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Sent via email to: ec.ministre-minister.ec@canada.ca ceaa.information.acee@canada.ca

The Honourable Jonathan Wilkinson MP Minister of Environment and Climate Change House of Commons, Ottawa, Ontario K1A 0A6 Impact Assessment Agency of Canada 200-1801 Hollis Street Halifax, NS B3J 3N4

Dear Minister Wilkinson,

Re: Goldboro LNG - Request for federal assessment under the Impact Assessment Act

We write to request that an impact assessment be conducted in respect of the proposed Goldboro Liquefied Natural Gas export facility project (Goldboro LNG) under the Impact Assessment Act (IAA). The construction of a new liquefied natural gas facility, including the one proposed for Goldboro, is expressly designated as an activity under the *Physical Activities Regulations*.² As a designated activity, Goldboro LNG cannot lawfully proceed without a federal impact assessment. The project must therefore undergo the planning phase under sections 10 through 15 of the IAA, with an ultimate decision made by the Impact Assessment Agency under section 16. The project's current status constitutes a continuing failure to comply with the requirements of the IAA. This noncompliance is based on an error that was made under the Canadian Environmental Assessment Act, 2012 (CEAA 2012)³ in December 2012. At that time, the then Canadian Environmental Assessment Agency (the "Agency")⁴ purported to make an unauthorized decision to allow the project to proceed without an assessment under the CEAA 2012. As set out in this letter, there was no statutory authority for such a decision. Consequently, if it proceeds, the project will do so without lawful authority, and in violation of sections 7 and 8 of the IAA.5 The Agency and the Minister had, and have, an ongoing obligation to remedy this non-compliance and require that an impact assessment be conducted. This non-compliance is not rectified by the passage of time and remains unlawful, and subject to judicial

¹ Impact Assessment Act, S.C. 2019, c. 28 (IAA).

² Physical Activities Regulations, SOR/2019-285, Schedule, subsection 37(d).

³ Canadian Environmental Assessment Act, 2012, S.C. 2012, c. 19, section 52 (CEAA 2012).

⁴ The Canadian Environmental Assessment Agency and its successor, the Impact Assessment Agency of Canada, will both be referred to herein as the "Agency".

⁵ IAA, sections 7 and 8.

review. Until the statutory process has been completed and a decision made, the project cannot proceed.

This request is made on behalf of our clients Ecology Action Centre, Nova Scotia Fracking Resource and Action Coalition, Sierra Club Canada Foundation, Council of Canadians, New Brunswick Anti-Shale Gas Alliance, Environnement Vert Plus, Citizens' Oil & Gas Council and Greenpeace Canada. Please see Appendix A for further information on these organizations.

The *IAA* requires that the Goldboro LNG project undergo an impact assessment. It will result in adverse environmental effects within federal jurisdiction as well as adverse and incidental effects, and it meets the criteria for public concern. Among other things, if and when it becomes operational, the facility will produce over 3.7 megatons of CO2e emissions per year, constituting a massive, dangerous and entirely unacceptable increase in greenhouse gas (GHG) emissions. These adverse environmental effects are a matter of significant public concern. Also of significant public concern is the fact that the Goldboro LNG Project is proceeding unlawfully, and without this project ever having received a federal impact assessment.

Under subsection 9(4) of the *IAA*, if there is a request that a project be designated, the Minister must respond, with reasons, within 90 days. Similarly, under subsection 97(1) of the *IAA* and the *Information and Management of Time Limits Regulations*, the Minister must respond, with reasons, within 90 days, to any request that an assessment in sections 92, 93, or 95 be conducted. Due to the similarities between our request and those made under subsections 9(4) and 97(1) of the *IAA*, we request that the Minister respond to this letter, with reasons, within 90 days.

