Subordination and Pretence:

Canadian Environmental Assessment, Indigenous Knowledge, and Reconciliation

NIALL RAND

Peter A. Allard School of Law

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PART I — INTRODUCTION

In recent years the global energy landscape has suffered from prolonged volatility, precipitated at least in part by rapid and transformational change in the market. While fossil fuels remain essential keystone commodities; rising economic instability, the threat of climate change, and the promise of technological advancement have begun to erode their dominant position. It is not clear whether volatility is the new normal.[1] Indeed, this could simply be another example of the boom and bust economics that have historically plagued the industry. Whatever the reason advanced to explain fluctuations in today's market, there are indicators that the energy landscape is evolving like never before. Countries that rely on energy exports to fuel economic prosperity have been forced to strategically reassess their investment in non-renewable resource extraction and more broadly question the continued viability of this once stable revenue stream. Canada, for its part, has not been immune from the global economic downturn; with federal, provincial, and municipal governments facing increasingly vociferous demands from their constituents to carefully consider energy policy.

As energy products are currently its largest export[2], Canada's economic and environmental decisions will continue to be fraught with controversy. Extant political questions have been complicated by the change of government at the federal level in 2015, raising significant doubts about its ambition to achieve the once heralded status of an

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[1] See Blu Putnam, *No 'New Normal' for U.S. Energy Markets; Volatility is Order of the Day* (2015), online: Brink <http://www.brinknews.com/no-new-normal-for-u-s-energy-markets-volatility-is-order-of-the-day/>. See also, Clifford Krauss, *Oil Prices: What's Behind the Volatility? Simple Economics* (2016), online: New York Times <http://www.nytimes.com/interactive/2016/business/energy-environment/oil-prices.html>.
[2] Statistics Canada, *Exports of goods on a balance-of-payments basis, by product* (2016-12-06), online: CANSIM, table 228-0059 <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/gblec04-eng.htm>

energy superpower.[3] A recent government-commissioned report, assessing emerging policy challenges and opportunities in the energy sector, cites a market that is rapidly moving towards renewable-sourced electricity, and therefore away from fossil fuels as the most-desirable source of primary energy.[4] The report's analysis suggests that this is not only desirable but—more importantly—is rapidly becoming a cost-effective and technologically realistic prospect, which in turn enhances national energy security, productivity, and economic stability.[5] While there is room to criticize speculative conclusions about energy markets[6], especially given the historical considerations noted above, it cannot be denied that the acceptable boundaries of sustainable energy development are emerging through recent discourse.

Shaping this discourse is a difficult prospect in light of continuing definitional ambiguity.[7] Canada has endeavoured, through its 2016-2019 Federal Sustainable Development Strategy, to create a firm foundation from which to implement its international and domestic environmental commitments.[8] However, many of the aspirational goals[9] it proffers—combined with the mandate upon which the current government was elected—awkwardly contradict the energy infrastructure roadmap

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[3] See Peter Forrester, Kent Howie & Alan Ross, "Energy Superpower in Waiting: New Pipeline Development in Canada, Social Licence, and Recent Energy Reforms" (2015) 53:2 Alta L Rev 419 at 420 who cite a 2006 address made by the then Prime Minister Stephen Harper at the Chamber of Commerce in London wherein he announced Canada's intention to become a world energy superpower.
[4] Public Service of Canada, Policy Horizons Canada, *Canada in a Changing Global Energy Landscape* (2016) <http://www.horizons.gc.ca/sites/default/files/Publication-alt-format/2016-0266-eng_0.pdf>
[5] *Ibid*. at 3-5.
[6] See *supra* note 3 at 449. The authors acknowledge the domestic and global factors hindering energy exports, but still classify Canada as an "energy superpower in waiting".
[7] The *Federal Sustainable Development Act* (S.C. 2008, c. 33) defines it as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."
[8] Canada, Department of Environment and Climate Change Canada, 2016–2019 Federal Sustainable Development Strategy (Gatineau: Environment and Climate Change Canada, 2016) at 5.
[9] *Ibid*. at 8.

inherited from their Conservative predecessors.[10] This conflict is particularly apparent in the context of Canada's environmental assessment process and its inclusion of Canada's Indigenous peoples and their surviving knowledge bases.

The current environmental assessment framework is a vital indicator by which to assess the government's commitment to Indigenous relations and, more broadly, sustainable development. Indigenous knowledge is increasingly championed by project proponents and government agencies as a meaningful way to legitimize development as sustainable. It remains to be seen whether such knowledge can be used to assess and mitigate the impacts of extractive energy developments. This paper argues that integrating Indigenous knowledge risks simply expanding the broad social licence required for such development, while simultaneously satisfying the government's duty to consult. This in turn hinders efforts by Indigenous peoples to challenge development within their traditional territories and further entrenches Canadian dependence on non-renewable energy export.

By outlining the core facets of Indigenous traditional knowledge in the context of the environmental assessment process, it is possible to critically assess whether Canada is making meaningful progress towards its sustainable development ambitions or simply leveraging an expedient political narrative to garner key Indigenous support. Part II begins by laying out the legislative framework of environmental assessment in Canada, and the ways it involves Indigenous peoples. Part III proceeds by connecting the assessment

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[10] For a comprehensive summary of recent regulatory and project developments which suggest that development in the energy-sector continues to move abreast, see Terri-Lee Oleniuk, Jeremy Barretto & Joel Forrest, "Recent Regulatory and Legislative Developments of Interest to Energy Lawyers" (2015) 53:2 Alta L Rev 529.

process to Indigenous knowledge and lays out the challenges inherent with definitional ambiguity, along with steps that must be taken for this knowledge to become meaningful. Finally in Part IV and V, the ideas forming the basis of the earlier discussions are applied to the Pacific NorthWest LNG Project in order to determine if the rhetoric surrounding the project is meritorious or purely political.

PART II — CANADA'S ENVIRONMENTAL ASSESSMENT FRAMEWORK

Proponents of contemporary industrial development in Canada have come to expect a level of regulatory review and oversight which informs their broader decision making. Environmental assessment is a prominent example of such regulatory governance, with a specific focus on curbing environmental degradation. As Fidler explains, "[it] is a universally recognized and important predictive tool that highlights potential environmental and social impacts…thus enhancing the prospects for sustainable development."[11] By enacting laws which require project proponents to obtain regulatory approval, federal and provincial governments are empowered to control the adverse environmental effects often associated with extractive development.

