Renewables and Reconciliation: Decolonizing climate policies for a just transition to a low-carbon future

by

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Abstract

This exploratory research paper sets out to unpack the misalignment between provincial climate policies and legislated commitments to reconciliation, the meaning of a *just* transition to a low-carbon future, and how Indigenous clean energy projects and proponents are, and ought to be recognized as, leaders in this transition. By conducting a comprehensive literature review and a series of semi-structured qualitative interviews with members of the Hupačasath First Nation and the Port Alberni municipal government, the data collected was used to assess the key priorities and interests outlined in *CleanBC* and the *Roadmap to 2030*. Key themes that emerged through the interviews revolved around opportunity, regionalizing power, and decolonizing power. As the following research paper will outline, existing provincial climate policies and strategies fail to recognize the growing momentum of Indigenous clean energy projects as climate solutions. By challenging existing state-driven climate futures and looking to Indigenous leadership and expertise, the findings of this research aim to promote meaningful policy changes that fulfill commitments to both climate action and reconciliation, as outlined in the British Columbia (BC) *Declaration on the Rights of Indigenous Peoples Act* (DRIPA) passed in 2019.

Keywords: Indigenous clean energy, renewables, First Nations, decolonization, climate policies, BC

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List of Acronyms

BC	British Columbia
BCICEI	British Columbia Indigenous Clean Energy Initiative
BCUC	British Columbia Utilities Commission
BIPOC	Black, Indigenous, People of Colour
DRIPA	Declaration on the Rights of Indigenous Peoples Act
EPA	Electricity Purchase Agreement
EV	Electric Vehicle
FNCEBF	First Nations Clean Energy Business Fund
FPIC	Free, Prior, and Informed Consent
GHG	Greenhouse gas
ICA	Indigenous Climate Action
ICE	Indigenous Clean Energy
IEJ	Indigenous Environmental Justice
IPP	Independent Power Producer
MW	Megawatt
NRT	New Relationship Trust
NTC	Nuu-chah-nulth Tribal Council
PPA	Power Purchase Agreement
SFU	Simon Fraser University
SOP	Standing Offer Program
TRC	Truth and Reconciliation Commission
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples

Chapter 1.

Introduction

As the world looks to secure global net zero by 2050 and keep a maximum of 1.5 degrees Celsius of warming within reach, the societal push advocating the need for the global economy to transition off fossil fuels is greater than ever. Technological advancements are improving at a rapid pace and the push for electrification is prioritized as a key avenue for reducing greenhouse gas (GHG) emissions. As the province of British Columbia pushes its climate agenda forward, central questions have emerged around where all this projected electricity is going to come from, how it will be generated and distributed, and who will maintain the regulatory control and ownership over it. Currently close to 90% of BC's electricity is produced from mega-dam hydroelectric systems, predominantly located in northeastern and southeastern BC in the Peace River and Columbia River regions (CER, 2022). These mega-dam projects represent aging, colonial infrastructure rooted in a legacy of ecological destruction, human displacement, and the blatant violation of Indigenous rights and title. Despite the poor track record, the province continues to forge ahead with the development of yet another mega-dam project, Site C, on the Peace River to power BC's "clean" energy future.

Contrary to the state-centric policies that have driven provincial energy agendas, Indigenous communities, governments, and organizations have been paving a different path forward as clean energy leaders. According to recent reports, there are over 200 renewable energy projects with Indigenous involvement across the country (ICE, 2022). These projects have proven to offer direct and multifold benefits for local communities. After the Crown and private utilities, Indigenous peoples are the largest owners of clean energy assets in Canada (Clean Energy Canada, 2021). However, despite the

considerable growth and demonstrated expertise of Indigenous peoples to lead this transition, BC has yet to formally recognize these contributions as solutions in their own provincial climate strategies. By ignoring these contributions and simultaneously neglecting to acknowledge its colonial roots across energy systems planning and decision-making, the province of British Columbia fails to advance an energy future that addresses its commitments to meaningful climate action *and* reconciliation.

If the BC government truly intends to fulfill its commitments to reconciliation as outlined in the 2019 *Declaration on the Rights of Indigenous Peoples Act* (DRIPA), it will have to abide by its own laws and take all measures necessary to ensure its provincial energy policies and legislation are updated to reflect consistency with the *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP). With dwindling opportunities for First Nations to develop revenue-generating clean energy projects on their territories, the BC government must consider whose priorities and interests are represented in their climate plans. In the face of climate change, the transition to a low-carbon future is paramount. However, equally important is considering what that transition will look like, whose interests will be represented, and who will be leading the transition. As BC looks to balance its commitments towards climate action and reconciliation, Indigenous clean energy projects offer a clear and promising pathway to an equitable climate future for BC.

The key objectives and questions that have guided this research are as follows:

1.1. Research Objectives

1. To identify where provincial climate policies, targets, and strategies conflict with BC DRIPA.
2. To work with in collaboration with First Nations to develop a set of tools that can be used to influence governance approaches to energy use planning in BC that incorporates Indigenous perspectives on reconciliation and decarbonization.
3. To produce high-caliber research on energy use planning that prioritizes Indigenous principles, objectives, and community interests, while simultaneously engaging in knowledge mobilization to ensure that the findings and recommendations are accessible and beneficial to a broad audience.

1.2. Research Questions

1. What factors influence and/or motivate Indigenous participation and leadership in the renewable energy sector?
2. What benefits do Indigenous-owned and operated renewable energy projects offer local community members?
3. How has the indefinite suspension of BC Hydro's Standing Offer Program and recent amendment to the *Clean Energy Act* affected market access opportunities for First Nations to invest in a low-carbon future?
4. In what measurable ways can BC's clean energy policies and strategies better respect Indigenous peoples inherent right to self-determination and adhere to commitments legislated in *the BC Declaration on the Rights of Indigenous Peoples Act* (DRIPA)?

1.3. Who am I?

Perhaps like other mixed-race folks, I find myself dancing between two cultures and two identities. I am a “ha-fu”. My mother is Japanese, a first-generation immigrant and settler. My father is “Canadian” – a White settler with mixed English, Swedish, and French ancestry. I grew up in a middle-class, mixed-race, nuclear family. Thanks to my mother’s efforts, I continue to have a strong connection to my Japanese heritage, culture, and language. I also have a strong sense of connection to Port Alberni – where my paternal family lives and have been settlers for multiple generations. And while I proclaim to have a strong sense of connection to Port Alberni, I acknowledge how shallow these roots are, especially in comparison to the Nuu-chah-nulth peoples (Hupačasath and Tseshaht First Nations specifically) who have governed and stewarded these lands and waters since time immemorial.

As a settler who is green to the world of clean energy, throughout this research, I have continually asked myself what my intentions are in this space. I approach this topic from a place of care and love for our planet and for the future generations who will inhabit it, and also from a desire to challenge, unpack, and unlearn my own preconceived notions of what climate action, clean energy, and justice all really mean. As I educate myself on this topic, I recognize the coloniality entrenched in conceptions of justice and climate action rhetoric. I continue to challenge my own knowledge and preconceptions around the mainstream narrative that seeks to ‘tackle’ climate change and the types of policy avenues touted as needed for a transition to a low-carbon future. While many climate policies and strategies are viewed and appreciated as positive, I have come to learn, through the works of BIPOC activists, scholars, and leaders in this space, that many of these policies and strategies are entrenched in colonial processes and do not address the roots of the problem itself.

I also acknowledge that while my research topic engages with the concept of 'decolonizing' climate policies, as a young, cis-woman settler, I am walking down a dangerous path of co-opting a concept and engaging in a subject that I perhaps should not be. I am not an expert, and I continue to grapple with the (neo)colonial relations and power imbalances that exist in academia, in politics, and in the world of "clean" energy. Thus, this research will not attempt to suggest or recommend how to decolonize climate policies. Instead, I am interested in supporting Nuu-chah-nulth self-determination and exploring how climate policies and strategies can evolve to recognize Indigenous rights and encourage Indigenous participation in the transition to a low-carbon future. I am guided by the works of Indigenous experts, scholars, activists, and leaders in the field.

I write this on the unceded and ancestral territories of the *xʷməθkʷəy̓əm* (Musqueam), Sḵwx̱wú7mesh (Squamish), and səlilwətaɬ (Tsleil-Waututh) Nations in East Vancouver.

Chapter 2.

Literature Review

Brief Context: "Clean" Energy and Indigenous peoples

Indigenous peoples[1] are leading the way in the transition to Canada's clean energy future and are at the forefront of the country's clean energy evolution (Gilpin, 2019; ICE, 2022). However, the history of renewable (or clean) energy development across Canada is not all that "clean". It is fraught with conflict, the dispossession of Indigenous land and life, ecological destruction, settler-colonialism, and state-centric policies. Indigenous peoples' relationship with the history of energy development in so-called Canada has been described by Hoicka et al. (2021) in three distinct phases: 1) the period prior to any required consultation process and the total lack of recognition for Indigenous rights and title (largely up until the 1970s); 2) the introduction of consultation and accommodation, (including the *Constitution Act,* 1982 and subsequent Supreme Court cases[2]*)*; and 3) an era of increased equity ownership. The third phase can be seen today through the growing number of clean energy projects with Indigenous involvement over the past two decades across the province of British Columbia (Bailey, 2020;

[1] Throughout this paper, I interchange between Indigenous peoples and First Nations. I would like to acknowledge that these terms are distinct and nuanced. From a colonial perspective, the three classifications of Indigenous peoples in so-called Canada (or "Aboriginal" as adopted in the *Constitution Act, 1982*), generally refer to Inuit, Métis, and First Nations peoples. Indigenous can also be used by those who may not necessarily be legally recognized through the *Indian Act*, but self-identify as Indigenous through their ancestry. When referring to a specific First Nation or Nations, I generally use First Nation(s), while recognizing that First Nations are a very diverse group of Indigenous peoples with diverse knowledges, philosophies, and experiences.

