambitions but ordering BC Hydro to reconsider their procurement programs threatens to interrupt a crucial sense of momentum. As the government appears to be winding down opportunities for IPPs, First Nations are only just

[21] These figures may contain investments in off-grid projects that are not likely to be affected by BC Hydro's rollback on power acquisition. However, the larger the dollar amount, the more likely this investment has been made on projects designed to generate revenue by selling power back to the grid.

[22] In the last few months First Nations have received letters from BC Hydro stating that if they proceed with project development, it is at their own risk. BC Hydro will not be held responsible.

beginning to experience the benefits of renewable energy projects on their territories. As Figure 1 demonstrates, most of the growth in Indigenous renewable energy projects is recent - the majority of grid-connected projects (33 out 55) have only been operational since 2011. This growth represents more than a decade's worth of organizing on the part of First Nations.

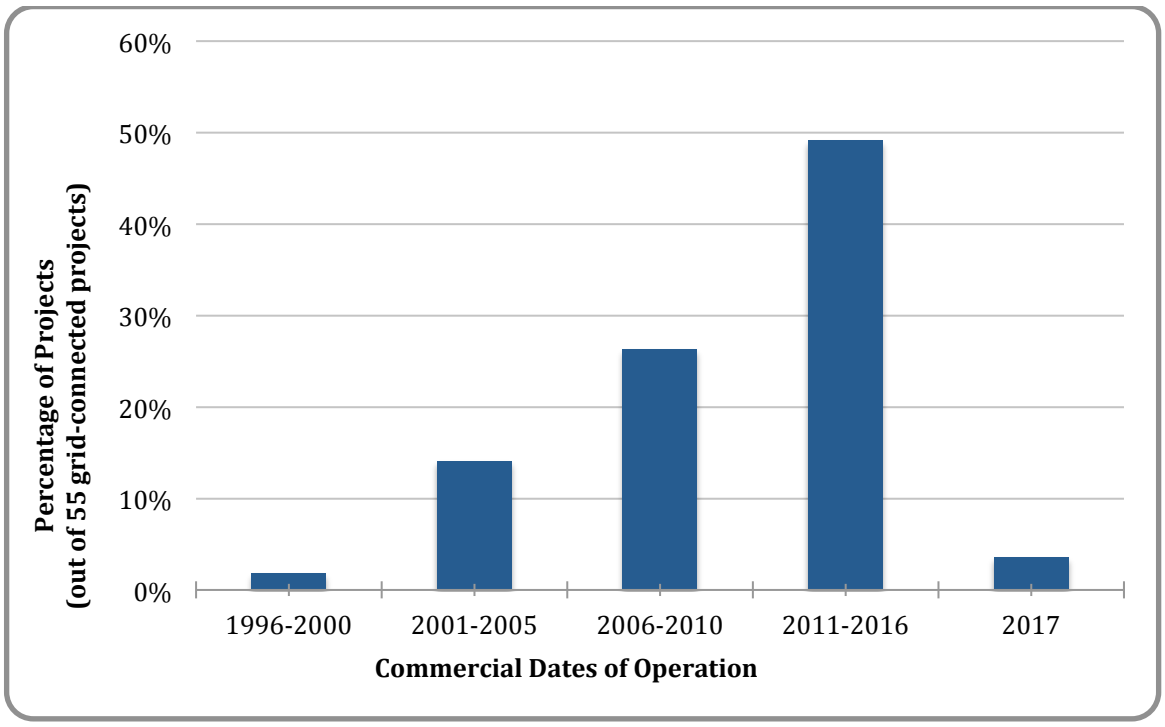

Figure 1. Indigenous renewable energy projects by commercial date of operation

Collectively, First Nations have tackled significant obstacles to increase their involvement in the sector, making big gains in the areas of financing, capacity building, and networking. On the financing front, two different funds were established to support First Nations in obtaining project equity.[23] Key players from the BC First Nations Clean Energy Working

[23] The Regeneration Fund was established through a partnership between Ecotrust Canada, the Tale'awtxw Aboriginal Capital Corporation, and the Tribal Resources Investment Corporation. It was the first fund of its kind in BC.

Group (BCFNCEWG)[24] also lobbied the provincial government to establish revenue sharing from independently owned renewable energy projects. By defending their right to benefit from such projects, they helped launch the Clean Energy Business Fund. With regards to capacity building, the BCFNCEWG developed a clean energy toolkit and co-hosted short courses for First Nations with Clean Energy BC. Lastly, on the subject of networking, many First Nations have strengthened their relationships through renewable energy developments. They have created valuable bonds with other First Nations through capacity building sessions, advocacy work, and visits to operational projects. They have also developed better working relationships with representatives from colonial governments as well as the private power sector. Over time, First Nations have successfully cultivated respectful business practices among potential partners, some of which are detailed in an MOU with industry representatives (Clean Energy BC, 2014). It has taken a significant amount of time and effort for First Nations to establish themselves in the renewable energy sector. Without further opportunities to sell power to the grid, several of these gains may fall away. For instance, the Clean Energy Business fund is based on revenues from new projects. First Nations can still access the fund to secure equity for small-scale projects and generally build capacity, but it will no longer be self-replenishing if no new commercial projects are built.

Summary of impacts.

The BC First Nations equity fund was formed by New Relationship Trust, All Nations Trust Company and Nuu-chah-nulth Economic Development Corporation. This fund was ended in the 2014-15 fiscal year.

[24] Representatives from Sts'ailes and Shíshálh were very active in these negotiations.

When the Liberal government began to privatize the electricity system, they did not intend for First Nations to benefit but now, as many First Nations have built up the resources to begin or expand their participation in renewable energy developments, almost all of the opportunities to sell to the grid are evaporating.[25] Many First Nations are struggling to access the benefits of renewable energy despite great interest in joining the industry or increasing their participation. As Sayers (2013) writes, "for many communities, this is the best economic development opportunity they have had since the demise of the fur trade, commercial fisheries, and logging" (para 2). BC Hydro's recent decision to suspend procurement programs deters First Nations who would like to be involved and harms those who have made significant investments in projects that may not proceed. It is also likely to disrupt the collective momentum that First Nations have established in the sector.

Discussion

This chapter provides an overview of Indigenous power production in BC as well as the decline of independent power procurement. Indigenous peoples in BC, as elsewhere, continue to experience the historical and ongoing impacts of colonialism, including multiple forms of energy injustice. This context informs First Nation involvement in renewable energy developments in BC, which has grown considerably over the last decade. Recent survey results indicate that, at a minimum, almost half of First Nations in BC are either involved or interested in being involved in renewable energy projects. Their involvement in the renewable energy sector began alongside energy privatization measures introduced by the Liberal government. As the Liberal government opened the grid to independent power producers (IPPs) through three key energy policies, many

[25] Only the net-metering program remains and it too is undergoing changes. In April 2018, BC Hydro announced that they plan to restrict applicants from selling power in excess of their personal electricity needs (CBC, 2018).

First Nations were forced to defend their lands from outside encroachment. Many of them also fought for the opportunity to develop their own renewable energy projects because they saw the potential to secure a wide range of benefits in a manner that was consistent with their values.

Over time, First Nations began to build individual and collective capacity, producing not only commercial renewable energy projects but also a network of resources. Then, in the midst of this momentum, the Liberal government revived the Site C dam project, introducing significant uncertainty for IPPs. It was hoped that a new government, headed by the NDP, might cancel the dam and continue to establish energy purchase agreements with First Nations. Instead, they approved the dam and suspended power procurement programs. The renewed reliance on publicly energy generation is already impacting First Nations with renewable energy ambitions and jeopardizing their accomplishments in the sector. First Nations are now identifying the lack of opportunity to sell electricity to the grid as a major barrier to further participation in the renewable energy sector. This policy reversal is not simply a setback but an injustice. As I argue below, examining the trajectory of First Nations involvement in BC's renewable energy sector as a matter of energy justice offers important insights for energy transitions in BC and beyond.

Making a claim to justice.

In order to make a justice claim, I apply the framework that Rezaei (2017) uses to examine First Nation experiences of energy poverty in BC. Adapted from environmental justice theorist Gordon Walker (2012), this framework calls for a description of the inequality, why this inequality matters, how it came about or is reproduced, and what can be done to address it. I have already described three key ways in which the decline of power procurement opportunities in BC is affecting First Nations who hope to sell electricity to the grid. In sum, it is 1) deterring First Nations who would otherwise pursue renewable energy projects, 2) causing financial harm

to First Nations who have already invested in projects that are unlikely to move ahead, and 3) disrupting the collective momentum that First Nations have established in relation to the renewable energy sector. One could argue that these impacts are being felt across the sector among all IPPs and thus are not unique to First Nations. This may be true, but the impacts are not distributed equally. Examining each one in turn reveals that the provincial government's decision to halt the purchase of independent power disproportionately affects First Nations.

To begin, the rollback on procurement programs is more of a deterrent to First Nations with renewable energy ambitions than IPPs because First Nations face a greater number of barriers than IPPs. Take for example, financing, which survey respondents named as the second most common barrier to participating in the renewable energy sector. Many First Nations struggle to access the capital required to build both community and commercial-scale renewable energy projects. Energy purchase agreements and net-metering guarantees are essential to many independent power projects but especially Indigenous ones. Without a market for their power, they will be hard-pressed to secure the financing needed to build renewable energy projects of any size. Financial precarity also adds to the second impact I mentioned, which is the harm that comes from lost investment. First Nations are not as well positioned as IPPs to absorb the risks of unsuccessful business ventures - they will feel the loss associated with stalled and cancelled energy projects more deeply than IPPs because it is time and money they could have invested in the wellbeing of their communities. Lastly, while IPPs might be able to ride the unpredictability of the provincial energy market, retaining the capacity to invest in renewable energy projects in the distant future or in other jurisdictions, First Nations are not similarly equipped to keep prospective projects afloat.[26] Disrupting the independent power industry disrupts community

[26] Since First Nations are primarily focused on investing in their own territories, it is unlikely that they would move their operations to another province.

readiness and the measures meant to support it, including industry-funded learning exchanges. Without access to sustained funding and training, First Nations are more likely to experience the effects of lost momentum than other developers.

These inequalities matter because they prevent First Nations with renewable energy ambitions from catching up with private developers. First Nations have not had the opportunity to build renewable energy projects on their lands the way that other industry players have. They have had to fight for everything, from securing water licences on their own territories, to negotiating fair impact benefit agreements, to providing input into BC Hydro's calls for power. It has taken years for First Nations to build capacity and level the playing field so that they too can participate in the sector. Now that they are ready to leverage the benefits of renewable energy projects on a broad scale, the provincial government has decided it no longer needs the power. In sum, First Nations have had to bear the impacts of BC's transition to independent power production but have not been permitted to benefit from it for long. Although BC Hydro has promised to consider five more projects with First Nation involvement, these five projects will not make up for the lopsided start. The run of river gold rush has come and gone and no amount of development at this point will see First Nations benefiting the way private developers have.

There are different ways to explain how these inequalities came about. It is possible to view them in isolation, as a distinct set of distributional and procedural injustices with recent origins. For instance, using Cohen and Calvert's (2010) privatization analysis, I have argued that First Nations were never the intended beneficiaries of the transition to independent power production. Given this lack of attention, it is not surprising that when the political winds changed, Indigenous interests were wrongly cast aside. However, it is also possible to interpret this situation as part of a larger pattern of unjust energy development in BC. As mentioned

earlier, the province has long prioritized non-existent industrial demand over the energy needs of residents (Rezaei, 2017). First Nations have had to contend with the resulting centralized energy system for many decades, experiencing the negative impacts of large-scale hydroelectricity projects without any of the benefits.[27] Site C is simply the latest example of this logic, the product of historical inertia that continues to place industrial development above all else (Dusyk, 2016). As the government recommits to twentieth-century ideals like economic development driven by cheap, plentiful energy, they carry on the long tradition of disregarding Indigenous rights and aspirations.[28]Acknowledging the larger pattern of energy injustice is helpful in explaining how the interests of First Nations continue to be ignored even after they have been enshrined in legislation like the Clean Energy Act. Regardless of whether the recent decline in power procurement opportunities is seen as a distinct set of injustices or part of a larger pattern, it is clear that First Nations have been denied the opportunity to meaningfully participate in energy decisions that greatly impact their lives and lands. In some cases they have been asked for input into specific processes and developments but they have never had a real say in the overall direction of energy policy in the province, or even on their own territories. [29]

What does energy justice look like?

[27] The clean energy revenue sharing agreement that First Nations managed to secure from the provincial government unfortunately does not include so-called heritage assets, i.e. the province's major hydroelectric developments. In some cases, they do not receive electricity either. Rezaei (2017) details how the Tsay Keh Dene have suffered and continue to suffer from the creation of BC's largest hydro-power reservoir, behind the WAC Bennett Dam, but are not connected to the grid and therefore do not have an affordable or reliable source of electricity.

[28] Premier Horgan said it himself, "When it comes to reconciliation and working with Indigenous leadership there has been over 150 years of disappointment in British Columbia. I'm not the first person to stand before you and disappoint Indigenous people" (para 20, R. Shaw, 2017).

[29] When the BC Utilities Commission did finally review the Site C dam, they consulted First Nations about the direct impacts of the dam but did not explicitly consult First Nations about the impact it would have on their plans to build renewable energy projects.

According to Rezaei (2017), the last element of making a justice claim involves describing what can be done to address the injustice in question. I have so far argued that the interests of First Nations have not been sufficiently prioritized in provincial energy politics - not recently, in the short-lived transition to independent power production, and not historically, in the development of a centralized energy system based on large-scale hydroelectricity projects. My brief analysis suggests that for First Nations to reap the benefits of transitions to renewable energy, their interests must be reflected in provincial energy policies from the outset, not included as an afterthought. It also suggests that just energy policies must be strong enough to withstand both political whims and the weight of historical inertia. They must have teeth and they must be enforceable. Additionally, these policies need to be implemented in cooperation with First Nations, not just devised with them in mind. In other words, there is a need to develop robust energy policies that fairly distribute the costs and benefits of energy developments in BC as well as a need to include First Nations in the planning and decision-making processes around them. To this end, a few scholars have proposed decision-making and analytical tools based on energy justice.

Sovacool, Burke, Baker, Kotikalapudi, & Wlokas (2017) present ten principles to help guide just energy decisions: 1) availability 2) affordability 3) due process 4) good governance 5) sustainability 6) intergenerational equity 7) intragenerational equity, 8) responsibility, 9) resistance, and 10) intersectionality. These principles could be applied to future decision-making around energy provision and policies in BC so that newer policies consider a much broader range of factors. Baker (2016) takes a slightly different approach, highlighting the ways in which energy policies can support three key elements of energy justice including: climate justice, environmental justice, and energy democracy. Under this framework, just energy policies would

promote low-carbon energy generation, pose little impact on marginalized communities, and offer communities both procedural and substantive benefits. Such an approach clearly favours Indigenous renewable energy projects and if applied to BC, might call for the continuation of independent power procurement.[30] Rezaei (2017), however, argues that is important to look beyond policy solutions to address energy injustice, because policy making relies on recognition from the state and therefore legitimizes the state's illegal occupation of Indigenous territories. Her argument deserves more attention because it provides an alternative explanation about how energy injustices arise and therefore a different vision of what can be done to address them.

For Rezaei (2017), making a claim to energy justice in a settler colonial context like BC means engaging with how relationships to the land are commoditized to create energy resources. In order to understand how injustices arise, it is necessary to understand the extractive nature of colonialism and the various ways in which it impacts Indigenous peoples. It is an invitation to view the problem I have discussed from another perspective, to examine how renewable energy projects arise from capitalist-colonial abuses and are themselves are a form of energy justice. In this slightly bigger frame, the decline of independent power procurement is not simply an injustice because it disproportionately impacts First Nations who have been repeatedly misrecognized by the state but also because it denies First Nations the opportunity to realize their particular visions of energy justice, which are based on redistributing political power. This telling requires a far deeper look at what First Nations are doing within the realm of renewable energy (including how their aspirations have taken shape and why they matter) and therefore provides a focus for the next two chapters.

[30] Premier Horgan has said that there might be a small opportunity for First Nations to sell electricity to the grid after Site C is built so it is worth considering how the provincial government and BC Hydro will shape procurement.

Chapter Four: A Comparative Analysis of Indigenous Power Producers

The previous chapter adopted Cohen and Calvert's (2010) analysis to examine the rise of Indigenous power producers. Using their observations on the privatization of BC's electricity system, I argued that the Liberal government unintentionally opened the door to First Nations who wanted to sell power to the grid. Many First Nations were attracted to renewable energy projects for social, economic, political, and environmental reasons and fought hard to develop their own projects. Collectively, they lobbied for inclusive provisions in the government directives and procurement programs that were meant to establish a private power industry. Anti-privatization scholars like Cohen and Calvert thus provide a helpful framework in which to explore the policy conditions that enabled Indigenous power production. However, their work is only helpful to a point. I argue here that in their attempt to drive home the negative consequences of privatization, they neglect Indigenous perspectives and fail to examine the full implications of this policy trajectory. Unfortunately, this lack of consideration is the norm in the literature on energy politics in BC. There are many accounts of how the electricity system in BC was radically restructured, but very few of them address the distinct experiences of Indigenous peoples in relation to these issues. They thus offer a limited foundation for building more just energy policies in the province going forward.

Reviewing the literature on energy privatization in BC, there are two general approaches to First Nations, and they are problematic in different ways. The first approach ignores First Nations almost entirely (Barlee, 2009; Norm Farrell, 2018; Norman Farrell, 2016; Jaccard, Melton, & Nyboer, 2011; Mair, 2009, 2016; Shaffer, 2013, 2016). There is little consideration of their involvement in BC's electricity system and hardly any mention of their interest in renewable energy projects. The second approach mentions First Nations in the context of

communities impacted by renewable energy developments (BC Government and Service Employees Union, 2017; Calvert, 2007, 2017). First Nations are primarily positioned as respondents and their interests are often conflated with settler communities. Having already outlined the scope and activities of Indigenous power producers in the first chapter, this chapter addresses the latter narrative, which assumes that First Nations are not meaningful participants in the renewable energy industry.

John Calvert is one of the few scholars to mention First Nations in his sustained critiques of the Liberal government's privatization agenda. His early work (2007, 2007a) concludes that First Nations are not positioned to benefit substantially from renewable energy developments. He argues that the provincial government and IPPs co-opted First Nations in order to secure a stable investment climate for the private power sector, soliciting their consent for very little in return. In Calvert's telling, First Nations have been duped into accepting sub-par outcomes and have not meaningfully benefited from their involvement in the sector. This story, in which First Nations are the victims of private power projects, is not a new one. Bargh (2010) notes, "given the marginalisation of Indigenous peoples from their resources and therefore energy production, much of the literature relating to Indigenous peoples and the energy sector portrays a bleak picture of Indigenous rights being trampled, environmental destruction and economic exploitation" (p.3). Calvert's work follows this tradition and attempts to address the very real threats that certain energy developments pose to Indigenous peoples. However, it is one thing to identify a pattern of injustice and another to assume the outcome of this struggle. Constructed without the input of Indigenous power producers, Calvert's privatization narrative denies First Nations agency in the events that occurred.

The aim of this chapter is therefore to introduce the perspectives of two Indigenous power producers, namely Kanaka Bar First Nation and Sts'ailes First Nation. By sharing their distinct approaches, I hope to demonstrate how they have adapted the IPP model to suit their own needs. This analysis is not meant to support the private power sector, nor deny the negative consequences of privatization. Rather, I wish to 1) complicate the conclusion that First Nations have not benefitted from the privatization of BC's electricity system, and 2) contribute to a more nuanced understanding of the relationship between Indigenous power producers and the private sector. The chapter is organized as follows: The first part reviews how Indigenous power producers have used renewable energy projects to their benefit by comparing the approaches of Kanaka Bar and Sts'ailes. The second part highlights commonalities in how Kanaka Bar and Sts'ailes have strategically navigated the private power sector.[31] As I explain in the discussion, their stories disrupt the traditional divide between private vs. public benefit and demonstrate the need for research, analysis, and policies built on a different, decolonial paradigm.