Although environmental assessment encompasses a number of elements, it is most clearly a systematic process to identify, predict and evaluate the environmental effects of proposed actions.[12] In theory, decision making is thus informed by the prospect of significant environmental consequence in order to promote sustainable development and

[11] Courtney Fidler, "Increasing the Sustainability of a Resource Development: Aboriginal Engagement and Negotiated Agreements" (2010) 12 Env Dev Sustain 233 at 234.
[12] Bram F. Noble, *Introduction to Environmental Impact Assessment: A Guide to Principles and Practice*, 3rd ed (Don Mills: Oxford University Press, 2015) at 331.

identify areas of potential enhancement or mitigation. Lambrecht embraces environmental assessment as a process wherein development is guided through planning, approval, and control stages in order to constrain risk and facilitate participation.[13] The Supreme Court of Canada also lends some support to this view by highlighting the important function of comprehensive information gathering; combined with decision making that reconciles the development desires of a proponent with the inherent environmental risks.[14] Conceived of in this way, environmental assessment "informs regulatory decision making and blends into it."[15]

The *Canadian Environmental Assessment Act, 2012*[16] ("*CEAA 2012*" or "the Act") is the latest iteration of federal legislation designed to regulate developments warranting assessment. It stands alongside a number of provincial statutes which together form a comprehensive environmental assessment framework.[17] This approach embraces a form of cooperative federalism and reflects overlapping federal and provincial jurisdiction.[18] As the Court explains, "[it] would lead to the most astonishing results" if a level of government was barred from assessing the environmental effects of a given project.[19] While not triggered by every development proposal, the *CEAA 2012* is arguably still the most

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[13] Kirk N. Lambrecht Q.C., *Aboriginal Consultation, Environmental Assessment, and Regulatory Review in Canada* (Regina: University of Regina Press, 2013) at 4.
[14] *Friends of the Oldman River Society v. Canada (Minister of Transport),* [1992] 1 S.C.R. 3 at 71 [*Oldman*]. La Forest J. affirms that environmental impact assessment is "descriptive of a process of decision making".
[15] *Supra* note 13 at 43.
[16] SC 2012, c 19, s. 52. The *Canadian Environmental Assessment Act, 1992* SC 1992, c 37 was repealed.
[17] See e.g. BC *Environmental Assessment Act* [SBC 2002] [*BCEAA*]. In an effort to streamline the process, mechanisms recognizing principles of equivalency and harmonization have been built into the wider legislative regime. This includes *CEAA 2012*, ss. 32(1) & 105(b), as well as *BCEAA*, s. 27. See also *Mining Watch Canada v. Canada (Fisheries and Oceans)*, 2010 SCC 2, [2010] 1 S.C.R. 6 at paras. 24-25.
[18] *Supra* note 13 at 44.
[19] *Oldman, supra* note 14 at 66.

universally applicable statute and therefore deserves careful analysis.[20] Interestingly, the legislative purposes of the Act are quite broad and span a diverse range of issues which go beyond the protection of environmental components.[21] Of particular note, for the purposes of the analysis to follow, is paragraph 4(1)(d) which promotes the "communication and cooperation with aboriginal peoples with respect to environmental assessments".[22] Its inclusion alludes to intersecting Aboriginal and treaty rights—which are "recognized and affirmed" under section 35 of the *Constitution Act, 1982*[23]—and the importance of consultation to environmental assessment.

Consultative undertakings should be viewed as the cornerstone of an effective environmental assessment process. Such engagement is legitimizing when guided by democratic decision making; allowing for the public evaluation of significant environmental risk and the social impacts of development. For Indigenous peoples, meaningful participation is an elusive concept complicated by the Crown's concurrent duty to consult.[24] As Booth and Skelton assert, the exploitation of natural resources often

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[20] Note that in some cases the *CEAA 2012* is wholly, partially, or selectively inapplicable. This is particularly important in jurisdictions regulated by comprehensive land claims agreements, which encompass parts of northern Canada including the *Mackenzie Valley Resource Management Act* SC 1998, c 25 & *Yukon ESA Act* SC 2003, c 7. While such agreements should not be discounted, this paper will only focus on the emerging nexus between Indigenous communities within predominantly non-Indigenous jurisdictions and the environmental assessment process. These communities are increasingly forced to engage with project proponents, must rely on the general legislative framework, and stand to gain a great deal from substantive reforms to the *CEAA 2012* which prioritize the reconciliation of Indigenous knowledge.

[21] See the purposes listed under *CEAA 2012*, s. 4(1) which incorporate: precautionary considerations, cooperation between jurisdictions, public participation, timeliness, sustainable development goals, and the study of cumulative effects.

[22] *Ibid.*

[23] Schedule B to the *Canada Act 1982 (UK)*, 1982, c 11 .

[24] See Aniekan Udofia, Bram Noble & Greg Poelzer, "Meaningful and Efficient? Enduring Challenges to Aboriginal Participation in Environmental Assessment" (2016) Environ Impact Asses Rev at 1. The authors note the lack of concrete legal meaning for environmental assessment participation. Instead, they infer that where traditional lands and resources are affected communities ought to be involved.

disproportionately affects Indigenous communities and the traditional relationship they may have with the land.[25] While a recognizant process is clearly desirous—based primarily on the purposes noted within section 4(1) of the *CEAA 2012*—competing pressures often necessitate compromise wherein Indigenous input risks being too easily discounted.[26] It should be no surprise that project proponents have resisted environmental assessment obligations.[27] Perhaps more interesting are the pressures faced by governments to stimulate economic growth and their corresponding fear that increased environmental scrutiny will hurt the competitiveness of the Canadian market.[28] With this in mind, the question arises as to how the environmental assessment process in Canada has responded to the perceived necessity for compromise and the ramifications this has on the participation of Indigenous peoples.