[2] *Haida Nation v. British Columbia (Minister of Forests)*, [2004] 3 S.C.R. 511, SCC 73, and *Taku River Tlingit First Nation v. British Columbia (Project Assessment Director)* [2004] SCC 74

Cruickshank, 2020; Fredericks, 2018; Gilpin, 2019; Kelly, 2017; Lavoie, 2019; Madrali & Blair, 2020; Titian, 2013; Wohlberg, 2014).

Since 2017, medium-to-large[3] Indigenous renewable energy projects have experienced a 29.6% growth rate across Canada, with at least 204 projects with Indigenous involvement[4] now in operation (ICE, 2020; ICE, 2022). On top of this, there is an estimated 1,700 - 2,100 micro or small renewable energy systems across Canada with Indigenous leadership or partnership (ICE, 2020). Moreover, it is becoming increasingly common to see the whole ownership of renewable energy projects belonging to Indigenous communities (Hoicka et al., 2021; ICE, 2022). In BC, approximately 95% of the province's electricity is generated from renewable energy, with about 87% produced from hydroelectric sources (CER, 2021; CER 2022). The majority (80%) of the power generation and supply is owned by BC Hydro, a provincial Crown corporation. The remaining capacity is provided by FortisBC and Independent Power Producers (IPPs), which 79 out of the 102 existing IPPs[5] are owned, operated, or co-partnered by First Nations (Pembina Institute & New Relationship Trust, 2021). BC has the largest number of Indigenous renewable energy projects in Canada and combined,

[3] According to Lumos Energy, medium-large projects are categorized as renewable energy installations generating a minimum of 1 megawatt of electricity at full operating capacity (approximately enough electricity to supply 400-500 homes) (Henderson & Sanders, 2018)

[4] Involvement can span from full project ownership, co-ownership, partial ownership, minor ownership (including equity and/or physical asset ownership), or otherwise defined financial benefits (ICE, 2022).

[5] The conversation regarding IPPs in British Columbia is a largely controversial topic. IPPs largely gained momentum from the province's growing energy demands in the late 20th century and subsequent to the 2002 Energy Strategy. In the early 2000s, environmental organizations raised alarms over IPPs privatizing BC's rivers and ignoring environmental regulations for capital gain at the cost of ecological destruction and harmful cumulative effects (West Coast Environmental Law, 2009; Wilderness Committee, 2008). At the time, many IPPs constructed hydroelectric dams on rivers without the consent of the local First Nations or without adequate environmental assessments. It was also later discovered that the former BC Liberal government forced BC Hydro to sign decades-long EPAs to purchase overpriced electricity from IPPs that were owned by BC Liberal donors (Beers, 2019). However, in recent years, First Nations have built significant momentum in the renewable energy sector in BC as IPPs, and yet are still hindered by the history of these corporate IPPs.

First Nations deliver approximately 13% of BC's electricity (Hoicka et al., 2021; ICE, 2022; Pembina Institute & New Relationship Trust, 2021).

Many Indigenous IPPs entered into Electricity or Power Purchase Agreements (EPAs or PPAs) with BC Hydro to sell generated electricity back to the North American power grid. To support the BC Energy Plan (2007) and the BC *Clean Energy Act* (2010), BC Hydro introduced the Standing Offer Program (SOP) in 2008 as an avenue for IPPs to pursue and develop renewable energy projects. As former studies have indicated, on top of economic development and revenue opportunities, the motivations and benefits for Indigenous renewable energy projects vary on a case-by-case basis including (but not limited to): employment and capacity-building opportunities, increased self-sufficiency, minimized environmental impacts, reduced electricity expenditures, community pride, energy autonomy, and increased self-determination (Cook et al., 2017; Fitzgerald, 2018; Ozog, 2012; Rezaei, 2017; Rezaei & Dowlatabadi, 2016).

However, in 2019, BC Hydro announced the indefinite suspension of the SOP program. BC Hydro's decision to neither accept new applications nor award any new EPAs, beyond five existing projects with significant Indigenous involvement, has disproportionately affected First Nations with renewable energy ambitions, current operational projects, projects in development, and/or projects under consideration (Fitzgerald, 2018; Yunker, 2020; Shaw, 2018). As of now, there are 15 Indigenous-owned or partnered projects with EPAs scheduled for renewal within the next 10 years, and it remains uncertain whether they will be renewed and what kind of terms will need to be negotiated in order for the projects to remain financially viable for communities (Pembina Institute & New Relationship Trust, 2021).

BC Hydro's declining interest in issuing EPAs and the decision to suspend any Calls for Power came at the same time the BC government decided to push forward with the construction of the Site C Dam along the Peace River in northeastern BC (Cook et

al., 2017). Although Site C is touted as a clean energy project that will advance CleanBC's targets, the large-scale hydro project has become increasingly well-known for its exorbitant costs, concerns around environmental injustice, and blatant disregard for treaty rights. Prior to the approval of the mega-dam project, all eight Treaty 8 Nations whose lives and lands would be most directly impacted by its construction were opposed to the project (Cook et al., 2017; Cox, 2018). The project is also slated to destroy rich agricultural land across the region and present adverse impacts to the ecological integrity of the surrounding natural landscape (Cox, 2021).

To date, Site C will be the most expensive dam in Canadian history with a projected price tag of $16-billion CAD (Cox, 2021). But according to BC Hydro, Site C "will be among the most cost-effective resource options for BC Hydro ratepayers" and, "after a significant upfront capital cost, Site C would be inexpensive to operate and would have a long life of more than a 100 years" (BC Hydro, 2014). However, while BC Hydro claims that Site C will provide enough electricity for the province and is the least expensive option[6] for a long-term source of clean and renewable energy, researchers from SFU's Clean Energy Research Group (CERG) contend that given the province's goals of reducing greenhouse gas emissions (GHGs) by 80% below 2007 levels by 2050, BC's growing electricity demands can in no way be met by Site C alone (Hira, 2020). According to a recent report published by the Pembina Institute in collaboration with the New Relationship Trust (2021), it is estimated that the demand for additional

[6] BC Hydro claims that these decisions are based on economic factors and that purchasing power from IPPs would mean higher energy rates for BC residents. However, this does not need to be the case as appropriate regulations can ensure the protection of ratepayers. In addition, often left out of their equations are the building costs of such massive hydro projects (Cox, 2018). When considering that Indigenous IPPs will cover their own construction costs, through initiatives like the New Relationship Trust, the British Columbia Indigenous Clean Energy Initiative (BCICEI), and Natural Resource Canada's Clean Energy for Rural and Remote Communities (CERRC) program, there is a financial benefit to ratepayers as there is no possibility that project cost overages will be shouldered by the energy consumers, thereby removing a significant risk factor from investments into our energy future.

electricity generation will increase between 19% to 34% for BC by 2030. Currently, First Nation clean energy projects have a combined power capacity of 2,553 megawatts (MW) (Pembina Institute & New Relationship Trust, 2021). For reference, this is more than double the capacity of the Site C dam, which will provide 1,100 MW of capacity (BC Hydro, n.d.). Rezaei (2017) describes this narrative as the often-misguided discourse of "energy plenty" in BC.

On top of the indefinite suspension of the Standing Offer Program, in June 2020, just shy of a year since BC passed the *Declaration on the Rights of Indigenous Peoples Act* (DRIPA) into its provincial legislation, the BC Government proposed an amendment to the *Clean Energy Act* (2010) with the introduction of Bill 17. This amendment has stirred controversy and disappointment amongst First Nations across BC, who were not consulted in the decision-making process (Nuu-chah-nulth Tribal Council, 2020). The proposed Bill repealed the definition of electricity self-sufficiency, thereby creating an opportunity for BC Hydro to purchase power from any jurisdiction (such as the United States) rather than supporting local, in-province First Nations economic development opportunities. The Bill also intentionally refrained from clearly defining what constitutes "clean" electricity, thereby dodging responsibility and accountability for ensuring that all generated electricity meets certain environmental standards. The proposed amendment to the *Clean Energy Act* works to further restrict Indigenous participation in the renewable energy sector and for First Nations to pursue economic development opportunities across their unceded territories. Judith Sayers, the President of the Nuu-chah-nulth Tribal Council, stated in response to the province's decision to amend the *Clean Energy Act:*

> *"Every step the BC government takes in clean energy is away from BC First Nations ability to develop power now and in the future...BC [is] trying to stifle First Nations entrepreneurship."* (Nuu-chah-nulth Tribal Council, 2020)

The decision to repeal the self-sufficiency clause and halt the Standing Offer Program directly restricts Indigenous peoples' self-determining capacities to freely pursue their economic development, which is both a constitutionally protected right[7], and outlined in Article 3 of the *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP)[8], which states:

> *Indigenous peoples have the right to self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development.* (United Nations, 2007)

On top of this, the decision by the province to amend its energy legislation without the prior consultation of First Nations across BC is also not in congruence with Article 19 of UNDRIP, which clearly states:

> *States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free, prior and informed consent before adopting and implementing legislative or administrative measures that may affect them.* (United Nations, 2007)

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[7] The Government of Canada recognizes the inherent right to self-determination as an existing Aboriginal right, which is constitutionally protected in Section 35(1) of the Canadian *Constitution Act, 1982*, which reads:

The existing aboriginal and treaty rights of the aboriginal peoples of Canada are hereby recognized and affirmed.

[8] UNDRIP was adopted by UN General Assembly in 2007, and later adopted by the Government of Canada in 2016. It establishes an international framework for recognizing the "minimum standards for the survival, dignity and well-being of the indigenous peoples of the world." (United Nations, 2007)

As Hoicka et al. (2021) argue, “[t]he most profound change to support reconciliation would be the implementation of FPIC [free, prior, and informed consent] that would allow Indigenous communities control over all resource development projects, including renewable energy.” (p.13) The decision to amend the *Clean Energy Act* without consultation makes it evident that the provincial government did not take all measures necessary to ensure that the amendment was consistent with UNDRIP, which as outlined in Section 3 of DRIPA directly states:

> *In consultation and cooperation with the Indigenous peoples in British Columbia, the government must take all measures necessary to ensure the laws of British Columbia are consistent with the Declaration.*

This blatant violation calls into question BC’s commitments to reconciliation as outlined in DRIPA. Instead, while all eyes were focused on the COVID-19 pandemic, the province continued to quietly push forward with an economic agenda that went largely unchallenged by the public gaze. This type of politics of distraction (Corntassel, 2012) is not in congruence with a just transition to a low-carbon future. While the provincial government’s decision to proceed with the construction of a mega-dam on the one hand might be contributing to the province’s overall climate targets, on the other hand, it is not advancing the government’s obligations to reconciliation as outlined in DRIPA. If anything, it highlights how the province’s current climate agenda and policies both contribute to climate injustice and fail to meaningfully address climate change (ICA, 2021). Borrows (2016) argues that reconciliation requires the province of British Columbia to collaboratively co-create legislation with Indigenous governments to recognize, respect, and affirm Indigenous rights and self-determination.

