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BURIED BURDENS:

The True Costs of Liquified Natural Gas (LNG) Ownership

Yellowhead Institute

CREDITS

AUTHORS

Janna Wale
Gitanmaax First Nation,
Cree-Métis

Michaela M. McGuire
Haida Nation

Rosanna Carver

Emily Lowan

REVIEWERS

Thomas Gunton

Mark Kalegha

Michael Sambasivam

Janelle Lapointe
Stellat'en First Nation

Shiri Pasternak

Jesse Stoeppler
Wilp Spookwx
(Lax Gibuu / Gitumden)

Shannon McPhail

Kris Statnyk
Gwich'in, Vuntut Gwitchin
First Nation

INTERVIEWEES

Patience Muldoe
Gitxsan, Gisk'aast (Fireweed) Clan
Wilp Gutgwinuxws

Drew Harris
Wet'suwet'en, Gitxsan

Hooxi'i, Kolin Sutherland-Wilson
Gitxsan - Fireweed Clan

Yahaan (Donald Wesley)
Lax Kw'alaams Band, Tsimshian

EDITOR

Hayden King
Anishinaabe Beausoleil First Nation

PROJECT MANAGEMENT & PRODUCTION

Ash Vols
Métis

Emily Lowan

DESIGN

Yumi Numata
with additional support from Anita Sekharan

COPY EDITOR

Jasmyn Galley
Wiikwemkoong Unceded Territory
& London, UK

COVER ART

Untitled, 2025.

Hetxw'ms Gyetxw, Brett Huson
Gitxsan Nation

This artwork presents a Gitxsan perspective that personifies the natural world to explore themes of rights, law, and governance. In Gitxsan storytelling, personification is not rooted in mythology; rather, it emphasizes the equality of all life forms. This approach reflects our tradition of sharing knowledge through visuals, rhythm, and storytelling, highlighting the laws and responsibilities that are inherent in the land.

FEATURED PHOTOGRAPHY

page 8, 16, 23, 27, 33
Mike Graeme

ADDITIONAL ARTWORK

page 28-29
Ash Vols
Métis

AUTHORSHIP

Introduction

Michaela M. McGuire, Janna Wale, Rosanna Carver, Janelle Lapointe

Part I: The Prince Rupert Gas Transmission Project (PRGT) and Financial Risk

Rosanna Carver, Emily Lowan

The authors would like to acknowledge Éric Pineault's internal briefing that helped to inform the financial risk factors in Part I.

Part II: The Environmental, Cultural and Legal Considerations of LNG in B.C.

Janna Wale, Michaela M. McGuire, Rosanna Carver

Marine and Waterway Impacts:
Rosanna Carver,
Michaela M. McGuire

Electrification and Net-Zero:
Rosanna Carver, Emily Lowan

Cumulative Impacts
Rosanna Carver, Michaela M. McGuire, Janna Wale

Food Security
Janna Wale,
Michaela M. McGuire

Housing, Health Services, and Safety
Michaela M. McGuire,
Janna Wale

Divide and Conquer: Rights vs. Title
Janna Wale, Michaela M. McGuire, Rosanna Carver

Future Pathways: Culture as Compass
Michaela M. McGuire,
Janna Wale

The Stewardship Economy: Grease Trails
Janna Wale, Michaela M. McGuire

ABSTRACT

As federal and provincial governments pass legislation to fast track resource development, a long-delayed liquefied natural gas (LNG) pipeline in B.C. has been approved. The contentious Prince Rupert Gas Transmission Project (PRGT) and Ksi Lisms facility are expected to transport and export millions of tonnes of fracked gas annually, making it one of the country's largest LNG projects. It is contentious because the Project is championed by the Nisga'a Government, a significant investor, but crosses Gitxsan and Tsimshian territory. This Special Report considers the Project's fraught history and identifies a number of issues, including an outdated environmental assessment, changes to the pipeline route, and costly construction risks.

Part I offers an analysis of the rise of Indigenous equity ownership in resource development, loan guarantee programs, and the financial risks associated with LNG production generally, but also specifically with PRGT and Ksi Lisims.

Part II draws on interviews with Tsimshian and Gitxsan community members on the Project against the backdrop of environmental, social, cultural, and legal risks, all of which form the basis of their resistance to the Project. Taken together, this analysis forms the argument that PRGT and Ksi Lisims present significant and potentially devastating risks to investors, communities and the land and water. It must be reconsidered.

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Toronto Metropolitan University

Faculty of Arts

No matter your understanding of economics, we must understand that our obsession with unrestricted growth is killing the very thing that sustains us. Our relationship with and actions upon the environment are interconnected: we cannot exist without a healthy environment and the tools to steward it according to Indigenous laws.

TABLE OF CONTENTS

INTRODUCTION

"I go to Shegunia River (located on Wilps Gutgwinuxws Territory, my Wilp). I will dunk three times. It is a glacier-fed river, so it is really cold. Then I will smudge with malgwas (dried Indian Hellebore root, *Veratrum viride*). They are planning on putting a pump there. To pump water for the pipeline…I couldn't imagine going there and just… feeling so unsafe."

- PATIENCE MULDOE GITXSAN, GISK'AAST (FIREWEED) CLAN

In the 2025 Canadian Federal Election, there seemed to be just a single Indigenous-focused policy issue: Indigenous participation in resource development.

While this narrative is not new, it has now become mainstream. Over the past decade in Canada, there has been a large increase in Indigenous participation in resource development. This has been primarily through a co-ownership model (i.e. equity ownership) in major extractive projects, where Nations share project profits and risk with a commercial partner(s) (Kung et al., 2022). Co-ownership has gained traction due to changes in the political and legal landscape, including Canada's proposed "economic reconciliation" mandates. While proposing to grant Indigenous Nations access to shared project returns, industry has openly championed equity ownership as a way to gain "consent" more quickly from Nations and fast-track projects through overlapping, contested Indigenous territories (Bourque and Exner-Pirot, 2024).

While there are potential benefits from participating in equity ownership when compared to shorter-term Impact Benefit Agreements (IBAs) and service contracts, there are also greater risks (Scott, 2020). This is the case for Liquified Natural Gas (LNG) infrastructure, which is the focus of this Special Report.

Indigenous-owned LNG project proposals have rapidly increased in recent years and are celebrated as progress toward "economic reconciliation," but the economic, ecological, and social risks of owning these projects are not widely understood. We do not assume that all Indigenous Peoples are opposed to the potential for extraction. However, this particular philosophy of "economic reconciliation" imagines Indigenous communities regaining control of their economies, aiming for self-sufficiency, sustainability, and self-determination. This is an industry-driven narrative that presents resource extraction as the singular pathway to achieve these ends. Yet, a debate has emerged on this approach. Not all share the industry's view.

As more information on the benefits and harms of LNG emerge, disagreements within Indigenous Nations, governments, and communities have driven divisions rooted in uncertainty: will the potential monetary gains outweigh the trade-offs after they sign on? These disagreements are further amplified by the differing political and legal circumstances of Nations engaged in these discussions. While Indigenous Nations are within their self-determining rights to decide, these decisions must not infringe upon the rights of other self-determining Nations. Land claims, title assertions, and ongoing conflict with Canada further shape Indigenous Nations' approaches to LNG.

Colonialism has always been about the exploitation of lands and extraction of their resources. Indigenous dispossession is required for colonial wealth generation expansion, though the strategies may change through time. Drew Harris (Gitxsan and Wet'suwet'en) suggests it is "the same old colonization tactics."

In a Canadian context, logging, mining, forestry, construction, and resource development have significantly impacted Indigenous Peoples' cultures, identities, ways of life, food sources, and health — all of which have been well documented (CAPE, 2025; Jonasson et al., 2019; Tobias and Richmond, 2014). However, even how we talk about these processes can contribute to colonial and capitalist narratives on this dynamic. Corntassel (2012), for instance, refutes the term "resources" as a "way of commodifying Indigenous homelands; in contrast, Indigenous peoples view their homelands and communities as a complex web of relationships" (p. 92).

The interrelationship between Indigenous Peoples and ecosystems is integral to "Indigenous cultural integrity, economic viability, and political self-determination" (Whyte, 2020, p8). But those relationships have been undermined by this extractive agenda, which is often presented to Indigenous Peoples as a solution to economic hardship. Or, rather, their "resources" are. However, the very economic hardship that resource extraction claims to address is a direct result of colonialism and the displacement of Indigenous Peoples from their lands.

Over time, industry impacts have been compounded by changes to economic structures; trade, potlatch, and ceremonial wealth distribution are now considered accessories to the dominant Western economic narrative. Displacement from ancestral economies, removal from lands and territories, and lack of access to education and employment all contribute to the role that Indigenous communities play within the new economic system and within resource development projects on their own lands, like LNG. No longer forced to watch the process unfold, Indigenous people are now encouraged to participate.

While the dynamics and narratives have shifted somewhat, the long-standing trend is that resources and goods are moved *across* Indigenous territories without distributing any of the goods amongst community members. Echoing Harris, Hooxi'i, Kolin Sutherland-Wilson says that "LNG is just the latest manifestation… of what I would think of as the colonial strategy."

Given these trends, in addition to the current political climate, illuminating the hidden costs of LNG ownership and development is critical to making sound decisions on project proposals. In this report, we challenge industry-driven narratives by considering the economic risks, impacts on the environment, and overlooked costs. We also include perspectives of those who may be impacted by this development, offering considerations for moving forward.

The report is divided into two broad sections under the framework of risk. Part One considers the financial risks of equity ownership for Indigenous Peoples considering participation in the Prince Rupert Gas Transmission (PRGT) development; it is rooted in economic analysis and previous examples of similar developments. Part Two considers the environmental, cultural, and legal risks or issues for those challenging the development and helps explain their opposition, drawing on interviews with Gitxsan and Wet'suwet'en and Tsimshian Peoples. We hope this report offers insight to those seeking clarification as the regulatory process unfolds against the backdrop of the redefinition of reconciliation in B.C. and Canada more generally.

PART I

THE PRINCE RUPERT GAS TRANSMISSION PROJECT (PRGT) AND FINANCIAL RISK

Gitxsan land defender Drew Harris protests the PRGT pipeline.

Globally, the Canadian oil and gas industry has led the creation and development of Indigenous equity ownership agreements.

As mentioned above, Indigenous Peoples with varying degrees of legal rights are included as part-owners in these projects. This model has grown rapidly in recent years. There has been a wave of LNG proposals in B.C., all of which involve Indigenous ownership in an attempt to share revenue and streamline the regulatory process. The scale and scope of the new approach cannot be understated. However, there are considerable risks.

One focus of this discussion is the Prince Rupert Gas Transmission Project (PRGT). In 2014, multiple pipelines were proposed through what the province of B.C. and the LNG industry hoped would collectively form an "energy corridor." The PRGT project was, and is, a key element of this LNG expansion. PRGT would involve the construction of an approximately 750-kilometre natural gas pipeline that would supply fracked gas to the Ksi Lisims floating LNG export terminal in the Nass estuary. PRGT was initially expensed at $5 billion in 2014. In May 2025, Western LNG disclosed that the PRGT capital costs are now expected to be $12 billion, and an additional $10 billion for the Ksi Lisims terminal ($22 billion in total), but noted that this is not a comprehensive estimate.