It is understandable for any government facing the uncertainty prompted by global recessionary forces, to regulate in ways that create jobs and stimulate economic growth. A number of commentators suggest that this core government mandate informed the most recent reforms made to Canada's environmental assessment framework in 2012.[29] While there is some room to question this conclusion, the reforms clearly align more closely with

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[25] Annie L. Booth & Norman W. Skelton, "Improving First Nations' Participation in Environmental Assessment Processes: Recommendations From the Field" (2012) 29:1 Impact Assess & Project Appr 49 at 49.
[26] Aniekan Udofia, Bram Noble & Greg Poelzer, "Community Engagement in Environmental Assessment for Resource Development: Benefits, Enduring Concerns, Opportunities for Improvement" (2015) 39 Northern Review 98 at 99. The authors describe the completing pressures for effectiveness {which entails "a participatory, comprehensive, and transparent process…[that] delivers benefits to local communities"} and efficiency {which entails a cost-efficient and timely process which is "responsive to the needs of industry and decision makers"}.
[27] Denis Kirchho, Holly L. Gardner & Leonard J. S. Tsuji, "The Canadian Environmental Assessment Act, 2012 and Associated Policy: Implications for Aboriginal Peoples" (2013) Int Indg Pol J 1 at 5.
[28] *Ibid*. See also *supra* note 26 at 99; Robert B. Gibson, "In Full Retreat: the Canadian Government's New Environmental Assessment Law Undoes Decades of Progress" (2012) 30:3 Impact Assess & Project Appr 179.
[29] See e.g. *supra* note 27.

the interests of efficiency over effectiveness.[30] Both Gibson and Doelle conclude that the *CEAA 2012* is a regressive piece of legislation which denotes a "comprehensive and dramatic" retreat.[31] Of particular concern for Indigenous peoples, a number of structural changes have dramatically reduced the opportunity for involvement.

Firstly, the standard environmental assessment process has been accelerated. This was achieved by imposing time limits throughout the process which are now strictly enforced by limiting ministerial discretion. Where public participation is allowed, including the screening and assessment phases[32], legislated windows for comment are established.[33] Most assessments will be completed within 12 months but may take up to 24 months if a review panel is requested.[34] This makes it particularly difficult for remote or isolated Indigenous communities to meaningfully participate and risks delegitimizing consultation efforts. Engagement has also been focused by limiting the definition of interested parties to those who are "directly affected" or have "relevant information or expertise".[35] This is exacerbated by the increasing complexity inherent to the process which necessitates specialized expertise and significant capital.[36]

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[30] *Supra* note 25. See also Meinhard Doelle, "CEAA 2012: The End of Federal EA As We Know It?" J of Env Law & Practice 1 at 17. The author suggests that it actually also hurts efficiency by imposing a duplicate process in certain areas.
[31] *Ibid.* at 17. See also Gibson, *supra* note 28 at 179-180.
[32] See *CEAA 2012*, ss. 9; 27(2) & 54(2).
[33] See *Ibid*. s. 79.
[34] Note that these timelines may be extended in a limited set of circumstances. *Ibid*. ss. 27(3)(4) & 54(3)(4). See also, s. 38(1) which drastically reduces the window available to the Minister to refer an assessment to a review panel.
[35] *Ibid.* s. 2.
[36] *Supra* note 27 at 8.

Secondly, it is contended that a comprehensive and precautionary approach has been lost with the adoption of a streamlined one-size-fits-all process.[37] Indeed, lower level projects—which make up a significant portion of all environmental assessments—are now exempted altogether.[38] Doelle is particularly concerned with the shift away from a broad legal test to a codified list of applicable projects. He suggests the result is a less precautionary and environmentally certain result.[39] Further narrowing has taken place under section 5(1), which defines a set of environmental effects that will be taken into account. Most, if not all, closely align with the regulatory authority of the federal government and are therefore less inclusive. While a number of environmental changes which directly impact Indigenous peoples are referred to under paragraph 5(1)(c) of the Act, this does not necessarily address the need for wider jurisdiction at the federal level.

The reforms highlighted suggest that Indigenous peoples have reason to be concerned about their evolving role within the Canadian environmental assessment process. Even at an institutional level, the *CEAA 2012* prioritizes the reduction of regulatory barriers at the expense of meaningful participation.[40] If, as Lambrecht suggests, "industry and governments have a common interest in ensuring the sustainability of development…through robust environmental assessment"[41], it is concerning to see

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[37] See *CEAA 1992,* s. 16(1) which drew a distinction between a screening and a comprehensive study based on a number of factors.
[38] *Supra* note 28 at 179 & 181 notes that ~99% of projects were at least subject to a minimal self-assessment process.
[39] *Supra* note 30 at 3. See also, the *Regulations Designating Physical Activities* (SOR/2012-147) which now sets out which projects are likely to require an environmental assessment.
[40] *Supra* note 30 at 4 goes as far as suggesting that earlier iterations of the *CEAA* were "designed around the basic idea that all federal decision makers…should consider the environmental implications [of]…proposed projects."
[41] *Supra* note 13 at 38.

substantive restrictions that hinder meaningful Indigenous inclusion. Rather than working to facilitate and engage, the current framework has devolved into a mere information gathering process that provides very little opportunity for future energy development to be influenced by the principles commonly associated with sustainability. Even efforts designed to increase Indigenous participation, especially those channelling resources towards representative organizations, have been hampered by federal funding cuts. The result is a modern jurisprudential landscape that increasingly privileges the protection and affirmation of Indigenous peoples rights and interests, while in practice structures such as the environmental assessment process impose artificial barriers to their substantive realization.

This contradiction goes to the heart of the discussion to follow. While it is troubling that the *CEAA 2012* has the potential to increase irresponsible resource development practices, this paper endeavours to find a way to incorporate Indigenous perspectives in lieu or in advance of legislative reform. It is contended that these perspectives can be invaluable and help to mitigate the potential damage irresponsible development causes. Interestingly, this concern has also been raised by industry proponents. As Udofia et al. note, Indigenous participants have begun co-opting the environmental assessment process as a forum for much larger policy debates.[42] As it stands, historic land claims and broader polycentric considerations around sustainable development are undoubtedly ill-suited to the process. Therefore, any solution must spur meaningful participation while recognizing

[42] *Supra* note 24 at 7.

the inherent flaws of the traditional consultation structure in light of *CEAA 2012* reforms. Looking to section 19(3) of the Act provides one solution which merits careful analysis.