Energy Justice & The *Just* Transition

Decarbonization, electrification, and the transition to a low-carbon economy are all at the forefront of discussions around tackling climate change. Launched in 2018, CleanBC is upheld as the province's official roadmap to achieving its legislated climate targets by 2030. However, what is missing and largely an afterthought in BC's official plan for a net zero future is the concept of a *just* transition. While the phrase is mentioned once in passing (CleanBC, 2021, p.25), it does not explain what is meant by a "just transition", its significance, why it is necessary, and how the roadmap plans to help facilitate the process. Outside of CleanBC, the phrase "just transition" has been, in recent years, gaining popularity and increased attention when discussing how to move forwards toward a low-carbon future. As Williams & Doyon (2019) argue, a transition to a low-carbon future cannot be sustainable unless the process of getting to that future is grounded in a foundation of justice. Therefore, based on this mode of thinking, CleanBC cannot and will not be sustainable due to its inadequate foundation of justice as well as its lack of recognition for historical injustices.

Jenkins et al. (2018) also point out that, without adequately engaging with questions of justice, not only may the transition be rendered unsustainable, but also dangerous. From an energy perspective, energy justice has grown as a field of research that investigates the intersection of justice and ethics to better inform energy decision-making by reframing energy problems as pressing justice concerns. Benjamin Sovacool defines energy justice as "a global energy system that fairly distributes both the benefits and burdens of energy services, and one that contributes to more representative and inclusive energy decision making" (Sovacool et al., 2017, p. 677). By critically reflecting on affordability, accessibility, availability, as well as how energy is generated, distributed,

and regulated, energy justice can serve as a lens to inform energy decision-making that is more just and equitable (Sovacool et al., 2017).

Building upon traditional justice principles, the energy justice framework has been analyzed through the three core concepts of distributive justice, procedural justice, and justice as recognition (Walker, 2012). Distributive justice looks at the allocation of burdens and benefits (IPCC, 2022), and addresses questions around availability, affordability, sustainability (Sovacool et al., 2017), as well as scale (Jenkins et al., 2016). As Silveira and Pritchard (2018) point out, affordability also encompasses the equitable distribution of economic benefits. Procedural justice examines the decision-making process across social and political spheres in terms of both inclusivity and fairness (Williams & Doyon, 2019). It examines the due process, transparency, accountability, intra- and intergenerational equity, responsibility, and resistance (Sovacool & Dworkin, 2015; Sovacool et al., 2017). Lastly, justice as recognition refers to the basic respect and recognition of pluralist and alternative needs, issues, and solutions to sustainability, ways of knowing, and being (Williams & Doyon, 2019). Recognition centers the energy discussion back on people (Sovacool, 2014) and highlights intersectionality (Sovacool et al., 2017), the politics of energy infrastructure (Fuller & McCauley, 2016), and energy poverty (Rezaei & Dowlatabadi, 2016). These three dimensions of justice (distributive, procedural, recognition) are all conceptually connected but analytically distinct, and as Hurlbert & Rayner (2018) describe, can be understood as a trivalent relationship.

In the systems transition framework put forward by Williams & Doyon (2019), they highlight the importance of issues around power and governance in transitions (Avelino & Rotmans, 2009; Lawhon & Murphy, 2012; Meadowcroft, 2009; Shove & Walker, 2007). The body of transition research and literature suggests a need to address power and governance at multiple spatial, jurisdictional, and temporal scales (Termeer et al., 2010), as well as asking and recognizing those whose voices remain excluded and

unheard (Markard et al., 2012). According to MacArthur et al. (2020), energy transitions are inherently political. As Williams & Doyon (2019) suggest, transitions must move beyond conventional strategies and interact with all three dimensions of energy justice, and in doing so, present opportunities for transformational systems change.

Within the context of settler colonialism, Rezaei (2017) critiques the elevated status of the state as both an agent of justice, and as an entity that, on its own terms, grants recognition. Yellowknives Dene scholar Glen Coulthard (2014) rejects this type of colonial politics of recognition and instead argues for the self-recognition by Indigenous peoples and communities, who are the sole agents with power to decide who they are. While energy justice in a Euro-centric and Western perspective situates fairness at the heart of policy responses to growing energy demands (Jenkins et al., 2018), Anishinaabe scholar and environmentalist Deborah McGregor calls for a distinct framework of Indigenous environmental justice (IEJ) that goes beyond Euro-dominated conceptualizations of justice and fairness. McGregor et al. (2020) describe IEJ as a framework that is grounded in Indigenous philosophies, ontologies, and epistemologies. They argue that any sustainable and “transformative” change must integrate an IEJ analysis and recognize that the concepts of justice and reconciliation must be conceptualized beyond the human dimension to be inclusive of *all relations* and the land itself (McGregor, 2019; McGregor et al., 2020). Failure to apply this analysis and to renew relationships among peoples and the land will mean that any remedy toward a transformative and sustainable future will fail and “aggressively undermine Indigenous peoples” (McGregor et al., 2020, p.36).

Energy Sovereignty

Energy sovereignty is a relatively new concept that is emerging from a body of transdisciplinary research models across energy policy (Schelly et al., 2020). According to Laldjebaev et al. (2015), energy sovereignty draws from some of the historical roots of *food sovereignty* and “emphasizes the role of local people and their institutions in determining their energy systems in ways that are culturally relevant and ecologically sustainable.” (p.102) They describe energy sovereignty as “a framework that recognizes the individual, community, or nation’s rights, and strengthens their abilities to exercise choice within all components of energy systems” (Laldjebaev et al., 2015, p.103). Expanding upon this definition, Schelly et al. (2020) describe how energy sovereignty not only recognizes these individual and collective rights but centers them. They describe energy sovereignty as a place-based practice that “redefines the priorities for decision making regarding energy systems while encouraging increased reliance on renewable energy technologies” (Schelly et al., 2020, p.109). For Valine Brown, a member of the Haida Nation K’aawas Eagle Clan, energy sovereignty means “enabling Indigenous communities to own and operate [their] own energy systems…[that] are aligned with Indigenous cultures, knowledge, and land rights, and…increase[s] the resiliency of Indigenous communities that have been negatively impacted by colonialism and capitalist resource extraction” (Brown, 2019). According to Krupa et al. (2015), “truly sustainable renewable energy development requires a project design that reflects community values, incorporates community control, and incentivizes Indigenous ownership” (Krupa et al., 2015).

With an increasing lack of opportunity for grid-tied First Nations to sell electricity to the grid, sourcing and purchasing energy from grid-tied First Nations' clean energy projects is a significant opportunity to support Indigenous leadership in the energy

sector, fulfill the GHG reduction objectives outlined in CleanBC, and adhere to the commitments legislated in DRIPA. BC Hydro's monopoly-like position in BC's current electricity system prevents and undermines the inherent sovereignty, authority, jurisdiction, and governing practices that First Nations have in relation to their unceded territories (McGregor, 2019).

The Pembina Institute & New Relationship Trust (2021) recommend that 50% of the new projected electricity supply should be directed to First Nation renewable energy projects. As Hoicka et al. (2021) highlight, community control and equity ownership of projects are important indicators of reconciliation. While Impact Benefit Agreements (IBAs) relating to natural resource extraction and renewable energy projects can offer pathways to enhanced socio-economic wellbeing for Indigenous communities (Slowey, 2008), Boron & Markey (2020) point out the concerns that these "neoliberal, market-driven forms of self-governance can create new configurations of dependency" (p.155). Thus, Hoicka et al. (2021) argue that decentralized and democratic forms of community control and ownership, in their ideal forms, offer a more promising pathway towards a low carbon, just transition that simultaneously contributes to reconciliation. As MacArthur et al. (2020) point out, energy democracy[9] challenges the top-down, centralized, and increasingly private ownership of energy systems. Instead, it emphasizes the importance of inclusion, participation, control, and ownership by non-traditional actors (outside of the industry-policy nexus) and historically marginalized populations[10] (MacArthur et al., 2020).

[9] Energy democracy challenges who owns and controls our energy future. The two primary mechanisms for energy democracy that MacArthur et al. (2020) discuss are 1) participation (particularly including non-traditional actors acorss energy planning and decision-making), and 2) increased asset ownership by citizens at the local level.

[10] MacArthur et al. (2020) also acknowledges that there can be no climate justice or just transition without gender equity. A paper by Allen et al. (2019) discusses the role of women's leadership in

Decolonizing Climate Policy

Based on a recent report by the Pembina Institute and New Relationship Trust (2021), for the promise of DRIPA to be achieved, energy policies must support and prioritize opportunities for Indigenous self-determination and sovereignty in the energy sector. The report describes renewable energy projects as direct pathways to Indigenous reconciliation (Pembina Institute & New Relationship Trust, 2021). Reconciliation, as defined by the Truth and Reconciliation Commission, means:

> *"... an ongoing process of establishing and maintaining respectful relationships. A critical part of this process involves repairing damaged trust by making apologies, providing individual and collective reparations, and following through with concrete actions that demonstrate real societal change. Establishing respectful relationships also requires the revitalization of Indigenous law and legal traditions"* (TRC, 2015)

McGregor (2019) believes that reconciliation should be an outcome of climate policy in Canada. She also emphasizes the importance of expanding the definition of reconciliation to "privilege Indigenous conceptions of reconciliation based on Indigenous legal traditions, knowledges, protocols, and practices" (McGregor, 2019, p.143), and to conceptualize reconciliation beyond what is often endorsed by the state as a top-down approach to renewed relationships with one another, but with the Earth and all living beings (Sinclair et al., 2015). She argues that any climate policy (no matter the jurisdictional level) must address the historical and ongoing processes of colonization, as well as center the rights and interests of Indigenous peoples (McGregor, 2019). Failure to address colonial legacies risks further perpetuating and entrenching those same

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the energy sector transformation and describe the three main goals of energy democracy as resist, reclaim, and restructure.

legacies into the future (Borrows, 2016; McGregor, 2019). She goes on to further assert that “no policy, either climate-based or otherwise, is going to be successful in the long run if it does not result in genuine restructuring and transformation of contemporary relationships between the state and Indigenous peoples.” (McGregor, 2019, p.140) It is from this position that McGregor et al. (2020) argue the need for decolonization as a way to envision a viable and sustainable path forward (p.36).