> In recent projects, capital costs have doubled or tripled ***after*** construction starts, so further cost jumps are likely (TC Energy, 2023; Lee, 2024). Additionally, the current Ksi Lisims cost estimate ($10 billion) uses an outdated baseline. The International Institute for Energy Economics and Financial Analysis (IEEFA)'s mid-range analysis forecasts a total capital cost of $26 billion for the Ksi Lisims terminal alone – almost triple the initial estimate (Kalegha, 2025).

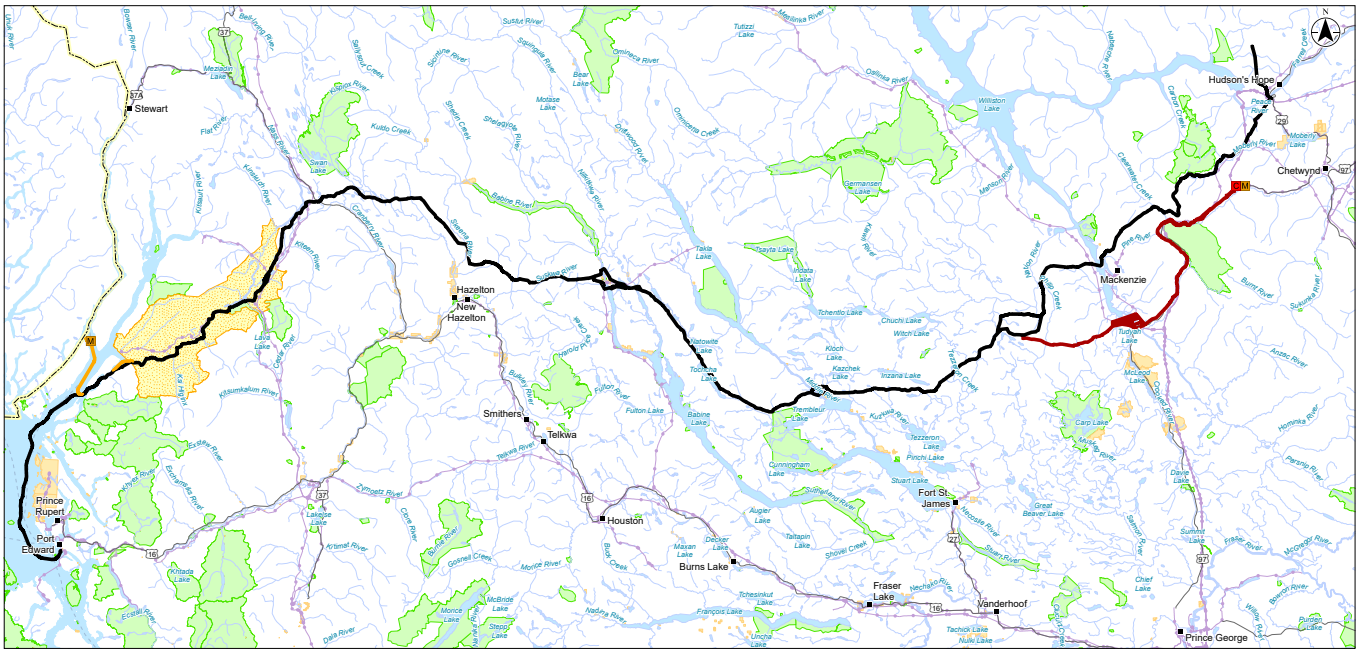
When the PRGT project was initially proposed in 2014, it was owned by TC Energy, which signed Benefits Agreements with a mix of elected Band Councils and some — but crucially, not all — hereditary chiefs across Northern B.C. In 2017, after years of blockades and opposition from Gitxsan and Ts'msyen land defenders, Petronas, the company building the LNG terminal to process the gas for transportation, cancelled the project, citing "changes in market conditions." Regardless of market fluctuations, pipeline projects in B.C. receive enormous public subsidies. A similar project, LNG Canada Phase 1, which includes Coastal Gaslink, received *at least* $6 billion in public subsidies from the B.C. Government, and expects a similar subsidy package for PRGT and LNG Canada Phase 2 (Simmons, 2022).

In June 2024, TC Energy sold the project to Western LNG, a Texas-based company, and their partner, the Nisga'a Lisims government, who negotiated an equal equity stake in the project (Bennett, 2024). Western LNG is largely financed by US private equity firms and has no prior production experience. Blackstone Energy Transition Partners, an affiliate of Blackstone Inc., is a major investor in PRGT, whose CEO, Steven Schwarzman, is a Top 10 Republican donor and has been a close advisor to President Trump since 2016 (Lim et al., 2024). In terms of construction, the company selected to oversee and manage PRGT is Bechtel, an American firm with longstanding ties to the US government (Denton, 2017).

The consortium of Western LNG and Nisga'a Lisims government, alongside Rockies LNG, is also developing the Ksi Lisims floating LNG project, a proposed 12-million-tonne-per-year LNG project on Pearse Island on the northwest coast of B.C., where the piped LNG will be refined. Ksi Lisims' floating LNG refinery is proposed to be located at Wil Milit, off a small island approximately 15 kilometres west of Gingolx, on Nisga'a-owned land. Yahaan (Donald Wesley) of Lax Kw'alaams recalled his 12 years of PRGT opposition, which began with the original PRGT project in 2013:

> **"There will be no economic boom. I said [to the project proponents], how come you're going to give us money over 40 years? That money is never going to trickle down into our hands. They use this enormous amount of money as bait for us to just put up our hands… Who is going to clean up the mess after? Who's going to put the ground back to its natural habitat? Who will bring back our river? Who will replace a tree once it's poisoned, once the ground has been poisoned?"**

Lax Kw'alaams Band have been strongly opposed to the Ksi Lisims project — neither Lax Kw'alaams Council nor the Nine Allied Tribes have approved or consented to the project (Lax Kw'alaams Band, 2023, p.4; Reece and Edwards 2023).



Certified Pipeline Corridor (CPC)

Proposed CPC for Marine Route Alternative

Proposed CPC for Eastern Route Alternative

PRGT Pipeline Route

Initially, the PRGT pipeline was proposed to exit Nisga'a territory on the coast before turning south underwater to a Petronas LNG facility near Prince Rupert. However, several reroutes were proposed in 2024 (BCEAO, 2024). These were, in part, due to concerns about caribou populations. The first (left, in orange) proposed a marine route where the pipeline would turn north underwater, redirecting to the Ksi Lisims' floating platform. The second (right, in red) was proposed by Western LNG to include an alternative marine route and was open for public comment until September 2024. The project was given the green light in June 2025.

The PRGT project initially received environmental clearance in 2014, which was extended in 2019, prior to the project's sale. In November 2024, PRGT project proponents filed for a "substantially started determination," a tool attempting to avoid a new environmental assessment. On June 5, 2025, the B.C. government approved the "substantially started determination" (British Columbia, 2025).

The project being greenlit means that the original environmental certificate has been extended indefinitely. This approval occurred despite ongoing resistance from Indigenous and environmental groups — resistance that will only be exacerbated with the B.C. government's newly passed **Bill 14, the Renewable Energy Projects Act,** and **Bill 15, the Infrastructure Projects Act.** These Acts fast-track infrastructure development and "clean energy projects."

As this recent approval demonstrates, Indigenous rights and title are already being sidelined by the never-ending drive of capitalism and fear of cross-border impacts.

Considering there are substantive changes to the project, including a new proposed pipeline route and the addition of marine components, many believe a new environmental assessment is required (Gitanyow Hereditary Chiefs, 2025). Hereditary elected chiefs and health professionals have argued that a new environmental assessment should be issued to reflect the new developments in B.C.'s Indigenous rights law, the Declaration on the Rights of Indigenous Peoples Act (DRIPA). The updated assessment should reflect the new knowledge on LNG's climate impact — that it creates worse emissions than coal — and new air pollution regulations (McGregor et al., 2024).

Despite this opposition, **B.C.'s fast-tracking of Bills 14 and 15** and the decision to approve PRGT without a new environmental assessment demonstrates the same convenience-based accountability we have come to expect from colonial governments. Canada is cashing in on fears of economic turmoil by pushing through Bill C-5 to fast-track extractive projects. Noting that "Canada needs to use all tools at its disposal to get major projects built"

(Government of Canada, 2025, para. 3). This emphasis on capital above all else is another iteration of the long-held Canadian tradition of running roughshod over Indigenous peoples' inherent rights when they stand in the way of the Canadian economy (Wale and McGuire, 2025).

TYPES OF PROJECT "EQUITY OWNERSHIP"

Models of equity ownership and their associated risks and benefits vary. Equity ownership is essentially a "commercial arrangement" that involves agreements around the value of an investment and the potential financial risk of being a shareholder (Kung et al., 2022). Unlike Impact Benefit Agreements (IBAs, increasingly called "Relationship" or "Partnership" Agreements), equity returns are not *fixed* payments. They are based on the project profits and are more vulnerable to financial risks before and after the project becomes operational, such as increased project costs, market shocks, and delayed construction timelines. This means that Indigenous equity owners rely on project profits and stable cash flow to repay their loans.

Below are the types of equity ownership and their descriptions in the context of Indigenous participation in resource development.

TYPES OF OWNERSHIP	DESCRIPTION AND POTENTIAL IMPLICATIONS
Limited Partnership	The most common form of structure used for Indigenous equity participation involves two or more people, industry partners, or Indigenous Nations (in some cases, individual band councils) coming together with a view to profit from an element of a project or business. Each partner's liabilities are limited to the amount of money (or assets) that they invest in the project. A limited partnership can involve either a minority or majority equity stake.
Minority Equity	A Nation owns less than 50% of a project. This structure accounts for approximately 52% of Canadian energy projects as of 2023. This form of ownership can result in economic returns for the Nation. Being a minority shareholder can limit how much they can meaningfully participate in decision-making about projects in their territory (Kung et al., 2022).
Majority Equity	A Nation owns over 50% of a project (e.g. Haisla and Cedar LNG). This structure accounted for approximately 28% of Canadian energy projects in 2023. With a typical 80:20 capital structure (80% debt, 20% equity), a 50% equal ownership would mean a 10% equity stake.
Partial Financing	In exchange for equity in a project, a Nation provides financing capital on a fixed schedule at specific project phases over time (as opposed to a one-off sum). The Nation is exposed to more financial risk at each stage of the construction timeline, as more capital is invested until the project reaches completion.
Economic development corporation (EDC)	A Nation can establish an EDC as a separate for-profit business entity to engage in commercial opportunities on its behalf. As a business, an EDC may enter into partnerships and joint ventures, an increasingly popular option for Nations entering the renewable energy sector. Unlike other businesses, the community's members are the only shareholders, which means the EDC reports to the community and its board of directors.
No Financial Contribution	If a Nation was promised ownership without financial contributions, it is unlikely they would face direct financial penalties if the project failed. However, they would be unable to recoup any of their expenses prior to its failure. They would also be responsible for any costs related to environmental damage on their territories.