Overview of the project:

Goldboro LNG is a proposed liquefied natural gas (LNG) export facility that Pieridae Energy Ltd. (Pieridae) seeks to develop on Nova Scotia's Eastern Shore. The Pieridae proposal envisions natural gas sourced in Alberta being delivered via pipelines to Nova Scotia, where it will be liquefied at the Goldboro plant and exported by ship to international markets. The target markets are Europe, South America and Asia.⁷

Goldboro LNG received a provincial environmental assessment and approval in 2014 under Nova Scotia's *Environment Act*. In its report on that assessment, the Nova Scotia Environmental Review Panel states:

To facilitate that review and assist in the Agency's decision making, Pieridae submitted a comprehensive comparative description of the two projects in November 2012 (AMEC, 2013a). This document followed the federal guide to preparing a project description (the Agency, 2012), and compared the two projects with an emphasis on the EA requirements established by the Agency (2012). The Agency reviewed the document and in an e-mail dated December 20, 2012, the Agency informed Pieridae that it determined that the Project does not require a federal EA pursuant to section 128(1)(c) of CEAA [2012].⁸

⁸ Goldboro LNG – Natural Gas Liquefaction Plant and Marine Terminal, Environmental Assessment Report (Class 2 Undertaking) (September 2013), online: http://goldborolng.com/wp-content/uploads/2013/03/04-Regularatory-Environment.pdf at Section 4.0 Regulatory Environment, p 4-1.



⁶ Supra note 1, subsections 9(4), 97(1) and Information and Management of Time Limits Regulations, SOR/2019-283.

⁷ Goldboro LNG Company site, accessed April 19, 2021, online: http://goldborolng.com/

We have been unable to find any published statement or notice to that effect on any federal government website or any indication that public consultation took place in any form. The only public information in this regard is contained in a brief summary within the report of the Nova Scotia review panel within the provincial process. The Agency's rationale, as reported second-hand by the Nova Scotia review panel, was that a federal assessment was not required as the federal government had assessed a previous proposal for the same site which had not gone forward. This earlier proposal was known as the Keltic Project, which was said to be "very similar in nature" to the Goldboro LNG project. The Keltic Project was proposed in 2005 (sixteen years ago) by Keltic Petrochemicals Inc. and proposed the construction and operation of a petrochemical and LNG importation facility in Goldboro, Nova Scotia. The Keltic Project did not proceed. Seven years later in 2012, instead of conducting a review specific to the Goldboro LNG Project, the Agency purported to rely on environmental review documentation submitted years earlier, in respect of a different project, to justify its refusal to assess the environmental implications of the currently proposed Goldboro LNG Project. Project.

To the best of our clients' knowledge, these decisions were made behind closed doors, without the knowledge of the public or any opportunities for public participation. It appears that, in November 2012, Pieridae submitted a comparative description of the two projects, Goldboro LNG and Keltic.¹¹ Email correspondence dated December 20, 2012, from a Project Manager at the Agency, states:

Based on the information provided by Pieridae Energy Ltd, and in particular the analysis of the project and its components against those assessed during the comprehensive study (under the former Canadian Environmental Assessment Act) of the Keltic LNG Project (Goldboro LNG Versus Keltic Petrochemical and LNG Tanker Terminal Comparative Description, November 2012), the Agency has determined that this project would not require a federal EA. We consider that section 128(1)(c) of *CEAA 2012* applies to this project. However, it is important to contact us again should there be any changes to the project and its components from the information that has been provided. ¹²

As discussed below, the Agency did not have statutory authority under section 128 of *CEAA 2012*, or under any provision of that Act, to make this determination.

We submit that an impact assessment must be undertaken for the following reasons:

¹⁰ AMEC Earth & Environmental, *Keltic Petrochemicals Inc. Liquefied Natural Gas Facilities and Marginal Wharf Goldboro, Nova Scotia – Final Comprehensive Study Report*, (October 2007) online: https://www.ceaa-acee.gc.ca/052/document-html-eng.cfm?did=23949; Canadian Environmental Assessment Agency, *Keltic Liquefied Natural Gas Facilities and Marginal Wharf Project Isaacs Harbour* (March 2008), online: https://www.ceaa-acee.gc.ca/052/document-html-eng.cfm?did=25805; and Nova Scotia Canada, *Keltic Petrochemicals* (accessed April 11 2021) online: https://www.novascotia.ca/nse/ea/kelticpetro.asp

LNG%20Pieridae%202nd%20supp%20to%20App%2008_10_15.pdf



⁹ Ibid.