The term ‘decolonization’ has been increasingly garnering attention across diverse disciplines. As Corntassel (2012) points out, a central feature of decolonization is to re-center and reinvigorate Indigenous resurgence and connections to land and culture. It also necessitates an intersectional approach and understanding to simultaneously tackle racism, capitalism, and heterosexism (Snelgrove et al., 2014). Decolonization is also described as a process of daily actions and interactions. For Hunt & Holmes (2015), “Decolonization involves actively challenging or disrupting systems of knowledge that do not fully account for the lives of Indigenous people” (p.159). And as Atleo (2018) describes, it is also “a deeply personal endeavor” (p.79) that both settlers and Indigenous peoples can undertake on a daily basis, and requires “the creation of something new, decolonial, and anti-capitalist” (p.82). For Indigenous peoples, decolonization is also understood in terms of reconnecting with the land and Indigenous ways of knowing and being (Wildcat et al., 2014; Simpson, 2011). For settlers, Davis et al. (2017) describe decolonization as giving up power and privilege in order to “fulfill a humanistic, ethical and moral commitment.” (p.394) Furthermore, as put forward by Tuck and Yang (2012), “decolonization is not a metaphor”, and it requires new relationships that upset existing asymmetrical relationships. They remind folks that decolonization should not be a “settler move to innocence”, but rather centered around the repatriation and reclamation of Indigenous land and life (Tuck & Yang, 2012, p.10). This, they describe, is the distinction between reconciliation and decolonization, wherein the former

proclaims a settler move to a “renewed relationship”, while continuing to exist within and benefit from the same framework and ideology that perpetuates (neo)colonial systems of oppression.

As Indigenous Climate Action[11] stated in their latest publication on decolonizing climate policy, “Colonialism caused climate change. Indigenous rights are the solution.” (ICA, 2021). This sentiment has been articulated previously by Potawatomi scholar, Kyle Whyte (2017) who also argued that “Anthropogenic climate change is an intensification of environmental change imposed on Indigenous peoples by colonialism” (p.153). Therefore, to truly address and mitigate the impacts of climate change, climate policies must reckon with and be reflective of Canada’s historical and ongoing colonial legacies. When referring to “decolonizing climate policies”, this paper seeks to explore how climate policies can 1) confront the legacies of colonization across Turtle Island; 2) promote the repatriation and reclamation of Indigenous land and life; 3) support Indigenous resurgence and recognize Indigenous self-determination and sovereignty; 4) center and validate Indigenous knowledges[12], pedagogies, governance systems, and ways of being (in all their diversity); and 5) dismantle western decision-making processes across energy systems that are entrenched in colonial relationships. As Hudson & Vodden (2020) argue, “Decolonization must be a unique and context-specific process that includes individual and collective acts of resurgence, revitalization and determination contingent upon time and place, in Indigenous peoples’ pursuit of self-determination.” (p.4)

[11] Founded in 2015, Indigenous Climate Action (ICA) is an Indigenous-led organization (or “INGO”, Indigenous Not-for-profit Organization) that advances climate justice and climate action through diverse pathways, programs, publications, and annual reports.

[12] Knowledges* (plural) is intentional throughout in recognition that there is no singular pan-Indigenous knowledge.

Currently, energy policy does not prioritize energy sovereignty or community control (Schelly et al., 2020). Schelly et al. (2020) contend that designing energy policies based on concepts of energy sovereignty would prioritize community voices in energy decision-making processes. There remains an uneven approach in who maintains control over energy decision-making across this country, which ultimately affects Indigenous lives and self-determining capacities. During an online webinar on "Decolonizing Policy", Sophia Rabliauskas, an elder and grandmother from the Poplar River First Nation in northern Manitoba shared how policies, broadly speaking, have caused a lot of hurt and grief in her community (ICA, 2021). It is these lived experiences, perspectives, and expertise that must be centered in the design of climate policies to render any notions of justice, sustainability, or decolonization. Métis scholar, Gregory Lowan-Trudeau (2017), argues that while many people support and celebrate the development of renewable energy by Indigenous people *in principle*, the support often dilutes when it comes down to political and economic sovereignty, which he states only further highlights "the deeply-seeded colonial structure to which we are all still subject." (p.610)

Chapter 3.

Methodology

This research is guided by Indigenous methodologies and the key works of Nêhiyaw and Saulteaux scholar Margaret Kovach and Maori scholar Linda Tuhiwai Smith. In this way, my approach to this research is to:

- Confront the ongoing legacies of colonization in perpetuating the climate crisis and violating the rights of Indigenous peoples,
- Center the stories, place-based relationships, worldviews, expertise, and knowledges of Indigenous leaders, scholars, organizations, governments, and communities involved in clean energy,
- Support and advance Indigenous self-determination, sovereignty, and climate futures,
- Work to deconstruct and challenge some of the (neo)colonial assumptions and ideologies that have underpinned the dominant discourses around climate "solutions" (Reed et al., 2021).

Methods:

The primary research methods for this project entailed 1) a literature review, 2) a series of semi-structured, qualitative interviews, and 3) a policy analysis.

Part 1: Lit Review

The literature review comprised of reviewing online scholarly journal articles and academic papers accessible via Google Scholar and SFU Library with a combination of keywords including (but not limited to): Indigenous, First Nations, clean energy, renewable energy, community energy, power, utilities, transition, just transition, climate

policies, BC, Canada, decolonization, reconciliation, decarbonization, self-determination, energy sovereignty, energy justice, energy poverty. In addition, a thorough review of grey literature including press releases, newspaper articles, reports, legal documents, legislation, and multi-jurisdictional climate policies and strategies was also reviewed. The goal of the literature review was to familiarize myself with diverse perspectives, publications, and guiding documents on the topic of Indigenous renewable energy projects, with a preference given to recent publications (published or updated within the past 5-10 years) relevant to the BC context.

Part 2: Interviews

Why Hupačasath?

The Hupačasth First Nation consists of about 230 members, with approximately half of its membership living on-reserve (Hupačasath, n.d.). Their territory spans across approximately 229,000 hectares and engulfs the whole Alberni Valley, which is located on central Vancouver Island. They are a member of the Nuu-chah-nulth Tribal Council, a part of the Nuu-chah-nulth language group, have governed and occupied their unceded territories since time immemorial, and are comprised of three distinct tribes: the Muh-uulth-aht, the Kleh-koot-aht, and the Cuu-ma-as-aht (Ahahswinis). The decision to further explore Hupačasath First Nation's renewable energy journey is grounded in a few reasons:

1) My pre-existing personal connections to the territories and my commitment to supporting Nuu-chah-nulth self-determination and learning more about renewable energy potential in the region,

2) The China Creek micro-hydro project is considered a part of the “first wave” of ground-breaking Indigenous clean energy projects and warrants further attention,

3) Upnit Power Corporation is majority-owned by the Hupačasath First Nation, and represents a grid-tied, Indigenous-owned and operated, revenue-generating renewable energy project.

Why Expert Interviews?

The purpose of the interviews was to gain critical insights from local leaders and experts in clean energy planning and development. Specifically, I was interested to learn more about:

1) The history and story of Upnit directly from the individual who catalyzed the project,

2) To better understand some of the motivations and barriers for developing renewable energy projects for grid-tied Indigenous communities,

3) To learn about some of the ambitions and future renewable energy goals for the Hupačasath Nation, Nuu-chah-nulth Tribal Council, and Indigenous leaders in this space,

4) To unpack how this research can be of most benefit to the community.

The responses were then used to draw key themes and informed conclusions that relate to how provincial energy policies and strategies can be reformed to be compliant with DRIPA as well as community goals and interests. All the findings from this research will be returned to the Hupačasath First Nation who maintain full rights to utilize the information obtained. Prior to the interviews, introductions were made, and permission was granted to conduct this research by the President and Vice-President of the Nuu-chah-nulth Tribal Council as well as the CEO of the Hupačasath First Nation. There was

a clear commitment to strictly abide by and respect the 'Protocols & Principles for Conducting Research in a Nuu-Chah-Nulth Context'.

In total, this research project consisted of a series of semi-structured qualitative interviews (n=4). The interviews were conducted by myself, the principal researcher. Due to the COVID-19 pandemic, the interviews were conducted online over Zoom. All participants are public figures and/or experts in their field and their contact details are publicly accessible. The semi-structured interview questions focused on their specific work and expertise around community energy needs and objectives. As noted in the table below, interviews were conducted with members of the Hupačasath First Nation (n=3), and a member of the Port Alberni municipal government (n=1).

Interviewees:

Judith Sayers (Cloy-e-iis): Member of the Hupačasath First Nation, President of the Nuu-chah-nulth Tribal Council, and former elected chief of the Hupačasath Nation (for 14 years)
Kwatuuma (Cole) Sayers: Member of the Hupačasath First Nation, former manager of the BC Indigenous Clean Energy Initiative (BCICEI) and New Relationship Trust (from 2017 to 2022)
Ricky-Lee Watts (Aamiitlaa): Member of the Hupačasath Nation, Council member for the Hupačasath First Nation, and the Youth Programs Manager for Indigenous Clean Energy
Pat Deakin: Economic Development Manager for the City of Port Alberni

Disclaimer:

The sample size of interviews for this research is limited. The comments, experiences, recommendations, and opinions shared in this research are based upon the comments of the select interviewees participating in this project. The conclusions drawn do not represent those of Indigenous peoples, Nuu-chah-nulth Nations, or Hupačasath First Nation members as a whole.