2014 - JUNE 2025

PRGT Timeline of Key Dates

2014

PRGT receives its environmental assessment permit. The pipeline route is immediately blockaded at Madii Lii by a Gitxsan house group, Luutkudziiwis.

2015

Ts'msyen land defenders, supported by allies across the Skeena watershed, reoccupy Lelu Island and block construction of the project terminal.

2017

Petronas cancels its LNG terminal plans, leaving PRGT without a shipping destination.

2019

The original environmental assessment is extended.

JUNE 2024

TC Energy sells PRGT to the Nisg̱a'a Government and a new company, Texas-based Western LNG. Under new ownership, they propose a new terminal on Pearse Island called Ksi Lisims, requiring a new pipeline route.

AUGUST 21, 2024

Gitanyow Hereditary Chiefs and Indigenous youth establish a road checkpoint on their *Lax'Yip* (territory), stopping PRGT construction of the new route. The area was identified in the original project review as an extremely valuable site for fish, wildlife and cultural uses – the Ganeda (Frog clan) Wilps Watakhayetsxw and Gamlakyeltxw vow to protect it.

AUGUST 22, 2024

Gitanyow Chiefs burn the pipeline impact benefit agreement that was signed in 2014, as the current project no longer reflects the original proposal.

AUGUST 24, 2024

PRGT begins logging along the pipeline route on Nisg̱a'a treaty lands (the only place with permits to work).

AUGUST 27, 2024

Nisg̱a'a members block a road leading to a work camp in Nisg̱a'a territory. Their group, the Nass Valley Tribal Alliance Society, launches a local petition, earning over 200 signatures to explore an injunction against the construction of PRGT.

AUGUST 29, 2024

Communities launch a legal challenge against the BC Energy Regulator for bypassing the legal steps required to greenlight PRGT construction.

OCTOBER 2024

Opposition expands, as house groups begin establishing permanent cabins and a dog sanctuary on the territories.

OCTOBER 28, 2024

Gitanyow Hereditary Chiefs launch a legal Challenge to the Ksi Lisims LNG project for failing to uphold the Duty to Consult. The facility is also opposed by the Lax Kw'alaams. Work cannot be started on the majority of the pipeline route until Ksi Lisims has regulatory approval.

NOVEMBER 2024

Project proponents file a proposal to avoid a new environmental assessment as the first PRGT environmental certificate, issued in 2014, is set to expire.

NOVEMBER 25, 2024

Gitanyow Hereditary Chiefs issue a press release relating to the Indigenous Protected Conservation Area along the pipeline route.

JUNE 2025

The PRGT environmental assessment is extended indefinitely by the B.C. government, despite the change in route and updated environmental regulations.

ENABLING EQUITY OWNERSHIP: GOVERNMENT LOAN GUARANTEES

Many First Nations considering this approach face hurdles in accessing the capital required to purchase equity (Kung et al., 2022). Governments have established Indigenous loan guarantee programs to assist Indigenous Nations in making equity investments, offering guarantees to financial institutions. These programs help to offset some of the financial risks of equity ownership projects: in the event that a Nation cannot repay the loan, the government guarantees repayment. In the event of project failure, loan guarantees can provide a loss limit to the Nation — though they do not impact cost and profit swings during the construction and operation of the project.

> At the time of writing, there are no guaranteed loan programs that are willing to guarantee the debt that a company incurs, which means that the revenue the Nation receives is still dependent on the project's overall profitability and the stability of their partner company. These government programs are typically conservative in deciding which and how many projects to support (Bourque and Exner-Pirot, 2024).

While loan guarantee programs hold potential for Nations pursuing their visions of energy sovereignty, difficult choices lie ahead. According to a recent survey of their membership, the First Nations Major Projects Coalition reported that, for national "loan guarantee backing," First Nations respondents' highest ranking project type was "clean electricity generation" (84%), and lowest ranking was "oil and gas pipelines" (40%)" (2024b). Despite this, it is very possible that pipeline and upstream projects, like PRGT, could monopolize loan programs and crowd out essential backing for Nations with interests in lower-risk projects such as electricity generation, battery and transmission projects (First Nations Major Projects Coalition, 2024; Exner-Pirot, 2023).

In March 2025, Canada announced it would double the amount available in the program from $5 billion to $10 billion (Canada Development Investment Corporation, 2025).

THE ALBERTA INDIGENOUS OPPORTUNITIES CORPORATION

In the past five years (2019-2024), the Alberta Indigenous Opportunities Corporation (AIOC) has funded seven equity deals, with a total value of $680 million and individual loans ranging from $20 million to $250 million. The AIOC selects the projects it perceives to have the "lowest risks" to minimize unforeseen costs to taxpayers (AIOC, 2024). For oil and gas projects, this program has favoured stable midstream plant operations, such as gas processing and recovery facilities (AIOC, 2024). There are notable differences between provincial Indigenous loan guarantees and the types of projects supported. The AIOC, for example, proclaims to be "sector-agnostic," but currently has no clean energy projects in its portfolio. In contrast, the Ontario-based Aboriginal Loan Guarantee Program is tailored to support electricity infrastructure programs, including renewable green energy infrastructure (FNMPC, 2024a).

[1] There are exceptional cases of government loan guarantees much larger than existing loan guarantee programs. For instance, Trans Mountain's loan facility, which had a syndicate of commercial banks for $19 billion, was guaranteed by the government.

THE FOUR RISKS OF EQUITY OWNERSHIP

There are many potential risks to "equity ownership" of LNG projects specifically. First, equity owners are paid after lenders, which means they are financially vulnerable if a project defaults or does not result in projected returns. Unlike IBAs, equity returns are not fixed payments. They are based on cash flow and are therefore vulnerable to different financial risks, such as market shocks, increased project costs, and/or longer construction timelines.

If equity ownership involves financial contributions, then a Nation has two considerations: 1) *the cost of repaying the debt* incurred to raise the funds to make the equity contribution, and 2) *the cash flow available* to pay dividends on the equity contribution. Returns on the equity investment must be higher than the cost of the loan over the relevant borrowing time horizon. As a result, Nations that hold equity ownership stakes should plan for a number of potential scenarios while ensuring sufficient cash flows throughout all aspects of the project.

Finally, equity owners are also vulnerable to project abandonment or the collapse of a partner company. In these instances, Nations can be left with the project debt.

Beyond the general and specific risks of equity ownership, once a project has secured investment and proceeds, a number of additional risks accompany its development. Next, we outline some of these considerations, from market projections to construction delays, drawing on examples from the Canadian context where these risks became tangible and resulted in serious consequences.

INTERNAL RISK FACTORS	EXTERNAL RISK FACTORS
The extent of a Nation's contribution, whether financial or in-kind (e.g. land or other tangible assets) and access to a government loan guarantee	Market supply and demand and market volatility
Community opposition	Shifting government policies and changes in the political landscape
The amount of capital invested by partners and their access to ongoing financial resources	Exchange and interest rate levels
The terms and conditions underlying the agreements between project partners	The level of regulatory standards and associated approval processes
Project management, construction, operation and decommissioning (according to stipulated budgets and timeframes)	Environmental change

A comparison of the internal and external risk factors that Nations are exposed to when engaging in equity ownership of LNG projects

(Pineault, 2024)

Investing in LNG could crowd out public and private-sector investments in renewable energy, divert scarce hydropower away from households, public transit, and cleaner industries while locking in LNG infrastructure that is incompatible with a net-zero future (Pauer and Elbrecht, 2024) and the projected decline in market demand.

FINANCIAL RISK #1

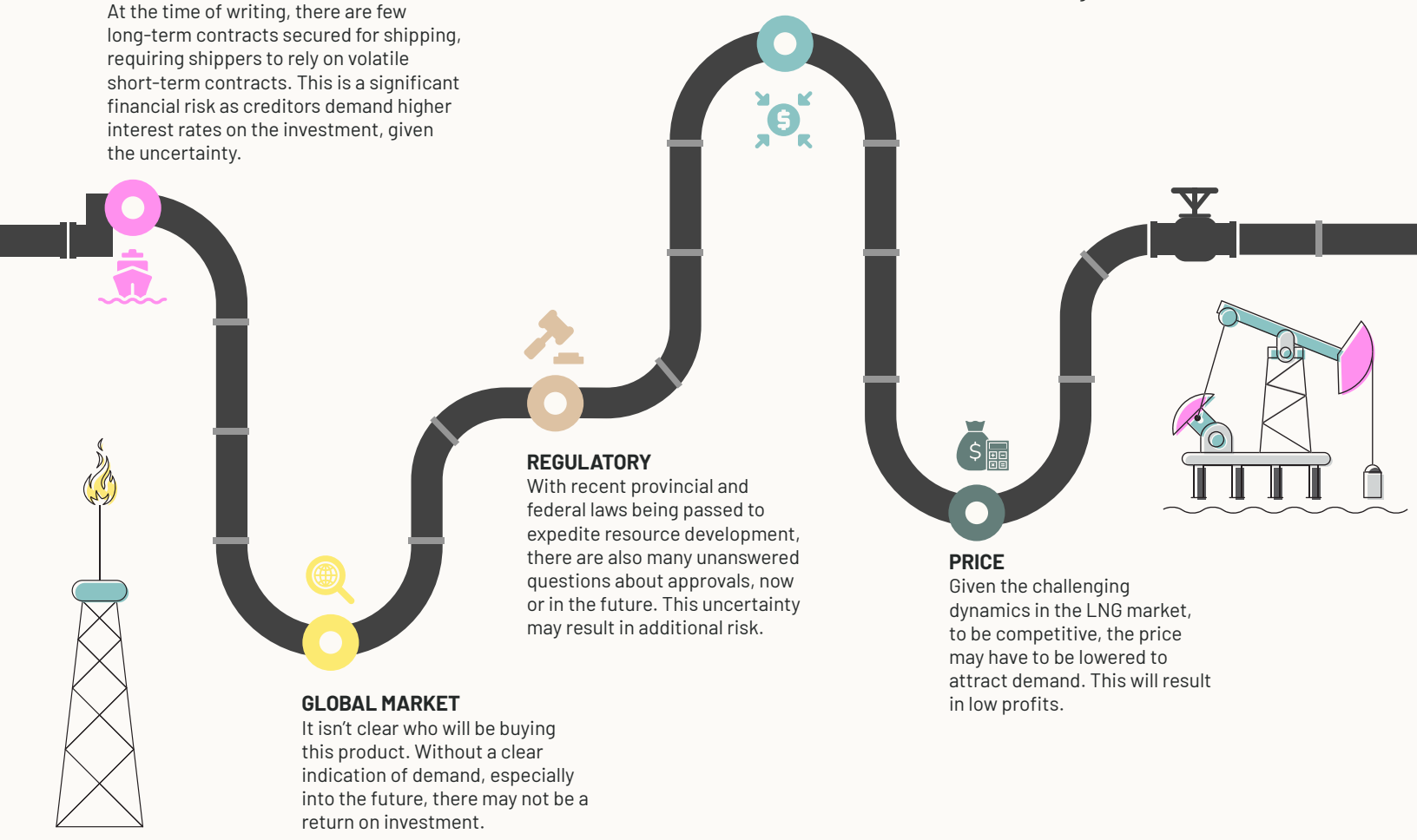
Market Volatility

In the early phases of any development, investment is required to finance the project. As described above, Indigenous communities are increasingly invited to participate in the financing. Yet, this investment comes with a risk. The case below demonstrates how risk revolves around market conditions, which are influenced by, and can in turn influence, a range of variables. These variables include hesitant investors, viable transport contracts, the global market, and the regulatory regime (Pineault, 2024). Each variable — and how they are connected — is illustrated here.