¹¹ Supra note 8. To our knowledge, this "comparative analysis," which was apparently submitted to the Agency, was never made public. The public was never notified of its existence and was not consulted on any issue regarding a decision not to conduct a federal assessment of Goldboro LNG.

¹² The December 20, 2012 email was located only because of a submission made in 2015 to a US Agency regarding the project: Norton Rose Fulbright, *Pieridae Energy (USA) LTD., Second Supplement to application for long-term, multi-contract authorization to export natural gas into Canada for consumption and through Canada to free trade and non-free trade agreement nations after conversion into LNG and motion to lodge* (August 7, 2015), online: https://www.energy.gov/sites/prod/files/2015/08/f25/14-179-

- 1. There has been no valid federal assessment for the Goldboro LNG Project under *CEAA* 2012, and the project does not comply with the requirements of the *CEAA* 2012 and the *IAA*:
- 2. There have been substantial changes in the understanding of the potential adverse impacts of the Goldboro LNG Project on climate change, methane and GHG emissions reduction commitments and the economic benefits associated with LNG projects; and
- 3. There is significant public concern regarding the Project and its impacts.

Each of these will be discussed in turn below.

1. No valid federal assessment was conducted for the Goldboro LNG Project under CEAA 2012, and the project does not comply with CEAA 2012 and the IAA

Again, instead of conducting the required environmental assessment of the Goldboro LNG Project under the *CEAA 2012*, the Agency relied on environmental review documentation submitted by another proponent relating to the Keltic Project to avoid assessing the Goldboro LNG Project's anticipated environmental impacts. This was unreasonable and unlawful because (a) there is no statutory basis in section 128 of *CEAA 2012* (in force when the Goldboro LNG Project was proposed) to not require a federal assessment for a separate and distinct project, proposed by a different proponent; and (b) there are substantial differences between the Goldboro LNG and the Keltic Projects. On this basis, there has never been a valid federal assessment for Goldboro LNG which, as a designated activity under the *Physical Activities Regulations*, must be submitted for an impact assessment under the *IAA*. Until this unlawful situation is remedied, no federal decisions or authorizations can be granted, and the *IAA* prohibits the project from proceeding.

a. Lack of statutory basis to not require a federal assessment

The Agency purported to rely on subsection 128(1)(c) of the CEAA 2012, which states:

- 128 (1) This Act does not apply to a project, as defined in the former Act, that is a designated project as defined in this Act, if one of the following conditions applies:
 - (a) the proponent of the project has, before the day on which this Act comes into force, initiated the construction of the project;
 - (b) it was determined by the Agency or a federal authority under the former Act that an environmental assessment of the project was likely not required;
 - (c) the responsible authority has taken a course of action under paragraph 20(1)(a) or
 - (b) or subsection 37(1) of the former Act in relation to the project; or
 - (d) an order issued under subsection (2) applies to the project. [emphasis added]

Section 128 of *CEAA 2012* was never meant to apply to two different project applications, made by two entirely distinct and separate proponents, as is clear from the applicable case law and rules of statutory interpretation. As discussed below, none of the above factors set out in subsection 128(1) applied to the Goldboro LNG project. More specifically, despite the Agency's reliance on subsection

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 $^{^{13}}$ CEAA 2012 at section 128. As discussed below, the reference in section 128 to the "former Act" is a reference to the CEAA 1992.

128(1)(c), no course of action under any of subsections 20(1)(a) or (b), or section 37, was taken in relation to the project under the former Act. 14

i) Applicable caselaw

Section 128 has only been considered in one decision, <u>Minnova Corp v Canada (Attorney General)</u>, 2015 FC 898. This was an application for judicial review of an Agency decision to characterize the applicant's gold mine (PL Mine) as a "new" mine when it resumed operations after more than two decades of inactivity. On that basis, the Agency found that the mine was subject to subsection 16(c) of the Schedule to the then *Regulations Designating Physical Activities* (the 2012 *Regulations*) and therefore required a new environmental assessment.¹⁵ The Agency took the position that subsection 128(1)(a) of the *CEAA 2012* did not apply because the proposed project was separate and distinct from the existing mine and facilities.