Part 3: Policy Analysis

The third component of this research includes a review of *CleanBC* and the *CleanBC Roadmap to 2030*. As the official climate strategy for the province, each document was reviewed to evaluate how they might address and/or engage with any of the following five considerations on decolonization (as outlined in the on page 20). Each document was analyzed to determine if they:

1) Confront the legacies of colonization across Turtle Island (ICA, 2021; McGregor, 2019);
2) Promote the repatriation and reclamation of Indigenous land and life (Tuck & Yang, 2012);
3) Support Indigenous resurgence, self-determination, and sovereignty (Corntassel, 2012; Coulthard, 2014);
4) Center and validate Indigenous knowledges, pedagogies, governance systems, and ways of being (Simpson, 2011; Wildcat et al., 2014); and
5) Dismantle western decision-making processes across energy systems that are entrenched in colonial relationships (Whyte, 2017).

In providing a critical evaluation of these guiding documents through a lens of decolonization, this policy analysis works to bring further attention to the shortcomings of the province's official climate strategy for addressing any meaningful commitments to climate action and obligations to reconciliation as legislated by DRIPA. This analysis is guided by the research conducted by Indigenous Climate Action (2021), Reed et al. (2022), as well as the important works of Indigenous scholars, leaders, organizations, and activists, and the comments and expertise provided by the interviewees.

Chapter 4.

Discussion & Policy Analysis

A renewable energy journey: The Hupačasath Nation

Situating the story:

In the late 1990s and early 2000s, former elected chief of the Hupačasath Nation, Dr. Judith Sayers, led her Nation to become one of the first First Nations in BC to build and develop their own hydro project, known as the China Creek Micro-Hydro Project, which is operated by Upnit Power Corporation. Upnit is a 6.5-megawatt run-of-river hydro project on China Creek, located just outside of the city of Port Alberni, BC, which began producing power in 2005. It is majority-owned by the Hupačasath First Nation (72.5%), and their partners Synex Energy Resources Ltd. (12.5%), Ucluelet First Nation (10%), and the City of Port Alberni (5%). During its peak operation, it produces enough electricity to power 6000 homes. For reference, according to 2016 census data, there are 9,931 total private dwellings in Port Alberni (Statistics Canada, 2017). The Alberni Valley, located in central Vancouver Island on the unceded and ancestral territories of the Nuu-chah-nulth peoples (including the Hupačasath, Tseshaht, Ucluelet, Uchucklesaht, and Huu-ay-aht Nations), is a region known for its wet winters and dry hot summers. The city of Port Alberni is located at the head of the Alberni Inlet, which is a 40-kilometre (km) channel that leads out to the Barkley Sound and open Pacific Ocean. Given the region's diverse landscape and weather patterns, it is abundant with renewable energy potential, including hydro, solar, wind, tidal, and biomass.

During an interview with Judith, she recalled some of the early planning days of Upnit and shared the care and intention that went into building a hydro project with the

lightest footprint on the earth as possible. The early motivations stemmed from the Nation's opposition to a proposed natural gas facility, which then spurred the action to take matters into their own hands and explore alternative opportunities on their territory that were sustainable. Judith discussed the efforts that went into site selection and conducting environmental assessments (including fisheries and geotechnical surveys) to ensure that the project would not disrupt salmon populations, which is a staple for the community's diet and livelihood. They also took care to ensure that there were no sacred sites in the area as well. In listening to Judith reflect on these earlier days, it was clear that getting this project up and running was an incredible feat. Judith described the numerous obstacles that the Nation had to overcome and the lobbying that was needed to secure the necessary funding to get the run-of-river project up on its feet, which had a total building cost of approximately $14 million.

Now, the project helps build local capacity through the employment of two full-time employees from the community. It has also established a positive relationship with the City of Port Alberni who were given 5% ownership of the project. As a trailblazing Indigenous-owned and developed renewable energy project, it has also sparked motivation and inspiration for other First Nations across the province (and beyond) to see the value of such projects and embark on their own clean energy ventures, while learning from the Hupačasath experience. As majority owners of the project, not only does Hupačasath generate revenue (predominantly during the wetter seasons), but they also have the decision-making power and authority to set the standards and manage resources on their traditional territory in a sustainable way that they can be proud of.

At the time, Hupačasath signed a 20-year EPA with BC Hydro, which is set to expire in 2025. With the indefinite suspension of the Standing Offer Program and recent amendments to the *Clean Energy Act*, Judith expressed her uncertainty around whether BC Hydro will renew their agreement. Without a renewal, the Nation will no longer be

able sell the generated electricity back to the grid, which is a significant source of revenue for the Nation and is what keeps the project financially viable.

Today:

During an interview with Ricky-Lee Watts, one of the current Hupačasath elected councillors, he shared some of the exciting ambitions on the horizon for the Hupačasath Nation to further showcase their leadership in clean energy. Currently, they are exploring avenues to develop electric vehicle (EV) infrastructure, including the implementation of charging stations and bringing an electric vehicle fleet to their community. Ricky-Lee described how these electrification investments will support their membership in the transition to an electric future by 1) providing the necessary infrastructure, 2) diversifying their economy with a new potential source of revenue for their community, and 3) further situating the Nation as a leader in clean energy. As the community is located enroute to the popular west coast tourist destination of Tofino, Ricky-Lee shared that the Nation would like to seize the opportunity for passerby travellers to charge their EVs at a Hupačasath charging station and support other local businesses in the area. He commented on the opportunity for the Hupačasath First Nation to partner with the city of Port Alberni to own an EV charging station within the city's municipal boundaries, which could present mutual benefits for both governments and act as a small piece of economic reconciliation and "land back"[13] for the Nation.

[13] Land Back refers to a complex, multi-generational, Indigenous-led movement that, in part, recognizes that the nation-state of Canada is built on stolen Indigenous lands and works to reclaim Indigenous jurisdiction over stolen territories across Turtle Island (Yellowhead Institute, 2019).

In Western Canada, community energy projects have proven to offer sustainable avenues for economic diversification in formerly resource-dependent communities (Miller et al., 2019). During an interview with Pat Deakin, Port Alberni's Economic Development Manager, Pat shared his excitement for the transitionary period that the city is currently experiencing. He expressed how, between the three councils (Hupačasath, Tseshaht, and Port Alberni), there is *"a real willingness to work together"* and a huge opportunity for economic reconciliation. Historically a town that thrived off natural resource extraction (primarily forestry and fishing), Pat described how the city is pivoting and shifting towards a restorative and regenerative economy. What is needed, Pat mentioned, is continued political will, confluence between councils, capital, and explicit statements on renewable energy across city plans and strategies. It is these types of explicit statements that were identified across interviews as potentially important tools for encouraging and incentivizing further innovation and opportunity for Indigenous clean energy projects.

It is from this point in the story that this research project seeks to explore how provincial climate policies and strategies create (if at all) opportunities for Indigenous renewable energy projects during a time when both the provincial and federal governments express their alignment and commitments towards climate action and reconciliation. The following table lists important data drawn from the interviews, which highlights some of the main motivations and barriers currently facing grid-tied First Nations interested in developing or furthering renewable energy projects on their territories.

Motivations & Benefits	Barriers & Obstacles
• Energy sovereignty • Capacity building • Sustainable economic development • The ability to compete in the market • Self-determination • Increased self-reliance • Values and connection to land • Community pride	• Lack of opportunity • Market access • Politics • Capacity • Policies • Funding timelines • Existing structure of BC Hydro • Specificity of each project

Table 1: Data from conducted interviews

These motivations and barriers are important to reiterate here because of their ability to cast focus on larger emerging themes which were observed during the interview process. These key themes highlight some of the challenges currently faced by Indigenous energy leaders. Addressing them is of paramount importance if BC truly intends to honour its legislated commitments outlined in DRIPA. The key themes selected for further expansion are as follows:

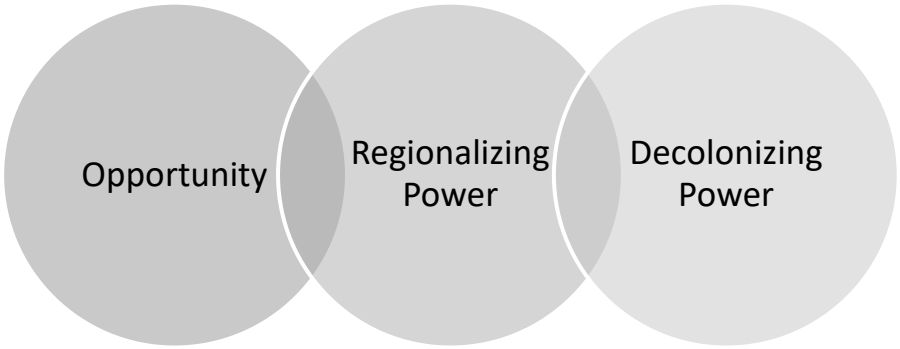

Figure 1 Key themes that emerged through the interviews

Emerging theme #1: *Opportunity*

Throughout the interviews, a theme that repeatedly emerged revolved around the idea of *opportunity*, and its lack thereof for Indigenous peoples interested in developing clean energy on their territories. Specifically, opportunity was mentioned in relation to market access opportunities for grid-tied communities. This lack of opportunity to sell electricity to the grid was also identified as the primary barrier (ahead of community readiness and securing finances) in Eryn Fitzgerald's (2018) graduate research survey on First Nation involvement in renewable energy projects in BC. Some of the reasons identified as limiting market access opportunity during the interviews included (but are not limited to):

- BC Hydro's procurement programs: Notably, the indefinite suspension of the Standing Offer Program that provided IPPs with EPA opportunities from BC Hydro
- Recent amendments to the *Clean Energy Act* which removed the self-sufficiency clause
- Antiquated climate policies and legislation
    - Under the *Clean Energy Act*, there are only two sections that address market access opportunities for First Nations:
        1. Section 4: The Standing Offer Program. This section is now irrelevant and devoid as the program is indefinitely suspended.
        2. Section 6: The First Nations Clean Energy Business Fund (FNCEBF)[14]
- BC Hydro's monopoly-like structure

[14] The FNCEBF was created by the *Clean Energy Act* in 2010. The grant structure currently funds three types of projects: Capacity ($50,000), Demand Side Management & Energy Efficiency ($150,000), and Equity ($500,000). A briefing note prepared by Ecotrust Canada (2020) identifies three challenges with the current structure of the FNCEFB: 1) the fund is increasingly mis-aligned with the government's energy priorities; 2) the fund is colonial in structure; and 3) the fund is administratively burdensome.