Part 1 - Leveraging the Benefits of Renewable Energy

Those opposed to privatization argue that private power projects have not significantly contributed to local economies. Calvert (2017) asserts, "once built, these projects provided an ongoing stream of revenue to their private owners but virtually no economic benefits to the affected communities" (para 7). His critiques focus on project ownership and employment. He argues that private power projects have failed to provide equity and long-term jobs for First Nations. Leaving aside the dubious wisdom of focusing on economic benefits to the exclusion of other benefits, this section delves into how Indigenous power producers have sought economic gains through renewable energy projects. It provides an introduction to the economic benefits of

[31] In this section, I use pseudonyms for all of the participants except for Chief Patrick Michell.

renewable energy projects as reported by respondents of the First Nations Clean Energy Survey, presents two different approaches to the industry, and then returns to the questions of equity and employment.

The business of renewable energy.

Private encroachment has both impeded and impelled Indigenous access to the renewable energy industry. Despite claiming the best lands for development, the industry has been surprisingly accessible to First Nations compared to other industries (Sayers, 2013). Unlike forestry, where the private sector grabbed the lion's share of the market without Indigenous consent, IPP ambitions were tempered by the duty to consult and accommodate First Nations. As a result, the private power sector and First Nations have had to work closely in developing energy projects. Such collaboration typically involves several types of agreements, but Impact Benefit Agreements (IBAs) are especially common. Indeed, the majority of operational renewable energy projects (45 out of 78) identified by survey respondents involved an IBA of some kind. Also known as participation or accommodation agreements, IBAs often include financial, employment, and environmental provisions (Sayers, 2015b). However, there are no provincial rules regarding the development of IBAs, so First Nations have had to work hard to ensure favourable terms.

When asked about the benefits of operational projects on their territory, survey respondents indicated that they are benefitting as follows: resource royalties, training and employment, equity, and other benefits. For projects in development, the reported benefits shift slightly. As Figure 2 indicates, respondents anticipate less in royalty revenue but more in training and employment benefits as well as increased equity and other benefits. These benefits are further explained along with a variety of other tools that are being used to secure benefits.

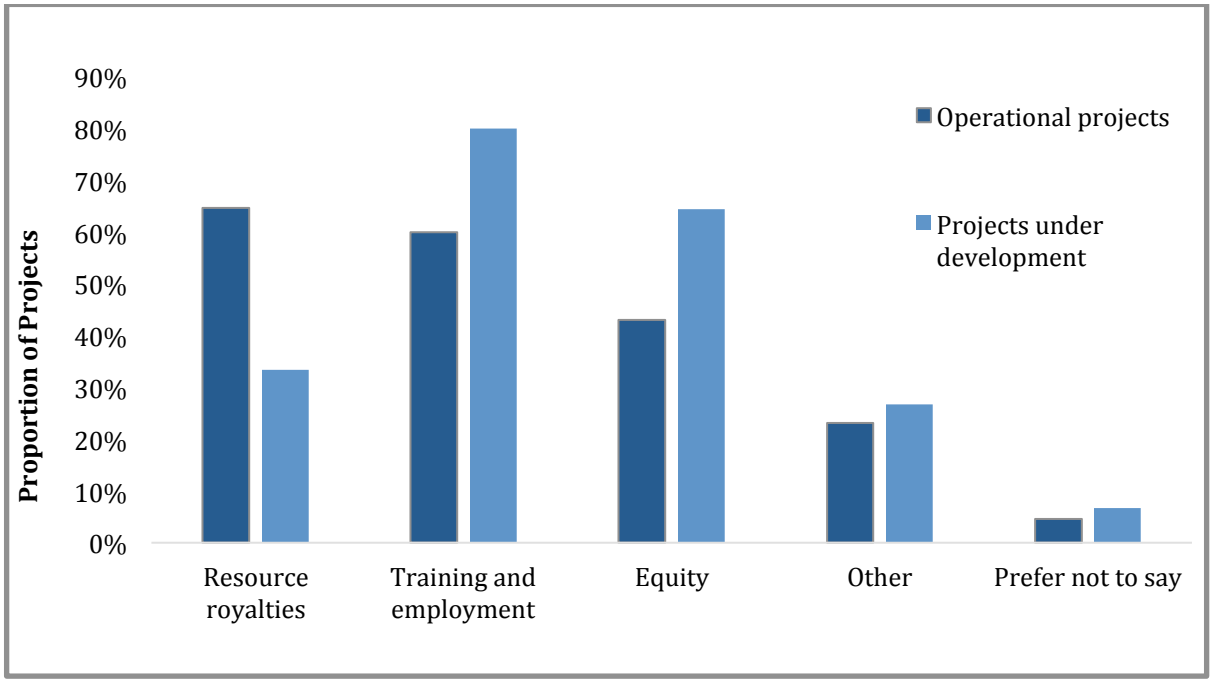

Figure 2. Benefits of operational projects vs. projects in development (Cook et al., 2017)

Resource Royalties are a percentage of a project's gross revenue or a percentage of the free cash flow, i.e. the revenue that remains after capital and operating expenses are deducted. It is difficult to report on the royalty amounts that First Nations receive through renewable energy projects because IBAs are typically confidential, but research participants say that the initial industry standard of 1-2% has increased. Many First Nations also seek project equity in addition to resource royalties, purchasing shares in a project in order to receive dividends. In some cases, First Nations are full or majority owners, and in other cases they are only partial owners. Many First Nations have negotiated full ownership after a certain number of years, once the capital expenses have been recuperated, usually after the initial EPA. First Nations may also negotiate capacity funding from business partners to carry out project work, potentially covering the costs of hiring staff, retaining independent legal counsel, and conducting various studies. Other common ways in which First Nations are reaping financial benefits from renewable energy projects are taxation and revenue sharing. First Nations can establish themselves as taxing authorities and collect tax on infrastructure and assets associated with renewable energy projects.

First Nations may also obtain financial returns on renewable energy projects through revenue-sharing agreements with the provincial government, acquiring a portion of the revenues the province derives from water rentals.

Beyond revenues, training and employment are often cited as important outcomes of renewable energy projects, with benefits flowing to both individual members of First Nations as well as the collective (Henderson, 2013). Employment opportunities occur at every phase of project development including feasibility, planning, construction, operations, and decommissioning. The number of jobs varies by project type and size but the majority of positions are in construction. Some positions require advance training and others provide training on the job. To ensure that positions are made available to their members, Indigenous power producers may stipulate certain employment targets, hiring preferences, and recruitment processes in their IBAs. They may also insist on direct awards for contracts so as to simultaneously integrate their other business ventures while employing their members in large numbers.

Distinct approaches to development.

There are clearly many possible ways for First Nations to secure benefits from the renewable energy sector. Indigenous power producers are constantly adapting the tools of the trade to meet their needs and developing unique approaches to the industry. Kanaka Bar and Sts'ailes offer two approaches for consideration. Kanaka Bar developed one run of river hydro project over the course of many decades (and is now developing a micro-hydro project), whereas Sts'ailes has been involved in the development of eight hydro projects in less than a decade. Their experiences reveal distinct approaches to the industry but a shared will to benefit from their lands and resources. The following section reviews their approaches in more detail, highlighting the economic benefits they have worked hard to achieve.

Kanaka Bar: reviving the local economy with a single project.

Kanaka Bar Indian Band is located between the towns of Lytton and Boston Bar in the Fraser Canyon. Once known as T'eqt''aqtn'mux (the crossing place people), they have inhabited the mountainous terrain since time immemorial. Kanaka Bar is part of the Nlaka'pamux Nation, sharing similar linguistic, cultural, legal, and spiritual traits with over a dozen other bands in the region, but they maintain jurisdiction over their territory. Though Kanaka Bar has only a small number of permanent residents, approximately 75 in the winter, and 120 in the summer, the community has become a significant presence in the region. Since launching a run of river project in 2014, the community has been vocal about the benefits of renewable energy and drawn considerable attention to their successes (Gilpin, 2018; Pollon, 2016; Suzuki, 2018a).

Kanaka Bar is best known for their 49.9 MW run of river project on Kwoiek Creek. The $180 million project produces approximately 215 GWh of electricity annually, enough to power around 22,000 homes. The hydro project diverts waters from the lower reaches of Kwoiek Creek, channelling the high-pressure flow through a penstock for more than 7 km before spinning several massive turbines. The resulting electricity is fed to a substation through a 70 km transmission line, where it is then distributed across the province by BC Hydro according to a 40-year electricity purchase agreement. Far more than a simple feat of engineering, the project has been a game changer for Kanaka Bar in its quest to disrupt the colonial status quo. Using revenue from the hydro project, Kanaka Bar has revitalized their community and strengthened their position as an Indigenous power producer. However, this journey has been long and unpredictable, beginning several decades ago.

Driven by the desire to reverse the adverse impacts of colonization, the community began investigating potential economic development projects 1978. The community was looking for a

way to return to a state of self-sufficiency. Specifically, they hoped to reduce dependency on the federal government, restore community pride and self-esteem, and develop a project that would benefit the entire community for generations to come. To achieve this vision, they set about developing a renewable energy project that would generate significant returns by selling electricity to the grid. They were not motivated by the revenues per set but by the desire for financial independence and employment opportunities. Kanaka Bar has achieved considerable success in both regards and experienced many other unanticipated benefits.[32]

The Kwoiek Creek hydro project is a new and notable source of own source revenue for Kanaka Bar, generating in excess of one million dollars annually. Kanaka Bar has leveraged 14 different revenue streams from the project, some during development and others ongoing. The short-term revenue streams included:

1) Capacity payments: During the development phase, Kanaka Bar received a monthly contribution from Innergex to spend as they saw fit;
2) Resource sales: The business partnership purchased sand, gravel and timber from Kanaka Bar, and
3) Construction payment: Once construction began, monthly capacity payments from Innergex ceased, and Kanaka Bar instead received a lump sum from the partnership.

The ongoing revenue streams include:

4) Land rental fees: Kanaka Bar collects a lease payment from the partnership for the land on which the powerhouse is situated;

[32] For a summary of these other, anticipated benefits, see Chief Michell's presentation on tangible versus intangible benefits (Michell, 2014).

5) Permit fees: Kanaka Bar charges permit fees for the land occupied by roads, the cable crane, and the transmission line;
6) Taxes: Kanaka Bar became a taxing authority in 1994. They receive over $270,000 annually in taxes related to the Kwoiek Creek project on reserve;
7) Sub-debt interest: Kanaka Bar contributed 3.5 million in sub-debt financing. As the project loan is repaid, they receive interest payments on the sub-debt;
8) Infrastructure cost savings: The partnership covers the cost of project access, maintaining the roads and bridges leading to the Kwoiek Creek project intake;
9) Corporate philanthropy: Innergex makes in-kind and financial contributions to regional events;
10) Training: Innergex invites Kanaka Bar members to participate in operational training opportunities;
11) Employment: The partnership occasionally hires Kanaka Bar members for project maintenance through the band's employment agency, KBES;
12) Royalties: Kanaka Bar receives a 2.5% royalty on the project's free cash flow[33] (project revenue minus capital and operating costs);
13) Profit: As an equity owner, Kanaka Bar receives dividends on their shares;
14) Revenue sharing: Kanaka Bar receives 20% of the water and land rents that the province collects on Kwoiek Creek.

Kanaka Bar has reinvested revenues from the Kwoiek Creek project into several other energy related projects from which they expect to see cost savings as well as revenues. Since 2016, they

[33] Kanaka Bar opted for a royalty on the project's free cash flow as opposed to its gross revenue because unlike gross revenue, it increases over time (after operational expenses are covered). This choice also saved them a considerable amount by lowering the interest rate applied to their loan.

have installed almost 18 kW worth of solar arrays to power community infrastructure. Two of these projects generate surplus electricity, which is sold to BC Hydro through the net-metering program. Kanaka Bar has also been working on a micro-hydro project through a 50/50 partnership with a private developer. The 500 kW Siwash Creek project is being considered for an EPA, one of the last five independent power projects that BC Hydro intends to pursue for some time (R. Shaw, 2018). Most recently, Kanaka Bar launched a demand side management project, through which members are learning about conservation and energy efficiency in their homes. These developments offer only a small glimpse into how Kanaka Bar has used the Kwoiek Creek hydro project to rapidly advance their knowledge of the renewable energy sector and strengthen their position as an Indigenous power producer. Similar beneficial outcomes are apparent in the area of employment.

Kanaka Bar has become one of the biggest employers in the Fraser Canyon. Nearly half of the employees on the Kwoiek Creek project were Indigenous and many of them local to the area. Among Kanaka Bar's members, eighteen found employment in various positions over the two year construction phase, and since then, many have found related employment elsewhere. The band was strategic about job creation, working with the construction contractor to provide the names and resumes of their members within 24 hours of any request. Since then, the band has continued to employ their members on a diversity of local projects catalyzed by the revenues from the hydro project. As a result, Kanaka Bar has been able to attract members who have either left the reserve or never lived on it. Beyond the benefits accrued to individual members through newly available jobs, the decades-long process of developing the hydro project has increased capacity among the community generally in matters of renewable energy as well as business, governance, and finances.

In short, Kanaka Bar has generated significant economic benefits from the Kwoiek Creek hydro project. The community may have taken over 30 years to develop it, but they have moved swiftly ever since. It is hard to overstate the transformative impact of their involvement in the renewable energy sector. In the last five years, Kanaka Bar has elected a new chief and council, introduced a new organizational structure, acquired six new fee simple land parcels, and created a community economic development plan (CEDP), to name but a few initiatives. Detailing the community's self-sufficiency goals, the CEDP outlines Kanaka Bar's path to a self-sufficient, sustainable and vibrant community. This document and the vision contained within are inseparable from the hydro project. By investing heavily in one project, Kanaka Bar has steadily built capacity and diversified their economy.

Sts'ailes: integrating renewable energy into an already diversified economy.

Sts'ailes, meaning Beating Heart, is an independent nation with nearly 1,000 members (Sts'ailes First Nation, 2010). Approximately 500 people live on the reserve, which is located in the Fraser Valley, 100 km from Vancouver. Despite relatively easy access to several urban centers, Sts'ailes is set apart in a scenic mountainous area. Their ecologically diverse territory draws thousands of bald eagles annually who come to feast on salmon in the Harrison River. The area is an internationally recognized stronghold for pacific salmon, with all seven species of salmon making use of the river, lake, tributaries, sloughs, and wetlands. This watershed, vitally important to the salmon and the people, is also host to many hydro projects.

Sts'ailes has gained a substantial foothold in the renewable energy industry in only a decade. There are eight projects on their territory in different phases of development: 5 in operation, 2 in construction, and 1 in planning. All of the projects, except for the last one, are run of river hydro and designed to sell power to the grid through electricity purchase agreements

with BC Hydro. The operational projects range in size, from roughly 5 MW to 40 MW, but most of the projects on Sts'ailes' territory are around 20 MW. All of these developments occurred within a relatively short amount of time, presenting a steep learning curve that Sts'ailes has managed well. Due to their previous business experience and the diversity of their economic activities, Sts'ailes has been relatively well positioned to take advantage of renewable energy opportunities.

The first few renewable energy projects on Sts'ailes' territory were unexpected developments introduced by outside developers. Since then, Sts'ailes has worked diligently to increase their involvement in the sector, obtaining better impact benefit agreements with every project. The Sts'ailes Development Corporation (SDC) oversees the nation's involvement in the renewable energy sector. Their mission is "to serve the sovereign interests of the Sts'ailes people through the creation, ownership and operation of profitable businesses including socio-economic enterprises that nurture and strengthen self-reliance" (Sts'ailes Development Corporation, 2010). The SDC has integrated renewable energy projects into their other entrepreneurial efforts. Building on their experience managing three forest licences and four fishing businesses, among other initiatives, the SDC has gradually increased the nation's capacity to bid on large contracts, purchase equity within the renewable energy sector, and invest in other economic development projects.

Initially, Sts'ailes benefitted very little from the renewable energy boom. After receiving only small royalties for the first two projects on territory, Stokke and Tipella, they sought better outcomes from the Sawki Creek Hydro project. Completed in 2015, Sts'ailes negotiated a 30% equity position as well as royalties. They also secured a position on the board and two contracts for land clearing and construction work. Around this same time, two other projects were being

developed on their territory: Tretheway Creek and Big Silver Creek. On the first, a 21.2 MW hydro project on Tretheway Creek, Sts'ailes negotiated a 40-year annual royalty payment as well as compensation for providing oversight during the construction phase. On the second, a 40.6 MW hydro project on Big Silver Creek, Sts'ailes again provided oversight during construction but increased their involvement considerably. They landed two site development contracts and a direct award to provide remote camp services. They then formed a joint venture with a camp services company, which provided revenue sharing as well as training and employment opportunities.

Not long after negotiating the Big Silver agreements, Sts'ailes involved themselves in two more run of river projects, Bremner and Trio, with a different developer. The pair of 25 MW projects is an excellent example of how Sts'ailes has increased their negotiation skills and financial capacity. Sts'ailes negotiated equity in lieu of royalty payments and recently purchased 3.2 million dollars in additional shares. Once completed, they will have a 10% stake in the partnership. They have also provided $5 million in financing towards the combined project cost of $206 million. To contribute these sums, Sts'ailes pursued an arduous accreditation process through the First Nations Finance Authority. Becoming accredited has allowed them to borrow large sums of money at lower interest rates, and they now using this increased borrowing capacity to invest in other initiatives beyond the renewable energy sector. Additionally, Sts'ailes has maintained their focus on obtaining contract work. They have already secured one contract for the Trio project and they anticipate more employment opportunities down the line as well as the continuation of their camp services venture.

As the latest annual report attests, "Sts'ailes has established itself as a significant participant in the clean energy economy through negotiation of various revenue sharing

opportunities," (Sts'ailes First Nation, 2016, p.127) but their journey is ongoing. They are now considering a substantial new renewable energy project for which they have already secured water rights and land use certificates. Their latest initiative, Tha'wel Power Corp LP, represents more risk and reward than all of their other projects combined. Sts'ailes has partnered with Innergex to develop a pumped storage project on Lookout Lake. Pumped storage brings water from a lower reservoir to a higher one and then releases the water to generate electricity during peak demand, taking advantage of price fluctuations to turn a profit. Sts'ailes recently signed a confidentiality agreement with an American utility company who is interested in purchasing power directly from the proposed 300 MW project. While it will be several years before Sts'ailes decides whether to proceed, the hydro project would generate unprecedented economic benefits in the form of revenues and employment.

Representatives from Sts'ailes have described their involvement in the renewable energy sector as a continuum. The nation has learned from each industry encounter and gradually secured better benefits. This incremental approached has served Sts'ailes well and now they are prepared to invest more deeply. The Tha'wel Hydro project is their biggest project yet and an innovative one that moves beyond run of river technology. In sum, Sts'ailes has worked on many projects in a short amount of time, quickly adapting to unexpected developments on their territory and applying hard-won lessons.

Employment, equity, and other benefits.

Calvert has been a vocal critic of private power projects for many reasons and chief among them is the supposed lack of economic benefits to First Nations. Kanaka Bar and Sts'ailes provide powerful counter examples in that they have derived considerable economic gains from

grid-connected renewable energy projects. Their stories cast doubt on Calvert's claim that private power projects provide neither long-term jobs, nor ownership opportunities for locals.