The Federal Court found that the Agency's decision was unreasonable, as a purposive construction of the terms "new mine" and "existing mine", in the context of the *CEAA 2012* and the 2012 *Regulations*, led to the conclusion that the proposed resumption of operations for the PL Mine was an existing mine, not a new mine. Although the judicial review application was deemed premature, the Court also found that the mine did not require a new environmental assessment since it was an existing mine previously in operation and under care and maintenance as a non-operating mine under valid provincial laws for the past 26 years. The Court found as follows:

[30] Simply put, what is old cannot be new again, and if one purposively interprets the CEAA 2012 and Schedule to the Regulations as a whole, the meaning of "new" mines as distinguishable from "existing" mines contextually makes it clear that a pre-existing mine still in existence cannot be determined to be a new mine under the CEAA 2012 and Schedule to the Regulations.

While *Minnova Corp* addresses the applicability of subsection 128(1)(a) of *CEAA 2012* rather than subsection 128(1)(c), the decision turns on the finding that that the PL Mine was one single project and the proponent simply sought to revive the same operation. *Minnova Corp* demonstrates that the term "the project" in section 128, can only refer to the <u>same</u> project and not to another project. Unlike the PL mine, the Keltic Project was neither constructed nor operated, and existed only on paper. It involved different processes and activities from the Goldboro LNG Project. As discussed in detail below, the Goldboro LNG project is a distinct and different project which required a separate assessment and was not exempted from the operation of *CEAA 2012* under section 128.

ii) Application of the rules of statutory interpretation

Although there is only one instance of judicial consideration of section 128, we can also look to the modern rules of statutory interpretation to discern its meaning. These rules require that the words of a statute be read "in their entire context and in their grammatical and ordinary sense harmoniously with the scheme of the Act, the object of the Act, and the intention of Parliament." The phrase "in relation to the project", interpreted in its grammatical and ordinary sense, may only apply to the same



¹⁴ Ibid.

¹⁵ Regulations Designating Physical Activities, SOR/2012-147 at section 16 (the 2012 Regulations).

¹⁶ Rizzo & Rizzo Shoes Ltd (Re), [1998] 1 SCR 27.

¹⁷ *Ibid* at para 21.

project: not two separate projects with key differences and different proponents, as will be further discussed below.

Provisions must also be interpreted purposively and contextually. Prior to the *CEAA 2012*, federal environmental assessments were governed by the *Canadian Environmental Assessment Act*, S.C. 1992, c. 37 (*CEAA 1992*). ¹⁸ In April 2012, with the passage of Bill C-38, the 1992 Act was repealed and replaced with *CEAA 2012*. Under *CEAA 2012*, even if a project was designated by regulation, thereby making it subject to federal environmental assessment, an assessment may still not occur in two scenarios:

- (1) The Agency may make a decision under subsection 10(b) that no environmental assessment of the designated project is required and post that decision on the Internet site. The Agency may make such a determination only after the requirements of subsection 10(a) are met. It must be established through the review of the project description and public comments received on the project description following posting of a notice regarding the project, that the designated project has no potential to cause adverse environmental effects, or has the potential to cause minor environmental effects that can be adequately managed through other existing legislative or regulatory processes; or
- (2) The federal government may decide not to conduct its own environmental assessment of a designated project on the basis that the project is being, or has been, assessed provincially, only after following the process set out in sections 32 through 37 of *CEAA 2012*. These sections provide for substitution of the process for an environmental assessment, <u>if a province requests such a substitution</u>.¹⁹

Neither of the above scenarios appear to have occurred with respect to the Goldboro LNG project.²⁰ There was no public consultation regarding an exercise of discretion not to require an environmental assessment under *CEAA 2012*, and there is no evidence on any public registry that the requirements of section 10 of *CEAA 2012* were met. Likewise, there is no request or notice regarding substitution, or of a Ministerial approval of such substitution, appearing anywhere on the Agency's internet site, and consequently no compliance with the requirements of sections 32-37 of the *CEAA 2012*.