    - According to Hira (2020), there's a conflict of interest when BC Hydro reinforces its position as sole energy provider and also sets the rules for new generation that could provide competition.
- The misguided discourse on energy surplus and BC's focus on the Site C Dam
    - Research has indicated that BC Hydro's future estimates of electricity supply and demand are unreasonable, and "growth in electrical demand beyond what Site C can provide is an absolute certainty" (Hira, 2020, p.14). The findings also state that, "The lack of open-source data on BC Hydro's modeling and data assumptions has led to an energy literacy deficit in which policy and decision makers are bereft with evidence-based knowledge" (Hira, 2020, p.13).

These reasons above reflect the fact that energy landscapes change quickly, and while securing funding was identified as a large hurdle in the development of Upnit in the late 1990s and early 2000s, the availability of funding has changed quite considerably in the past two decades. During his interview, Ricky-Lee described how funding itself is not necessarily the primary obstacle anymore. It is the funding timelines, administrative requirements, and project readiness, which can still present a challenge. It is also worth noting that while the availability of funding (particularly at the federal level) has grown with the government's commitment to reducing GHG emissions, grid-tied communities are hindered by the fact that much of this investment is currently focused on efforts to transition formerly diesel-dependent communities to cleaner sources of energy.

Policy Analysis: Reviewing CleanBC

Launched in late-2018, CleanBC is a provincial plan, strategy, and pathway for how the province sets out to reach net zero by 2050. The plan lays out several strategies for reducing overall GHG emissions in the province. According to CleanBC, it describes "how, together, we can make things more efficient, use less energy and waste less, while making sure that the energy we use is the cleanest possible and to the greatest extent possible made-in-B.C." (CleanBC, 2018, p.5). However, this seemingly optimistic statement is in contradiction to the province's 2020 decision to then, only two years later, amend the *Clean Energy Act* and remove the self-sufficiency clause and muddle the definition of what in fact constitutes as "clean" electricity. The table below highlights CleanBC's key actions (taken from CleanBC, 2018):

Cleaner Transportation

- Bring down the price of clean vehicles
- Speed up the switch to cleaner fuels

Improve where we live and work

- Better buildings
- Support for better buildings
- Support for communities

Cleaner Industry

- Ramp up the CleanBC program for industry
- Improve air quality by cutting air pollution
- Reduce methane emissions from natural gas development
- Industrial electrification
- Carbon capture and storage
- Cleaner fuels for industry

Reduce emissions from waste

- Reduce waste and turn it into a clean resource

Table 2: CleanBC Key Actions (2018)

As seen in the table above, there is no key action that specifically touches upon Indigenous involvement in the electrification transition. While the 60-page document mentions the words “reconciliation” (n=4) and “Indigenous” (n=42), it is predominantly referenced in the context of engagement and collaboration. The only area that explicitly discusses opportunities for Indigenous peoples falls under the “support for communities” category. This sub-section highlights the CleanBC Communities Fund (CCF) and the BC Indigenous Clean Energy Initiative (BCICEI) as funding avenues to support Indigenous communities working on the development of clean energy projects, as well as to help diesel-dependent communities (particularly remote communities) transition off diesel fuel to cleaner sources of electricity generation. While these funding avenues are a critical piece of the puzzle, as noted above, CleanBC does not extend opportunities outside of funding for Indigenous communities interested in developing revenue-generating renewable energy projects on their territory.

CleanBC Roadmap to 2030:

Spawning from CleanBC, the CleanBC Roadmap to 2030 was released in 2021 and introduces new measures to ensure that the province can still meet its emissions reduction targets for 2030 and reach net zero by 2050. The Roadmap states, “we are accelerating industrial decarbonization by utilizing one of B.C.’s strongest assets in the fight against climate change – our supply of clean, abundant, and affordable hydro-electricity” (CleanBC, 2021, p.7). This narrative is aligned with the province’s position that all future electrification targets can be met by the construction of the Site C Dam alone. However, as indicated above, the data supporting this statement is obfuscated by the lack of transparent and openly presented data by BC Hydro (Hira, 2020). It also

undermines the growing capacity of clean energy projects that First Nations are already operating, which as mentioned in Chapter 2 have a combined power capacity that is double that of Site C's (Pembina Institute & New Relationship Trust, 2021).

As a slight improvement to CleanBC, the Roadmap mentions "reconciliation" (n=5) and "Indigenous" (n=62) on more occasions, however, again it is primarily in the context of engagement, consultation, partnership, and collaboration. Out of the sixteen "Foundational Roadmap Actions" (listed on page 8), not one action mentions Indigenous peoples. Thus, while there continues to be talk of reconciliation and Indigenous peoples throughout the document, it is evident that the Roadmap continues to prioritize climate strategies that allow for the province to forge ahead (albeit quieter) with their business-as-usual, (neo)colonial, and neoliberal agendas, which continue to undermine the work and expertise of Indigenous peoples and violate Indigenous rights more broadly. During an interview with Judith, she expressed:

> *"They [the BC government] don't believe in Indigenous peoples, or our ability to do this. Even though we've proved to them over and over again that we can do this…First Nations that are involved in clean energy are the experts." – Judith Sayers*

Both CleanBC and the Roadmap to 2030 lack the confidence in Indigenous communities to lead this transition. As Ricky-Lee commented during his interview:

> *"Plans need to have the flexibility and confidence in the Nation and local community to guide the work – by community, for community." – Ricky-Lee*

The "What we heard" boxes in the Roadmap indicate that there was a process of engagement and consultation with Indigenous peoples in the creation of the Roadmap (ticking the consultation box), however, the Roadmap does not then provide any actionable steps based on what is heard (i.e. going beyond engagement). For example,

the Roadmap states that through its engagement process, Indigenous peoples have "expressed interest in low carbon economic opportunities in their communities" (p.15), yet it does not then provide any information on how they plan to work towards creating such opportunities. This was similarly highlighted in a 2021 Pan-Canadian climate policy analysis by Reed et al. (2021) wherein the researchers found that Indigenous peoples are referenced but often downgraded to "engagement" rather than shared decision-makers. This type of tokenistic inclusion is business as usual for BC and remains consistent across other resource-based industries.

According to Judith, CleanBC is not enough. While the Roadmap should be commended for raising the terms "equity" (n=3), "fairness" (n=2), and a "just transition" (n=1) in its report, it does not provide any critical conversation on how those concepts translate in the context of implementation. As Indigenous Climate Action (ICA) discuss in Phase One of their report on Decolonizing Climate Policy, policy makers cannot attempt to "solve" the climate crisis with the same framework that perpetuated the crisis in the first place (ICA, 2021). In their report, ICA explored whether two federal climate plans (the Pan-Canadian Framework on Clean Growth and Climate Change (PCF), and A Healthy Environment, A Healthy Economy (HEHE)) addressed the root causes and drivers of the climate crisis and whether they centered the voices, knowledge, and leadership of those most impacted by the crisis. As their report concluded, the answer is no.

In looking at CleanBC and the Roadmap to 2030, these plans similarly fail to acknowledge and recognize the roots causes and drivers of the climate crisis. Unsurprisingly, the word "colonization" is not raised whatsoever (n=0). On top of this, both plans allow for the continuation and further development of the fossil fuel industry, which is both a known primary source of GHG emissions and, as ICA points out, a major contributor to the ongoing infringement and violation of Indigenous rights (ICA, 2021).

For any meaningful climate action to take shape, climate policies and strategies must evolve to center and validate Indigenous knowledges, pedagogies, governance systems, and ways of being as solutions (ICA, 2021). When speaking with Judith during the interview, she mentioned the following sentiment in reference to when her Nation was considering various options for renewable energy projects on their territories:

> *"One of the things I always regret is that we never asked our elders where the most constant wind in our territory was." – Judith Sayers*

This honest sentiment raises the importance of how place-specific stories, understandings, ancestral knowledge, and grounded expertise can guide the future decision-making of climate solutions and strategies. It also provides valuable insight into why elders should be invited to the decision-making tables and planning processes. She discussed how her elders carry generational knowledge about the wind patterns throughout their territories that both pre-date any recorded history and expand beyond single point data like those obtained from weather stations. This knowledge and stewardship of the land is central in the next emerging theme which looks to center place-based, Indigenous knowledge as key to the regionalization of power generation.

Emerging theme #2: *Regionalizing Power*

Important to this discussion of the regionalization of power on Vancouver Island is the observation of Vancouver Island's current energy landscape. Presently, approximately 70% of Vancouver Island's electricity is supplied through high-voltage AC submarine cables coming from the mainland of British Columbia, which are predominantly transporting electricity from mega-hydroelectric systems in the Peace River and Columbia River regions (Watson, 2021). The figure below highlights key BC

Hydro generating stations in these two regions, showing their date of construction and operating capacity in megawatts[15]. The dark blue overlay lines provide a visual representation of BC Hydro's existing transmission line network across the province. The inset map is provided to zoom-in on the two submarine transmission cables that bring power from the mainland to Vancouver Island. The pin drop on Vancouver Island indicates the approximate location of the China Creek micro-hydro power plant.