With regards to employment, both Kanaka Bar and Sts'ailes have used the hydro projects on their territories to meet their employment goals. True, these projects do not offer very many long-term positions once they are completed, but Calvert has overlooked other important employment outcomes. First, the hydro projects have contributed to individual and community capacity at Kanaka Bar and Sts'ailes. In both cases, interviewees noted that employment opportunities throughout project development have promoted career and business growth. Second, the projects have generated revenue, which Kanaka Bar and Sts'ailes have reinvested into training and employment opportunities. Kanaka Bar's employment agency, KBES, now uses revenues from the Kwoiek Creek hydro project to employ 30 people, on average, per month. Sts'ailes directs revenues from the hydro projects on their territory into a legacy fund that supports workforce training and economic diversification. In other words, both First Nations have found ways to extend the benefits of hydro developments beyond employment on the hydro projects themselves.

With regards to ownership, both Kanaka Bar and Sts'ailes have managed to secure equity in the projects in their territory. As mentioned, Kanaka Bar owns half of the Kwoiek Creek hydro project and will own the project outright 40 years from the commercial date of operation. They will own half of the Siwash Creek Project as well. Sts'ailes has 30% equity in the Sawki Creek hydro project, and will have 10% equity in both the Trio and Bremner hydro projects once completed. They also expect to own half of their new pumped-storage project, whose projected capacity is double the size of all the other projects combined. This information, while anecdotal, nonetheless suggests shifting ownership patterns. Kanaka Bar and Sts'ailes, like others, have

begun their involvement in the renewable energy sector as partial owners but with experience, have sought equity in more projects, greater amounts of equity, and full equity over time. Data from the First Nations Clean Energy Survey lends weight to this observation. Survey respondents indicated that they expected equity increases in nearly 25% of operational projects. The survey also revealed a trend towards greater equity in renewable energy projects with respondents saying that they anticipated equity in over 60% of projects under development versus only 40% of operational projects.

While ownership and employment opportunities are very significant to Kanaka Bar and Sts'ailes, there are many other benefits to renewable energy projects that are worth examining. By focusing exclusively on economic development, Calvert (2007), like many others, overlooks some of the most important ways in which First Nations are using renewable energy projects to their advantage. Broadly speaking, Kanaka Bar and Sts'ailes are using run of river developments to enhance their relationships to the land, restoring connections that have been disrupted by colonization. For Kanaka Bar, developing the Kwoiek Creek hydro project has been an invaluable opportunity to learn more about their territory. Chief Michell explains:

> If you do this right, one of the things you get is information… archaeological reports, fishing reports, weather reports, environment reports. We help gather it, we help come out, but professionals put it together. Report is still there. Transferable. So the greatest asset we received from the development phase has been the information.

The information to which Chief Michell refers is not only helpful to Kanaka Bar's other renewable energy plans but to their political autonomy. Armed with archaeological information supplied by private developers, Kanaka Bar is better prepared to defend their territory from colonial encroachment through a potential title claim.

For Sts'ailes, the value of renewable energy projects is not just in securing employment but in connecting such opportunities to existing skills, including ones that relate back to

traditional ways of being on the land. An impressive example of this alignment is the work that Sts'ailes has undertaken to enhance fish habitat on their territory in conjunction with renewable energy projects. With funding from their business partners to mitigate the impacts of run of river construction, Sts'ailes has restored four sloughs along the Harrison River. These sloughs provide salmon with critical habitat and shortly after completing this work, chum and coho salmon were spawning there. For their efforts, Sts'ailes was recently awarded the Environmental Stewardship and Community Improvement Award by Clean Energy BC. Most importantly, taking care of the salmon is linked to the very survival of Sts'ailes as a people. SC describes this relationship as follows:

> I just met with the CEO of Innergex, had dinner with him, and we talked about the benefits of the program and he said, "well we give you guys this much money for a legacy fund." And I said, "well, that's good". He said, "you get this many jobs." And I said, "well, that's good too." And he said, "you're gonna have ongoing royalties for this amount of time." And I said, "that's good too but probably the biggest benefit, the most meaningful benefit to my nation and its members is the salmon habitat." And so they didn't even think of it as that meaningful but to me that's very very meaningful. Because our belief is that we were supposed to look after all things so that seven generations coming behind us have the same thing: clean air, clean water, minimal impacts to the traditional territory and their environments and the salmon as well as our songs, our ceremonies, our language, our culture. We're supposed to look after all of that. And if my DNA says I'm this much salmon, our great great great grandchildren have the right to be that much salmon too. My grandfather used to always say, "you got no more fish today." And that was in the seventies and early eighties when there was still some pretty good runs coming in. Now today, look where we are: we only have two openings for food, social, ceremonial fishing this year so that salmon habitat work is really really important for the future of our people and so I don't think the company saw it that way but I told them that's probably the most beneficial thing.

This quote reveals the extent to which Sts'ailes values the health of their salmon kin, a crucial part of their identity, over other benefits associated with the renewable energy projects. It also provides insight into the nation's relationship with the private power industry, a topic to which I turn next.

Part 2 – Shaping the Private Power Sector

The previous section explored different ways in which Indigenous power producers are using renewable energy projects to their benefit. Perhaps Calvert (2007) can be excused for overlooking these benefits because many of them have only recently materialized. However, he based his predictions on assumptions about First Nation capacity, which must now be scrutinized. Calvert warns that IPPs are shifting the risks of renewable energy development to First Nations because they are disproportionately equipped with the knowledge of "commercial contract law and the various contractual requirements needed to maximize the interests of their investors" (2017, p.223). Without explicitly saying so, he assumes that First Nations lack the capacity to negotiate and enforce IBAs and makes no mention of them as proponents. While it is true that skilful negotiation is required to maximize the benefits of renewable energy projects and that First Nations experience capacity deficits due to the impacts of colonization, Calvert prematurely concludes that Indigenous power producers are unable to meaningfully participate in the private power sector. This harmful argument is pervasive and goes much deeper than Calvert's work, to the very core of colonialism. As Bargh (2010) notes:

> Colonial perceptions of Indigenous peoples as inferior and less civilised have supported colonial desires for, and acquisition of, Indigenous peoples' lands and resources. The argument that Indigenous peoples did not have the capacity to exploit the resources involved was often put forward to support the confiscations of Indigenous peoples' land and resources or the minimisation of the role that Indigenous peoples were to play in the exploitation of resources and receipt of revenues (p. 3).

To counter this narrative, accounts from Indigenous power producers such as Kanaka Bar and Sts'ailes are needed. Both have strategically navigated the renewable energy industry and developed many insights into partnerships with private developers. The following section presents a few of these insights, revealing savvy industry players who have developed strategies for dealing with the private power sector.

Besieged but not dissuaded: entering the renewable energy industry.

Almost immediately after BC Hydro opened the grid to IPPs in 1988, Kanaka Bar was made aware that proponents had purchased water licences on their territory. As Chief Michell explains, the news prompted Kanaka Bar to consider the renewable energy industry for the first time:

> 1988 was when BC Hydro, our monopoly, our only purchaser and competitor opened up the grid. That's where it changed. We now saw an opportunity to start using the land and the resources to start creating a new economy for the community. But the issue was, by the time we applied for a water licence in 1990, we were now the fourth in line… But at least we now had an opportunity.

Water licences are administered on a first come, first served basis, known as the First in Time, First in Right system, in which senior water licence holders have priority over junior water licence holders (Gage, 2013). Kanaka Bar was able to amass $10,000 to purchase a water licence for Kwoiek Creek (a large sum for them at the time) but they needed to surpass the other licence holders in order to develop a project. They considered buying out the senior licence holders but could not afford the huge sums they were demanding, which in some cases were half a million dollars. Kanaka Bar's members were incensed that outsiders planned to profit off the land they had stewarded since time immemorial. The band started a letter writing campaign to the provincial government stating that speculators were holding their resources hostage. Wielding the province's legislation, Kanaka Bar argued that the other licences did not amount to "beneficial use." The province then began notifying the license holders that they had a year to take action or their licences would be struck. It took ten years, but through sustained pressure, Kanaka Bar was able to force the other licence holders to withdraw their applications. Their entry into the renewable energy industry is hardly enviable and yet as Chief Michelle explains, Kanaka Bar was in a better position than most:

> Who owns the water licences and the licences of occupation? He's in the driver's seat. He has the assets…. Kanaka Bar is unique in the sense that we had the assets at the beginning. Most people, they don't have the land, they don't have the water licence. They don't have the baseline data and as a result they try to secure a strong impact benefit agreement but they're not in any bargaining position to do so.

This predicament resembles Sts'ailes First Nation's introduction to the renewable energy industry. As the private power industry took off, Sts'ailes found themselves at the centre of the small hydro boom with very little access to water licences. The area's steep rivers and proximity to transmission lines are ideal for run of river developments and attracted a steady stream of private developers. Sts'ailes experienced the worst of the industry before they were able to gain more control over the projects on their territory.

As mentioned, the first few projects on Sts'ailes' territory were unexpected developments and characteristic of widespread encroachment onto Indigenous lands by private companies during that time. Initially, they were approached by company called Cloudworks Energy who expressed interest in developing a run of river project in the northern part of Sts'ailes' territory, which is subject to an overlap agreement with a neighbouring First Nation. The company told them that the project would benefit the other First Nation, who relied on costly diesel generators for electricity. Sts'ailes gave their blessing but later realized that they were not fully informed of the project's scope and purpose. SA recounts the awareness that followed:

> We started looking into it a little bit more and reading these documents ourselves as they were coming through, realizing that they were going to be producing way more power than they needed and that this was really a business, a multimillion dollar business. And so we said hang on here, you know, we have our policy here, on consultation, and accommodation, etc. And so we brought them back but by that time, they had already signed an agreement… and they started on another project too … and from that, we received benefits.

The two hydro projects, Stokke and Tipella, are now owned and operated by Innergex Renewable Energy Inc. They are fair sized projects (22 MW and 18 MW respectively) but

Sts'ailes receives only small annual royalties from them. SA views the situation as a difficult but valuable learning experience:

> I like to refer to our evolution in this energy sector as a continuum because that was the beginning essentially. The projects were both well underway when we became involved and there were other projects that [they] wanted to develop in our territory. So we cut our teeth on those two first projects and then negotiated a better agreement for the other projects.

When the opportunity to develop additional projects arose, Sts'ailes was better prepared and fought for more advantageous outcomes.

Had Sts'ailes and Kanaka Bar decided not to fight for the right to utilize their lands and resources, their involvement in the renewable energy industry would indeed be tainted by initial negative encounters. Yet both First Nations chose to pursue renewable energy projects and maximize the benefits of these projects to the best of their abilities.

Sorting out good partners from bad.

Both Kanaka Bar and Sts'ailes have actively sought out business partners and rejected those who do not respect their values. Kanaka Bar worked with one partner for several years before switching partners. They did not feel as though they were on equal footing with their first partner even though they had the same amount of equity. In 2003, unhappy with the way the Kwoiek Creek project was developing, they invited Innergex to the table and negotiated a new development agreement. Reflecting on the experience, Chief Michell emphasizes the importance of taking an active role:

> Are you a partner, are you a developer, are you a respondent? It completely changes the dynamic, whether it's wind, biomass, geothermal, solar, or run of the river. Are you a partner or are you asked to sit back, shut up, and enjoy the ride? And just take the money and keep your beak shut and look good for the pictures? That's critical because it changes the whole relationship. It changes the whole project.

By changing partners, Kanaka Bar repositioned themselves as developers and equal partners rather than respondents. They were well aware of what they wanted to achieve and sought out a partner who could help them meet their objectives.

Sts'ailes is equally thoughtful about the companies they allow on their territory. As SB explains, they have met with many IPPs over the years and witnessed the worst of the industry:

> There are some proponents that we've met with to look at their initial plans for a project that they had water licences on. We met with them to explain that this is one of our ancient village sites and these are the family members that come from there, these are the cultural activities that we've done, this is what the land means to us and they were very disrespectful. And we told them, you know for us to even meet with you and discuss these projects with you, that there's some capacity funding that needs to flow our way and they were very rude and disrespectful about it. So that didn't take very long for those negotiations to fall apart because they had no respect for the culture and for the things that we know are important to us.

Sts'ailes does not tolerate disrespectful proponents and has gone so far as to expel them from the industry. SA describes advocating against one company in particular:

> There was a company that had half or dozen or so water licences… and they're now defunct but they didn't like us. They didn't like anybody. They were "move ahead and screw you guys." That's the way that they were, to the point where we contacted BC Hydro and said, "over our dead body will you give these guys an EPA." And there were racist, belligerent people…. so those projects never did get developed.

Sts'ailes has ample experience with IPPs and is capable of discerning who operates with integrity or not. They only work with proponents they deem worthy and do not hesitate to take action against the others.

Teaching the private power sector about respect.

Interviewees from both Sts'ailes and Kanaka Bar describe themselves as stewards of the land, saying that this role informs their approach to the renewable energy industry. Sts'ailes is accustomed to industry referrals and has a well-established system through which they screen potential developers. Part of their screening process involves teaching outsiders about the

territory and gauging their understanding. SC details the education that goes into each interaction:

> Whenever we talk to government or industry, we share with them … the history about how we've existed on the land, how we've settled land boundaries with other nations around us, how we defended our territories to get access to resources, and then eventually how we developed agreements amongst each other as well to get along on the land. Once we settled our boundaries, any other nations that came through would have to pay tributes to the people of the land, they couldn't just harvest or gather unless there was permission and an understanding, so that's what we also use when industry comes in.

SB further explains the understanding that Sts'ailes has attempted to cultivate among the private power industry:

> It's that respect and the relationship and their understanding of what the territory and the land means to us. Because the most important thing to us about anything that happens in our territory is that our strong belief that we are the land. We don't actually own the land, that we can sell or anything like that. We are the land. So whatever we do to the land is what we do to ourselves.

Kanaka Bar has also had to bear the burden of teaching outsiders about respectful engagement. From the outset of their involvement in the renewable energy industry, they have taken pains to communicate their relationship to land. KB recalls the former Chief discussing the community's approach to partnership:

> One of the things that I kept hearing him talking about was that he wanted to make sure that no matter who was going to help Kanaka build this project, he wanted to make sure that there was respect. And he wanted to make sure that if you say you're going to do this, then do it but always make sure that you thought of the land, whether you're going to damage the land or not. And if you are, be up front with it and how much damage. Always keep the people updated. He always wanted to make sure that the people that came here were going to be respectful, not only of the land but of the people themselves.

Kanaka Bar has since put these principles into writing. In a presentation to representatives of the renewable energy industry, Chief Michell (2016) writes:

> There is underlying knowledge within our membership that "What we do to the land and resources (or allow others to do), we do to ourselves." Therefore, our community decision to participate in Economic Development has never been unfettered. There are

> other community principles in play and we want people to know that they exist and they are applicable during a projects development, construction, and operations phase.

In proceeding, community directions were and remain:

1) Do it right.
2) Take only what you need.
3) If you take it in, take it out.
4) Return the remainder lands back to its natural state (Michell, 2016, p.1)

Although the specifics vary, both Kanaka Bar and Sts'ailes have made a point of communicating their close relationships to land. Unfortunately, many developers still struggle to understand the nature of these relationships, forcing both First Nations to be vigilant in their business dealings.

Holding one's own and holding others accountable.

Having resisted colonial incursions for over a century, both Kanaka Bar and Sts'ailes are accustomed to outside interest in their territories and cautious about potential partners. This caution is reflected in their comments about negotiating agreements and managing partnerships with private developers. Chief Michell describes how Kanaka Bar approached negotiations with Innergex:

> We were talking about a project that was capable of generating 500 million dollars worth of gross revenue over a period of 40 years. The types of discussions that had to go on meant that we needed lawyers to help with the agreements and financial advisors to make sure that the project was financially viable and two, that because it was equal, what Innergex got, Kanaka Bar got. Because as much as you love your partners, don't. The lawyers are there to make sure that we're equal, right….so it's risk and reward, we share the risks the same way.

In order to strike a fair deal and avoid taking on too much financial risk, Kanaka Bar had to hire professionals. They did not have sufficient funds at the time so Innergex provided capacity funding for independent legal and financial advice. Reflecting back on the partnership as a

whole, Chief Michell explains that while Kanaka Bar values their partner, they still feel the need to remain vigilant:

> The relationship has been positive in my opinion. One of the challenges though is that Innergex's development and construction team has moved on to bigger and better things. A lot of the new partners, the new people that come in have forgotten the terms of the agreement. I'll use a simple example. Any expenditure, lump sum or cumulative over a period of a year over $50,000 requires my expressed consent. I get a little pissed if there's something going on that doesn't have my consent. The problem is new staff have taken over and the agreements themselves are close to 500 pages….Innergex is experiencing human resource turnover.

Kanaka Bar keeps a close eye on private developers and does not take anything for granted, even in the context of good partnerships. Likewise, interviewees from Sts'ailes asserted that it was important to remember what motivates private developers. SC describes their approach during negotiations:

> You can become, I think, good partners but you always have to remember in negotiations with companies that they get a lot of their direction from that margin of profit and that gets dictated by somebody else. And they're always going to look for that margin and so they're controlled by what they can make. Lots of times, the companies are going to want to wine and dine you and make you feel good. And you think you're doing really well so you develop a friend and that friendship interferes with good decisions… So sometimes you've got to put that aside and negotiate.

While Sts'ailes understands the mindset of private developers, it is not always easy to influence well-established business practices. SA describes the challenge as follows:

> They roll things along in their own way and they have so many different layers. And they've never worked with you before and they have shareholders to report to … So they're used to doing things a certain way and for us to come along, we disrupt all of that. We're a fly in the soup, you know, because we're not tried and true. So sometimes they just want to offer you crumbs.

Sts'ailes has had to prove their capacity repeatedly to secure the contracts they deserve and in some cases, they have had to follow up with developers to enforce the terms of their IBA. SB describes how successful negotiations can result in failed commitments:

> With one of the projects, we weren't getting the economic opportunities…that we had agreed to….so the development corporation wasn't getting the results of that agreement. So they weren't acting on good faith, the proponent. So now they've agreed to give us a $250,000 amenity agreement so that we can use it for projects that we prioritize as Chief and Council.

Sts'ailes plans to use the funds to build docks at their main beach to facilitate travel to one of their cemeteries. The project is important to the community because it will increase accessibility for elders who are otherwise unable to travel by boat. By holding their partner to account, Sts'ailes has managed to transform the transgression into a benefit.

A curious mutualism.

Considering the perspectives of Kanaka Bar and Sts'ailes together provides much-needed insight into how Indigenous power producers relate to the private power sector. Their experiences demonstrate far more agency on the part of First Nations than previously suggested by scholars such as Calvert (2007). To be fair, Calvert raises legitimate concerns around the capacity required to address private encroachment onto Indigenous lands. However, his analysis does not take into account how quickly First Nations have learned to manoeuvre these issues. They have actively sought out partnerships and rejected bad proponents. They have demanded that the private power sector learn about their territories and respect their role as stewards of their lands. They have proved themselves careful negotiators and they have held the private power sector to account.

Reflecting on Sts'ailes involvement in the industry, SA touches upon several important themes:

> I think probably the major challenges were negotiating agreements that looking back five years, that was a pretty decent agreement, or we could have done better. That hindsight thing is always interesting. The challenge was to have people believe in us, in our capacity to do things and go with us. We were successful in some regards and not in others but we will be. I have that confidence.