The transitional provisions in *CEAA 2012*, including section 128, dictated what happened to assessments which were started but not yet completed under *CEAA 1992*. For instance, under sections 124-126 of *CEAA 2012*, any screening, comprehensive study or assessment by a review panel of a project commenced under *CEAA 1992* before *CEAA 2012* came into force was to be continued and completed as if the former Act was not repealed. Additionally, section 127 provided

²⁰ We note that both options are no longer available to the Agency, since *CEAA 2012* has now been replaced with the *IAA* and none of the *IAA*'s transitional provisions would apply to these scenarios. Both the decision that no environmental assessment of the designated project is required pursuant to section 10 of *CEAA 2012* and the decision for the substitution of the process upon the request of a province pursuant to section 32 of *CEAA 2012* must have occurred prior to the new Act coming into force, which is not the case here, for sections 185 and 185.1(1) of the *IAA* to apply to those decisions. The Agency or Minister would therefore have to pursue the relevant processes set out within the *IAA* (ss. 16 and 32), including ensuring compliance with the new *Act*'s preconditions regarding providing notice, ensuring an opportunity for public participation, considering certain factors and comments from the public as well as ensuring that certain conditions will be met.



¹⁸ Canadian Environmental Assessment Act, S.C. 1992, c. 37 (CEAA 1992).

 $^{^{19}}$ CEAA, 2012 at section 10, and sections 32 - 37.

for substitution of a process under the former Act approved prior to *CEAA 2012* coming into force, under which an environmental assessment of a project commenced under *CEAA 1992* before the day on which *CEAA 2012* comes into force was also continued and completed as if the former Act had not been repealed. It is clear that all of these provisions, which immediately precede section 128, could only have applied to one singular project. They referred to the continuation and completion of specific assessments of particular discrete projects that had been started but were not completed under *CEAA 1992*. There is no basis to conclude that the term "project", as used in subsection 128(1)(c), should be interpreted differently.

Similar provisions are found within the *IAA*. The *IAA* contains transitional provisions that dictate what happens to assessments which are started but not yet completed under *CEAA 2012* and *CEAA 1992* prior to the *IAA* coming into force. Sections 178 to 185 of the new Act refer to either 'a project' or 'a designated project'. There is nothing to indicate that the transitional provisions in the *IAA* could apply to exempt a new and different project from assessment if an assessment of that new project had not already begun under *CEAA 2012*. If a new project is proposed, a new assessment is required.²¹

iii) No actions under subsections 20(1)(a), (b) or 37 CEAA 2012 were taken in relation to the Goldboro LNG Project for subsection 128(1)(c) to apply

As stated above, subsection 128(1)(c) of *CEAA 2012* could not be relied upon to exempt the Goldboro LNG project from assessment. Subsection 128(1)(c) dictated what occurs for assessments for which a decision was already made under *CEAA 1992*. Again this subsection stated:

128 (1) This Act does not apply to a project, as defined in the former Act, that is a designated project as defined in this Act, if one of the following conditions applies: ...

(c) the responsible authority has taken a course of action under paragraph 20(1)(a) or (b) or subsection 37(1) of the former Act in relation to the project... [emphasis added]

Subsection 128(1)(c) of *CEAA 2012* does not apply if a responsible authority took a course of action under any of subsections 20(1)(a) or (b) or 37(1) of *CEAA 1992*. No such course of action was taken in relation to the Goldboro LNG project.

The only decision taken under subsection 37(1) of *CEAA 1992* was with respect to the Keltic Project. That decision read, in part:

taking into account the mitigation measures described in the comprehensive study report, is not likely to cause significant adverse environmental effects; and the mitigation measures and follow-up program described in the comprehensive study report are appropriate for the proposed project.²²

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²¹ It should be noted that section 185.1 of the *IAA*, which sets out the limited situations under which the new Act does not apply to a 'designated project', does not exempt the Goldboro LNG Project from the application of the *IAA*. Subsection 185.1(1) *IAA* does not apply to the Project because there was no lawful determination from the former Agency that no environmental assessment was required pursuant to section 10 of *CEAA 2012*. The Agency's informal determination that section 128 of the *CEAA 2012* applied to the project lacked any basis in fact and law, as discussed herein. Subsection 185.1(2) *IAA* does not apply because the Project is a 'designated project' under both Acts.