Factors Impacting the Financial Feasbility of a Pipeline Project

SHIPPING
At the time of writing, there are few long-term contracts secured for shipping, requiring shippers to rely on volatile short-term contracts. This is a significant financial risk as creditors demand higher interest rates on the investment, given the uncertainty.

INVESTORS
As project costs are expected to rise during the construction phase, equity owners may need to refinance the project or seek additional sources of financing.



REGULATORY
With recent provincial and federal laws being passed to expedite resource development, there are also many unanswered questions about approvals, now or in the future. This uncertainty may result in additional risk.

GLOBAL MARKET
It isn't clear who will be buying this product. Without a clear indication of demand, especially into the future, there may not be a return on investment.

PRICE
Given the challenging dynamics in the LNG market, to be competitive, the price may have to be lowered to attract demand. This will result in low profits.

Accurately estimating project costs is crucial for investors to seriously consider a project. As a project progresses, its financial picture becomes clearer, and the budget becomes more reflective of current economic conditions, which are increasingly uncertain. Given the delays in the project and the uncertain LNG market, is the PRGT project even financially feasible?

FINANCIAL RISK #2

Construction Complications

Once the market volatility issues are addressed, the most significant risk to a project involving pipeline infrastructure (also known as the "asset") is the prospect of construction cost overruns.

> These overruns can occur due to another set of internal and external factors, ranging from project management issues, inflation, labour disputes, material costs, the regulatory regime (also mentioned above), and increasing delays as a result of climate change. How do these risks threaten project development?

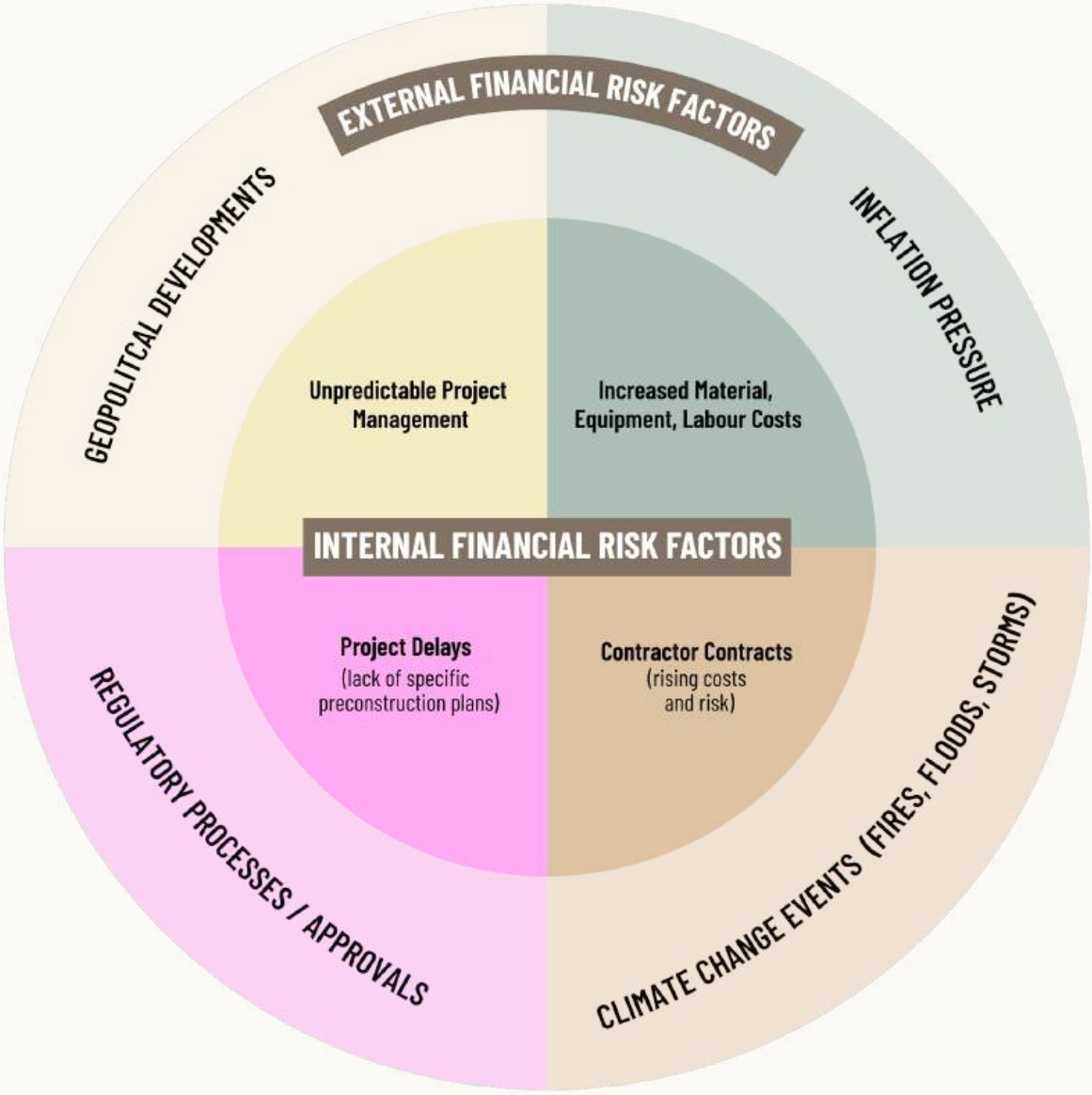
Delays or uncertainty can result in fees and expenses required to pause the project, as well as the cost of any penalties imposed by suppliers or contractors in the event of a project timeline extension (Pineault, 2024). Proponents may, therefore, have to increase their leverage (debt) or ask investors to increase their capital investment (or a combination of the two). If refinancing (or accessing increased financing) is dependent on the credit market, this will likely result in higher interest expenses throughout the rest of the project. Ultimately, a larger proportion of income from the project will be redirected to interest and principal repayment, and residual returns to partners would be lower.

A roadside sign in Kispiox warns the Critical Response Unit — formerly known as C-IRG — to keep out of Gitxsan homelands. The RCMP, which has a record of terrorizing Indigenous land defenders in neighboring Wet'suwet'en territory, was created to police Indigenous-led resistance against resource extraction across "B.C."

Meanwhile, pipeline projects typically rely on tolls paid by product shippers. These work similarly to tolls paid to use certain sections of the road; however, in this instance, a pipeline company charges their customers a price — a *"toll"* — for transporting gas through their pipeline. If the terms and conditions underlying the contracts with customers need to be renegotiated, tolls may be increased, putting the project's competitive position at risk. This could result in fewer transport contracts, lower income (and, in turn, reduced cash flows), and higher debt repayments (Pineault, 2024).

Cost overruns are normal if they exceed the projected 10% to 30% range. However, recent comparable examples have faced massive cost overruns (Coastal Gaslink 133% and TMX 500%), which damages the lifetime profitability of the project (IEEFA, 2021; Pineault, 2024). Significant cost overruns mean that both refinancing and renegotiation of contracts will likely be necessary, which creates huge ramifications. For example, Coastal GasLink's budget ballooned from an initial $6.2 billion to $11.2 billion and increased again to $14.5 billion — a cost overrun of 133%, an increase that caused share prices to plunge (Singh and Nickel, 2023). Crucially, in the case of Coastal Gaslink and TMX, their budget estimates soared once major construction started, doubling and tripling, respectively. PRGT's initial budget has already more than doubled (140%) before major construction, so further cost jumps seem very likely. Major cost overruns damage the project's overall profitability and raise the risk of lenders pulling out altogether (Pineault, 2024).

Internal and External Financial Risk Factors Associated with the Construction of the PRGT



This graphic depicts some of the financial risk associated with construction of PRGT and Ksi Lisims. With unpredictable "external" factors such as the regulatory regime, geo-political uncertainty, economic uncertainty (e.g. inflation or market demand) and climate change related delays, the "internal" assumptions of project costs may not hold. Any of the above can lead to a change in construction schedule, an increase in materials, contractors and labour costs, or project management challenges generally. These external factors are increasingly likely, and so financial risk associated with construction is a near certainty.

FINANCIAL RISK #3

Project Bankruptcy and Cancellation (or, the Death Spiral)

When a project budget increases, private financiers are more likely to deny further financing. Potential lenders are likely to pull out of the project if the "net present" value of the project drops below zero, where revenue fails to cover the project costs, including inflation and opportunity costs (Pineault, 2024). Cost increases also raise pipeline tolls and further discourage shippers, creating a "death spiral" for tolls, also known as a toll spiral. Fewer shippers will force tolls to increase further, raising project costs and debt until the project is financially unviable (Pineault, 2024).

> Consider a Nation with a 50% equity stake in a project that has provided $2 billion through a partial government loan guarantee (50%). The project costs increase significantly, which is typical for recent North American pipeline projects. The project is then cancelled by the American financiers pushing it forward. The Nation and its partners are unable to find new buyers, and the commercial partners declare bankruptcy. The Nation now has at least $1 billion in debt, not including possible remediation costs and loss of future profits.

Such a scenario is not difficult to imagine. When the Trans Mountain Expansion Project (TMX) received regulatory approval in 2016, it was estimated to cost $5.4 billion. However, by 2024, when the expansion became operational, the project cost estimate had reached $34.5 billion, over six times the original budget. A lack of project-budgeting rigour, regulatory, safety and environmental delays, and labour competition — to name a few issues — drove TMX's cost increases. "As a result, the project's projected returns suffered significantly and TMX was recapitalised. However, because the project was initially backed by government incentives, the cost of this newest loan was also borne by the Canadian taxpayer. The new subsidy brings the total amount of taxpayer's money loaned to TMX to $50 billion" (Levin 2025).

When a project is forced to shut down well before its maturity, investments, infrastructure, and resources can become redundant or lose their value, becoming *"stranded assets."* The Canadian government has expressed concerns about the future of LNG. In acknowledging the growing skepticism on the need for more LNG facilities, former Natural Resources Minister Jonathan Wilkinson stated that the risk of stranded assets is "real" (Zacharias, 2024). Should these projects fail, any capital investment would be lost and the shutdown costs would fall either to the project's owners or, if backed by government incentives, taxpayers.