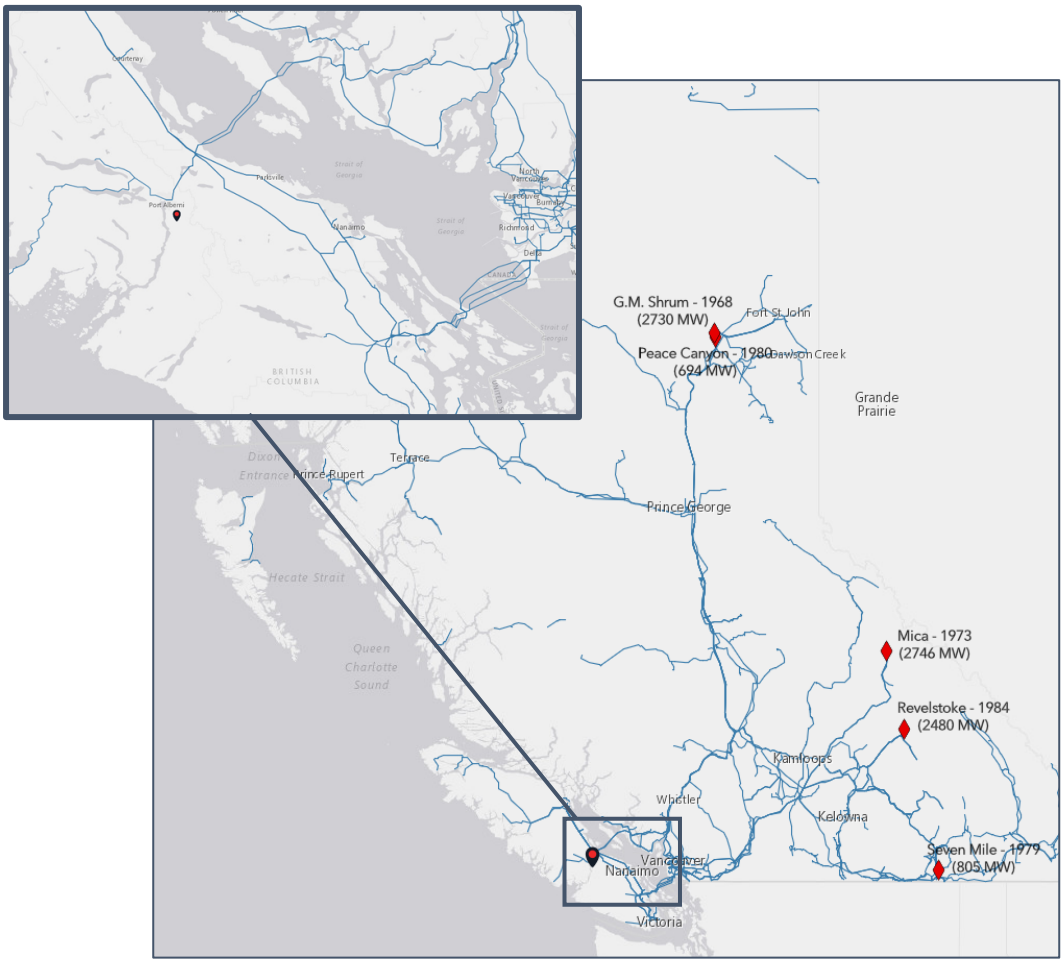

Figure 2 Map of BC's network of existing transmission lines (data retrieved from BC Hydro and generated using ArcGIS)

[15] The data points indicated on Figure 2 were collected from BC Hydro's website under the respective Peace Region and Columbia Region "Projects & Operations" pages.

As evidenced in this map, communities across Vancouver Island are highly dependent on distant, critically aging, and colonial infrastructure for their primary sources of power. This extensive transmission distance also leaves residents on the Island vulnerable in the event of increasingly prevalent climate-related disasters. Such vulnerabilities were exposed during the 2021 BC heat wave when one of the cable casings bulged and burst, leaving residents temporarily without power (Watson, 2021). On top of this, the ongoing maintenance and repair of high-voltage underwater cables is a long, difficult, and laborious process (Worzyk, 2009). These facts combined with the unpredictability of climate change and BC's susceptibility to seismic activity are precipitating a larger conversation around the increased need for localized resiliency and self-sufficiency, wherein diversifying energy sources is one part of this larger conversation. During an interview with Judith, she asked:

> *"Why not just produce the electricity on the Island and work with more First Nations? There's a lot of First Nations that want to produce power even within the Nuu-chah-nulth. What happens if there's an earthquake and the transmission line goes down? How long are we going to be without power? It's pretty scary when we begin to think about that." – Judith Sayers*

Given the abundance of renewable energy potential across Nuu-chah-nulth territories, Nuu-chah-nulth Nations have considerable potential to supply future energy demands across Vancouver Island. In a 2020 press release by the NTC, Mariah Charleson (Vice-President), stated that "Of the 14 Nuu-chah-nulth Nations, 13 Nations are involved in the development and production of clean energy or want to be." (NTC, 2020) Given the opportunity, Nuu-chah-nulth Nations could power the demand with local, community-owned projects. As Judith shared,

"We [the Nuu-chah-nulth Tribal Council (the "NTC")] would like to have every First Nation energy sovereign. Not relying on the grid whatsoever. That everybody can create their own power. Their own microgrids. Their own maintenance." – Judith Sayers

Unlike the mega-dams in the Peace and Columbia regions of this province, regionalized power presents an opportunity to generate power in a way that: upholds and respects Indigenous rights and title, supports local community goals and ecological resilience, creates sustainable economic development opportunities, promotes self-sufficiency, privileges place-based Indigenous knowledge, and advances Indigenous resurgence and self-determination. Because of this, energy planning and climate strategies must recognize the benefits of decentralizing power and prioritize Indigenous clean energy projects as a part of a long-term energy supply plan across the province.

Emerging theme #3: *Decolonizing Power*

Central and yet also in tandem with the idea of regionalizing power emerged the theme of *decentralizing* and *decolonizing* power. The idea was raised in the context of challenging, confronting, and resisting the dominant energy model and system that we know in BC. The following figure was created to provide a visualization of what a renewed energy system (based on the principles of decolonization) might prioritize. The points are by no means comprehensive and are drawn from interview responses and existing decolonization literature.

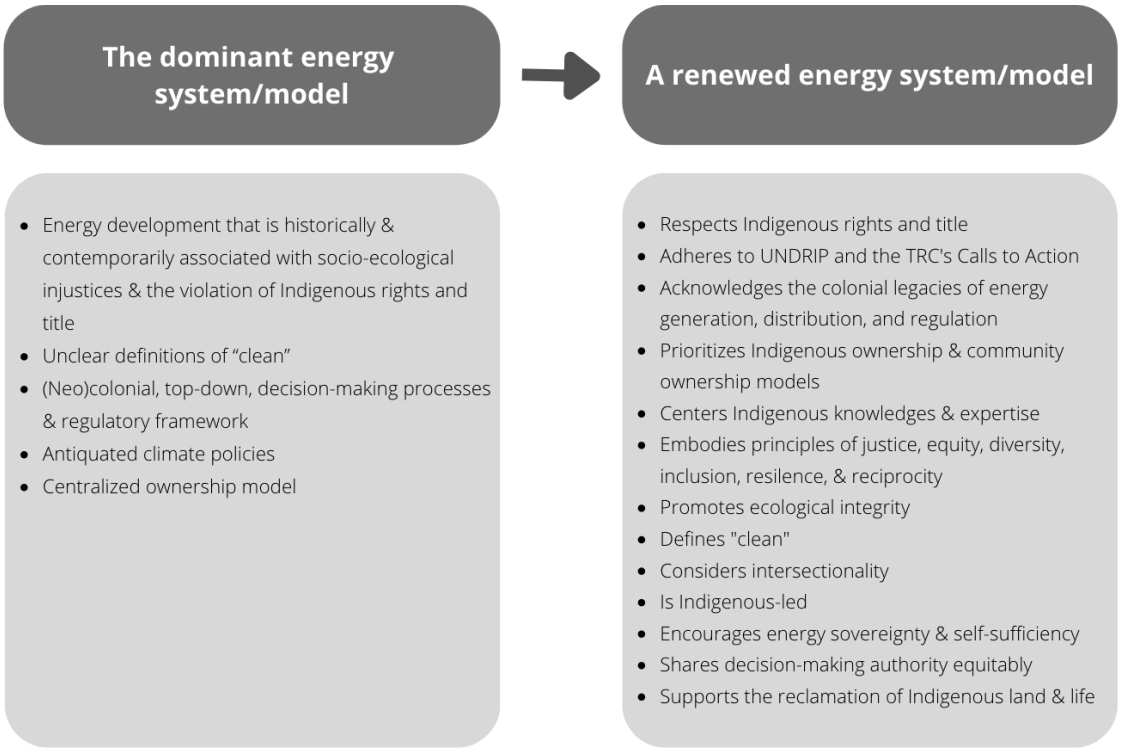

Figure 3 A shifting energy system/model

This renewed energy system and model could offer a shift in priorities that acknowledges some of the key tenets of a *just* transition to a low-carbon future. It also brings to light many of the shortcomings and injustices associated with the historic and ongoing regulatory energy framework that has failed to support meaningful climate action and reconciliation.