PART III — INCORPORATING INDIGENOUS KNOWLEDGE THROUGH SECTION 19(3) *CEAA, 2012*

It has already been shown that the space created through the Canadian environmental assessment process allows for a project's environmental and social impacts to be identified and debated.[43] Nonetheless, the process is arguably inadequate in a number of ways. The unique legal status of Indigenous peoples necessitates a close consideration of the potential impacts of energy development on their ways of life. Yet, the law as it stands offers only a limited opportunity for these communities to shape decision making. As Part II asserts, consultation is not valuable if it does little to influence a proponent's choices. The process must therefore become more collaborative and inclusive in order for Indigenous peoples to more broadly endorse future extractive development. In 2013, the special federal representative on west coast energy infrastructure Douglas Eyford submitted his final report which came to a similar conclusion.[44] In it he identifies that trust, inclusion, reconciliation, and action are necessary in order to start moving the relationship between

[43] See Martin Papillon & Thierry Rodon, "Proponent-Indigenous Agreements and the Implementation of the Right to Free, Prior, and Informed Consent in Canada" (2016) Environmental Impact Assessment Review 1 at 2.
[44] Canada, Minister of Natural Resources, "Forging Partnerships: Building Relationships" (2013) <https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/www/pdf/publications/ForgPart-Online-e.pdf

Canada and its Indigenous peoples forward.[45] Without concrete action, the rift between these groups will continue to go unresolved.

With these priorities in mind, section 19(3) of the *CEAA 2012* states that "[t]he environmental assessment of a designated project may take into account…Aboriginal traditional knowledge." Does this provide an effective mechanism to reframe a broken relationship, while in turn improving the environmental assessment process? There is certainly academic support for incorporating Indigenous knowledge. A survey of recent scholarship cites a number of benefits for proponents including: a more comprehensive range of information sources to rely on, a broader set of solutions at their disposal if conflict arises, more opportunities to hear from community members who do not traditionally participate, and the potential avoidance of costly and time-consuming litigation.[46] These benefits are likely attributable to the substantive form of participation that results, which has traditionally been stymied by the exclusion of a holistic Indigenous knowledge base.[47] Even so, the value of participation and the knowledge it provides have been recognized for quite some time. The Berger Inquiry—which was conducted from 1974-1977 to investigate the proposed Mackenzie Valley pipeline—is an early example of successful collaboration to resolve conflict. As Berger highlights in his final report, Indigenous peoples have "distinctive ethno-scientific traditions" which reflect their unique worldview.[48] While the statutory reference to Indigenous knowledge in the Act validates

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[45] *Ibid*. at 4.
[46] *Supra* note 26 at 101.
[47] *Supra* note 24 at 2.
[48] Thomas Berger, "The Report of the Mackenzie Valley Valley Pipeline Inquiry: The North" (1977) at 7 <https://docs.neb-one.gc.ca/ll-

Berger's findings, it is asserted that such knowledge cannot be valued and operationalized by proponents, as part of the environmental assessment process, without first being definitionally clarified.

Indigenous knowledge is a catch-all term that encompasses an assortment of intersecting meanings and concepts. As such it is difficult to distinguish between what such knowledge is and is not.[49] The term itself is not unanimously accepted, with most academics preferring to reference 'traditional knowledge' or 'traditional ecological knowledge'.[50] Most directly address these definitional challenges, while some also acknowledge the risk of linking such knowledge to tradition because it shackles Indigenous peoples to a historical way of life.[51] Matsui sees the resulting lack of consensus as a problem for policymakers and scholars alike; in effect forcing each to rely on personal assumptions to undertake any sort of cogent analysis.[52] These problems are only magnified for project proponents who, even with the best of intentions, may incorporate an artificially restrictive or insensitive approach.

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[49] Anthony Moffa, "Traditional Ecological Rulemaking" (2016) 35:2 Stan Envtl LJ 101 at 105.

[50] Nonetheless, Indigenous knowledge will be used throughout this paper, as it reflects the conclusion reached by Marc G. Stevenson, "Indigenous Knowledge in Environmental Assessment" (1996) 49:3 Arctic 278 at 280 that it is a more inclusive and empowering term.

[51] Peter J. Usher, "Traditional Ecological Knowledge in Environmental Assessment and Management" (2000) 53:2 Arctic 183 at 186. The author notes the risk of unduly restricting Indigenous knowledge to a static or archaic conception which does not reflect its "evolving and current" nature. See also Matthew S. Pudovskis, "Traditional Ecological Knowledge and Environmental Governance in Canada: The Role of Law and Comprehensive Agreements in Facilitation Incorporation" (2013) UBC LL.M THESIS at 24 describes it as a "frozen in time" approach.

[52] Kenichi Matsui, "Problems of Defining and Validating Traditional Knowledge: A Historical Approach" (2015) 6:2 The International Indigenous Policy Journal 1.

Definitional support via statute has, to date, been limited.[53] One example can be found in the *Yukon Environmental and Socio-economic Assessment Act*.[54] As Usher explains, it is much more common for the value or necessity of Indigenous knowledge to be referenced without clarifying—in practical terms—what it means.[55] Ambiguity makes providing guidance during an environmental assessment even more challenging. This is not to say that success is not or has not been possible. The "full consideration" referenced in the environmental assessment of the Voisey Bay Mine and Mill Development and the NWT Diamonds Project (now the Ekati Mine Project) should not be overlooked.[56] However, it is clear that more must be done to ensure proponents know what Indigenous knowledge is, what it can practically provide, its role as part of an environmental assessment, and how a projects outcome will be affected.[57] Academic analysis has led to unnecessary compartmentalization and a general uncertainty which has dissuaded project proponents from recognizing the substantive benefits it can provide. Nothing will change without first acknowledging that Indigenous knowledge provides inherent value to a comprehensive