²² Canadian Environmental Assessment Agency, *Archived - Environmental Assessment Decision Statement, Keltic Liquefied Natural Gas Facilities and Marginal Wharf Project* (March 7, 2008), online: https://iAAc-aeic.gc.ca/052/document-html-eng.cfm?did=25805

As this decision was made regarding the Keltic Project, it does not engage the exemption in subsection 128(1)(c) of the *CEAA 2012* with respect to Goldboro LNG. For subsection 128(1)(c) to apply, the responsible authority must have taken a course of action with respect to Goldboro LNG. As will be described more below, there are substantial differences between the Goldboro LNG and the Keltic Projects which demonstrate the illogic of the Agency's purported determination under section 128. In any event, mere similarity to another project does not exempt a subsequent project from the requirements of either *CEAA 2012* or the *IAA*.

b. Differences between Goldboro LNG and the Keltic Project

There are key differences between Goldboro LNG and the Keltic Project which undermine the logic of relying on the federal assessment of Keltic Project to accurately assess the impacts of the Goldboro LNG Project.

i. Differences between the components of the projects

The Goldboro LNG Project focuses on liquefying natural gas for export to overseas markets and its facility will have a capacity to receive, liquefy and export nominal 10 million tonnes of natural gas per annum (Mtpa) (about 1575 million cubic feet per day). ²³ Goldboro LNG will receive natural gas by a dedicated pipeline, liquefy the gas, store the LNG on site, load it onto carriers and export and ship it around the world. This process requires massive refrigeration compressors and their associated carbon dioxide emissions.

The Keltic Project underwent provincial and federal environmental assessments and obtained EA approvals in 2007 (provincial) and 2008 (federal), although it was never built. He Keltic Project was a proposed petrochemical complex supported by an LNG importation and vaporization facility and an electrical co-generation plant. The stated purpose of the Keltic proposal was to increase petrochemical production in North America. He facility proposed to use the natural gas for the production of polyethylene and polypropylene pellets for shipment to customers across North America. These pellets would be used to manufacture plastic products elsewhere in Canada and the US. A co-generation plant was also included to supply power and process heat. Gas would also be delivered to North American markets via the Maritimes and Northeast Pipeline (MN&P). As an overview, some of the key components of the Keltic project included:

• The LNG facility, including a marine terminal and marine transfer pipelines: This facility would have provided feedstock for the petrochemical plant and natural gas to the M&NP system. The heat required for the regasification of LNG would be supplied by low-pressure fuel and/or waste heat from the petrochemical plant and co-generation unit. The product of the regasification section was to be natural gas transported to the local end-users, the co-

Nova Scotia Canada website, Goldboro LNG Project (accessed May 5 2021), online: https://novascotia.ca/nse/ea/goldboro-lng.asp; and Goldboro LNG – Natural Gas Liquefaction Plant and Marine Terminal, Environmental Assessment Report (Class 2 Undertaking), (September 2013), online: https://novascotia.ca/nse/ea/goldboro-lng/00-Executive-Summary.pdf at Executive Summary, page i.

Pieridae Energy (Canada) Ltd., Goldboro LNG, Registration Document: Class 2 Undertaking (February 2013) online: http://goldborolng.com/wp-content/uploads/2013/03/Goldboro-LNG-Registration1.pdf at p 1, 8.

Nova Scotia Government, Keltic Petrochemicals, online: https://www.novascotia.ca/nse/ea/kelticpetro.asp

AMEC Earth & Environmental, Keltic Petrochemicals Inc. Liquid Natural Gas Facilities and Marginal Wharf, Goldboro Nova Scotia, Final Comprehensive Study Report (October 2007), online: <a href="https://files.pca-cpa.org/pcadocs/bi-c/2.%20Canada/3.%20Exhibits/Exhibits/20R-348%20-%20Keltic,%20Final%20CSR,%20excerpt%20to%202-3%20(October%202007).pdf at p ES-1.



generation plant and the petrochemical plant, and the M&NP by pipeline for further distribution to customers.