Two Ways Assets can become "Stranded":

1. **Oversupply**
   The global LNG market is flooded, greatly increasing the risk of stranded assets.
2. **The Energy Transition**
   International Energy Agency (2024) projections show that, where governments act to limit climate damage, LNG projects that are not yet under construction are likely to become stranded assets. All of B.C.'s new LNG projects are at risk, even under a slow global energy transition, and could result in significant financial losses (Pineault, 2024).

FINANCIAL RISK #4

Global LNG Supply Glut

Assuming the above risks are averted, there is an additional and pressing challenge to confront: an oversupplied global market, which is already projected within the next decade (IEA, 2024). This comes just as LNG from B.C. is expected to begin exporting to the global market.

Major natural gas producers worldwide have been increasing LNG production capacity in the last decade. The US, for example, has concentrated its production in the Gulf of Mexico and ships the majority of its volume to EU countries. In contrast, countries such as Australia, Qatar, and Russia have focused on supplying Asian markets. However, LNG demand is falling in countries such as Japan and Korea, which are the prospective anchor markets for B.C. LNG (Reynolds and Doleman, 2024).

Even if LNG demand increases in Asia, B.C. producers may struggle to compete with lower-cost producers elsewhere. B.C.'s LNG projects are already at a disadvantage, with production costs 26% higher than the global average (O'Connor, 2024). New megaprojects like Alaska LNG are poised to dwarf and compete directly

This emphasis on capital above all else is another iteration of the long-held Canadian tradition of running roughshod over Indigenous peoples' inherent rights when they stand in the way of the Canadian economy (Wale and McGuire, 2025).

Crucially, in the case of Coastal Gaslink and TMX, their budget estimates soared once major construction started, doubling and tripling, respectively. PRGT's initial budget has already more than doubled (140%) before major construction, so further cost jumps seem very likely.

with B.C. LNG projects. Taken together, it is clear that B.C. LNG is a "high-cost late entrant" to global LNG markets while displacing cleaner industries at home (Pauer and Elbrecht, 2024; O'Connor, 2024). Investing in LNG could crowd out public and private-sector investments in renewable energy, divert scarce hydropower away from households, public transit and cleaner industries, while locking in LNG infrastructure that is incompatible with a net-zero future (Pauer and Elbrecht, 2024) and the projected decline in market demand.

FINANCIAL RISK, PRGT, AND KSI LISIMS LNG

While the risks outlined above are based on real-world examples, they are somewhat general. What if we applied them to scenarios of potential financial risks that the PRGT and Ksi Lisims LNG project could be exposed to? These scenarios are based on available data and assumptions that can be found in Appendix A (p38).

SCENARIO #1
The PRGT is unable to raise financing and the project is cancelled

As a project progresses, the financial picture becomes clearer, more detailed, reflective of current conditions, and likely to drive up the budget estimate (as was the case for TMX and Coastal Gaslink). PRGT was initially expensed at $5 billion in 2013. In May 2025, Western LNG disclosed that the capital costs are now expected to be $12 billion, which will require $9.6 billion in debt financing and $1.2 billion in equity financing from Nisga'a Nation. Western LNG noted this was not a comprehensive estimate (Jang, 2025). The Ksi Lisims facility is anticipated to cost $10 billion, meaning that the total project cost is $22 billion at the time of writing (Jang, 2025).

In a recent report on Canadian LNG challenges, the International Institute for Energy Economics and Financial Analysis (IEEFA, 2025) noted that the current Ksi Lisims cost estimate uses an outdated baseline. IEEFA's mid-range analysis forecasts a total capital cost of $26 billion for the Ksi Lisims terminal alone — almost triple the initial estimate.

Furthermore, PRGT cost overruns pre-construction (140%) are already higher than Coastal Gaslink's post-construction cost overruns (133%) and face further increases when major construction starts and comprehensive estimates are conducted (Kalegha, 2025).

This escalating cost does not account for actual construction cost overruns and potential delays.

SCENARIO #2
PRGT construction cost overruns trigger a toll-death spiral

Since the PRGT cost overruns have already surpassed Coastal Gaslink, looking at other recent examples before construction, like TMX, is valuable. Applying the same proportion of the TMX cost overrun, PRGT construction costs could increase its completion cost to $30 billion. This poses a serious challenge. Project owners could potentially seek greater contributions through tolls and/or be willing to contribute more equity. With cost overruns leading to a need for increased tolls, this could discourage shipper demand. Reduced shipper demand could create a "toll spiral"; as shippers leave, this would necessitate higher tolls for those who remain. The higher tolls and subsequent losses of gas to market become self-fulfilling until the project is unviable and becomes a stranded asset even before its completion (CER, 2023).

Under an 80:20 debt-to-equity structure, both Western LNG and Nisga'a Nation have a 10% equity stake in PRGT, assuming equal ownership. This means the project would require $24 billion in debt financing from major banks and $3 billion in equity financing from Nisga'a Nation. That $3 billion equity share would also require a $3 billion loan guarantee from the government, absorbing 30% of the available funds in the Federal Indigenous Loan Guarantee program ($10 billion as of March 2025). If the cost of the project increases, and if project owners are unable to provide sufficient equity, lenders may refuse additional financing, and the project will need to be cancelled.

SCENARIO #3

The PRGT is fully financed and completed, but Ksi Lisims LNG continues to experience delays

This scenario would make the pipeline worthless and erase the value of all equity stakes in the pipeline partnership, triggering a default on all loans. As a result, there would be no revenue flow from the project to repay construction loans. The risk to a Nation depends on the terms of the loan(s) taken and who is owed.

SCENARIO #4

One or more of the partners wish to exit the project

There is a long history of companies that leverage environmental approvals to increase subsidies and boost their stock price (Allan et al., 2020). Even if companies don't plan to finish a project, they can reap the monetary benefits of regulatory approvals and exit the project with those marginal profits. In the case of Western LNG (an American company that has no previous production experience, limited financial resources, no other projects, and is not publicly traded), this is not beyond the realm of possibility. In short, Western LNG is not a "sophisticated" corporate entity compared to major oil and gas companies. Depending on the risk protections in the partnership agreement, Nisga'a Nation could be left with lost revenue, stranded infrastructure, and land remediation costs.
In summary, PRGT and Ksi Lisims are exposed to significant financial risks — all of those mentioned above — and it is not difficult to imagine these scenarios playing out, specifically the lack of a comprehensive budget, potential for construction cost overruns, global market volatility and, ultimately, stranded asset risk. Any of which is enough for investors to have second thoughts and threaten the development. However, many more risks have to be considered beyond the financial. These are outlined in the next section of the report.

"There will be no economic boom. I said [to the project proponents], how come you're going to give us money over 40 years? That money is never going to trickle down into our hands. They use this enormous amount of money as bait for us to just put up our hands...

Who is going to clean up the mess after? Who's going to put the ground back to its natural habitat? Who will bring back our river? Who will replace a tree once it's poisoned, once the ground has been poisoned?"

- YAHAAN (DONALD WESLEY) OF LAX KW'ALAAMS

PART II

THE ENVIRONMENTAL, CULTURAL, AND LEGAL CONSIDERATIONS OF LNG IN B.C.

The Skeena River

This report has been about the financial risk to Nations considering major participation in the LNG industry.

It has been based on real-world examples from previous projects and the material consequences when those projects face challenges. In other words, the financial risk is real. That being said, there are risks just as great, if not greater. And these are environmental, social, and cultural risks. We begin this section with an overview of the environmental risks.

While industry often claims that LNG reduces global emissions due to the displacement of coal use, greenhouse gas emissions from LNG have been estimated to be 33% greater than coal when measured over a 20-year timeline (Howarth, 2024). Additionally, US LNG exports are estimated to displace more renewables than coal globally (U.S. Department of Energy, 2024), deepening the environmental impact by delaying the transition to clean energy. But what can we expect from the Prince Rupert Gas Transmission project (PRGT)?

As mentioned earlier, PRGT's environmental clearance was awarded in 2014, despite concerns at the time around caribou populations and greenhouse gas emissions. Ten years later, those concerns have only grown. The decision to avoid an updated assessment is concerning and contradictory, especially given the stricter greenhouse gas emissions targets mandated by the B.C. government in July 2024. In the following section, we attempt to outline the environmental consequences of the project.

MARINE AND WATERWAY IMPACTS

There are many coastal Nations in B.C. The exportation of LNG and the construction of marine terminals involve significant impacts on the ocean, which has been stewarded by those Nations since time immemorial, and these impacts will be felt locally.

The ocean is already a frequent "dumping ground" for terrestrial over-exploitation. Potential environmental impacts associated with the construction, installation, running, and decommissioning of infrastructure, as well as the shipping of fuel, are all risks that may be slipping through the cracks in the environmental assessment accounting (Wang, 2024). Due to the geophysical characteristics of the ocean — the fact that there are currents, that water flows, and that it is turbid — unique challenges arise when assessing or monitoring environmental impacts.

Proposed LNG projects increasingly interact with the marine environment.

Governments and industry often frame floating platforms as having a "smaller footprint" than the landed components of LNG. Industry also claims that any impacts will be "easier to remediate at the end of [a] project's life" (Government of British Columbia, 2024). However, dredging and construction processes can bury coral reefs, shells and oyster beds (Wang, 2024).

> Yahaan (Donald Wesley) is cautious about this area, suggesting, "That part of the world is just too sensitive to have... any kind of mass projects going on there. It doesn't matter if it's LNG or anything – you can't build a pier in that area, you can't build nothing. It's a place where man should not be let in."

Offshore elements of LNG projects can also result in noise pollution and pose threats to marine life, including coral bleaching, which may not be confined to the operation site. They can have transboundary environmental effects, including on marine species whose habitats cover multiple jurisdictions (Wang, 2024). These impacts may also affect marine mammals, which, alongside herring roe, have been important for Nations, including Gitxaala lineages without access to the Nass' eulachon runs (Menzies, 2016).

Environmental impacts also occur during the transportation of LNG. Shipping emissions account for approximately 16% of GHG emissions in the LNG lifecycle (Haig et al., 2024; Simpa et al., 2024). The transportation of LNG also involves potential risks, including collision and grounding, which can result in fuel spills, leakages, and additional emissions (Simpa et al., 2024). With fuel leakages, short-term environmental consequences can include the pollution of surrounding waters and the death of marine species. However, as it is difficult to *assess* the long-term impacts of marine pollution, it can also be difficult to determine accountability and compensation for environmental damages if and when they do occur (Wang et al., 2023). The legal requirements for the offshore components of LNG remain unclear. For example, in Canada, vessels are required to have water management plans in an attempt to avoid or abate environmental harm, adhering to Canada's

Ballast Water Convention (Government of Canada, 2021). While it is likely that LNG terminals may require LNG carriers to comply with these management plans, uncertainty remains (Bromley et al., 2020). Additionally, it is unclear who would be responsible for monitoring the environmental impacts of the floating component of LNG projects, given the above concerns that these impacts may extend beyond the floating facility itself.