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[53] The *CEAA, 2012* definitions under s. 2(1) do not provide any clarity.
[54] S.C. 2003, c. 7 at s. 2(1): "traditional knowledge means the accumulated body of knowledge, observations and understandings about the environment, and about the relationship of living beings with one another and the environment, that is rooted in the traditional way of life of first nations."
[55] *Supra* note 51 at 184 cites the Government of the Northwest Territories' Traditional Knowledge Policy which states that "traditional knowledge is a valid and essential source of information about the natural environment and its resources, the use of natural resources, and the relationship of people to the land and to each other, and will incorporate traditional knowledge into government decisions and actions where appropriate." Available at <http://www.enr.gov.nt.ca/sites/default/files/documents/53_03_traditional_knowledge_policy.pdf>.
[56] See Voisey's Bay Mine and Mill Environmental Assessment Panel, "Memorandum of Understanding" (1999), online: <http://www.ceaa-acee.gc.ca/default.asp?lang=En&n=0a571a1a-1&xml=0a571a1a-84cd-496b-969e-7cf9cbea16ae&offset=22&toc=show>; Northwest Territories Diamonds Project: Report of The Environmental Assessment Panel (1996), online: <http://www.monitoringagency.net/LinkClick.aspx?fileticket=7y4I47bIGE0%3D&tabid=95&mid=478>.
[57] *Supra* note 51 at 184.

and participatory environmental assessment. As noted above, recognition has to some extent already begun, but more ought to be done to equip those responsible for consultation with the tools required to make it meaningful.

Firstly, there is a general perception that Indigenous knowledge is necessarily incompatible with extractive development and thus cannot be meaningful. Stevenson concludes that development need not be incompatible with an Indigenous worldview, nor does proponent driven capitalism have to hurt their existing economies.[58] Although he acknowledges the risk of sharing Indigenous knowledge—especially the possibility that governments and the energy industry will use it to further exploit Indigenous peoples—he does not go on to fully address how to protect against it.[59] Intellectual property law can provide a partial solution, but it fails to address the larger systemic issues involving respect and reconciliation that were noted previously. The *CEAA 2012*, and the environmental assessment process in general, have non-Indigenous origins and are therefore more likely to perpetuate colonial hegemony.[60] The process as it stands provides ample proof of that; as the interests of the broader Canadian economy are prioritized despite fierce opposition from directly affected Indigenous communities. Paci et al. goes so far as to suggest that "a hidden agenda of racism" has been maintained by the Act, whereby decision makers are captured by the influence of proponents.[61] As such, there is a need for agreement on what

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[58] *Supra* note 50 at 279.
[59] *Ibid.* at 279.
[60] Chris Paci, Ann Tobin & Peter Robb, "Reconsidering the Canadian Environmental Impact Assessment Act: A Place for Traditional Environmental Knowledge" (2002) 22 Environmental Impact Assessment Review 111 at 121 asserts that Indigenous values, beliefs, and teachings must be directly incorporated into the *Act* if anything is to change.
[61] *Ibid.* at 123-124.

the inclusion of Indigenous knowledge entails for each party[62] and— more importantly— how the voice of Indigenous peoples can alter modern discourse surrounding environmental assessment.

Secondly, environmental assessment should mitigate, not exacerbate, the cultural loss associated with large-scale extractive development.[63] The dominance of western scientific knowledge[64] creates a significant barrier to meaningful implementation in this respect. This is amplified by a pernicious romantic characterization which portrays Indigenous peoples as naive, ecologically idealistic, and therefore unable to produce legitimate scientific evidence.[65] This view is incorrect, yet even scholarship advocating for the importance of Indigenous knowledge tends to juxtapose it with a western paradigm.[66] If there is a need to compare, this should be done in a reconciliatory way which supports finding common ground and filling gaps where necessary.[67] Butler asserts that it is too easy to segregate the evolution of knowledge in ways that neglect how contact and exchange functions in practice.[68] By drawing parallels rather than distinctions there is an opportunity to break down the hierarchy of knowledge that project proponents maintain

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[62] *Supra* note 50 at 280. See also, Udofia, Noble & Poelzer, *supra* note 24 at 5.
[63] Pudovskis, *supra* note 51 at 86 cites s. 7(3) of the ILO Convention No. 169 which reiterates the value international law places on co-operative study. While Canada is not a party to this particular convention, it should nonetheless be viewed as informative.
[64] See Usher, *supra* note 51 at 186 acknowledging that 'western science' is ambiguously broad, but can be summarized as a method of empirical observation that privileges rationality and logic. This compares to Indigenous knowledge which is generalized as an extension of a lived experience which leads to felt truths about the world.
[65] *Supra* note 52 at 4.
[66] See e.g *supra* note 50 at 279.
[67] *Ibid.* at 287. See also, Caroline Butler, "Historicizing Indigenous Knowledge: Practical and Political Issues" in Charles R Menzies (ed.), *Traditional Ecological Knowledge and Natural Resource Managemen*t (Lincoln, Nebraska University Press, 2006) at 124: "Indigenous versus Western keeps Indigenous knowledge trapped in history…related to the past and to precontact resource use"; and Usher, *supra* note 51 at 185.
[68] *Supra* note 67 at 124.

as the status-quo.[69] Looking again to the purposes of the *CEAA 2012*, Indigenous knowledge, conceived of in this way, could readily support the promotion of sustainable development and the implementation of a more precautionary approach.

Finally, government and industry actors must actively legitimize Indigenous knowledge; giving it a new meaning and purpose that reflects its inherent value. New ways of looking at sustainable development should be valued, as it becomes increasingly clear that humanity cannot divorce itself from environmental systems.[70] This will require a reassessment of how Indigenous knowledge is currently reconciled with other sources, while discouraging subordination. Moffa describes this as "knowledge co-production" wherein each dataset is afforded equal footing and thereby equally influences decision making.[71] This is important in the context of Canada's environmental assessment process, as both governments and proponents are forced to move beyond information gathering into the realm of collaborative partnership. While conceptually simple, developing such a system will require a great deal of work and investment on all sides.[72] This should include a thorough process of information collection and organization that prioritizes communication between the parties. Such a process is not only beneficial to proponents, but also Indigenous communities who feel disconnected from the decisions being made by the federal government. Only through collaboration will legitimacy result.

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[69] Moffa, *supra* note 49 at 124 highlights the dangers of the maintaining the status-quo, noting critics that believe Indigenous knowledge is not capable of supplanting its western counterpart in the context of climate science. See also Paci et al., *supra* note 60 at 118 who believe that support and initiative are essential to breaking the status-quo.
[70] *Supra* note 49 at 109.
[71] *Ibid.* at 125.
[72] Investment should not be viewed as financial only, although a scarcity of resources within many Indigenous communities is not an insignificant challenge that must also be considered.