> We've come a long way. We had to work really hard to get where we've gotten and we're still there on that continuum. We're not jumping off the wagon, we're staying on it and we're pushing. We're more engaged than ever and I must say that we have a good partner today in providing us with the capacity to move forward. It costs money to hire people to travel, to lobby, to attend meetings, to engage, and they're giving us some good support and we didn't have that before up until a couple of years ago.

Over time and with much effort, Kanaka Bar and Sts'ailes have become knowledgeable industry players. They have fought hard to benefit from the renewable energy projects happening on their territories and in many instances, turned private interests into business opportunities for their communities. Recognizing the private power industry as yet another form of capitalist-colonial expansion, they have adapted the IPP model but continue to work closely with the private power sector. The private power sector has also matured and some developers have demonstrated the ability to be good partners to First Nations. What has emerged is a curious mutualism in which both Indigenous power producers and private power producers rely on each other. Many First Nations still require the involvement of the private power sector to complete renewable energy projects. In addition to capacity funding, as SA mentions above, most Indigenous power producers call upon outside expertise during various development phases. Likewise, the private power sector is reliant on First Nations now more than ever as evinced by BC Hydro's recent decision to limit recent EPA announcements to projects with Indigenous involvement (R. Shaw, 2018).

Discussion

I introduced this chapter by echoing Bargh's (2010) observation, that there are too few academic accounts of First Nations at the forefront of energy production. Those commenting on the transition to distributed, renewable energy projects in BC have taken one of two approaches to First Nations: they have either ignored them entirely or treated them as respondents, not

proponents of such projects. The second approach, espoused by many but most clearly articulated by Calvert (2007), assumes that First Nations have not meaningfully benefited from distributed renewable energy projects because they have not had the capacity to navigate the industry. I sought to counter this narrative by demonstrating how Kanaka Bar and Sts'ailes have leveraged renewable energy projects to their benefit and skilfully managed their relationships to the private power sector. In doing so, I have attempted to frame them not just as First Nations with power projects on their territory but as Indigenous power producers. Applying the label 'Indigenous power producer' is not simply a linguistic exercise but a conceptual one that disrupts the prevailing scholarly debate about the privatization of BC's electricity system.

Reflecting on his critique of privatization ten years later, Calvert (2017) writes:

> A final concern about the government's private power agenda is that it shifted the politics of electricity in BC because the government invited a number of new corporations into BC's energy policy arena. Future decision making must take into account the interests of a swath of new investors whose objective is to maximize their financial returns, and who have significant resources and political clout – courtesy of the generous public contracts they received – to pursue their interests at ratepayer's expense. Many of these investors are not from BC or Canada and they now have a seat at the table determining how our electricity system will be managed.

Calvert astutely surmises that energy politics in BC have changed due to the appearance of new actors. However, he overlooks the emergence of Indigenous power producers among them and thus fails to consider the implications of their involvement. First Nations are not newcomers, having practiced sustainable resource use on their lands since time immemorial, but their position as Indigenous power producers is new and unique within the electricity system. They are neither (exclusively) impacted communities who have had to fend off outside developers, nor conventional IPPs who seek to maximize financial profits. To be an Indigenous power producer, then, is to create new meaning and carve out discursive space. Many First Nations are still defining for themselves what it means to harness renewable energy and sell this power back to

the grid. Given the range of motivations and approaches, these interpretations are likely to vary widely. The experiences of Kanaka Bar and Sts'ailes, however, suggest some notable commonalities. One way to think of how they have approached the renewable energy industry is through the lens of community-based enterprise.

Outlining a theory of community-based enterprises (CBEs), Peredo & Chrisman (2006) write:

> CBEs are built on the skills and resources of the community. They have multiple social and economic goals, the former often taking precedence over the latter. Governance structures tend to be collective and management structures democratic. All of this is in keeping with the concept of the community as the entrepreneur and the enterprise (p. 321).

This concept is particularly useful for understanding how Indigenous power producers are different from both IPPs and respondents, who are commonly settler governments of rural municipalities. First, Kanaka Bar and Sts'ailes are engaged in the private power market but their aims are fundamentally different than those of IPPs. Rather than maximizing profit, they generate only as much electricity as needed and reinvest the revenues from their hydro projects into other initiatives. [34] Likewise, in relation to CBEs, Peredo and Chrisman (2006) note that:

> profit making need not be, and typically will not be, the exclusive or even the primary purpose of the enterprise. Although some return is necessary to make the operational sustainable, that return may be seen as strictly instrumental in achieving some other community purpose(s) (p.316).

In terms of profit, Indigenous power producers are more like CBEs than IPPs, and when it comes to community purpose(s), they are trying to accomplish far more than respondents. Both Kanaka Bar and Sts'ailes view their involvement in the renewable energy sector as an extension of their traditional practices and in accordance with their right to live off their lands. They are not so

[34] Kanaka Bar could have built an 80 MW run-of-river hydro project on Kwoiek Creek but instead built a 49.9 MW project. Although there have been accusations levelled at the renewable energy industry for avoiding more rigorous environmental assessments by building below 50 MW, Kanaka Bar has actually gone through the environmental assessment process twice.

much exploiting resources or responding to resource exploitation as they are exercising their responsibilities to the human and non-human communities of which they are a part. By harnessing renewable energy, they are reinforcing their role as stewards of the land and reclaiming these relations from colonial grasp.

Applying the concept of CBEs to Kanaka Bar and Sts'ailes' renewable energy projects suggests that the activities of Indigenous power producers do not fit squarely within private or public interests. As such, they disrupt the usual energy policy debates in BC, which have largely focused on the role of the state in resource development. This is particularly evident when examining Calvert's (2007) recommendations regarding First Nation involvement in renewable energy developments.

Calvert (2007) portrays First Nations as hapless victims of the private power sector rather than active proponents of the renewable energy industry. This conceptualization has influenced a particular set of policy recommendations that reinforce the colonial status quo. One of these recommendations is that BC Hydro develop distributed renewable energy projects with Indigenous input:

> Public control of the assets of power projects would ensure that First Nations could play an ongoing role in monitoring power projects to ensure they were operated in a manner that maintained fish stocks and ensured that community priorities where respected.

This suggestion attempts to confer agency on First Nations by recognizing their connection to their lands but it is flawed in a number of respects. Not only do many First Nations justifiably begrudge BC Hydro for the institution's destructive legacy in their communities (making such partnerships unappealing), but the majority of First Nations also expect much more from renewable energy developments. Indigenous power producers like Kanaka Bar and Sts'ailes are not throwing themselves into the industry so that they can better monitor the activities of BC

Hydro or private developers. Instead, they are using renewable energy projects to enact particular visions of self-determination. The complex nature of these undertakings begs the question: what would supportive renewable energy procurement programs look like?

Clearly, the province requires a more nuanced policy approach towards Indigenous power producers, one that recognizes both their agency as well as their relationship with the private power industry. Policies rooted in notions of "public interest" do not necessarily serve Indigenous interests, nor do policies that give free reign to the private sector. As the provincial government figures out next steps with regards to Indigenous power procurement, they would do well to consider the experiences of First Nations like Kanaka Bar and Sts'ailes. At a minimum, they need to engage First Nations in conversations about how they want to be involved in the industry, not simply solicit their input from the sidelines. Beyond that, there is real an opportunity to learn from the leadership of Indigenous power producers and use their innovations to guide future energy decisions.

Chapter 5: Kanaka Bar Case Study

> My greatest issue is that nobody wants to look at anything other than money and jobs. Well guess what, the hydro project is generating money and it's generating jobs but nobody seems to want to talk about what I will call social return on investment. So in the seventies, we saw a terrible future ahead of us: alcoholism, depression, suicide, addictions, prostitution… Today, we've got twenty one percent of my population who have graduated from high school over the last two years. We have had no suicide attempts within almost anybody's living memory…. Six years after we started this project, something changed. It was called hope. It was called opportunity, the possibility of a new future.
>
> - Chief Patrick Michell

Indigenous renewable energy projects vary widely and little is known about how these projects are impacting communities. The last chapter reviewed how Kanaka Bar and Sts'ailes have approached the business of renewable energy projects, arguing that these two First Nations have worked hard to shape the industry to suit their needs. While it is important to discuss the economic benefits of renewable energy projects to counter the perception that First Nations have been uniformly victimized by the private power industry, money and jobs are only one part of a larger story. The purpose of this chapter is therefore to discuss the significance of Indigenous renewable energy projects beyond economic development by taking an in-depth look at Kanaka Bar's experience developing the Kwoiek Creek hydro project. The following case study aims to explore what renewable energy has meant to Kanaka Bar in terms of wider social and political changes.[35] In this exploration, I consider some outcomes of their involvement in order to better understand the transformative potential of renewable energy projects. In the literature on Indigenous renewable energy projects, scholars have variously described the potential for

[35] Officially, Kanaka Bar is known as the Kanaka Bar Indian Band. For the purposes of this case study, I only use the word 'band' to refer to Kanaka Bar's administration. To refer to the collective, I adopt their use of 'community' rather than 'nation' because they only use nation in reference to the Nlaka'pamux Nation.

independence, autonomy, sovereignty, self-sufficiency, and self-determination but few have discussed the outcomes of such projects (Jaffar, 2015; Lowan-Trudeau, 2017; Rezaei & Dowlatabadi, 2015; Rodman, 2013). By visiting a community with an operational project, I hope to broaden the discussion about the transformative significance of Indigenous renewable energy projects to include impacts as well as aspirations.

The information in this case study is based on semi-structured interviews with 14 people, conducted during the summer of 2016. I interviewed members of Kanaka Bar as well as employees who are not members of Kanaka Bar. In this chapter, I only quote from Kanaka Bar members (8 participants in total) so as to emphasize the perspectives of those who formally belong to the community. I use pseudonyms for all of the participants (KA, KB, KC, KD, KE, KF, and KG) except for Chief Patrick Michell. With his permission, I have attributed these quotes in order to be transparent about the large role that he has played in both developing the Kwoiek Creek project and telling this story. Many Indigenous renewable energy projects require a champion to succeed and Chief Michell has played this role at Kanaka Bar for a long time.

Like Bargh (2010), I believe that, "Indigenous peoples have their own priorities and are best placed to create their own categories for self reflection"(p.20). Not wanting to impose an external framework on Kanaka Bar's activities, I based my analysis on the question, "Did you achieve what you set out to do?"[36] To explore this question, I inquired about the community's original motivations and then compared these visions with what happened. This approach posed some interesting methodological challenges that I would like to explore briefly. First, I aimed to include diversity of opinions in my analysis because, to my knowledge, there are no other scholarly case studies about Indigenous renewable energy projects in Canada that focus on

[36] Later, I was pleased to see the question "What defines 'success' of a northern energy project from the community perspective?" (p.122) as one of Keyte's (2015) suggested questions for future research. To my knowledge, no other scholars have taken this approach.

different visions and experiences within a community. It was somewhat difficult, however, to recruit participants who could remember why Kanaka Bar initiated the hydro project so many decades ago. Therefore, the first part of this case study relies heavily on a small number of voices and then later considers a broader range of perspectives. As a result, the heterogeneity of views on the Kwoiek Creek hydro project becomes more apparent as the case study progresses. Secondly, given the length of time it took Kanaka Bar to develop their hydro project, it did not seem wise to analyze the community's experience in terms of before and after the project. It was evident that the project became real for participants at different moments in time, e.g. the beginning of construction, the end of construction, commissioning. Rather than focus on before and after, I summarize the community's motivations, describe how these motivations changed over time, and review what happened after the project. Thus, the motivations, expectations, and outcomes to which I refer are not rigid categories or distinct concepts. This loose organization acknowledges the shifting nature of participant perceptions and is meant to leave room for other interpretations.

The case study is structured as follows: Part 1 describes the adverse impacts of colonization and identifies three primary motivations for the hydro project that emerged from this struggle; Part 2 describes new expectations that formed during the project's development; Part 3 explores key outcomes five years after the project's completion. The case study concludes with a discussion about what the project means to Kanaka Bar beyond economic development.

Part 1 - Motivations

This case study begins by describing some of the historical and ongoing impacts of colonization on Kanaka Bar to illustrate the conditions that led them to reassert their self-determination through renewable energy. Like other Indigenous peoples in British Columbia,

the Nlaka'pamux Nation, to which Kanaka Bar belongs, has endured the destructive effects of colonization for over 150 years. Given that the harms caused by successive colonial governments are too numerous and egregious to name in a single case study, it is best to start with the words of Kanaka Bar members themselves. Some of the key impacts described here are from Chief Patrick Michell's document, "*Memory, Loss, and Sorrow*…."[37]

The adverse effects of colonization.

When Europeans first arrived in Nlaka'pamux territory around the turn of the 17th century, they largely respected Nlaka'pamux protocols around land use and occupation. This relatively peaceful co-existence came to an end, however, when over 30,000 people invaded the territory looking for gold. Chief Michell (2010) recounts the catastrophic impacts of the 1858 gold rush:

> A new class of mixed people from around the world began arriving in the Fraser Canyon bringing with them values and a world view hereto unknown and arguably incomprehensible to the Nlaka'pmux. Values like competition, intensive exploitation of lands and resources for short term gain, and an attitude of superiority were the new principles brought to the land. As the miners moved up into the Fraser Canyon, there was no regard for Nlaka'pmux law, land, or people and the miners simply took, took, and took (p.3).

These pressures led to a brief series of skirmishes between mostly American gold miners and the Nlaka'pamux, known as the "Fraser River War" (Lutz, 2008). According to Marshall (2000), the war marked the formal inauguration of colonialism as well as Canada's expansion into this area of the world. Chief Michell notes that the Nlaka'pamux began to suffer in earnest as the colonial government of the day disregarded the business of treaty making. The government simultaneously gave away generous amounts of Nlaka'pamux lands to miners and others while

[37] The ellipsis in this title is intentional and according to Chief Michell suggests the making of a new chapter as Kanaka Bar continues to shape their present and future.

forbidding Nlaka'pamux ownership. This period brought about permanent losses to Nlaka'pamux lands and lives from which they have never fully recovered.

Shortly thereafter, the province of British Columbia joined Canada and transferred its political responsibilities towards the so-called "Indians" to the federal government. In 1876, the government of Canada passed the Indian Act, which had devastating effects on the Nlaka'pamux as well as Indigenous peoples across the country. Chief Michell (2010) summarizes some of the worst components as follows:

- Establishing reserves and reinforcing the provincial laws which did not allow for Indigenous land use or ownership off reserve and in some cases, forcibly restricting people to reserve lands;
- Imposing an *Indian Act* Chief and Council system and determining who was "Indian" based on a statutory definition of "status";
- Criminalising traditional ceremonies like the potlatch and sundance;
- Subsidising the residential school boarding system from 1880 to 1986 which saw children removed from their homes for up to 10 months of the year, away from their parents and grandparents and forbidden to speak their language; and
- Regulating and licensing of the traditional economy of hunting, fishing, and gathering. This eventually included temporary closures and outright bans on fishing in the Fraser River.

All of these federal interventions were incredibly damaging to the Nlaka'pamux but Chief Michell writes most about how the establishment of reserves forever changed the nations's relationship to their land. Initially, no reserves were allocated to Kanaka Bar because they were missed in the colonial government's original survey. The federal government eventually assigned

6 reserves to Kanaka Bar but these lands were considered poor and inadequate even by the government's standards. Since then, Kanaka Bar has witnessed persistent colonial incursions into their territory, many of them related to transportation. As Table 1 demonstrates, significant amounts of reserve land have been annexed for railways and highways. These projects, meant to clear the way for further colonial expansion, were often pitched in paternalistic and deceptive ways, with provincial and federal governments claiming that they were in everyone's best interest. In total, a third of Kanaka Bar's original reserve land (already only a small portion of their traditional territory) has been stolen through these processes. Michell summarizes the impact as follows:

> …the harsh reality of the public land removals was that the best of the already "poor quality" and "inadequate" reserve lands necessary for cultivation, housing, ranching, and fishing were taken. Individual Kanaka members were already prohibited from using adjacent lands off reserve and could not afford to buy the land once ownership could be acquired by the change in laws. The end result was that Kanaka community members could no longer use the "taken" lands for personal and community purpose and the remaining reserve lands were "no good."

To make matters worse, the federal government developed an informal policy called the pass system to confine Indigenous people to reserves. This system required Indigenous people to obtain a pass from colonial officials to leave the reserve, segregating them from their family members in other areas as well as settler society (CBC Radio, 2015). The pass system marginalized Kanaka Bar members, thwarting participation in both their traditional economic activities as well as those developed by colonizers.

Table 1. *Key Dates in the History of Colonization at Kanaka Bar*

Year	Event
1808	First contact with Europeans

1858	Gold rush and the Fraser River War
1867	Canada's confederation
1871	British Columbia joins Canada
1876	Indian Act is established
1878	Reserves allocated to Kanaka Bar
1884	Canadian Pacific Railway is built on Kanaka Bar reserve land
1913	Canadian National Railway is built on Kanaka Bar reserve land
1927	Trans-Provincial Highway is built
1951	Indians are assigned status numbers
1956	Indians are recognized as Canadian citizens
1957	Highway 1 is built on Kanaka Bar reserve land
1967	BC Hydro builds transmission lines on Kanaka Bar reserve land

Note. Adapted from Nayani (2017) p. 10.

By the 1950's, community life at Kanaka Bar looked radically different than it did a century previous. Nlaka'pamux ways of life were severely impaired by colonization and Kanaka Bar members suffered greatly as a result. Chief Michell summarizes the constraints and social ills as follows:

- Lack of land for housing
- Lack of land for personal cultivation
- Increased restrictions on hunting, fishing and food gathering activities
- Lack of meaningful and sustainable jobs
- Welfare dependency
- Alcohol and drug addiction
- Fighting and arguing with families, neighbours, and the other communities
- Nepotism and favouritism (Michell, 2010, p.7)

According to Chief Michell, these conditions prompted many members to leave when the pass system was phased out:

> The advent of the Indian Status Card allowed us to leave the reserve for the first time because now the Federal government was able to track its status Indians as divined in federal legislation. An actual exodus occurred. This land used to have 2000 people living

> on it. In the fifties, we were down to about 20. So what happened is that people started choosing to leave. There were no jobs. There was no housing. There was a lot of lateral violence, exacerbated by addictions, and alcoholism… the phrase I coined was a culture of despair.

As this comment illustrates, many people felt they had no choice but to leave their home. Those who remained were exposed to the culture of despair for several more decades and although they were increasingly cognizant of the growing misery in their community, it was difficult for them to imagine what recovery might look like. Chief Michell describes the awareness that formed over time:

> The long-term effects of colonization became very evident. Our membership became aware of the dependency and the oppression of residential school. So an awareness developed, an awareness of the status quo and it wasn't friendly, it wasn't pretty. So the question was, what can you do about it and there was a sense of powerlessness. There's nothing we can do about it.

As the community alternately wrestled with hope and despondency, they began to witness signs of Indigenous resurgence in their community and elsewhere. In 1973, the Supreme Court of Canada recognized the existence of Aboriginal title in Canadian law in the Calder Case (Calder et al. v. Attorney General of British Columbia). In 1976, the nearby residential school, St. George's, was converted into group homes and in 1979, it was officially closed. Inspired by these changes, Kanaka Bar members began to brainstorm new ways to regain their strength. Chief Michell remembers the period leading up to the hydro project:

> So the leadership of the day started exploring how to start returning to our old ways, whatever that might be. We didn't necessarily know what the old ways were. There was a disconnect. There was a loss of knowledge created by colonization.