In 2020, the BC Utilities Commission ("BCUC") released its Final Report on an Indigenous Utilities Regulation Inquiry. The report includes thirty-five recommendations for the BC government to consider regarding the development of Indigenous-controlled utilities as well as foundational changes to the current regulatory framework (Rand & Ghikas, 2020). As a relatively recent inquiry, an Indigenous Utility presents new terrain for further research. As Hira (2020) points out, the ambiguity and lack of clarity

surrounding land claims in BC further complicates the jurisdiction and regulatory authority across the province. Hira (2020) also acknowledges that while the fundamental issue of jurisdiction cannot be ignored, “the desirability of encouraging Indigenous economic development, in part through energy development, and the benefits to both those communities and the province, create a de facto situation of mutual interests, if the regulation is set up in such a way as to recognize these benefits.” (p.11)

During an interview with Kwatuuma Sayers, he expressed his support for an Indigenous Utility (also referenced as a First Nations Power Authority), distinct from BC Hydro, wherein First Nations could have the decision-making power to sell their generated power back to the grid as well as purchase power from other First Nations clean energy projects. In other words, it could present residents of BC with the opportunity to decide who they would like to purchase their power from – BC Hydro or First Nations. During the interview, Kwatuuma commented on the need for utilities to modernize, stating,

> *“they’re colonial, and they are archaic…We [Indigenous peoples] can power the demand.” — Kwatuuma Sayers*

As highlighted in a 2022 report published by Indigenous Clean Energy (ICE), “Indigenous communities, governments, organizations, and businesses have become among the most powerful clean energy proponents across Canada” (ICE, 2022, p.8). As such, it is unsurprising then that some of the leading clean energy proponents are advocating for an Indigenous Utility that seeks to challenge the status quo regulatory framework that has dominated energy systems decision making in BC. Considering that all renewable energy potential is either on unceded or treaty Indigenous territories (Hoicka et al., 2021), this is a crucial moment and opportunity for the province to put its

acclaimed commitments to reconciliation into action. As legislated by DRIPA, the BC government must take all measures necessary to ensure that its laws are consistent with UNDRIP, of which Article 26 states:

1. *Indigenous peoples have the right to the lands, territories and resources which they have traditionally owned, occupied or otherwise used or acquired.*
2. *Indigenous peoples have the right to own, use, develop and control the lands, territories and resources that they possess by reason of traditional ownership or other traditional occupation or use, as well as those which they have otherwise acquired.*
3. *States shall give legal recognition and protection to these lands, territories and resources. Such recognition shall be conducted with due respect to the customs, traditions and land tenure systems of the indigenous peoples concerned.*

Table 3: Article 26 of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP, 2007)

If the BC government truly intends to walk down a path towards meaningful reconciliation, then implementing an Indigenous Utility could be one step in the right direction. When referencing the four waves of Indigenous clean energy participation outlined in the ICE report (2022), Kwatuuma proudly stated:

> *"this next wave…we [Indigenous peoples] are going be a tidal wave." – Kwatuuma Sayers*

Chapter 5.

Looking forward

The following list is a compilation of suggestions on how climate policies and strategies could evolve to better support meaningful commitments to climate action, reconciliation, and a just transition to a low-carbon future:

- Radical truth-telling across all climate plans and strategies. This includes addressing the root causes and drivers of the climate crisis, those most directly and disproportionately impacted by its impacts, and acknowledging the historic, systemic, and ongoing exclusion of Indigenous peoples in key energy systems decision-making arenas at all jurisdictional levels (ICA, 2021; McGregor, 2019).
- Uphold Indigenous rights and title. Climate policies must provide actionable steps on how they will reflect and adhere to FPIC, UNDRIP, and the TRC's Calls to Action.
- Integrate an Indigenous Environmental Justice (IEJ) analysis (McGregor et al., 2020). Privilege and center Indigenous knowledges, expertise, worldviews, ways of being, and reconceptualizing reconciliation beyond the human dimension to include all relations.
- Mandate that the BC Government must work with First Nations to develop clean energy projects (equity ownership at the very least). The Pembina Institute & New Relationship Trust (2021) recommend that 50% of the new projected electricity supply should be directed to First Nation renewable energy projects.
- Ensure that it is an Indigenous-led process
- Update the *Clean Energy Act*:
    - Establish a legislated definition of "clean" that is held accountable to a set of environmental standards
    - Reinstate the self-sufficiency clause
    - Update the FNCEBF

Included below (Table 4) is a list of 10 recommendations/principles for decolonizing climate policies put forward by Indigenous Climate Action (2021):

1. Includes Indigenous communities and Nations as full partners at policy decision-making tables. National Indigenous Peoples Organizations are advocates for our communities and Nations and should not be treated as decision makers;
2. Raises up the leadership from Indigenous women and 2SLGBTQIA+ folks;
3. Respects Indigenous rights to self-determination and FPIC in the process of developing policy and in the *contents* of the policies and plans, as well;
4. Adheres to federal commitments to Nation-to-Nation, Inuit-Crown, government-to-government relationships;
5. Upholds the Calls to Actions emanating from the Truth and Reconciliation Commission and other government led-inquiries, including the Royal Commission on Aboriginal Peoples and the National Inquiry into Missing and Murdered Indigenous Women and Girls;
6. Promotes climate solutions that take into account the realities faced by Indigenous communities and Nations, both rural and urban;
7. Will not disproportionately impact Indigenous Peoples, negatively;
8. Acknowledges and actively addresses structural inequalities that are continually being reproduced through colonial relation, processes, and structures in so-called Canada;
9. Addresses the root causes of climate change (e.g. colonial capitalism and extraction);
10. Engages an intersectional understanding of climate to design *intersectional climate solutions* that reduce emissions while undoing systemic oppressions.

Table 4: Recommendations for decolonizing climate policies from Phase One of Indigenous Climate Action's report on Decolonizing Climate Action (ICA, 2021).

The following list outlines some learnings (outside of funding, budgeting, and financial management) from the Upnit case study as well as from interviewees that may be applicable for other First Nations or communities interested in developing a renewable energy project on their territory:

- Aim for majority ownership over projects (equity ownership at minimum)
- Conduct comprehensive ecological, cultural, geotechnical studies
- Ensure the inclusion of diverse community members (particularly elders) in key decision-making and site selection processes
- Integrate Indigenous knowledge and place-based knowledge into the design, planning, implementation, and ongoing monitoring of projects
- Consider the possibilities of power intermittencies to promote resiliency and self-reliance

Chapter 6.

Limitations & Further Research

A significant gap in this research project includes the limited number of conducted interviews (n=4) and lack of honoraria offered to interviewees for sharing their time, expertise, and knowledge with me. One of the initial objectives was to hear from more Hupačasath members as well as include perspectives from the BC government and BC Hydro. Initially, I sought to interview the Indigenous Relations Manager for BC Hydro and a Policy Analyst from the BC Community Clean Energy Branch. Unfortunately, this was not possible. The following questions were co-crafted with Judith Sayers intended for members of the provincial government and people in similar roles of power:

- What do you perceive as opportunity for First Nation clean energy? How are you encouraging innovation in clean energy when there's no opportunity for grid-tied First Nations?
- How do you see the role of reconciliation with First Nations when they want to develop power but cannot?
- Is BC considering changing its policies and having BC Hydro partner with First Nations?

While I was unable to ask these questions, these remain important questions that warrant genuine responses and consideration.

The following list includes areas of future research that were identified during interviews as being potentially valuable to support Indigenous communities, governments, businesses, and organizations looking to develop or further develop clean energy on their territories.

- Electricity forecasting: Conducting accurate projections for how much electricity supply will be needed given our most up-to-date climate targets
- Investigating what other jurisdictions (including beyond Canada) are doing in this field to learn from their best practices
- Context-specific feasibility studies (e.g. looking at weather patterns and the unique needs of the community to determine best clean energy options)
- Feasibility study for an Indigenous Power Authority
    - What would have to change to allow for an Indigenous Utility? What are some of the barriers to implementation?
- Further research into the concept and idea of “decolonizing power” and “decolonizing the grid”
- Policy-related research that suggest *real* policy changes
- Research that seeks to inspire the greater collective on the value of Indigenous leadership in the clean energy realm

Chapter 7. Conclusion

Despite being the least responsible for perpetuating the climate crisis, Indigenous peoples are disproportionately affected by its direct impacts. While clean energy is seen as one solution to addressing the climate crisis, state-driven climate solutions of mega-dams to supply “clean” energy in this province has, and continues to have, a disproportionately negative effect for local Indigenous communities whose land and life are sacrificed in the name of a “clean” future. Therefore, while BC Hydro’s (2021) electrification goals of reducing provincial GHG emissions by 900,000 tonnes per year by 2026 is exciting on the surface, it is important to critically evaluate the agenda that is being pushed forward. Nowhere on the Crown corporations’ Electrification Plan does it indicate any intention of creating opportunities for or working in partnership with First Nations to power future electricity demands (BC Hydro, 2021). Instead, BC Hydro continues to pacify ratepayers with their narrative of abundance and proclaimed surplus of “clean” hydro power. Their monopoly-like position over the province’s current electricity system works to restrict, prevent, and undermine the inherent sovereignty, jurisdiction, and governing practices of First Nations (McGregor, 2019). As BC Hydro’s Electrification Plan is officially backed by CleanBC, these state-centric energy plans and policies do not promote meaningful participation by Indigenous peoples (MacArthur et al., 2020), prioritize energy sovereignty, equity ownership, or community control (Hoicka et al., 2021; Schelly et al., 2020), and fail to align with the UN Declaration on the Rights of Indigenous Peoples. As the findings of this research project has indicated, this is a missed opportunity.

First Nations across the province have been demonstrating their commitment, readiness, expertise, and leadership in the low-carbon transition. Yet their contributions and expertise are repeatedly undervalued and largely tokenized. The recent decline in

power procurement programs and market access opportunities (such as the indefinite suspension of the Standing Offer Program) is not only a barrier for First Nations interested in developing or further developing their renewable energy potential, but an injustice (Fitzgerald, 2018). As the Pembina Institute & New Relationship Trust (2021) stated, renewable energy projects offer direct pathways to Indigenous reconciliation.

Rather than perpetuating a legacy of distributional and procedural injustices (Fitzgerald, 2018), BC must acknowledge its colonial roots in energy decision-making, and act in a way that takes all measures necessary to adhere to Indigenous rights and title and privileges the place-based knowledges and expertise of local Indigenous peoples. Regionalized power generation presents a unique opportunity for residents across British Columbia to have a choice in who they want to buy their electricity from and the kinds of projects they want to support. Given the diversity of renewable energy potential across Vancouver Island and the proven success of Nuu-chah-nulth leadership in clean energy development, regionalized, decentralized, and decolonized power can offer a renewed pathway to an energy future that challenges the status quo and is built upon respect for Indigenous rights and title, advances Indigenous self-determination, climate resiliency, equitable climate policies, and justice. Until this happens, eyes will remain focused on how the province plans to conduct its Indigenous clean energy opportunities review, comprehensive review of BC Hydro, and response to the BC Utilities Commission Inquiry on the Regulation of Indigenous Utilities. In order for BC to fulfill its legislated commitments to reconciliation and to engage in any meaningful climate action, it must, at a minimum, revise its climate policies and strategies to ensure alignment with the UN Declaration on the Rights of Indigenous Peoples.

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