> For the same reasons, the consequences for the ocean are difficult to assess, and waterways are likewise challenging. But they are nonetheless on the minds of community members. Hooxi'i, Kolin Sutherland-Wilson told us, "We have 300 kilometres of beautiful pristine riverway that is unimpacted by dams, unimpacted by mills or any type of development. I think that for most people around the world, having a river in that state is almost unheard of. That is a genuine treasure."

The Nass and Skeena rivers are two of B.C.'s largest Pacific salmon-producing river systems (Reid et al., 2022). PRGT's original environmental assessment did not fully address the impacts of the pipeline on fish and their habitats. As explained by Drew Harris:

> **[These are] our fish, our salmon, our watershed. We have one of the last functioning ecosystems in the world here… With climate change already affecting our salmon, our rivers are drying up, our creeks are drying up, they are getting so hot in the summertime… Everything is changing, we have no control over it. My first concern is the salmon. They are essential for our ecosystem… This will affect our forests, the berries. They will be drilling under sacred creeks, and salmon bearing fish habitats. That will affect the wildlife as well.**

ELECTRIFICATION AND NET-ZERO

The B.C. government has chosen to electrify the LNG sector, which has critical consequences for the energy transition. B.C.'s net-zero LNG policy, which was announced in 2024, requires all LNG projects that were in or entering the environmental assessment process to plan for net-zero emissions by 2030. To achieve this, these plans largely depended on the use of "clean" electricity as opposed to fossil fuels. However, in March 2025, the policy was updated so that LNG facilities only need to be "net-zero ready." This change enables LNG projects to continue to rely on fossil gas beyond 2030 if electricity is unavailable, However, projects are expected to switch from gas to electricity if electricity becomes available in the following years (Ecojustice, 2025).

The supply of clean energy to LNG projects is unlikely to make a difference in global emissions (Horen-Greenford, 2023). Building out the LNG export industry and electrifying liquefaction facilities would also require the equivalent of 8.4 Site C dams'[2] worth of electricity (Gorski and Lam, 2023). The supply of clean energy needed for LNG electrification would also drive up household electricity and gas bills (U.S. Department of Energy, 2024). B.C. is currently being terraformed to supply much of the electricity required for these projects through hydropower, and this infrastructure is being underwritten by all ratepayers, including residential households (Nagata, 2025).

Hooxi'i, Kolin Sutherland-Wilson noted that "anticipating the whole electrification of our economy… This all just seems a part of strategically reshaping our rural economy to facilitate resource extraction going well into the future. Then, for us, who don't have skills in these areas and are reliant on these territories remaining intact, healthy, and resilient. It is a huge cause for concern as things become more developed."

The Site C dam was built to divert electricity to power fracking and LNG projects. This was not simply business as usual; it required a subversion of the democratic process when the British Columbia Utilities Commission (BCUC) rejected the dam on environmental grounds and lack of demand. B.C. Premier Christy Clark then changed the law, removing the BCUC from the approval process to ensure Site C was built (Gilchrist, 2022). BC Hydro invested an estimated $16 billion into the dam and a further "$600 million for two transmission lines to provide electricity to upstream gas fracking and processing in the Northeast" (Cox, 2021). In addition to B.C. footing the bill for electricity infrastructure, LNG facilities will pay a significantly discounted rate alongside being supported through Federal subsidies, which is estimated to save them (and cost the province) between $32 million to $59 million annually (Government of British Columbia, 2019).

[2] Site C is a hydro dam on the Peace River and has faced court challenges due to flooding that puts "Indigenous burial grounds, traditional hunting and fishing areas, habitat for more than 100 species vulnerable to extinction" (The Narwhal, n.d).

Since hydro is considered "clean energy" due to its lack of emissions, it is considered a better alternative to gas-powered LNG facilities. However, operational LNG developments, such as LNG Canada[3] Phase 1 or Woodfibre LNG,[4] have consumption "equivalent to more than 35% of the annual generation from Site C dam's hydroelectric project. This equates to enough clean electricity to power approximately 450,000 homes annually" (Gorski and Lam, 2023). Almost all the remaining Site C energy will be consumed by completing Phase 2 of LNG Canada.

CUMULATIVE IMPACTS

The original environmental assessment submission has also been critiqued for lacking a detailed Cumulative Effects Assessment (CEA), which evaluates the combined impacts on the environment over time. While the original CEA identified 17 "components of the natural and human environment that are considered… to have scientific, ecological, economic, social, cultural, archaeological, historical, or other importance," they were determined as "not significant" (see Government of British Columbia 2013, p. 4). Furthermore, the analysis was incomplete and drew on outdated information, even in 2014. Given that over a decade has passed, there are calls for an updated comprehensive (and unbiased) analysis of environmental impacts. This call is echoed by Drew Harris, who told us there has to be "consideration of the cumulative impacts and effects of an area. And they are so narrow-minded in just looking at just what the pipeline is going to affect that they are not taking into consideration what logging has gone on, what mining in that area. There are so many things. The land can only take so much before we have really detrimental impacts to our salmon and wildlife."

Patience Muldoe added, "I think there are so many environmental impacts to this… They are planning on drilling underneath the Skeena… and the Kispiox River. The Kispiox River is hitting all-time temperature highs… I think there is just going to be so much habitat destruction and disturbance that there is going to be no return… Looking at their environmental assessment data from 10 years ago, they are like, 'We are just going to extend it.' There are so many value components that they need to reconsider and adjust to what is currently happening."

It is important to note that financial risks increase without a comprehensive understanding of the cumulative environmental impacts. One example revolves around insurance. Federally regulated pipelines are required to provide financial resources to cover the costs of unintended emissions. Because the PRGT project is regulated provincially, the proponents' approach to securing adequate financial resources, including insurance, is not guided by federal requirements. If, in the event of unforeseen circumstances — notably environmental disasters — its access to financial resources, including insurance coverage, is insufficient, the owners (including Nations) may have to bear the costs that aren't covered. In the case of Coastal GasLink, which shares a watershed with PRGT, unexpected flooding, drought, and wildfire caused construction delays and increased costs.

While detailing every potential environmental impact is beyond the scope of this report, they are nonetheless significant and should be critically assessed.

> **Too often, these "externalities" or overlooked costs are not considered. Western economic models are expressed in monetary terms, like cost-benefit analysis. Governments use these metrics to put a price on the environment, which is then translated into measurements like gross domestic product (GDP). But these methods of finding "value" are as limited as measuring the depth of a river by dipping in your toes.**

Traditional costing and value methodologies do not accurately reflect the social or cultural values (Donatuto et al., 2020) that are particularly important to Indigenous communities, whose cultural connections to their lands go far beyond a simple dollar value (Wale and Huson, 2024; Manero et al., 2022). To quote Hooxi'i, Kolin Sutherland-Wilson: "Whether that is the land or the *Lax'yip* (territories), the waterways, the habitat, the sacred places out on the land… that is stuff you can't put a money value on, and it is fundamental to our culture."

[3] LNG Canada Phase 1 is based in Kitimat and will receive natural gas via the CoastalLink pipeline to ship to Asian markets. The first LNG carrier arrived in Kitimat in April 2025.

[4] Woodfibre LNG is a 2.1 million-tonne-per-year LNG "export facility with 250,000 m3 of floating storage capacity being built near Squamish, BC" and is underpinned by agreements with BP Gas Marketing Limited. The project is expected to be completed by 2027 (Enbridge 2025).

The cultural implications of LNG development are not considered within current project proposals and development. For example, fishing, trade with neighbouring Nations, and ceremonies such as the potlatch appear only under "cultural heritage" considerations. Indigenous Peoples are disproportionately affected by climate change because of their close relationships with the land and waters (Vinyeta et al., 2016).

Ultimately, it is these "intangible" values (connection to place, understanding of time, culture, protocol, stories, and teachings) that we are responsible for passing on to the next generation.

Hooxi'i Kolin Sutherland-Wilson, chief councillor of the Kispiox Band, stands on the shores of the Skeena River near its confluence with the Kispiox, warning that the PRGT pipeline threatens his Gitxsan community and was pushed through with coercion, manipulation, and outdated permits that he says no longer justify renewal.

FOOD SECURITY

Along the coast of British Columbia, salmon is a major food source for Indigenous Nations. Yahaan (Donald Wesley) emphasizes that "the ocean still feeds this village." Hooxi'i, Kolin Sutherland-Wilson explains further,

> **We have a heavy reliance on our intact salmon habitat on Gitxsan territory. These projects would necessitate clear-cutting right aways that would cross all of our major waterways on the Gitxsan territory. Including our largest salmon spawning habitats which are in the Kispiox watershed. These are habitats that have already been impacted by forestry, that have already been impacted by other forms of industry and development. That is something that everyone in our community relies upon for sustenance… I could fish for two days, get 200 sockeye, smoke them, jar them all up, and I will have a source of protein for every single day of the year for my family… Where else in the world does high quality protein just swim right to your doorstep?**

Given this reliance on the ocean for sustenance, the Gitanyow Hereditary Chiefs (2024b) highlight concerns "about the combined and cumulative impacts on food security from rising food costs in stores, and environmental and climate impacts to salmon — a mainstay in Gitanyow's diet" (para. 11).

Food is more than a resource; the process of harvesting from the land and waters is a central component of cultural identity for many Indigenous Peoples. Oral histories, cultural teachings, languages, and ceremonies demonstrate the importance of salmon. Many Nations have specific protocols that reinforce a balanced relationship: taking only what is needed, harvesting respectfully, and maintaining good stewardship practices. Once salmon are harvested, families and communities preserve what is needed for the winter, spending time creating and reinforcing important community connections. While food security is an aspect of the relationship held with the salmon, the value and respect for salmon extends far beyond being filed away under "cultural heritage."

Drew Harris notes, "If we lose our fish, we are going to lose a huge cultural practice of fishing, jarring, and all the things that come with fish…Hunting, berries, all those things, will impact our cultural connection."

In the same way, current policies related to extraction do not perceive interconnected or system-wide impacts, such as forced dependence on high-priced groceries once traditional food is no longer accessible or safe to consume. Rural Indigenous communities are harvesting to subsidize what may be inaccessible in grocery stores. However, as territorial access is altered, it forces communities away from harvesting and towards more expensive and unhealthy options that undermine community food security (Patience Muldoe, 2025).