It was not until the late 1980s that Kanaka Bar identified a possible means to take back control of their community. The band became aware of the opportunity to sell electricity to BC Hydro as an independent power producer because they were notified of water license applications on Kwoiek Creek. In other words, the community began thinking of a potential hydropower project because

other developers were claiming the right to use Kanaka Bar's water resources. It was yet another instance of state-sanctioned encroachment on their territory. This time, however, the community's leadership was determined to rewrite history and resume authority over their resources. One participant, KD, summarizes the change as follows:

> A number of people, without us knowing about it, submitted applications for the water licence over there… They thought the government was going to ok it because they figured they're non-native and they can do what they want, when they want. They found out the hard way... it don't work that way anymore, you need our permission to even think about using the location here.

With great persistence, Kanaka Bar knocked the other three license holders out of the running to become the first in line to develop a hydro project on their territory. As the community began the onerous and uncertain task, they were motivated by a few vague hopes.

Three primary motivations.

Recalling the origins of the project, Chief Michell describes the community's vision as follows:

> The hope was, was that we would reverse the adverse effects of colonization. Break dependency. Right. Bring back self-esteem, pride, confidence. Walk this earth the way the creator gave us the gift to walk the earth, in harmony with the land, in harmony with the resources, in harmony with the other human beings.

His comment suggests that at the outset of the Kwoiek Creek hydro project, Kanaka Bar was motivated by three main hopes: breaking dependency, restoring pride, and caring for the collective.

1) Reducing dependency / Returning to self-sufficiency

When hydropower came into view, Kanaka Bar pursued it diligently because they had few other economic development options. Several industries had come and gone throughout the

decades, leaving the community in a desperate financial position. Chief Michell summarizes the community's economic prospects at the time:

> There is no third party coming to save us. Right. There's no agriculture economy. There's no tourism economy. There's no forestry economy. There's no mining economy. No third parties were coming to save us. We were caught in a form of federal government transfer … or fiscal dependency.

Kanaka Bar understood that only they could revitalize and stabilize their local economy, otherwise they would remain dependent on the federal government. The repercussions of this dependency were deeply felt, not only in matters of governance and finance but also in terms of physical, mental, and spiritual wellbeing. Chief Michell describes how this reality compelled Kanaka Bar to take action:

> We became wards of the state and we became dependent on others for almost every aspect of our daily lives for multiple generations. So the project was about taking back some form of control over our present and thus our future.

For members of Kanaka Bar, taking control meant returning to a self-sufficient existence, where the community would no longer need to rely on colonial powers.

2) Restoring pride and self-esteem

Along with autonomy, it was also hoped that the community would once again feel proud of themselves. The second motivation was therefore to restore pride, reversing the shame that colonial authorities had instilled through manufactured dependency and residential school.

Despite these hopes, it was not at all obvious whether the project would happen and if so, what it would entail. When asked what the community thought would happen, Chief Michell responded:

> We didn't know. We just knew that the status-quo wasn't working and we knew that in order to break the status-quo we had to effect change. Huge risk. Huge leap of faith. Nobody really knew. That's the answer.

As KA explains, the community was not very familiar with run of river technology:

> When we were described this job, it was more or less a false hope. Nobody was really into it. Nobody really understood it. And aside from the former Chief and council, nobody from the band got to go visit another project similar to this to explain everything so they had to bring people in.

It was clear to Kanaka Bar members, however, that the hydro project ought to benefit the community as a whole and in particular, future generations.

3) Caring for the collective and future generations

Several participants emphasized a collective mindset during in the early days of the project's development. KF recalls the focus of the first few meetings:

> It wasn't just to serve an individual. It would serve the children, the grandchildren, and the great grandchildren...so that our people never have to worry about wanting things and not having the money to do.

Likewise, KE remembers the project being framed as a long-term investment:

> I think it was to help all the band members because any funding that is coming from this is for the next generations. And it's always been earmarked for the next generations. It was never really for this generation but the grandchildren.

Both these comments emphasize that Kanaka Bar's third motivation in starting the Kwoiek Creek hydro project was to care for the collective, especially future generations.

Summary of motivations.

At the advent of the hydro project, Kanaka Bar had been subject to over a century's worth of colonial harm. As they struggled with the effects of dispossession, marginalization, despair, and dependency, Kanaka Bar members became aware that they needed to return to the "old ways." They wanted to address the impacts of colonization but did not know how exactly they would reassert control of their lands and lives. In the late 1980s, an opportunity presented

itself in the form of renewable energy. Private power producers set their eyes upon Nlaka'pamux waterways much like they had during the gold rush. Determined to protect their resources from outside exploitation and revive their community, Kanaka Bar decided to pursue hydropower. The members firstly desired to live in a self-sufficient manner as their ancestors had for millennia. In doing so, they wished to restore the community's sense of pride, lost due to the dependency created by colonization. They had very little expectations of what the hydro project might bring in terms of concrete outcomes, and in fact, were not confident that it would succeed. However, they spoke of the hydro project as an investment in the community as a whole, particularly in future generations.

Part 2 - Expectations

There are several phases in the development of renewable energy projects: feasibility, development, construction, operations, decommissioning. This section examines how Kanaka Bar ushered the Kwoiek Creek hydro project through development and construction. During these phases, the community's earliest motivations influenced decisions about how the project would proceed. The process presented many learning opportunities, which triggered new norms and expectations. These expectations are presented in roughly chronological order (see Table 2 for a list of project milestones) but more importantly, organized according to themes: partnerships, revenues, and employment.

Table 2. *Kwoiek Creek Hydro Project Milestones*

Year	Event
1990	Application for water license
2000	Sole holder of water license
2001	First Environmental Assessment Office (EAO) Review

2003	Meeting with Innergex
2004	Development agreement with Innergex
2005	Electricity Purchase Agreement (EPA)
2008	Second Environmental Assessment Office (EAO) review
2009	Community referendum and EAO certificate
2011	Beginning of construction
2014	Beginning of operation

Note. Adapted from Michell (2013, p.3).

Developers, not respondents: how Kanaka Bar repositioned themselves as equal partners and reasserted authority over the project.

Shortly after applying for a water licence, Kanaka Bar began searching for a private developer with whom they could partner to bring the Kwoiek Creek hydro project to life. They eventually struck a deal with a new company, Powerhouse Developments Inc., and proceeded to collect water data as part of the project's feasibility phase. However, after a few years, it became apparent that the partnership was not a good fit for Kanaka Bar for several reasons. First, as Chief Michell explains, the community was uncomfortable with the size and pace of development:

> It got too big too fast, was predicated on greed, maximizing disturbances in order to gain benefits for today. So the actual overwhelming thing was people said no, it needs to be redesigned and reconfigured.

Although the community did not have a precise design in mind when they started the project, it was clear that they did not share the same vision as their partner regarding the size of the project. Secondly, and perhaps more importantly, Kanaka Bar was not on equal footing with their partner. Chief Michell characterizes the relationship as follows:

> We were dependent… The original partnership was a partnership but even though we had done all this work, we were actually not a real partner. We were told to sit back and shut

> up and enjoy the ride…so the original structures weren't working. It was people who didn't know what they were doing, trying to do what they couldn't do in the first place.

Although Kanaka Bar and Powerhouse were equal partners on paper, the dynamic was such that Kanaka Bar felt powerless to enact their vision. In other words, the partnership did not serve one of their original motivations, which was to restore self-sufficiency by taking back control of their resources. In 2001, a decade after they first applied for a water licence, Kanaka Bar members saw an opportunity to change the course of the project through the environmental review process. During the review process, many members participated in public hearings about the project and learned details about it that were previously unavailable to them. They had the opportunity to reflect on whether they sincerely wished to develop this project on their territory and decided to record their concerns in a written submission to the EAO. The Environmental Assessment Office ultimately granted the partnership permission to develop the Kwoiek Creek hydro project on the condition that they meet 53 project specifications. By this time, however, the long process and diminishing community support deterred Powerhouse to the point where they were no longer actively working to address the project specifications needed to move the project forward.

In 2003, Kanaka Bar went looking for another partner and invited Innergex Renewable Energy Inc. to participate in the project. Innergex was looking to expand their business in British Columbia and agreed to form a partnership with Kanaka Bar. In 2004, they created Kwoiek Creek Resources LP and bought out Powerhouse's share of the Kwoiek Creek hydro project. Chief Michell describes how their approach to partnership was different:

> They saw the value of having strong First Nations partnerships. So the partnership had to be real. We weren't a hindrance, we weren't a financial hurdle, we weren't a pain in the ass, we weren't uneducated. We were actually considered by Innergex to be an important part of the project. Innergex was ahead of the curve in realizing the value of First Nations.

His comment suggests that what really made the difference to Kanaka Bar was working with a corporation that valued their position as a self-determining First Nation. By slowing the project's development and separating themselves from their first partner, Kanaka Bar reset their role in the project's development and repositioned themselves as equal partners. Chief Michell describes the partnership with Innergex as one built on "recognition, mutual respect, and collaboration" (Michell, 2014, p.5). This was a turning point in the project's development because the community began seeing themselves as project leaders. The partnership with Innergex also created significant momentum and catalyzed many new milestones. The first of these milestones was creating a development agreement, which prompted Kanaka Bar to seriously consider the project's revenue generating potential. Rough calculations revealed that the Kwoiek Creek hydro project had the potential to earn around 500 million dollars in gross revenue over 40 years. These numbers represented a significant increase in the amount of money Kanaka Bar was accustomed to managing. As the next section demonstrates, the financial projections sparked new ideas and about what to do with project revenues as well as concerns about how the decisions would be made.

Money matters: how the promise of revenue sparked a vision of community togetherness and governance changes.

Community togetherness.

As the band began to discuss the project's earning potential, Kanaka Bar members began to consider what they might do with the unprecedented influx of own-source revenue. Own-source revenues are not administered or controlled by the federal government and have therefore been incredibly important in fulfilling the community's desire for self-sufficiency, pride, and

investment in the collective and future generations. When asked what people wanted from the project during this period, one participant, KB, recalled:

> I think a lot of them were more or less focused on the revenues coming in…. We formed a committee called the hydro committee, where we discussed, put down on paper, all the categories we wanted to happen from that money. So our first priority was to have our own recreation hall and then the second one was to build homes for our membership and to be able to generate education funding from there so we're not dependent on AANDC.[38] And other things were to create gardening, things like that. And jobs for the community. And be able to be self-sufficient with ourselves.

This reflection demonstrates how the community's initial motivations crystalized into specific action items. To those on the hydro committee, community infrastructure was a crucial starting point. Their wish list indicates a renewed vision of community togetherness, with members once again living on the territory, enjoying a high quality of life, and planning for their future. As mentioned, a variety of social ills stemming from colonization had pushed Kanaka Bar members to leave their territory. Some members ended up in the nearby town of Lytton and others left the region or province entirely. As a result, very few people remained at Kanaka Bar and there was little in the way of shelter, services, or gathering spaces to facilitate communal living. The hydro committee's wish list is notable in that it marks a significant shift in expectations regarding the community's future. Revenues from the hydro project prompted Kanaka Bar members to consider how they might improve the community for both present and future generations as well as members living off reserve. While brainstorming possible expenditures, they became more invested in the financial success of the hydro project and began to focus on how revenue would be managed.

[38] AANDC is the acronym for Aboriginal Affairs and Northern Development Canada, which has since become two government entities called Crown-Indigenous Relations and Northern Affairs Canada and Indigenous Services Canada.

Governance changes.

As the community deliberated how they could use revenue from the hydro project, new questions arose regarding the management of these potential funds. In these discussions, members raised concerns about capacity, transparency, and accountability that ultimately led to significant governance changes. One participant, KD, recalled expressing doubt about whether the band's leadership was prepared for the additional fiscal responsibility:

> I publicly stood up at a meeting... and I said, at the current time, I do not trust our current Chief and current councilors in handling any of the resources or maintenance that's gonna come with this hydro project.

Another participant, KG, described the hydro project as an opportunity to change the way the band was governed:

> It was a source of income for our band to... make changes. At the time, it was very scary with our old administration because our chief ran everything. We didn't have a band manager. We didn't have all the people we have in our office today. We all voted as a community and a band to change over our policies and have an electoral system. I voted yes to that.... to where all of this unfolded now.

Highlighting the small number of people managing the band's affairs, this participant connects lack of capacity to lack of oversight. When asked to elaborate, KG emphasized the desire for accountability and the changes this introduced:

> We were all scared about what was going to happen because the band is given so much money every year from this project and under the old administration, there was no accountability. Now, we've got a whole administration and a whole new chief and council that are monitored by a band manager, which is an outside party,[39] which is good, which we didn't have before.

According to this participant, revenue from the hydro project gave members a reason to change the way the band was governed as well as the means to do so. The community began by creating new policies to improve accountability and transparency.

[39] This participant is referring to one of the CEOs who is not a member of Kanaka Bar.

In 2013, Kanaka Bar created a membership code, election code, and a governance code. One of the most striking changes is the effort to separate business from politics, by distinguishing between the role of CEO and Chief. The governance code introduces the role of the CEO as follows:

> Council will appoint a CEO that, as far as practicable, will provide full support to the Council in its governance, planning and policy-setting roles. For greater certainty, Council may terminate a CEO at any time if a resolution to that effect is passed at a duly held Council Meeting or Special meeting. (Kanaka Bar Indian Band Governance Code, 2013, p.9).

Relatedly, the governance code emphasizes the impartiality of the chief:

> The chief must at all times remain distinct and separate from management issues, which fall within the powers of the CEO. For greater certainty, the Chief must not hold the office of Chief and CEO concurrently (Kanaka Bar Indian Band Governance Code, 2013, p.4).

The governance code also introduces monthly assemblies and annual general meetings. These practices are designed to increase transparency and give members the means to hold leaders accountable. At each monthly assembly, members may vote to trigger a recall meeting, which in turn may trigger an election. Despite a long-time desire to see more accountability and transparency, KB notes that members of Kanaka Bar required time to adjust to their reality:

> It's gonna take them a while to get used to all that. Having an open door policy, right. So before, it was "no, I don't want to talk to you. No, I don't want to talk to you." It was hard to come into the band office.

The above governance changes suggest that community engagement has emerged as a new expectation alongside accountability and transparency. Engagement on the part of members is evidently crucial to reasserting collective control over the community's future but it is a difficult expectation to nurture given the legacy of colonial control.

Changing the relationship to work: establishing community readiness, new hiring practices, and competency.

Much like revenue, Kanaka Bar members developed new expectations about employment as the hydro project proceeded. The expectations that emerged were not just about the number and type of jobs that would be available during the project but about the community's relationship to work. These new beliefs and practices developed as Kanaka Bar members prepared for jobs, applied to jobs, and began working.

Community readiness.

Reflecting on the long period of time it took to develop the hydro project, Chief Michell identifies community readiness, as one of the project's main successes:

> It took time but building social licence meant we had community buy-in and as a result, everybody was ready. When the positions were available during the development of construction phases, the membership were ready for it… our membership were able to put their names in and secure themselves either contracting or employment opportunities.

His comment suggests that readying members for employment on the hydro project was not simply a matter of training them to fulfill specific job duties but rather preparing the community to adopt a new mindset. As discussed, one of the reasons that Kanaka Bar members left the territory en masse in the 1950s was lack of economic opportunity. In the 1980s and 1990s, not much had changed in terms of local employment opportunities. The largest regional employers at the time were the Canadian Pacific Railway and a small mill called Lytton Lumber. When the mill closed in 2007, many Kanaka Bar members were forced to choose between social assistance or work outside the region or a combination of both. KA describes the overall feeling of inertia that existed:

> Before the project, I guess you could say that it was dull and boring. I would say 90% of the people were on welfare, there was nothing ever done. The band was never happy with the quality of the living on the reserve. There was nothing going on. There weren't as many people in the reserve back then because there was just nothing to come home to.

The community's bleak economic situation made it difficult to believe that Kanaka Bar could once again be the source of local employment. So when the hydro project came along, one of the administration's first tasks was to convince members that it was worth preparing for potential jobs no matter how far-fetched they seemed. It was much easier to establish this expectation once the project received environmental certification in 2009.

With provincial permission to move ahead, Kanaka Bar hired the company CRT as a civil works contractor. CRT was responsible for hiring employees but informed Kanaka Bar of their human resource needs so that the band could prepare members and put forward qualified candidates. Chief Michell describes how the band then offered training:

> We actually put on a security guard course so people got certified to be security guards…Those people were aware that job competition, competition for jobs, was going to be tough so at least four band members went out and got their level three first aid…because we explained to them that they needed something more than diplomas.

His comment reveals how the band's administration worked to establish yet another expectation around job preparedness: it was important to develop qualifications beyond the job description in order to be a competitive candidate.

Fair hiring practices.

In addition to emphasizing job preparedness, the band's administration attempted to cultivate new expectations around fair hiring practices. The first of these expectations was the importance of applying to jobs rather than anticipating automatic employment. Chief Michell discusses the difficulty of establishing this norm:

> People wanted to be spoon-fed. It's hard to describe but there's a sense of entitlement on the part of people involved. You owe me… So the first challenge was and again, I haven't been able to put it down, because we're still struggling with it today, the sense of entitlement or dependency. If you wanted a job on the hydro project, you had to apply.

Chief Michell describes entitlement and dependency as flip sides of the same coin. The job application requirement, in his view, was meant to counteract the dependency that colonial authorities inculcated through dispossession and economic marginalization. KA also highlights how colonization impacted the band's capacity and thus their hiring practices. Here, they connect nepotism to lack of resources:

> There wasn't much happening really because our band had to partner with… 5 other bands. We were part of the Fraser Canyon Tribal Administration. The small bands couldn't acquire enough money to function so they had to band together. A lot of the work ... it used to be who you're related to, who you knew, how you got a job, didn't matter what you knew. That has changed since this hydro project.

KA's comment highlights another expectation around hiring practices. The band's administration not only encouraged members to submit applications but also encouraged them to trust that their applications would be properly considered. Chief Michell sums up the change as follows:

> People wanted to work and their expectations were if they were qualified they were given an opportunity. Every person that I was aware of was given that opportunity…They weren't hired because of them being angry. They weren't hired because they told a sob story…Each and every person was hired based on objective criteria. That showed people a whole new way of getting a job.

This new expectation, that hiring decisions would be based on qualifications only, was difficult to achieve at first because the band's administration was not directly responsible for hiring workers on the hydro project, only assembling a list of available labourers. Initially, many members felt that the process lacked fairness. One participant, KB, recalls how such tensions dominated community meetings at the beginning of the project:

> A lot of the questions were regarding employment because when they first started hiring, they hired all outsiders... that's where things got of out hand at the meeting because… they were hiring outsiders and not the membership and that's one of the agreements they

> had was that they would look at membership first before they looked at anyone else, to see who had the experience to run the machines, to do labour work, to do electrical, carpentry, anything like that. We had probably about six of them here that were capable of doing that job... there were a lot of issues that were brought to the table but nothing was dealt with until a month down the road.

KB's comment demonstrates that although Kanaka Bar's administration created internal norms around fair hiring practices, they still had to contend with the reality of outside labourers and a contractor who made the final hiring decisions.

Personal and collective competency.

As the project moved further into the construction phase, Kanaka Bar members proved that they were competent workers, team members, project managers, and stewards of the land. Their involvement changed how they thought of themselves personally and collectively. At an individual level, participants spoke of the need to develop realistic expectations regarding capacity. Chief Michell describes the general difficulty of transitioning from underemployment to the intensity of construction work:

> … for those people who did apply, or whatever, the challenge was recognizing their limitations. Physical, mental, emotional….If you haven't worked for twenty years, don't get mad when after three days you get low because you can't work anymore.

KG also spoke about adjusting to the rigors of the job:

> I said I wanna drive rock truck so they trained me to drive their forty ton rock truck and I stuck with that. I was one of the ones that stayed from our band that would work the seven days a week, 12 hours a day. I did that for the first year. And the second year, I got burned out and went to six days a week, 12 hours a day. Took my Sundays off.