Even so, Whyte suggests that the settlor-state has "insulated and enforce[d] laws, economic policies and practices of cultural and political domination that leave Indigenous peoples with little space to plan…what to do in the future."[73] His concerns align with the need for a planning process that rewards information when it is valuable, comprehensive, and reliable rather than expedient. Consultation becomes less of a duty and more of a reciprocal obligation in the best interest of all involved. For example, specific environmental knowledge that infuses ecosystem analysis within a sustainable and ethical framework, would provide proponents with a new dataset that would be difficult to produce and replicate through western science. This knowledge system has the potential to increase complexity and understanding of valued ecosystem components, thereby eliminating variables and reducing environmental risk factors.[74] To date, such a process has proven difficult to achieve in practice. For Nadasdy, systemic and educational barriers repeatedly hinder even the most tangible integration efforts.[75] The effect is a form of Indigenous knowledge that is crippled and disintegrated from its contextual base. Indigenous knowledge in this form should be regarded carefully and the motives of those involved questioned. As Butler forewarns, "evaluation…according to non-Indigenous measures and standards could easily become an act of colonization."[76]

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[73] Kyle Powys Whyte, "What Do Indigenous Knowledges Do for Indigenous Peoples?" (2016) Forthcoming in *Keepers of the Green World: Traditional Ecological Knowledge and Sustainability*, edited by Melissa K. Nelson & Dan Shilling at 6.
[74] *Supra* note 50 at 289.
[75] Paul Nadasdy, "The Case of the Missing Sheep: Time, Space, and the Politics of "Trust" in Co-management Practice" in Charles R Menzies (ed.), *Traditional Ecological Knowledge and Natural Resource Managemen*t (Lincoln, Nebraska University Press, 2006) at 145 cites skepticism from the biologists involved in the study he surveys, as well as bureaucratic failings that only exacerbates biases in the process.
[76] *Supra* note 67 at 122.

PART IV — STYLE OVER SUBSTANCE: PACIFIC NORTHWEST LNG AND *CEAA, 2012* IN PRACTICE

The preceding analysis pinpoints three obstacles to implementation that ought to be considered before Indigenous knowledge can be meaningfully operationalized within the framework created by the *CEAA 2012*. These obstacles are systemic and have been exacerbated by the most recent set of reforms.[77] Given their scope and complexity, it is not surprising that section 19(3) of the Act has, to date, remained a discretionary provision. Despite these obstacles and their associated risks, recent statements made by the federal government have begun to emphasize the use and importance of Indigenous knowledge.

The current Minister of Environment and Climate Change, Catherine McKenna, has been particularly vocal of late; connecting sustainable development with decision making that is based on traditional knowledge. Speaking at the Assembly of First Nations Annual General Meeting in 2016, Minister McKenna stressed that "traditional and scientific knowledge" is key to assessing resource projects going forward.[78] In her estimation, "[Indigenous] knowledge provides…invaluable information…makes our research more efficient and provides…first-hand observations about the state of…land, water, flora and fauna."[79] This largely reflects the commitments outlined in the Liberal Party of Canada's

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[77] Udofia, Noble & Poelzer, *supra* note 24 at 102 cite three enduring challenges not addressed by these reforms including: 1) capacity for engagement, 2) insufficient effectiveness gains, and 3) timing of engagement.

[78] Canada, Environment and Climate Change Canada, "Minister McKenna Reaffirms Canada's Commitment to Engaging with Indigenous Peoples and Youth at AFN Annual General Assembly" (2016-07-14) online: <http://news.gc.ca/web/article-en.do?nid=1098909>

[79] See Bruce Cheadle, *Environment minister tells AFN traditional Indigenous knowledge is key* (2016-07-13) online: CBC News <http://www.cbc.ca/news/indigenous/environment-minister-tells-afn-traditional-indigenous-knowledge-key-1.3677944>

2015 election platform regarding environmental assessment reform.[80] Interestingly, this rhetoric has recently expanded beyond environmental assessment into other areas of environmental protection. This expansion seems to reflect the federal government's desire to incorporate an inclusive and sustainable message into public policy announcements, while fulfilling its reconciliatory commitments.[81]

In light of the risks noted in Part III, the issue becomes determining whether leveraging the inherent value of Indigenous knowledge in a meaningful way, has instead devolved into a process whereby the broad social licence required for controversial extractive resource development projects is accumulated. Indigenous knowledge is therefore a mechanism through which proponent-driven consultation, and by extension government decision making, is legitimized and the risk of litigation reduced. As the proposed reform of the *CEAA 2012* has yet to take place, there is a rare opportunity to critically consider environmental assessment decision making in a context wherein Indigenous knowledge is politically favoured but still legislatively discretionary. The case study to follow will analyze the recent environmental assessment decision[82] and related

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[80] Modernization of the National Energy Board by making compositional and expertise changes stressed "environmental science, community development, and Indigenous traditional knowledge." See e.g Environmental Assessments (2015) online: <https://www.liberal.ca/realchange/environmental-assessments/>

[81] See e.g. Canada, PM of Canada, "Oceans Protection Plan: What it means for Canada's regions" (2016-11-07) online: <http://pm.gc.ca/eng/news/2016/11/07/canadas-oceans-protection-plan-what-it-means-canadas-regions>

[82] *CEAA 2012*, s. 54. See also, Canadian Environmental Assessment Agency, "Decision Statement for the Pacific NorthWest LNG Project" (2016-09-27) <http://www.ceaa.gc.ca/050/document-eng.cfm?document=115669>

materials used to approve the Pacific NorthWest LNG Project ("PNWLNG" or "the Project") in British Columbia.[83]

The market for liquefied natural gas ("LNG") has undergone dramatic global growth over the last 20 years.[84] Despite recessionary pressures, this growth trajectory is expected to resume as demand for cleaner energy grows.[85] Canada is poised to capitalize on this market as unconventional exploration has uncovered vast quantities of natural gas reserves in northern British Columbia.[86] The Canadian Association of Petroleum Producers projects fierce competition within the market going forward, but suggests that Canada is well-placed to participate competitively.[87] However, participation will largely rely on the availability of the investment for the development, approval, and operation of export facilities. Contemporary debates surrounding pipeline development, especially involving the export of bitumen from the Alberta Tar Sands to Asian markets, has been met with considerable opposition. The risk is that similar opposition will develop in relation to LNG

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[83] As the succeeding discussion notes, Canada's energy industry is in the midst of a diversification effort targeted at expanding the types of extractive products being produced, as well as the markets those products can be exported to. Within an uncertain regulatory environment, PNWLNG provides a unique opportunity to critically assess the tension between sustainable economic development and the contemporary value ascribed to Indigenous participants within environmental assessment. It is contended that energy infrastructure projects, of which PNWLNG is a glaring example, make use of Indigenous knowledge as a legitimizing tool to generate social license. This case study is indicative of a growing trend among project proponents to say and do whatever is necessary to receive regulatory approval rather than substantively engaging in reconciliatory dialogue. More broadly it evidences the need for legislative reform of the *CEAA 2012*.