THE STEWARDSHIP ECONOMY: GREASE TRAILS

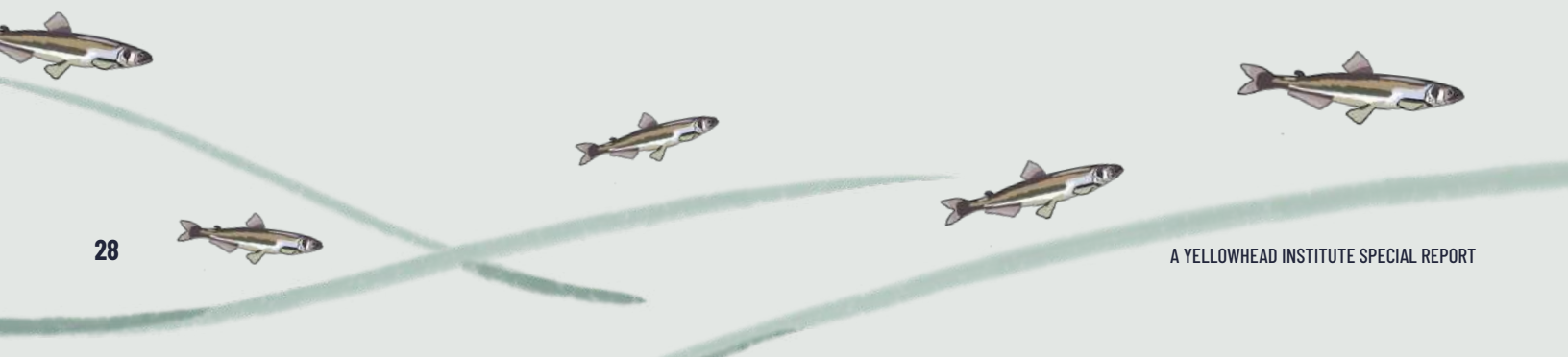
Along the Northwest Coast, one of the most famous examples of the coexistence of sustainability and economic structure is the development and use of Grease Trails.

Grease Trails get their name from the rich oil made from processing eulachon fish (Thaleichthys pacificus) that was commonly traded across the Northwest Coast. Grease Trails are networks of trails that were used by Coastal Nations to transport and trade harvested goods and materials (Armstrong et al., 2023; Hilland, 2013). Eulachon grease was not only a form of nutrition, but a currency that allowed communities to generate and redistribute wealth (Ryan, 2014; Soper-Jones, 2009). The grease trail networks were extensive. In Gitxsan territory alone, these networks stretched over 400 kilometres (Armstrong et al., 2023; Gitxsan knowledge keeper, pers. comms).

The wealth generated through the Eulachon grease trade was not individualized; community members demonstrated their wealth by paying it forward (Gitxsan knowledge holder; pers. comms). As an economy, grease trails helped establish Nation-to-Nation relationships; communities from as far as the interior traded with for the right to harvest eulachon and trade eulachon grease (Sutherland, 2001). Grease trails further supported trading items such as "copper, flint, furs, and dried meat" (Moody, 2008; Phinney et al., 2009). Communities along the grease trails benefited from the opportunity to exchange goods and information and share culture with other Nations — in effect, building and sustaining a network of relationships that continue to exist today.

While many historic Grease Trails have been quite literally paved over, Indigenous communities have continued to trade in the way of our ancestors. Grease Trails are one of many examples of stewardship-based economic activity of which our ancestors were a part. With the pace of economic and climate change, there is a need to return to values-based economic systems that support self-determination and community goals rather than undermine them. Simpson emphasizes that "the beauty of our knowledge systems, even in a dominant, capitalistic commodity-based reality, is that they do not cost capital to maintain" (2008, p.77). Increased collaboration and communication between Indigenous communities and Nations is needed in order to find alternative, sustainable solutions. Drew Harris discusses the importance of thinking about the alternatives and highlighted the work of the **Skeena Energy Solution** project, which, "rather than just opposing bad development, proposes good development" (Skeena Energy Solutions, 2025). Such projects are in collaboration with communities and align with their values.

> This kind of forward-thinking approach is not just about economic alternatives but about protecting what truly matters. Alternative solutions must recognize that lands and waters are more than resources; they are relatives. Holding onto these connections provides both the motivation and hope needed to protect our knowledge, as well as the lands and waters for future generations.



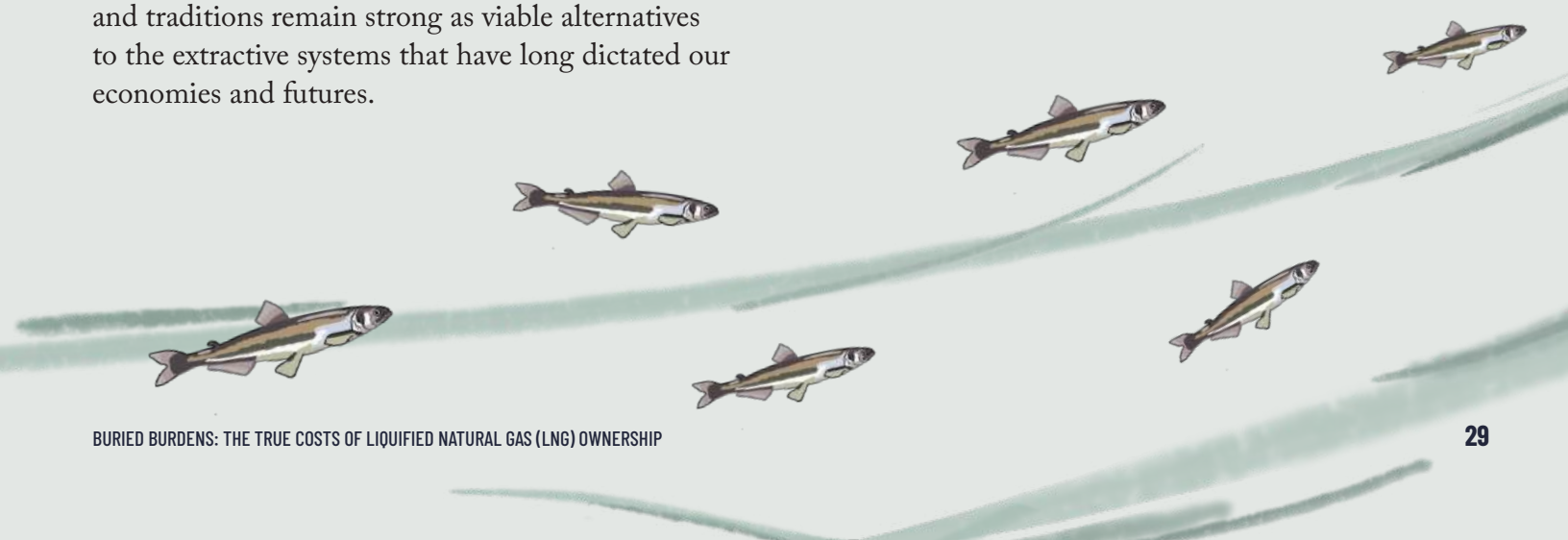
Finding motivation and hope is important in resistance and driving positive change while protecting territories. As Patience Muldoe recalls, "Right now, my efforts are towards the youth… learn from your elders, learn from your parents… I think it is so important that we set a good example for our young people that it is important to resist… My grandfather was Delgamuukw…reading the transcripts [of the court case] and what happened… gave me hope… Our elders fought for this; this is something that I also have to do. I just want to keep doing that and show our young people."

The motivation to preserve culture and territory for future generations is also connected to self-determination. Taking action can help build agency, especially for youth who have witnessed the struggles of the generations before them and who will ultimately inherit the decisions being made today. Drew Harris states, "You can't just act like there is not a global climate crisis… There should be young people here; this is our future, and we do have a say… It is for a greater cause, and my care for the *Lax'yip* (territory) makes it easy to do all of these things. We're the ones that are going to pay for it. They [the ones currently making decisions] are going to be long gone by the time we have to deal with all of these costs."

We must create opportunities for the next generation and recognize our own responsibility to act now — ensuring that culture, knowledge, and traditions remain strong as viable alternatives to the extractive systems that have long dictated our economies and futures.

Alternatives to extractive industries are not just about economic models. They are about cultural strength, identity, and self-determination. They are about decolonization and the resurgence of cultural practices, ancestral economies, and values that are useful today and will provide the foundation for new ideas. Rooting our futures within ancestral values and systems does not mean a "rejection of Western knowledge" in its entirety but, instead, rooting "economic self-determination within our own knowledge systems" (Smith, 2004, p. 41).

By centering culture as the foundation for climate resilience and economic alternatives, communities can reclaim their traditional practices, knowledge systems, and ways of being as viable and enduring pathways forward. Indigenous economies and governance systems have long been rooted in reciprocity, sustainability, and interrelationships with the land and waters. Drew Harris emphasized the importance of bringing back old ways of "helping each other out more and returning to systems of trading while also promoting food sovereignty." Hoo<u>x</u>i'i, Kolin Sutherland-Wilson contends that "the alternative is the success of our culture, and our culture being the driving force of our decision-making once again."



Indigenous communities will bear both the brunt of both lack of access to traditional foods via LNG development and the increased prices within "hub" towns that house LNG workers.

HOUSING, HEALTH SERVICES, AND SAFETY

Hub towns, administrative centres, and staging areas for resource development drive up the costs of food and housing and put a strain on social and public health services while providing little economic benefit to communities (Amnesty International, 2016; Bennet, 2024; Gitanyow Hereditary Chiefs, 2024b; Stokes et al., 2019). For example, Terrace, B.C., serves as a hub city for surrounding resource developments. Given the influx of workers, the disruptions in services near LNG projects may be under-reported because not everyone who accesses services is captured within census data for the area. As a result, hub towns or cities often experience resource scarcity. Patience Muldoe recalls, "Our emergency [department] is not open 24/7… and if big industry comes in, we don't have the capacity for that."

These impacts to food and shelter are compounded by ongoing racism and marginalization of Indigenous people (Stokes et al., 2019). Many LNG projects import workers and their families to fill job opportunities, with limited job availability for local Indigenous Peoples (Stokes et al., 2019). Hooxi'i, Kolin Sutherland-Wilson notes, "While there might be a short influx of temporary jobs, that seems to dry up… after a period of about three years."

> Yahaan (Donald Wesley) echoed this point, "I have friends all over the Northwest here: Kitimat, the Nass Valley, Haida Gwaii, Bella Bella. I know everybody. And when we talk about stuff here, a lot of people, sure, people want money. People want jobs, [but] training a few people to sweep the [LNG plant] floors... Is that prosperity in your eyes? I don't think that's prosperity."

Rising housing costs paired with impacted access to cultural foods creates negative health outcomes (Tobias and Richmond, 2014). Drew Harris states, "If the pipeline comes in and takes away the fish, and messes with the berries, then lots of people wouldn't be able to eat. We already have really poor health down here… so it would be more reliant on store-bought food… That would definitely negatively affect our physical health [and]… our well-being."

"Access points" required by industrial development put further strain on the land, access to cultural foods, and health. As Hooxi'i, Kolin Sutherland-Wilson puts it, "By our traditional laws, all of the other creatures who live on that *Lax'yip* (territory)… also have a right to sustain themselves from that land, and to house themselves on that land." Amongst the hidden costs of development and LNG, the health and well-being of the Land, or the impacts on the functionality of the ecosystem, are undervalued.