By managing the transition to (more than) full-time employment on the hydro project, many members confronted their limits and figured out the best way to approach future employment opportunities. According to Chief Michell, these work experiences also brought about the opportunity to think differently about the community:

> The most important thing here, and it has to do with the hydro project… we couldn't do it alone. So I always ask people take home that we work together as a team. We collect the information as a team. We designed it as a team. We construct it as a team and we've operated as a team. Collaboration is not just a word. Successful projects require actual, real meaningful relationships, not lip service.

Reminding community members of their capacity to work together is not trite; the pressures of colonization have led to lateral violence and social tensions at Kanaka Bar for some time. Through employment on the hydro project, members had the opportunity to practice collaborating and trusting one another.

The band's administration also used the hydro project to display their competency to outsiders. On several occasions, the leadership shared local insights with the contractor that benefited the project overall as well as Kanaka Bar members directly. For instance, they repeatedly demonstrated the value of hiring local workers, thereby maximizing employment for Kanaka Bar's members and proving themselves capable project managers. In addition to the project's practicalities, Kanaka Bar members also taught those who worked on their territory about the importance of respectful relations, reinforcing their position as original inhabitants and stewards of the land.

Kanaka Bar welcomed many visitors in the lead-up to the hydro project, including business partners, professionals, and labourers from other regions. The influx of outsiders presented communication challenges, especially given the diverse cultural backgrounds and experiences of those visiting. Over time, Kanaka Bar members found themselves tasked with teaching people about how to work respectfully. KF summarizes this experience as follows:

> We would say, you know when this project is over, you just pack up your equipment and leave but we're the ones that have to look and say, "Oh my god, look at all those logs! Oh my god, look they destroyed this! How come they didn't put that back? Oh my goodness, look at this…" you know? We have to live with that. And that's one of the main things that we want to do to ensure… not just Innergex but people in general. You want to pick up a rock, don't just throw the rock anywhere. Be aware of where you're putting that rock

> because it does affect something. You may not be there to witness it but it does affect something and we wanted the common human being to understand that.

Although they were not the contractors, Kanaka Bar nonetheless kept an eye on the work to make sure it was being done in the right way. This observation does not imply that First Nations ought to be saddled with educating outsiders about respectful land use, only that in this case, it gave members to opportunity to reinforce their position as stewards.

Summary of expectations.

As Kanaka Bar developed the Kwoiek Creek hydro project, the community formed new expectations of themselves and the project around key concerns such as partnership formation, revenue generation, and employment. First, in their dealings with private developers, Kanaka Bar assumed responsibility for the project and repositioned themselves as equal partners. Second, in discussing potential revenues, Kanaka Bar members developed a vision of community togetherness and implemented governance changes to better manage collective resources. Lastly, in building the hydro project, Kanaka Bar created new norms around job preparedness and hiring practices and ultimately demonstrated their individual and collective competency in several ways. Cumulatively, these developments reinforced Kanaka Bar's original motivations to once again become self-sufficient, restore pride, and care for the collective and future generations.

Part 3 – Outcomes

At the time of writing, nearly five years have passed since the Kwoiek Creek hydro project became operational.[40] Since then, Kanaka Bar has done a considerable amount of planning, further defining their goals as a community. In 2016, the band released a community economic development plan (CEDP) detailing their objectives under five forms of self-

[40] The project was completed in 2013 and became operational in January 2014.

sufficiency: financial, infrastructure, employment, energy, and food. Like the expectations explored in Part 2, these broad self-sufficiency goals are both outcomes of the hydro project as well as new motivations. These goals are the product of decades worth of work to address the adverse impacts of colonization. They reflect the community's original motivations as well as expectations that developed during project, and provide benchmarks against which future endeavours will be measured. Using this framework, I summarize key developments associated with each form of self-sufficiency, including both direct and indirect impacts of the Kwoiek Creek hydro project. I then turn to participant comments to understand what these changes have meant to members of Kanaka Bar.

Key developments.

Financial self-sufficiency.

Financial self-sufficiency is of enormous importance to Kanaka Bar and has been a key driver in the development in the Kwoiek Creek hydro project. When Kanaka Bar started the project, they were entirely reliant on the federal government for funding. Successive colonial governments created this financial dependency through non-consensual resource use and economic marginalization. In other words, the state exploited Kanaka Bar's territory without compensation while implementing discriminatory policies that restricted Kanaka members from participating in traditional and non-traditional economic activities.[41] While Kanaka Bar continues to live with the consequences of colonial imposition, they are now using the Kwoiek Creek hydro project (among other sources) to provide for their members and regenerate their

[41] Many of these incidents have yet to be resolved and restrictive economic practices, like fishing bans, continue to this day.

economy. In 2015, only two years after the hydro project was completed, Kanaka Bar derived 55% of their annual income from own-source revenues. The hydro project is a key contributor to this figure, generating close to one million dollars annually. Kanaka Bar has leveraged fourteen different revenue streams from the Kwoiek Creek project. Ongoing revenues include profit from the sale of electricity, royalties, interest on sub-debt, tax revenues, and water and land rental revenues collected through the province.

Long-term, Kanaka Bar hopes to become 100% financially self-sufficient. Their short-term goal, however, is to generate 75% of their own revenues by 2021. To achieve this, they plan to pursue new revenues streams and implement cost saving strategies. As they develop new business ventures, they hope to break-even or generate small profits rather than maximize profits. Chief Michell describes this approach as "regenerative economics" in which the band generates only as much as needed to sustain the community rather than pursuing profit for profit's sake.

Foundational Community Infrastructure

Foundational community infrastructure[42] is closely tied to financial self-sufficiency. Kanaka Bar members have long wanted to invest revenues from the Kwoiek Creek project in key infrastructure projects in order to re-establish a strong presence on their land. Before the hydro project, there was a significant housing shortage and no community buildings except for a water treatment plant. Many members lived in off reserve, in other communities.[43] This dislocation was

[42] Kanaka Bar recently renamed this area of activities "Foundational Infrastructure and Policies." It is no longer considered a self-sufficiency goal in itself but rather a set of initiatives designed to support the four main self-sufficiency goals.

[43] The first three houses at Kanaka Bar were built in 1983.

the direct result of colonial policies that relegated Kanaka Bar members to inhospitable reserve land.[44]

Since the hydro project, Kanaka Bar has developed a housing policy, conducted assessments on existing houses, and built new housing. In 2017, with support from the federal government, they added 10 new units to their housing stock. Kanaka Bar has also made it a priority to strategically acquire fee-simple properties suitable for commercial development. Using revenues from the hydro project and the CEDP as a guide, they have purchased six properties near their reserve lands. Totalling just over 100 acres, the six properties represent key sites for future development. Kanaka Bar has outlined their latest plans in an off-reserve land and resource strategy. Proposed developments include the Siwash Creek hydro project, a rest stop along Highway 1, and additional housing. Along with these initiatives, they plan on working on a raw water distribution system and an asset management plan.

Employment self-sufficiency.

Much like financial self-sufficiency, employment self-sufficiency has been a top priority for Kanaka Bar since beginning the Kwoiek Creek hydro project. Before the hydro project, there were very few local employment opportunities for members of Kanaka Bar. Several industries came and went, forcing many people to either leave the region or apply for social assistance. As such, it has been a long time since Kanaka Bar members have had the opportunity to work close to home. As discussed earlier, many members found valuable work experience through the Kwoiek Creek project but the most significant employment impacts have occurred since the project's completion.

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[44] As mentioned at the beginning of the case study, the federal government belatedly allocated inadequate and poor quality reserve land and over time, illegally annexed a third of it.

Kanaka Bar has reinvested a significant portion of the revenues from the Kwoiek Creek project into employment, spending approximately 40% of their budget on job creation and training. On average, the band offers over 30 job opportunities per month, with almost 60% filled by Kanaka Bar members. Since the hydro project, the number of positions at Kanaka Bar has risen from 6 to 36, which includes permanent full-time, permanent part-time, and on-call positions. Many of these employment opportunities are offered through Kanaka Bar Employment Services (KBES). Using revenues from the Kwoiek Creek hydro project, KBES employs Kanaka Bar members and non-members to work in seven main business areas: renewable energy; land development and acquisition; new capital infrastructure development; property and asset management; trails, land clearing, and reclamation; and community maintenance services. Kanaka Bar also manages contracts from government and industry through KBES, allowing them to bid on work in the area and increase local employment opportunities. Their employment self-sufficiency goal is to beat the provincial unemployment rate by one percent. Along with this goal, they recently identified other priorities such as filling key positions, training local youth, and investing in personnel development.

Energy self-sufficiency.

In addition to self-sufficiency in the realm of finances, infrastructure, and employment, Kanaka Bar has included energy self-sufficiency among its goals. The community currently depends on BC Hydro for the majority of their electricity but within 5 years, they hope to be 100% energy self-sufficient. Although this particular goal is relatively recent, it is rooted in Kanaka Bar's desire to return to the "old ways" by using their lands and resources responsibly as they have since time immemorial.

Since the Kwoiek Creek hydro project, Kanaka Bar has quickly launched into small-scale energy production, retrofits, and demand side management. For energy production, they have focused on solar and hydro. Their solar projects include: a 6 kW ground array that powers the band office, a 4 kW pole-mounted array that powers the health office, a 0.5 kW rooftop array that powers security equipment, and a 7.2 kW solar tracker that powers the community's maintenance shed. Kanaka Bar has deliberately varied their solar installations in order to learn what works best for them. Their next project, a 500 MW micro-hydro project on Siwash Creek, is being designed to first sell electricity to BC Hydro and then eventually power the community. They also plan to continue with household renovations to improve energy efficiency and to launch a demand side management program for residents.

Food self-sufficiency.

Food self-sufficiency, like energy self-sufficiency, has always been important to Kanaka Bar members but has only recently made its way into the community's formal goals. The salmon stocks that have sustained Kanaka Bar for generations are dissipating due to colonial mismanagement and climate change. Many members still maintain traditional food practices but rely on outside food sources, often traveling several hours each week to buy affordable groceries. The community is aware that they must find other ways to feed themselves and is thus re-investing the revenues from the hydro project into food security measures.

Kanaka Bar is steadily working towards their objectives under their food self-sufficiency goal, including: 100% of members engaged in traditional food and medicine practices; 20 backyard gardens; 2 community gardens; 3 beehives and other animals for food production. In 2016, they hired a permaculture consultant to help them create a detailed food security vision and install a community garden at the band office. They are now installing an irrigation system and

making plans to develop a small greenhouse along with another community garden. They are also preparing some of their new properties for agricultural use with the long-term goal of preserving food for themselves and selling surplus products locally.

Clearly, Kanaka Bar has accomplished a great many things in a short amount of time. In the last five years, they have created a community economic development plan, among other important visioning documents, and used revenues from the hydro project to pursue their self-sufficiency goals. While this review clearly demonstrates some significant, beneficial changes, it is also crucial to consider how Kanaka Bar members feel about the project and its impacts so far.

Participant perceptions.

When asked to describe whether Kanaka Bar achieved what they set out do with the hydro project, participants used a variety of criteria to evaluate the project's impacts. Sometimes participants described their successes in terms of the community's original motivations. At other times, they made reference to the expectations that formed throughout the project's many decades of development. It was also apparent that participants were thinking about Kanaka Bar's newly formed self-sufficiency goals in their responses. Not surprisingly, many participants focused on project revenues, governance, and employment in their assessments. Participants had less to say about energy self-sufficiency and food self-sufficiency because these goals were not explicit aims of the hydro project. Nonetheless, I have included some of their thoughts on energy self-sufficiency because they provide additional insights into the project's indirect impacts. Overall, the following exploration reveals just how important participant perceptions are to a fulsome understanding of the community's relationship to the hydro project.

Project revenues.

Many participants referred to project revenues in evaluating whether the community has achieved their goals with respect to the hydro project. For Chief Patrick Michell, the project has greatly contributed to the community's goal of financial sufficiency and enabled other forms of self-sufficiency:

> So the reality of the situation is we're still aggressively pursuing a reduction in dependency. So we're creating employment for the community and we're using financial self-sufficiency as that thing and our first project, Kwoiek Creek hydro project, is what's created that. So our goal is employment self-sufficiency, financial self-sufficiency, food self-sufficiency, energy self-sufficiency, and it needs to be sustainable. Sustainable means that year after year after year it's still there. So we're creating employment for the next 40 years. We've created revenue streams for the next 40 years. That's what Kwoiek Creek has done for us. A forty year certainty.

In addition to providing a basis for other forms of self-sufficiency, Chief Michell emphasizes that financial self-sufficiency creates certainty. Another participant, KE, provides a similar assessment:

> I'm just happy that we have the opportunity to take on other stuff now as before we didn't. There was no funding for it or you had to wait for governmental approval, and government dollars.

When this participant was asked to consider what the project means for the community's future, they replied:

> I think they have... certainty that they will always have money in there for their kids, for their education and for their other funds that they need it for, they will always have that.

However, Kanaka Bar members do not share a united view regarding the hydro project's financial implications. KB, for instance, expresses concern about whether the project is on track to generate the promised revenues:

> Me: …do you think it was worth it?
>
> KB: If we can get enough, more money out of it. To me, it doesn't seem like we're

> getting the revenues we should have been. That's the way I'm looking at it right now.
>
> ME: So, what would be enough for you or what would make you feel like it was?
>
> KB: Well, our agreement was that we got so much a year but I think they cut it back a little bit because of the water flow and that's my concern because they're not going by the agreement anymore.

This exchange suggests that doubts remain as to whether the band is getting a fair deal. KD has similar concerns about maintenance costs, demonstrating wariness towards the band's administration and the band's business partner, Innergex:

> They don't have a plan in place, or they haven't at least brought it to my attention or the band members' attention about any maintenance that will have to happen within five years regarding the transmission line itself, nothing in that manner...we already had to do a major job on the hydro project once and nobody told us how much money that cost us…Nobody stood on an apple box to say oh by the way Innergex cost us another five thousand dollars over there.

Another participant, KA attempts to counter the perception that the project has made the band rich by emphasizing project debt:

> The band isn't rich. The hydro project has been up and running for a couple of years now. It's like a 40-year loan and we just don't have that money. The money that is coming off the project now just goes back to the loan so we don't see much of it. People just don't understand that. They're looking for handout money. They want free money. There's no such thing as free money.

The above comments demonstrate that the influx of own source revenue is not yet enough to create a sense of financial certainty for all members. They also reveal that participants are not simply concerned about gains and losses but about the larger issues of partnerships and governance. As during the project's development, members continue to reflect on Kanaka Bar's position in the business. For some members, the partnership requires vigilance to ensure that the community remains on equal footing with Innergex. The comments also point to the continued importance of governance questions, particularly how to manage revenues from the hydro project.

Governance.

In discussing the use of project revenues, several participants named an emergent tension among community members. Participants characterized the tension as a debate between individual and collective benefit. Here, KA elaborates on expectations of personal enrichment:

> All they see is the money. Everybody is asking for handouts. The Chief is opposed to that and so am I. I went through the residential experience and I've seen a lot of people get huge amounts of money and drink themselves to death.

KA believes that distributing project revenues among members could exacerbate the impacts of colonialism. Another participant, KB is opposed to individualized payments because they view them as contrary to the community's wish list:

> All they wanted was money and that really kind of hurt me because I thought the hydro project was gonna be for the lists that we had to help the community: with recreation, to create employment, to build more housing, and things like that, and better education for our children. But all they wanted was money. They kept asking for that every time they came to a meeting.

Despite the reported prominence of this debate, no participants personally spoke in favour of individually distributing project revenues. Rather, participants generally described: 1) a desire to see different priorities reflected in the band's expenditures and

2) a desire to improve the band's decision-making processes.

When asked how they would allocate revenues from the project, participants referenced earlier expectations. Even though KA was generally supportive of the band's expenditures, they nonetheless emphasized housing as a current and future priority:

> Better housing. That would be top of my list. I live in a band house. They call it cracker box houses. Poorly insulated, poorly built. Falling apart. I would like to see better homes built. Something that you can actually take pride in living in. Not something just thrown to you, like give a dog a bone, you know.

KB once again brought up items from the hydro committee's wish list:

> I would like to have them put away some money for education, for housing. That's my two things, that I want. And a recreational hall. Something for the kids to come to everyday.

These comments reflect a continued focus on infrastructure, emphasizing how changes to the built environmental are an essential part of the community's vision of self-sufficiency, pride, and caring for future generations. Some participants trust that such developments will occur over time while others are impatient to see results. However, it is possible that these views have changed slightly since the interviews were conducted as Kanaka Bar recently added new housing units.

Other participants focused on the band's decision making processes, highlighting the need for increased engagement. KD describes the need for more input as follows:

> To me, they've got more money, less ears and eyes to see it, and they seem to be spending it on whatever they feel like it. Even though we did have some band meetings and make some community decisions about what should happen with the monies that we do get… nobody is saying to us, by the way, Kanaka Bar First Nation membership, here's what we had come in. This is the amount of money that we got… what do you think we should do with it?

For KB, there have been real improvements in collective decision-making but they must be continually nurtured:

> You know, I was surprised that when we first started getting our meetings here, it was fine for the first four months…. and then it gradually phased out …. I think it's the way it's presented and not enough room for them to say their concerns. It's always "ok, we have to .. ok, yeah, ok, yeah." I think that's what made them turn away from coming to band meetings.

Some participants nonetheless expressed hope for the future, suggesting that the band's emphasis on future generations will pay off in terms of additional interest in decision-making processes. KC describes their vision:

> I think ... this is going to sound very ageist... a lot of the older people, stick to their old habits, you can't teach an old dog a new trick or whatever that saying is, but I feel like with our younger generation that there's going to be a lot more community involvement

> because they're doing all this training for the youth there and that there's gonna be a bit more educated generations this time around and… they're gonna be more concerned with their community.

The above comments on governance demonstrate that revenues from the hydro project continue to raise questions about the distribution of wealth. Members are reflecting on the band's expenditures and assessing to what extent they meet the community's original motivations and later expectations, with foundational infrastructure being a clear priority. They are also interested in refining the band's decision-making and community-engagement processes.

Employment.

Participant comments on employment were largely positive, emphasizing the hydro project's long-term impacts in the realm of individual and community capacity building as well as ongoing job provision. To begin, several participants reported that they witnessed or developed new career insights and opportunities as a result of working on the project. KA describes how the experience benefited their son:

> They did a lot of on the job training. There are some people who never drove rock truck before. My son for instance, he drove rock truck for a little while. He did a few different jobs down there that he trained for on the job. And it's changed him in a lot of ways because he used to just be a maintenance worker for the band and it's broadened his horizons, where now he works for the railroad.

KA further explains how, in both the case of their son as well as the community, this capacity building has led to general interest in education:

> So now he's got his class 1 driver's licence. He's got his crane operator's ticket. He's working on his welding ticket right now. I think that's great because when he graduated high school, he didn't have any interest in anything like that. And I think it's opened up the eyes of the majority of people on this reserve that through schooling, you can better yourself but it's just something you've got to see and the only way a lot of them will see it is through work experience.

KG also experienced professional momentum from the hydro project. Here, they describe how the work experience led to another job:

> I got a lot of extensive heavy equipment training through there. Excavator operator. Wheel loader. Coarse rock truck. Roller packers. Learned a lot about reading because of the language barrier. You had to learn what the equipment's capable of because they spoke French and I don't speak French. So I was real good at it, to the point where they called me up, when Kwoiek was done, for a job in Pemberton.

Although personally beneficially, KG's experience demonstrates how capacity building can be a double-edged sword for small, Indigenous communities as skilled workers are pulled away on jobs elsewhere. Recognizing this challenge, Kanaka Bar has made it a goal to facilitate and create local work opportunities to enable members to remain on the territory or return as needed. Not surprisingly, many of these work opportunities are within the realm of renewable energy, a new area of expertise for the band.