[84] See Canadian Association of Petroleum Producers, "An Overview of the World LNG Market and Canada's Potential for Exports of LNG: An Update" (2015) online: <www.capp.ca/~/media/capp/customer-portal/publications/266489.pdf> at 2 citing an increase from "8.5 Bcf/d (billions of cubic feet per day) in 1994 to nearly 32 Bcf/d in 2014."

[85] *Ibid.* at 7.

[86] See Natural Resources Canada, "British Columbia's Shale and Tight Resources" (2016) online: <http://www.nrcan.gc.ca/energy/sources/shale-tight-resources/17692>. Approximately 524,6 trillion cubic feet have been discovered in the province to date, primarily within the Motney, Horn River, and Liard Basin's.

[87] *Supra* note 84 at 1 notes the advantageous proximity of West Coast reserves to export destinations and Asian market buyers, foreign investment, the need for energy export diversification, and the potential price advantages of markets outside of North America.

export. It is therefore in the best interest of the federal government to garner robust social licence. If, as Forrester et al. suggest, proponents will require more than regulatory approval to proceed with development, there is now an incentive to cater to groups who have traditionally been vocal opponents to such projects.[88] In British Columbia, Indigenous communities are increasingly intertwined with project outcomes, as demonstrated through the use of Indigenous knowledge in the environmental assessment process.

The PNWLNG Project includes the construction of a range of energy infrastructure forming part of a natural gas liquefaction and export facility. The majority-owner Petroliam Nasional Berhad ("Petronas") as part of Pacific NorthWest LNG Limited Partnership ("the Proponent") intends to process and export natural gas sourced by Progress Energy Canada Ltd. from northeast British Columbia at a rate of 3.2 billion standard cubic feet per day when fully operational.[89] The facility's location on Lelu Island, south of Port Edward, is primarily located on federal lands and was subject to both a federal and provincial environmental assessment.[90] The federal environmental assessment process for PNWLNG commenced on April 8, 2013 and was completed on September 27, 2016 when Minister McKenna announced that the project would go ahead. In accordance with paragraph 52(1)(a) of the *CEAA 2012*, the Project was deemed "likely to cause significant adverse

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[88] *Supra* note 3 at 420.

[89] Canadian Environmental Assessment Agency, "Environmental Assessment Report for the Pacific NorthWest LNG Project" (2016-09-27) online: <http://www.ceaa.gc.ca/050/documents/p80032/115668E.pdf> at 1. See also, Pacific NorthWest LNG, "The Project"(2016) online: <http://www.pacificnorthwestlng.com/the-project/the-project/>

[90] The Canadian Environmental Assessment Agency took a leading role in the environmental assessment given its location on federal lands. This was in accordance with the *Canada-British Columbia Agreement for Environmental Assessment Cooperation*.

effects"[91] necessitating a referral to the Governor in Council for a final determination.[92] Although 190 conditions were attached, they deemed that the Project was justified in the circumstances.[93] Indigenous knowledge was cited extensively as a part of the Environmental Assessment Report ("the Report"), Decision Statement ("the Decision"), and subsequent approval announcement. For example, the federal governments news release states that the decision was based on "science, traditional knowledge of Indigenous peoples and other relevant evidence".[94] If this was indeed the case, did the parties involved substantively address the obstacles and risks noted in Part III? Furthermore, has this incorporation resulted in a project that is more conscious of sustainability? The bulk of the analysis to follow will rely on the findings of these sources to critically analyze the claims of the federal government.

Indigenous knowledge is only cited in 1 of the 190 conditions referred to in the Decision. The Proponent is obliged to ensure its actions "are informed by the best available information and knowledge, including community and Indigenous traditional knowledge".[95] This is decidedly general, but could represent a meaningful condition if the Canadian Environmental Assessment Agency ("the Agency") and the Proponent successfully integrated Indigenous knowledge during the environmental assessment. The sensitive nature of the adjoining Flora Bank, for example, is considered by some to be a crucially important and biologically sensitive part of the Skeena river system. If, as the

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[91] *CEAA 2012*, s. 5(1).
[92] *Ibid*. s. 52(2).
[93] *Ibid*. para. 54(2)(a)
[94] Canadian Environmental Assessment Agency, "News Release-The Government of Canada Approves Pacific NorthWest LNG Project" (2016-09-27) online: <http://www.ceaa.gc.ca/050/document-eng.cfm?document=115672>. More specifically the "observations about marine conditions" which prompted further study.
[95] See, *supra* note 82 at s. 2.1.

Agency asserts[96], their findings considered Indigenous knowledge, the Flora Bank should have received ample regard, along with the effect the proposal would have on Indigenous rights as per the *CEAA 2012*.[97]

There was no shortage of Indigenous groups directly affected by the Project[98], and many more who provided additional comments.[99] The Environmental Impact Statement[100] submitted by the Proponent contends that all Indigenous groups were engaged through a variety of means. However, only the Lax Kw'alaams, Gitxaala, Metlakatla, Kitsumkalum, Kitselas, and Gitga'at were "provided with the opportunity to participate" in additional surveys and investigative programs relating to Lelu Island.[101] Capacity and Impact-Benefit Agreements were also reached with all of the Tsimshian Nations, excluding the Lax Kw'alaams.[102] These agreements included increased participation through traditional knowledge and use studies. While these negotiations are generally confidential, excluding the Agency, it was reported that the Lax Kw'alaams Band had rejected an offer estimated to include $1.15 billion compensation spread over the next 40 years.[103] Finally, a Participant