Finally, there are risks to Indigenous women and girls, who are already disproportionately affected by and targeted for violence (National Inquiry, 2019). Relevant to this discussion, resource extraction projects often involve the formation of man-camps, which have been found to put Indigenous women and girls at risk (Amnesty International, 2016; National Inquiry, 2019; Paradis, 2022). A previous construction boom in Northern B.C. led to the "exploitation of Indigenous girls as young as 13 years old" (Stokes et al., 2019, p. 55). The combination of young, transient workers, high pay, and "high pressure work conditions" contributes to increased substance abuse and rates of violent crime (Linnitt, 2020; National Inquiry, 2019, p. 6). This is particularly concerning as many of the projects in Northern B.C. pass through the Highway of Tears (Highway 16).[5]

DIVIDE AND CONQUER: RIGHTS VS. TITLE

Within B.C., where many Nations have coexisted since time immemorial, major industrial projects that bisect multiple territories raise important questions around consent, including the true extent of self-determination within environmental assessment processes.

Co-existence has meant shared stewardship of neighbouring or overlapping territories. Given the importance of land and waters for Indigenous Peoples, increased involvement in extractive projects has led to disagreement within and amongst Nations (Nowlin, 2021) who have traditionally navigated those disagreements with diplomacy and Indigenous laws. But that is changing.

[5] Highway 16 was given this name because of the number of cases of missing and murdered Indigenous women and girls along it.

As Drew Harris suggests, when people are "hooked on getting these big pay cheques… those things are colonization, not our way of thinking. Fighting our own people is half the battle." The drive for project expansion puts Indigenous Peoples in a challenging position, working to preserve their limited territories while grappling with imposed poverty and being offered "economic benefits from industrialization" (Nowlin, 2021, p. 91).

For example, the proposed PRGT pipeline is jointly owned by the Nisga'a Lisims Government, who have cited the development as an example of "economic reconciliation" (Jang, 2024). While the Nisga'a Nation is within its self-determining rights to make decisions on behalf of their Nation, those decisions must not infringe upon the rights of other self-determining Nations. There is an ongoing disagreement about the nature of these rights regarding marine title as well.

In the case of PRGT, the pipeline must find its way to the ocean, crossing the territories of several other Nations that have signed no such agreement or have indicated no interest in LNG development or transport within their territories. About 50 kilometres of the pipeline would cross Gitanyow's territory, with the total portions of the pipeline route on Gitxsan lands accounting for nearly a quarter (23%) of the PRGT's total 750-kilometre length (Jang, 2024).

There is an ongoing legal debate about the rights of modern treaty holders (the Nisga'a) vs. the rights of those who assert or hold title (Gixsan and Haida, among others), and this will continue to unfold in courts but may take many years. These disputes, in the court or otherwise, "exacerbate historical tensions between [Nations], which diverts attention away from critical issues of environmental sustainability and Indigenous sovereignty" (Gitanyow Hereditary Chiefs, 2024a). Yahaan (Donald Wesley) recalls, "Where Lax Kw'alaams is situated… and these guys are proposing another LNG [project] on our land, that's outside their treaty land… My people have trap lines all along the corridor… the pipe will go underwater and will go right through some very rich fishing habitat, where… people harvest their salmon right outside my village."

Learn more about marine title in Yellowhead Brief, **Recognition and Erasure of Indigenous Oceanic Rights and Title** by Michaela M. McGuire and Rosanna Carver

Whether Indigenous Peoples truly have Free, Prior, and Informed Consent when it comes to large-scale development — that is ongoing and negotiated — is another question entirely. As Hooxi'i, Kolin Sutherland-Wilson puts it, "That kind of raises the issue of who is in a position to grant consent or to make authoritative decisions on behalf of the wider territories beyond the scope of the Indian Act reserves?" When industry only has consent from one Nation, development projects risk pitting Indigenous Nations against each other, which serves only to undermine historical relations.

Many coastal Nations uphold traditional governance models, dissimilar to the imposed Indian Act decision-making systems. As Patience Muldoe emphasizes, "Either they are getting a yes from the band council or the hereditary chiefs. I think industry uses that to their advantage sometimes… They will go to the people that are going to say yes, and then it just furthers the divide." Similarly, Drew Harris states, "I feel like it really messes up all of our self-determination because… a handful of people make decisions on behalf of a Nation that never got asked or consulted. None of us were asked if we wanted a pipeline; we just saw agreements and announcements. What is self-determination? Who gets to decide?"

Indigenous Nations must decide for themselves what they want their legacy to be. All things considered, it remains important that we move away from "a singular Indigenous narrative," especially related to land, rights, and self-determination (Kwak, 2020, para. 20). While uncomfortable, conflict and disagreement are part of Nation-to-Nation relationships — and always have been. However, it is equally important to recognize that in *true* Nation-to-Nation relationships, the self-determining rights of one Nation cannot supersede the inherent rights of another.

While this is framed here as a risk because the legal landscape is not yet clear on the issue of asserted and established rights, meaning new interpretations of the law have the potential to challenge PRGT on the grounds of Indigenous rights — it is also an opportunity.

Could we conceive of a landscape where these neighbouring Nations actually return to the practice of diplomacy and *Indigenous* laws to resolve these questions, avoiding the courts altogether?

FUTURE PATHWAYS: CULTURE AS A COMPASS

The first step forward requires a step back. First and foremost, Settler Canadians must "reconsider the histories they have been taught and realize what a great lie much of it has been" (Huggins, 2017). The colonial project and capitalist relationships with the land have resulted in "carbon-intensive economies, which produce the drivers of anthropogenic climate change" (Whyte, 2017, p. 154). No matter your understanding of economics, we must understand that our obsession with unrestricted growth is killing the very thing that sustains us. Our relationship with and actions upon the environment are interconnected: we cannot exist without a healthy environment and the tools to steward it according to Indigenous laws.

At the end of the day, LNG projects are fossil fuel projects. Fossil fuels increase greenhouse gas emissions that fuel climate change. For Indigenous communities, who hold deep relationships to the land and waters, climate change perpetuates colonial dispossession, removing us from our lands and waters (Whyte, 2017). Given the rate, scale, and intensity of climate change, we must accept that we are approaching a point of no return. As Yahaan (Donald Wesley) reminds us, "Economic growth is fantastic if you can manage it with the environment. The environment can't be harmed anymore. We're so brutal with our small little world we live in."

As Simpson recalls, "It is time to admit that colonizing governments and corporate foundations are not going to fund our decolonization because the colonial relationship serves their interests, and they remain the beneficiaries of colonialism" (2008, p. 77). The narrow focus of the dominant industry-driven understanding of economic reconciliation reinforces a cycle in which resource extraction is positioned as a viable economic pathway for Indigenous communities.

Although governments frequently pledge support for Indigenous land and governance rights, these commitments are often weakened or reversed when political conditions shift — usually without significant public scrutiny. Meanwhile, industry partnerships consistently receive unwavering political support along with widespread and largely positive media coverage.

> This pattern reflects broader systemic priorities: Indigenous economic participation is encouraged when it aligns with resource development, but when communities assert sovereignty over land or propose alternative economic models, they often encounter resistance (Lapointe, 2024).

Many Indigenous Nations have examples of sustainable economies, rooted in cultural values like respect, reciprocity, and stewardship. Now more than ever, Nations need *their own people* to be in charge of *their own futures*. This starts and ends with Nations holding the pen.

PHOTO CAPTION, PAGE 33: A Gitxsan child plays at the confluence of the Skeena and Kispiox rivers, just seven kilometres from the path of the proposed PRGT pipeline.

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APPENDIX A

The risk scenarios for PRGT are based on the following assumptions drawn from similar projects.

Ownership

We assume a partnership structure where Western LNG has a 50% stake in the project and Nisga'a Lisims Government has a 50% stake.

Financing and capital structure

We assume a capital structure with a leverage of 80:20 of debt to equity. Debt will be a mix of loans, bonds, both senior and subordinate. We further assume a repayment schedule of 15 years after completion of the construction. We assume that neither partner in *NW Infrastructure Limited* owns senior debt, but that the Nisga'a Lisims Government might own subordinated debt. It remains unclear if any extractors or traders are acting as sponsors of this project and have taken on project bonds or loans. Sale of the PRGT project to the partnership by TC seems to imply a liability to be paid once the infrastructure is in operation.

Income model

As stated above, operation of the pipeline will generate a toll fee income stream. After operational costs, financing costs, payments to TC and benefit payments, any residual will be split according to the partnership structure. At this time we have no knowledge of the types, if any, of contracts with shippers.

Business model

The pipeline will offer an alternative route to tide water and Asia Pacific LNG markets for natural gas extracted in the Montney fields.

Construction

We are assuming full operation of both the pipeline and Ksi Lisims LNG facility in 2030. The big question for our assumptions is the cost of construction of the pipeline. Average overruns in North America for such infrastructure projects are in the range of 10% to 30%. However, the latest gas pipeline project comparable to PRGT, *Coastal Gaslink* experienced cost escalations from an initial $6.2 billion to approximately $14.5 billion at completion.

PRGT was initially expensed at $5 billion in 2013. In May 2025, Western LNG disclosed that the capital costs are now expected to be $12 billion, but noted that this is not a comprehensive estimate. The Ksi Lisims facility is anticipated to cost $10 billion, meaning that the total project cost is $22 billion at the time of writing. This means that the PRGT cost overruns (140%) are already higher than Coastal Gaslink (133%), and face further increases when comprehensive estimates are conducted.

Status of LNG in the energy transition

We finally assume that there is growing consensus that natural gas can no longer be considered a bridge fuel in the global energy transition, meaning that gas transportation infrastructure assets will not be favoured by escalating global climate mitigation policies, but could instead be stranded by them.

Market conditions for LNG

The global LNG market is headed towards oversupply conditions in the short and medium term, with a glut plateau projected in 2030 when PRGT and Ksi Lisim LNG are set to commence commercial operations. Furthermore, long-term contracts are being replaced by spot contracts, making the LNG market an evermore volatile one in terms of price, which favours flexible low-cost producers of LNG. Though the B.C. coast is at a favourable shipping distance from main Asia Pacific markets, in particular northern markets such as Japan and Korea, *the well to LNG processing port* distance is considerable (750 kilometres in the case of PRGT), implying long and costlier pipelines. This makes gas shipped from Montney through pipelines such as PRGT costlier — all the more so given that they are in competition with pipeline systems that have been operating for years and are fully paid off. Because these infrastructures are already in place and do not require major new investments, they can often transport gas at a lower cost compared to building new pipelines or systems. Transport capacity out of the Montney, south to the US through existing pipelines, is far from saturated and cheaper than through the Rockies. Natural gas producers who want exposure to price dynamics in the Asia Pacific can do so without actual shipments to this region through linked price contractual instruments. Westbound pipelines are thus an option, not a necessity, for Montney producers. These producers will have prior options before the completion of PRGT to ship to Asia Pacific markets such as Canada LNG.

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