More than one participant highlighted the hydro project's legacy in terms of ongoing job provision and capacity building in the renewable energy sector. KG describes their involvement in ongoing maintenance work on the hydro project:

> We've taken on small contracts for Innergex and to my understanding, we haven't had any complaints. We've put in a concrete pad for them at the powerhouse. A lot of work that I've never done before, I've taken on.

KG also explains that the skills they developed on the hydro project are now relevant to Kanaka Bar's other renewable energy projects:

> I was a part of the solar panel building. I built the frames that hold the panels that run the band office. Last week, I put in those posts that are gonna hold the new panels to feed the health office. This is stuff that I wouldn't have been able to do if I didn't get the training from CRT to run heavy equipment.

Likewise, KB observes how the Kwoiek Creek project influenced their son's interest in the band's latest hydro project:

> He found that he got a lot of experience doing the hydro project and when he heard about the Siwash one coming up, he said, "I wouldn't mind working on that!"

KB's son enjoyed learning about turbine technology is now keen to apply this knowledge to the Siwash Creek project. Kanaka Bar's goal to create employment opportunities at home, however, is not without challenges.

As mentioned, Kanaka Bar uses revenues from the Kwoiek Creek to hire people through their employment agency, KBES. One unanticipated outcome of this approach is that members are no longer eligible for social assistance if they turn down local work. Some members, who are not interested in the band's employment options, have left the reserve and taken up residence in a nearby town so as to remain eligible for social assistance. This dynamic makes it difficult for Kanaka Bar to meet their employment self-sufficiency goal and creates additional capacity issues, sometimes requiring the band to look beyond the membership to fill roles within the community. As a result, certain participants believe that outsiders are disproportionately benefitting from the new employment opportunities. These concerns echo those expressed during the project's construction and reveal the ongoing complexities of job creation and capacity development.

While it is difficult for some participants to be optimistic about local job opportunities, many others are encouraged by what they see happening at Kanaka Bar. For them, the community has gone from a place where "nothing ever happens" to a place where local jobs can be reliably found, an expectation that appears to have grown with time. Reflecting on the impacts of the Kwoiek Creek project, KG summarizes the change as follows:

> Now, every band member has an opportunity to work and earn a wage as before we didn't. Most of our people were on SA. Now we've got opportunities for our youth.

This quote demonstrates that in addition to individual and collective capacity building, the hydro project has enabled Kanaka Bar to create employment opportunities beyond the construction phase. These jobs are yet another example of how the project is contributing to the community's original goals of self-sufficiency and providing for future generations.

Energy.

The Kwoiek Creek hydro project was never designed to meet local electricity needs but many participants nonetheless hoped it would provide power to the community and change their relationship to BC Hydro. Reflecting on the reality, some participants expressed dismay while others noted value in the unexpected outcome. KG, who generally supported the Kwoiek Creek project, says he is bit disappointed by the result:

> I feel somewhat bummed because we can't access that power. We still have to go through BC Hydro and whatnot and they make it really hard for.... well, the cost of hydro just keeps going up and it's crazy.

Another participant, KD, laments BC Hydro's continued control, noting that the hydro project has not tipped the balance in Kanaka Bar's favour:

> To me, the agreement that was made on increments of the hydro itself is nothing compared what BC Hydro says to its citizens today. You know, two years ago, they needed to raise rates. That's already happened. Now they're talking a 15% raise. Can we as a band say to whoever is buying our hydro, "Oh by the way, we're kind of short a few hundred thousand dollars after putting in a few poles so we need to raise our price," and send the invoice and not worry about it being contested? Meanwhile, if we decided to contest BC Hydro, what happens?

KD also described the strained relationship that some Kanaka Bar households have with BC Hydro, including the challenge of having one's electricity cut off. For this participant, the hydro project has not yet rectified issues of energy insecurity, including the crown corporation's enduring power over the community. Conversely, KF, speaks about the outcome in positive terms even though it differs from initial expectations:

> KF: My own interpretation of this hydro project was that this hydro project was going to be built … so that our people wouldn't have to worry about their hydro anymore… and I often wonder, am I the only one who thought that or what?
>
> Me: You thought that it would directly supply electricity or get rid of your hydro bill?
>
> KF: Yeah, exactly. I had asked my sister, "so what did you think about this hydro project? Did you actually think that you would have no more hydro bill or anything like that?" And she goes, "yeah, that's what I thought but then I like it this way." And I'm like, "what is this way?" And she said that the amount of water that's coming through builds energy and we sell that energy and she goes, "I like that that's where we get our revenues." "So did you ever dream of something like this?" I asked her. And she says, "no, but I just think it's kind of neat now that I understand it more."

KF's comment reveals that for some members, the hydro project's financial contributions make up for the fact that it does not supply electricity to the community. The question of local energy access is more complex, however, than direct power provision. Additionally, the project has catalyzed other renewable energy projects. Chief Michell notes:

> As a result of our experiences with Kwoiek, we became aware of other resources available for sustainable use: wind, sun, and biomass. Geothermal is on our radar but we haven't advanced it because we have an abundance of the top three: sun, wind, and water.

Kanaka Bar's foray into other renewable energy projects has generated a wide range of reactions that echo and inform participant evaluations of the hydro project. Some participants are upset that the community has spent money on solar installations instead of other infrastructure while others are pleased that the solar projects have provided job opportunities. Some participants expressed cautious approval of the new solar panels in so far as they provide electricity in the case of power outages. That said, all participants view the solar energy initiatives as pilot projects and are still deliberating their worth.

The hydro project, while not intended to provide power to the community, created an expectation around local access as well as the financial resources to explore other forms of community energy generation. Participants are still forming opinions regarding the success of the

project in this regard. Despite Kanaka Bar's long engagement with hydropower and the community's new goal of energy self-sufficiency, community acceptance of new renewable energy projects is not a given.

Summary of outcomes.

Taking inspiration from Kanaka Bar's CEDP framework, I have outlined some notable impacts of the Kwoiek Creek hydro project. The first section reviewed key developments under the community's self-sufficiency goals and the second section explored how Kanaka Bar members perceive these changes. There are many more direct and indirect impacts that could be explored. For instance, participants also mentioned interesting outcomes regarding local and regional social cohesion, relationships to land, and climate change. Rather than relaying all of these perceptions, I have presented only those that relate to revenue, employment, and energy, as these were prominent themes across interviews. I have also attempted to frame this discussion in terms of whether Kanaka Bar members feel they have achieved what they set out to do. In their reflections, participants referred to the community's original motivations, the expectations that developed over time, and the community's new self-sufficiency goals, demonstrating that they are evaluating their experiences using multiple reference points.

With regards to revenue, many participants acknowledged that Kanaka Bar has significantly improved their financial situation through the hydro project. Specifically, participants reported increased certainty and flexibility, noting that the band is able to better able meet the immediate and long term needs of the community without relying on external funding. In this sense, the project has gone a long way towards fulfilling the community's primary motivation of reducing dependency. Some participants, however, were cautious in their assessments of financial self-sufficiency. For these participants, the amount of money earned is

secondary to how it is spent, revealing ongoing questions about partnership and governance. With regards to governance, some participants articulated a desire to see different priorities reflected in the band's expenditures and a desire to continue improving the band's decision-making processes. Notably, some are reserving judgment about the hydro project's financial significance until key infrastructure goals are met, as these projects are important to meeting the community's primary goal of caring for the collective and future generations. This finding is interesting in two respects. First, it demonstrates that to many members of Kanaka Bar, self-sufficiency and caring for the collective and future generations are inseparable and it is therefore difficult to assess one without the other. Second, it takes time to create new structures for collective and future enjoyment, such as residences and recreation buildings. Given that the Kwoiek Creek hydro project has only been operational for five years, it is too early to estimate its full impact. That said, Kanaka Bar is moving quickly on many fronts. They have clearly thought deeply about what it means to regain self-sufficiency and applied revenues from the hydro project accordingly.

On the subject of employment, participants reported experiencing and witnessing personal and professional momentum as a result of employment on the Kwoiek Creek hydro project. They also noted an increase in local job opportunities, made possible through the reinvestment of hydro project revenues. While a few participants highlighted challenges with regards to employment, most spoke of past and current employment opportunities in positive terms. Taken together, the comments suggest that the community's collective employment experiences have contributed to an overall sense of accomplishment with regards to their primary motivations. As a result of their involvement in the hydro project, Kanaka Bar has been able to employ their own members to meet their own needs. There are complexities to creating jobs at home but by

prioritizing human development, Kanaka Bar is gradually fulfilling a key aspect of self-sufficiency as well as investing in the collective and future generations.

Participants also commented on the expectations that emerged around energy self-sufficiency. Unlike revenue and employment, however, this topic required a bit more exploration because it was not among the community's primary motivations. The Kwoiek Creek hydro project was never designed to supply power to Kanaka Bar but some participants nonetheless thought it might. Some participants expressed disappointment with this outcome because the community is still reliant on BC Hydro for electricity, while others were more forgiving because they see the hydro project as a good source of revenue, one that can be used to fund other local energy projects. Thus far, Kanaka Bar has directed revenue from the hydro project towards several solar projects. At the time of interview, however, participants were still unsure whether the recently installed solar panels would fulfill the community's unmet expectations around energy self-sufficiency.

The above analysis suggests that the Kwoiek Creek hydro project has been very important to Kanaka Bar in terms of reducing dependency/returning to self-sufficiency and caring for the collective and future generations. Even as community members debate the extent to which they have accomplished what they set out to do, it is clear that Kanaka Bar is using the project to fulfill their initial visions. In this analysis, however, I have neglected to discuss the community's desire to restore pride and self-esteem. Participants mentioned pride in their comments on revenue, employment, and energy but it became clear that this particular motivation was deserving of special focus. If not already apparent, the following discussion of pride further reveals the significance of the hydro project to Kanaka Bar beyond economic development.

Discussion

At the outset of the Kwoiek Creek hydro project, Kanaka Bar reached for something without knowing exactly what would materialize. Having experienced the effects of colonization for decades upon decades, their hope was that the hydro project would enable members to take back control of their community but there was little expectation of success. Even as the band conducted studies, developed partnerships, and reached various milestones, many members did not believe the project was a real possibility until the very end of construction. KE sums up the community's disbelief as follows: "I don't think they actually believed it would happen because it was taking so long. Then it finally happened." In 2014, approximately 25 years after Kanaka Bar applied for a water license on Kwoiek Creek, the community celebrated the project's commercial date of operation. KF discusses how the community's initial sense of disbelief has given way to excitement:

> Our people today, when we look at the Kwoiek project, or we look at the development that we're making right now… our people are excited…I know two of them have said to me over the last month that they are glad that there's development. They are glad that there's opportunity. They actually want to go out and do something for themselves even though they've never left Kanaka… There are things that build and allow you to take that risk, to believe in yourself and know that you can do it. It was really interesting to hear people actually talk like that. They never thought that things were possible and they said that now that they see Kwoiek project all done and it is possible. They're now applying that to themselves so that's pretty interesting.

The very fact that Kanaka Bar completed the project created a sense of hope and self-efficacy on a collective and personal level. When asked whether the community's original vision was achieved, KF says:

> I believe so. I really believe so. I don't think a lot of our people realized it would be as big as it actually is. I know for me I didn't think it was going to be this big. You know, to see the size of it, to be able to actually go over there and see for my own eyes, wow, that's amazing, to see something that big and that our little band was a part of making that happen, and all things are possible.

Other participants also compared the size of the project to the size of community, saying that it was remarkable that one of the smallest bands in the area could pull off such a large feat. In addition to size, participants highlighted the novelty of the project and the difficulty of developing it without much help. KA describes the connection as follows:

> It's given people of this reserve, pride, because we're the first small band to do it on our land. Like I said, we've asked other bands for help, and they said no or they wanted a piece of the pie and usually, they wanted a bigger piece of the pie, the controlling piece, and that's just not going to happen.

When asked to elaborate on the feeling of pride, KA further emphasizes the band's independence:

> I feel prideful because it's something accomplished without any outside help other than say, the banks, because even the government said no. I was part of a hydro committee that did all the decisions for it and we had to do a lot of lobbying.

KA's comment demonstrates the link between pride and self-sufficiency. Not only did Kanaka Bar develop a large project, but they also did so without much help. Another participant, KC, also emphasizes self-sufficiency but speaks of the desire to inspire others:

> I think it's an amazing first step that we're doing something like this … I really want our community to inspire other communities to work towards self-sufficiency as well. I think it gives our community a sense of pride that we can do this and that we're not just sitting here basically, that we're here and we're doing something, and that we're doing great things. I think it's pretty cool.

Many participants mentioned that Kanaka Bar is trying to set an example for others to follow. They have given a substantial number of public presentations, mentored other First Nations, worked with post-secondary institutions, and hosted many events on their territory to share their experience in renewable energy. In these exchanges, Chief Patrick Michell often notes the difference between tangible and intangible outcomes and sometimes refers to the latter as the "social return on investment." Here, he discusses the elusive nature of this category and provides some examples:

> How do you quantify social return on investment? How do you quantify the return of pride? self-esteem? … I come to my office, I see people staying late, coming in early, working through lunch….How do you quantify the return of laughter? How about that sparkle in people's eyes? Husbands and wives walking down the road holding hands and the laughter of children? I don't even know how to describe it….People say oh, it's about jobs and money….you think Kanaka Bar did it for the money? I don't know how to quantify that. I think there are economists who could… the only thing I'm saying is why would you? Why would you add a dollar value to that?

Chief Michell's comment highlights that it is not necessarily desirable to measure all of the ways that Kanaka Bar has changed since the hydro project, even if it were possible.

For him, it is crucial to look beyond things that are easily quantified, like money and jobs, to really understand what renewable energy projects mean to First Nations. And like other participants, he emphasizes the return of pride and self-esteem as a significant but intangible outcome.

The above comments on pride suggest that it has been empowering for Kanaka Bar to complete the Kwoiek Creek hydro project. It is one thing to have a vision of a different future and another to actually know, through experience, that one is capable of enacting that vision. I use the term "empowerment" cautiously, recognizing that it is a favoured concept among proponents of neoliberalism, who attempt to offload the state's responsibilities onto society's most vulnerable. While scholars have rightly criticized this concept for its role in perpetuating inequality (Bargh, 2007; Miraftab, 2004; Rushing, 2016), I am struck by how accurately it describes Kanaka Bar's overall experience with the Kwoiek Creek hydro project. The community has used the project to regain their power and begin addressing the impacts of colonization. The project has thus contributed to a sense of freedom at Kanaka Bar. By developing the project, Kanaka Bar has cultivated "freedom to" in addition to "freedom from." The project represents freedom from colonial dependence but also freedom to live off the land as their ancestors have since time immemorial. This notion of empowerment, one that encapsulates

a positive version of freedom is also present in Powell's (2006) analysis of Indigenous renewable energy projects on US-occupied lands. Powell writes:

> This recent emergence of renewable energy technologies on reservations inspires analysis of natural resource conflicts to move beyond models of resistance in understanding controversies and social struggles over resource management and energy production to seeing the ways in which concepts such as 'sustainability' are being resignified through the introduction of what I argue are imaginative technologies of existence" (2006, p.130).

For Powell, renewable energy projects are "imaginative technologies of existence," rather than just resistance, because they are part of a wider, Indigenous-led environmental justice movement that is "envisioning and enacting alternative ways for tribes to self-sustain and grow healthy economies, ecologies, cultures, and bodies in an integrated manner" (p.130). Renewable energy projects are not the only technologies of existence; Powell names the recovery of traditional food practices, water resource planning, salmon habitat restoration, and the production of film media as just a few examples of activities that are rooted in struggle but focused on future well-being. According to Powell, these technologies of existence are essential to survival, not necessarily in a biological sense, but in the sense that they empower those who employ them to live and grow in bold ways.

As a technology of existence, Kanaka Bar's Kwoiek Creek hydro project has enabled the community to simultaneously pursue economic, social, political, ecological, and cultural goals. As the case study demonstrates, these objectives are interdependent and mutually constitutive. While they are partly informed by the community's experience with colonization, they are not simply based in critique. When Kanaka Bar initiated the project, they began to imagine an alternative future, one based on "old ways" but inspired by current developments. For them, the hydro project is a hybrid pursuit, bringing together "knowledge of wider energy and trade markets, science, and engineering, local resource management issues, global processes of climate

change and wars for oil, and the relation knowing that comes with enacted attachments to place" (Powell, 2006, p.131). Today, Chief Michell calls this approach, "the best of both worlds" and describes it as follows:

> Using and benefiting from modern day technology, abiding by existing laws, and participating in all aspects of the mainstream society in a good way. At the same time, maintaining a personal connection to the land and my community, learning my language, participating in ceremony, and participant in hunting, fishing, and gathering activities and teaching my children to do the same (Michell, 2010, p. 12).

As Chief Michell's comment demonstrates, Kanaka Bar has found a way to honour their traditions in a way that integrates emerging knowledge. The Kwoiek Creek hydro project has been instrumental in addressing the impacts of colonization but has also enabled the members of Kanaka Bar to do more than just resist the status quo. It is important, however, to note that the Kwoiek Creek project is not in and of itself a source of empowerment. Technologies of existence, like renewable energy projects are just that: technologies. While discussing the transformative potential of renewable energy projects, it is crucial to remember that it is in fact the members of Kanaka Bar who leveraged this technology to create the change they wished to see.

Conclusion

The overall aim of this case study was to examine the implications of Indigenous-owned renewable energy projects from a community-based perspective. By highlighting Kanaka Bar's experience, my intent was to explore the importance of renewable energy projects to First Nations in BC beyond economic development. In particular, I was curious to know whether members of Kanaka Bar experienced social-political changes as a result of their involvement and if so, how they described these changes. The literature on Indigenous renewable energy projects, though limited, has repeatedly emphasized the transformative potential of such projects in terms

of independence, autonomy, sovereignty, self-sufficiency, and self-determination (Jaffar, 2015; Krupa, 2012a; Lowan-Trudeau, 2017; Rezaei & Dowlatabadi, 2015; Rodman, 2013). Rather than applying any one of these terms to Kanaka Bar's experience at the outset of this research, I asked the question, "Did you achieve what you set out to do?" Specifically, I asked participants why the project was started, how they developed it, and what happened as a result.

Participants identified three primary motivations at the beginning of the project: 1) reducing dependency / returning to self-sufficiency 2) restoring pride/self-esteem and 3) caring for the collective and future generations. They also described new expectations that arose as a result of project development, giving new definition and form to the community's primary motivations. First, Kanaka Bar switched partners, repositioning themselves as proponents rather than respondents in order to reaffirm their leadership in the project. Next, members began imagining how they would use project revenues, which catalyzed new visions around community togetherness and governance. Then, as Kanaka Bar approached the construction phase, the band worked to instill norms regarding job preparedness and hiring practices. As members began working on the project, they developed new expectations with regards to personal and collective capacity. Following the construction of the hydro project, Kanaka Bar developed a community-economic development plan detailing their vision of self-sufficiency including financial, infrastructure, employment, food, and energy self-sufficiency. The band has leveraged revenue from the hydro project to accomplish a great many things under this plan and the work continues. Participants largely agreed that meaningful changes have occurred at Kanaka Bar as a result of the hydro project but debated the extent to which it has contributed to the primary motivations of reduced dependency/ renewed self-sufficiency and care for the collective and future generations. There was little ambivalence, however, about the return of pride and self-esteem. Participants

mentioned various reasons why developing the project has brought them pride, suggesting an overall sense of empowerment.