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[96] *Supra* note 89 at 2.
[97] *CEAA 2012*, para. 5(1)(c)
[98] *Supra* note 89 at 22: Lax Kw'alaams Band; Metlakatla First Nation; Gitxaala Nation; Kitsumkalum First Nation; Kitselas First Nation; Gitga'at First Nation. While the Office of the Wet'suwet'en; Gitanyow Hereditary Chiefs; Takla Lake First Nation; Gitxsan Hereditary Chiefs (including Wilp Delgamuukw, Wilp Gwininitxw, and Wilp Luutkudziiwus (Gitxsan)) were added in January 2016.
[99] *Ibid.* Allied Tsimshian Tribes of Lax Kw'alaams, Blueberry First Nation, Métis Nation of British Columbia and the Union of British Columbia Indian Chiefs. The Haida Nation was also contacted and commented regarding marine shipping.
[100] Canadian Environmental Assessment Agency, "Environmental Impact Statement for the Pacific NorthWest LNG Project" (2014) online: <http://www.ceaa.gc.ca/050/document-eng.cfm?document=98593>
[101] *Supra* note 89 at 24 notes the range of opportunity. A broader subset of groups was allowed to review these findings.
[102] *Ibid.*
[103] CBC News, *Lax Kw'alaams Band reject $1B LNG deal near Prince Rupert* (2016-05-13) online: <http://www.cbc.ca/news/canada/british-columbia/lax-kw-alaams-band-reject-1b-lng-deal-near-prince-rupert-1.3072293>

Funding Program was established by the Agency which allocated $559,644 for Indigenous and public participation which facilitated additional comment and review of the various environmental assessment stages.[104] Given the abundant opportunity to hear from Indigenous communities, even within the limits of the *CEAA 2012*, one would expect to conclude that a corresponding degree of Indigenous knowledge would inform the decision making of the Agency. However, looking to valued components that the Project was predicted to affect, this conclusion cannot be supported.

The Agency's consideration of marine fish and their habitat, including species at risk and marine plants, includes a number of striking contradictions.[105] A tremendous amount of criticism was levied by Indigenous groups at the adequacy of the baseline data submitted by the Proponent.[106] The length of study, species targeted, methodology used, and resulting interpretations were all contested. It was further contended that the three-dimensional modelling conducted by the Proponent "did not accurately represent the observable conditions", and therefore might inaccurately document the processes at work in the area.[107] A sediment trend analysis submitted by the Lax Kw'alaams Band was not accepted, nor were contentions that the Project was not sustainable due to effects it would have on ecologically important habitat. It was not clear whether these effects could even be offset.[108] Nonetheless, the Agency chose to rely on the advice of Fisheries and Oceans Canada and Natural Resources Canada and deemed the anticipated effects to be of little

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[104] Canadian Environmental Assessment Agency, "Public Notice Pacific NorthWest LNG Project — Summary of Federal Funding Allocated" (2016-07-22) online: <http://www.ceaa.gc.ca/050/document-eng.cfm?document=115168>
[105] *Supra* note 89 at 58-75.
[106] *Ibid.* at 69.
[107] *Ibid.*
[108] *Ibid.* at 70.

concern. Despite the availability of Indigenous knowledge and active participation, the Agency made a value judgment in favour of the western science and the Proponent, then affirmed these sources using other government departments. A similar imbalance is evidenced with valued components, especially the assessment of the current use of land and resources for traditional purposes.[109] In particular, the conclusions note uncertainty, a lack of agreement, a need for greater confidence through follow-up and monitoring, and stressed that cultural association could be moderately impacted. This does not align well with an environmental assessment process that was allegedly based on Indigenous knowledge. Obstacles to meaningful recognition and reconciliation clearly remain.

PART V — CONCLUSION

It is acknowledged that the constraints imposed by the current legislative scheme call for action beyond the purely regulatory arena. While proponents have increasingly embraced their consultative role through private agreements—if only to rally support and manage the risk Indigenous political capital has begun to pose[110]— environmental assessments remain characteristically adversarial and the scientific method has proven obstinate in the face of rapid change.[111] Leveraging section 19(3) of the *CEAA 2012* alone is unlikely to be enough for Indigenous knowledge to gain the status laid out in the preceding discussion. Moreover, engagement has historically only occurred relatively late in a

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[109] *Ibid.* at 103-119. Also note the assessment of physical and cultural heritage and historical and archaeological sites and structures at 129-132.
[110] *Supra* note 67 at 119. See also Maureen Killoran et al., "Navigating Murky Waters: Emerging Trends in Aboriginal Consultation and Project Approval" (2014) 52 Alta L Rev 207 at 209.
[111] *Supra* note 60 at 115.

project's planning process, curtailing any opportunity Indigenous knowledge has to affect change.[112] On the surface projects such as PNWLNG challenge the perception that Indigenous knowledge and modern extractive development are irreconcilable. However, as the analysis in Part IV shows, many obstacles remain. Indigenous knowledge may have been legitimized through its collection, but it was too easily disregarded when forming conclusions. The dominance of western science remains. Furthermore, the Environmental Assessment Report openly acknowledges a great deal of risk to existing knowledge transmission systems which are inconsistently accounted for—thus furthering the perception that Indigenous knowledge was subordinated.

Perhaps more concerning is the approach adopted by the Minister and federal government. While the Report certainly includes a great deal of comment from Indigenous groups, there is very little to support that Indigenous knowledge was indeed reconciled meaningfully. It is therefore inappropriate to claim that PNWLNG serves a reconciliatory function and is substantively based on the anything but western science. It is also acknowledged that changes were made to the marine terminal by the Proponent which address comments received during the public comment period.[113] Even so, late-stage alterations such as these do not address many of the fundamental concerns raised. There remains much to be done in order to reform the *CEAA 2012* in ways that overcome the inherent challenges it creates for Indigenous peoples today. In the meantime, even the most

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[112] Udofia, Noble & Poelzer, *supra* note 26 at 104-105 note Indigenous peoples are generally excluded from early discussions that determine whether resource development is appropriate at all.
[113] *Supra* note 89 at 11.

promising development projects subject to environmental assessment ought to be regarded with care. This pretence of reconciliation, will only perpetuate colonialism.