Kanaka Bar's story demonstrates the importance of looking beyond economic indicators to understand the value of Indigenous-owned renewable energy projects to First Nations in BC. While economic considerations such as revenue and employment are important to the members of Kanaka Bar, and indeed a central part of their reflections, they are not necessarily aims in and of themselves. Instead, these priorities must be understood as part of their desire to regain control of their community. Additionally, it is crucial to consider intangible outcomes such as pride and empowerment when examining the transformative potential of renewable energy projects.

Chapter 6: Conclusion

First Nations in BC are interested and involved in developing renewable energy projects and many of them would like to sell electricity to the provincial grid. However, BC Hydro has recently suspended its independent power procurement programs, leaving First Nations with little to no market to sell electricity. This change arrives in the midst of considerable national fanfare around Indigenous renewable energy projects. It is fair to say that support for Indigenous involvement in the renewable energy sector has never been greater. To explore the implications of this contradiction, I proposed the application of energy justice as an emerging concept and analytical tool. I selected Rezaei's (2017) framework for making a justice claim, adapted from Walker (2012). This framework is divided into four parts - it calls for a description of the injustice, why it matters, how it arose, and what can be done about it. I suggested that this framework could be used to understand the predicament facing Indigenous power proponents in BC as a justice issue. I first applied it to the existing research on Indigenous power production in Canada, arguing that in order to understand the injustice at hand, it is necessary to describe First Nation involvement in the renewable energy sector and why it matters. After reviewing the literature, I identified gaps and devised the following two research questions:

1) How are grid-connected First Nations involved in renewable energy developments in British Columbia?

2) What are the implications of Indigenous-owned renewable energy projects for self-determination?

I explored these questions over the course of three chapters. The following section summarizes those chapters, including the objectives, results and contributions.

Summary of Results and Contributions

Chapter 3.

Chapter 3 provided a foundational understanding of how First Nations are involved in renewable energy projects in BC. It also argued that the lack of opportunities to sell electricity to BC Hydro is not simply a barrier but an injustice. I first described First Nation participation in the renewable energy sector using results from the BC First Nations Clean Energy Survey. I also detailed the rise of First Nation involvement alongside three key policy measures that privatized BC's electricity system. I then described the province's renewed commitment to public power generation and the subsequent decline in independent power procurement programs, highlighting the impacts that this policy reversal is having on First Nations with renewable energy ambitions. Lastly, using Rezaei's (2017) adapted framework for making an energy justice claim, I argued that the policy trajectory on this issue constitutes an injustice against First Nations.

This chapter confirmed what has already been widely reported in the news media: First Nations in BC are interested and involved in renewable energy projects in BC in large numbers. However, they are now struggling to participate in the renewable energy sector due to the decline in power procurement programs. This decline is an injustice because First Nations are disproportionately impacted by the downturn and are thus unable to benefit from the renewable energy sector the way independent power producers (IPPs) have. More importantly, this decline perpetuates a long history of distributional and procedural injustices whereby the provincial government has consistently prioritized industrial development above the rights and aspirations of Indigenous peoples. While there are helpful tools to create and/or reform energy policies to

incorporate the principles of energy justice, it is also important to look beyond policy solutions to promote energy justice, and this requires understanding how renewable energy projects are themselves forms of energy justice.

Chapter 3 helps answer the first research question, "How are grid-connected First Nations involved in renewable energy developments in British Columbia?" by providing a provincial overview of First Nation involvement where none existed. It also fills a gap in the literature about how BC energy policies shape and are shaped by the renewable energy ambitions of grid-connected First Nations. Additionally, the chapter highlights how transitions towards distributed renewable energy can be quite tenuous and do not guarantee energy justice in and of themselves. Examining the experience of First Nations in BC suggests that these transitions must be explicitly designed to redistribute political power if they are to deliver just results.

Chapter 4.

Chapter 4 began by identifying two harmful tendencies in the literature about BC's electricity system. Scholars critiquing the province's energy privatization measures have either characterized First Nations as respondents to renewable energy projects or ignored them altogether. The objectives of the chapter were therefore to 1) demonstrate that First Nations have, through much effort, managed to benefit from the transition to independent power production, and 2) describe in more nuance the relationship between First Nations and the private power sector by detailing the strategies that First Nations have used in their interactions with private developers.

I organized the chapter in two parts. I first explained how First Nations have leveraged the economic benefits of renewable energy projects by reviewing financial and employment benefits. I then compared the approaches of Kanaka Bar Indian Band and Sts'ailes First Nation to

the industry. Kanaka Bar developed one hydro project over a long period of time and is now reinvesting the revenues of this projects in a variety of initiatives. Sts'ailes involved themselves in eight hydro projects in a relatively short amount of time and have gradually negotiated more benefits with each project. Secondly, I described how both First Nations have navigated the private power sector, identifying common strategies they have employed to establish themselves as savvy industry players.

The chapter revealed that contrary to some scholarly depictions, First Nations have been able to secure long-term employment opportunities and ownership in renewable energy projects in BC. Additionally, they have adapted the industry to suit their needs, developing effective partnerships with the private sector. Most importantly, First Nations have emerged as distinct players within the renewable energy industry. Indigenous power producers are neither private developers, nor respondents; their goals are more akin to those of community-based enterprises. As such, they disrupt typical energy policy discourses that revolve around the debate between public versus private benefit.

This chapter helps answer my first research question in more depth by focusing on the details of two Indigenous power producers whose experiences have are not well documented in academic literature. Additionally, it gives more insight into what active participation in renewable energy projects might entail, addressing a gap in the literature on Indigenous power production. The chapter also begins to answer the second research question, “What are the implications of Indigenous-owned renewable energy projects for self-determination?” by focusing on the economic benefits that flow from operational projects in which First Nations have equity.

Chapter 5.

The purpose of Chapter 5 was to explore the transformative potential of Indigenous renewable energy projects beyond economic development. My secondary aim was to examine the significance of such projects in terms of their impacts. To meet these objectives, I created a detailed case of study of Kanaka Bar's experience developing the Kwoiek Creek hydro project, around the question, "Did you achieve what you set out to do?" Part 1 described the adverse impacts of colonization and identified three primary motivations that emerged from these struggles. Part 2 discussed new expectations that formed during the project's development. Part 3 explored outcomes five years after the project's completion, including key developments under the community's self-sufficiency goals and participant perceptions of these changes. The main learnings in Chapter 5 are thus organized around motivations, expectations, and outcomes.

Members of Kanaka Bar were motivated to initiate the Kwoiek Creek hydro project to 1) reduce dependency / regain self-sufficiency, 2) restore pride and self-esteem, and 3) care for the collective and future generations. As they ushered the project through key development stages, they formed new expectations relating to partnership formation, revenue generation, and employment. These experiences served to reinforce and refine the community's original motivations. As a result of their involvement in the Kwoiek Creek hydro project, Kanaka Bar has created a community economic development plan and made big strides towards the self-sufficiency goals contained therein. When asked whether they had accomplished what they set out to do, participants focused on revenue, employment and energy, and noted that in some cases they believe the project has fulfilled expectations but in other cases there is still more work to be done. Their responses revealed that they are evaluating their achievements using multiple reference points (including the community’s original motivations, the expectations that

developed over time, and the community's new self-sufficiency goals) and that these reference points are interrelated. Interestingly, participants almost unanimously reported an increase in pride and self-esteem arising from various aspects of project development. They also connected this newfound sense of pride to empowerment, describing the latter in terms of the freedom to create an alternative future that nonetheless honours "old ways." By integrating contemporary knowledge with traditional ways of being, Kanaka Bar's overall experience with the Kwoiek Creek hydro project is reminiscent of Powell's (2006) description of renewable energy projects as technologies of existence, not merely resistance.

Chapter 5 helps answer the first research question by providing an in-depth look at the processes one First Nation undertook to participate in the renewable energy sector. The chapter also provides a detailed answer to the second research question by focusing on the connection between renewable energy and self-determination, exploring what self-determination means to Kanaka Bar and how it changed and grew over the course of the project. This chapter also contributes to the literature on Indigenous renewable energy in several ways. First, the case study is unique among accounts of Indigenous renewable energy projects in that it is not told from a single perspective but is comprised of multiple, sometimes dissenting, views. Second, the chapter focuses on outcomes, detailing how these outcomes are connected to specific aspects of project development. Lastly, the chapter affirms what the literature has said about pride as an especially transformative aspect of renewable energy projects among First Nations. It extends this observation by documenting the sources of pride as well as its connection to empowerment.

Indigenous Renewable Energy Projects as Energy Justice

Taken together, the above research findings provide much more clarity around the transformative potential of Indigenous renewable energy projects. First, commercial scale

renewable energy projects can be a real source of economic benefit for First Nations. Contrary to some scholarly opinions, these benefits are not negligible. For many First Nations, the renewable energy industry presents some of the best economic development opportunities they have seen. However, according to the Indigenous power producers featured in this thesis, economic benefits such as revenue and jobs are not in and of themselves the most valuable aspects of renewable energy projects. First Nations are using renewable energy projects to pursue various initiatives that contribute to their self-determination as Indigenous peoples. Kanaka Bar, for instance, is leveraging revenues from their hydro project to promote several forms of self-sufficiency, including finances, employment, food, and energy. Sts'ailes is using the hydro projects on their territory to invest in cultural revitalization programs and build infrastructure that brings them closer to traditional burial sites. Observing the importance of renewable energy projects in these terms adds more depth to the justice claim I proposed at the beginning of this thesis.

Following Rezaei (2017), I suggested that Indigenous renewable energy projects might be considered forms of energy justice. Rezaei does not fully explore the justice implications of Indigenous renewable energy projects but creates a framework in which this can be explored. Powell (2006), however, directly situates renewable energy project within the Indigenous environmental justice movement by drawing out two key ways in which such projects promote justice: existence and resistance.

Resistance has been considered within the literature on Indigenous renewable energy projects (Rezaei & Dowlatabadi, 2015; Rodman, 2013) and has recently made its way into the literature on energy justice (Sovacool et al., 2017). In the first case, resistance is described as a broad-based attempt to counteract the historical and ongoing injustices wrought by colonialism. In the second case, it is described as actively and deliberately resisting unjust energy

developments. Both forms of resistance are present at Kanaka Bar. Members have described the Kwoiek Creek hydro project, along with newer solar projects, as a means of resisting colonial powers. These projects arise from the despair of colonization and are attempts to take back the community. Most members believe that the hydro project has helped them regain control over their lives and lands by reducing reliance on colonial institutions and reasserting territorial authority. Some members also see their involvement in renewable energy as a rejection of carbon-intensive energy production. Members of Sts'ailes First Nation, however, primarily describe their approach to renewable energy development in terms of the first form of resistance. Along with other economic development projects, they see their involvement in run of river hydro projects as a way of asserting sovereignty and increasing self-reliance.

That said, to Kanaka Bar and Sts'ailes, renewable energy projects represent much more than resistance. This is where Powell's (2006) concept of 'technologies of existence' applies. Powell describes Indigenous renewable energy projects as technologies of existence "to emphasize the creative, imaginative work of … envisioning and enacting alternative ways for tribes to self-sustain and grow healthy economics, ecologies, cultures, and bodies in an integrated manner" (p. 6). Both Kanaka Bar and Sts'ailes describe renewable energy in creative terms, as an opportunity to revive old ways of being and introduce new ones. Their involvement in the renewable energy developments is just as much about existence as resistance, about generating new futures in addition to dismantling colonial oversight. For instance, Kanaka Bar is reinvesting the revenues of the hydro project into local food production, supplementing traditional sustenance practices with new ones that will withstand the effects of climate change. Likewise, Sts'ailes is developing renewable energy practices with salmon habitat in mind. In addition to providing a source of physical nourishment, salmon are the basis of important spiritual, cultural,

and political practices for the Sts'ailes people. While members of Kanaka Bar and Sts'ailes do not explicitly talk about energy justice, the way they describe their involvement in renewable energy illustrates what energy justice could look like. Their visions and their experiences suggest that energy justice is comprised of both resistance and existence.

Understanding Indigenous renewable energy projects as forms of energy justice provides an interesting opportunity to revisit the predicament of Indigenous power producers in BC using Rezaei's adapted framework for making a justice claim. In Chapter 3, I argued that the decline in procurement programs is not simply a barrier to First Nations with renewable energy ambitions but an injustice, on the basis that it disproportionately affects them and prevents them from benefiting from the transition to distributed renewable energy in the way that IPPs have. However, the above exploration of Indigenous renewable energy projects as vehicles for energy justice presents another, arguably better, way of comprehending the injustice of this situation.

By indefinitely suspending the purchase of independent power, the BC government has not just removed a good economic opportunity for First Nations, but has denied them the chance to leverage all of the other benefits associated with these projects, benefits that Indigenous power producers now deem critical to their pursuit of self-determination. The rollback on procurement programs does not just inconvenience First Nations, it removes one of the surest ways for them to resist the ongoing effects of colonization and build alternative futures informed by tradition. In short, it is an injustice because it stands in the way of energy justice.

Much more analysis would be needed to properly detail the origins of this injustice, which arises from capitalist-colonial logic that violently dispossesses First Nations time and again. My goal here is to point out First Nations are not like other stakeholders in the transition to distributed renewable energy. Not only have they suffered more losses due to the centralized

energy-planning paradigm than any others, but they are also entitled to dictate the development on their territories as they see fit. To argue that the decline in independent power production is an injustice is not to call for continued energy privatization but rather to highlight the larger problem of colonial governance, which systematically and illegally alienates First Nations from their lands. While it may be worthwhile to examine measures that compensate First Nations for historical and recent losses associated with centralized energy developments as well as those that increase First Nation involvement in provincial energy planning and provision, these approaches are short-term fixes.[45] They do not go far enough to address the larger set of issues from which this particular injustice arises. Like Rezaei (2017), I believe that direct action is one of the most effective tools that everyday folk, including Indigenous people and settlers, have to hold colonial governments to account.[46] Of course, there are many other ways to promote energy justice beyond opposition to unjust decisions. Settlers should respect and support Indigenous self-determination in its many forms by seeking out and contributing to Indigenous-led initiatives.

Additional Reflections on the Research Process

There are several limitations to this thesis that I would like to acknowledge before concluding. The first is about the justice framework I have applied to this research, the second is about my ability to interpret the results of the research as a white settler, and the third is about academic conventions that prioritize certain kinds of contributions over others.

Limitations of applying a justice framework.

[45] Other jurisdictions are heading in this direction. For instance, some territorial governments are adopting targets for First Nation involvement in new renewable energy projects (Fitzgerald & Lovekin, 2018).

[46] For an excellent list of tangible ways to support energy justice, see Rezaei's (2017) dissertation conclusion.

I hesitated to use a justice framework for this research because so there are so few academic accounts of Indigenous peoples at the forefront of power production (Bargh, 2010). My sincere wish was to share stories that emphasize Indigenous peoples in control of energy production rather than exploring countless related injustices. The people I interviewed do not see themselves as victims and they are not interested in being portrayed as such. When I reflect on why they shared their stories with me, I believe it is because they want others to know what they have done. They are proud of their accomplishments and they hope that other First Nations will follow suit. The justice framework is not for them – they already know that what they have experienced and continue to experience is unjust. They are actively resisting and remedying the injustices in their lives.

The justice framework is for settlers, who occupy Indigenous territories without permission and uphold colonial governments. As a settler, the justice framework helps me think through the responsibilities I hold towards Indigenous peoples and the governments I have helped elect. Thinking through these responsibilities, however, should not detract from the leadership, expertise, and achievements of Indigenous power producers. Their stories need to be celebrated and held up as examples of energy justice, guiding not just future policy reforms (which presumes the continuation of the settler state) but other attempts to disrupt the colonial status quo.

Researching Indigenous self-determination as a white settler.

Now that I have organized conversations with members at Kanaka Bar and Sts'ailes into formal research results, I believe it is important to acknowledge the limitations of these results based on my position as a white settler. Beginning the research process, I was aware that people might find it difficult or unappealing to share their stories with an outsider and I was truly

surprised by how generous everyone was with their time and knowledge. That said, I know I missed the opportunity to hear from certain people and I am sure that I did not elicit the most candid views from everyone. Even if I had been privy to additional perspectives (to which academics should not feel the least bit entitled), my ability to interpret them would remain an issue. As I began thinking about what people had shared, I realized that I had a narrow range of tools to make sense of their stories.

I was not raised to value or inquire about Indigenous ways of knowing and I have only recently been exposed to the worldviews of certain Indigenous peoples. Coming to this research as a cis-gendered white woman from a middle-class background, I did what I could to understand and honour the perspectives of those who spoke to me. I processed what I heard and experienced by reading, writing, going for walks, discussing ideas with fellow researchers, attending lectures, and in the case of Kanaka Bar, returning to the community again and again. I relied on follow-up conversations with community members and gradually learned how to comprehend some of what had been shared with me. I hope that I have done justice to their words but I know that my position as a settler limits my ability to communicate their wisdom fully. Unfortunately, this is an issue across the literature on Indigenous renewable energy projects. Most of the scholarship on Indigenous renewable energy projects is from non-Indigenous researchers. There is clearly a need to support Indigenous researchers in bringing their own analyses forward. There is also a need to tell Indigenous success stories through non-conventional means, as academia tends to limit expression and render powerful messages inaccessible.

Rethinking conventional academic contributions.

During this research process, I have developed a new appreciation for how difficult it can be to produce academic knowledge that generates material benefits for Indigenous peoples.

Among other things, academic institutions demand certain products, primarily written documents such as theses/dissertations, journal publications, and academic poster presentations. I struggle to see how these documents serve research participants. I know that the norms around academic work products are changing along with other research practices but it is a long road. Conforming to traditional academic standards has sharpened my awareness around the ways in which academia reproduces privilege. Like many white settler scholars, I received funding to conduct research with Indigenous peoples but noticed few institutional mechanisms to ensure that this work actually benefits them. Therefore, I think it is important to restate the contributions of this research, in practical terms, not just academic ones.

As mentioned, I believe that Kanaka Bar and Sts'ailes agreed to participate in this research because they see value in sharing their stories more widely. Both are vocal advocates for First Nation participation in the renewable energy sector and are interested in assisting other Indigenous power proponents. Additionally, I believe that the community members who participated in interviews did so largely because they enjoyed talking about what they had accomplished. I hope that the interview recordings along with the large amount of detail in this thesis can serve as resources for them. To really have an impact, however, I think it is necessary to explore other ways to communicate this research. Some of it has already made its way into the public sphere (Cook et al., 2017; Kara Shaw, Cook, Fitzgerald, & Sayers, 2017) but I am aware that more work is needed to make it relevant and accessible to a wider audience. Therefore, the research process is not over. I will continue to maintain the relationships I have made throughout this process and honour my commitments to collaborate with Kanaka Bar and Sts'ailes to communicate the results of this research in ways that work for them.

Moving forward, I think a stronger emphasis on relationship building is important for others to consider. To begin, Indigenous people are best suited to conduct research concerning Indigenous people. Whether they are members of Indigenous communities or established Indigenous scholars, their work is more likely to flow from and generate respectful relationships. They should be the first to receive support for their research interests. If settler researchers want to work directly with Indigenous peoples, then they must to do the work to build supportive research relationships and obtain permission to proceed. Additionally, in order for this research to tangibly enhance Indigenous well being, these relationships must be developed before the research begins so that Indigenous people can shape the direction of the research to suit their needs. Much more can be said, and has been said by others (Carlson, 2016; Kovach, 2010; Menzies, 2004; Noble, 2015; Smith, 1999). I offer these over-simplified reflections partly to challenge the tradition of offering questions for future research. While this thesis has prompted me to consider additional research questions, I believe that future research should emerge from trusted research connections and serve the wishes of the Indigenous people involved.

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