- The Petrochemical Facilities: The facility was to be fed by ethane and propane obtained from the LNG Terminal and the Sable Offshore Energy Inc. plant. The facility would have produced primarily ethylene and propylene using steam cracking. Polyethylene and polypropylene pellets would subsequently be produced for shipment to external markets.
- Marginal Wharf: The marginal wharf was required for receipt and shipment of products and by-products in support of the petrochemical plant and for receiving supplies and equipment during construction of the complex.
- Co-Generation Plant: This power plant was to incorporate gas turbines and heat recovery steam generators with a capacity of approximately 200 megawatts (MW). The co-generation plant would be fuelled by spent LNG with any remaining spent LNG injected into the existing M&NP pipeline in Goldboro.²⁷

Even based on these project descriptions, there are fundamental differences between Goldboro LNG and the Keltic Project. First, unlike the Keltic Project, no component of Goldboro LNG is comparable to the Keltic facility's primary focus on petrochemical production using imported LNG, and its goal to increase such production in North America. Goldboro LNG would not involve the manufacturing of plastic products. Goldboro LNG focuses solely on liquefying natural gas for export to overseas markets and would not have the capability to synthesize other petrochemical products. This was a key component of the Keltic Project but is completely absent in the Goldboro LNG proposal. The Keltic Petrochemicals report claims that:

The large scale industrial production of polyethylene and polypropylene is the <u>key element</u> of the proposed undertaking with respect to its character as a value-added energy project. This Project component aims at an economic return through the supply of polyethylene and polypropylene to the North-American market and its increasing demand for plastic resins.²⁸ [emphasis added]

There are also fundamental differences in the cumulative GHG emissions associated with the two project proposals. The federal assessment of the Keltic Project assessed cumulative GHG emissions as a "minor contribution to Nova Scotia's total GHG" emissions.²⁹ The Keltic Project was intended to implement energy-efficiency measures throughout its facilities, including the use of low pressure fuel or waste heat. The federal assessment stated that while the Keltic facilities' main contributor to GHG emissions would be the 200 MW co-generation plant, regasification of LNG would also be a

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²⁷ Comprehensive Study Report – Keltic Petrochemicals, Liquid Natural Gas Facilities and Marginal Wharf (October 2007), online: https://www.ceaa-acee.gc.ca/050/documents staticpost/pdfs/23818-02E.pdf at section 2.0: Project Description and Scope of Assessment at p 2-5 – 2-17.

²⁸ AMEC Earth & Environmental, *Environmental Assessment: Keltic Petrochemicals, Petrochemicals and Liquefied Natural Gas Facility* (July 2006), online: https://novascotia.ca/nse/ea/kelticpetro/eareport/KelticPetro Section02-07.pdf at section 5.4, p 5-2.

²⁹ Keltic Petrochemicals Inc. Comprehensive Study Report – Final Report (October 2007), online: https://IAAc-aeic.gc.ca/050/documents staticpost/pdfs/23818-08E.pdf at Section 8.0: Cumulative Environmental Effects Assessment, p 8-18 & 8-50.

source.³⁰ The report states that the release of CO₂ would be greatly minimized when compared to the alternative of taking power off the NSPI grid.

In contrast, the provincial assessment of the Goldboro LNG Project recognized that it would increase the province's GHG emissions by almost 20% (above 2010 levels) and that the Goldboro LNG facility would be the largest single GHG emitter in the province. The provincial report recognizes that Nova Scotia had committed to reducing GHG levels to 10% below 1990 levels by 2020 as part of the Environmental Goals and Sustainable Prosperity Act (EGSPA). The report states that despite the commitment to developing a GHG management plan and contributing to carbon offset programs, "it is still likely that the province's ability to achieve the goals laid out in the EGSPA would be compromised."³¹ As the 2020 EGSPA target has passed, this increase in emissions will also threaten Nova Scotia's intended minimal targets for 2030 and 2050, set out in the Sustainable Development Goals Act (SDGA), ³² as discussed further below. The provincial environmental effects assessment also provides an inventory of Project emissions of the proposed Goldboro LNG plant, demonstrating that the highest CO₂ emissions stem from the refrigerant compressor gas turbines and the power generation gas turbine.³³ These components, which are sources of very high projected emissions associated with the Goldboro LNG project, were not present or even contemplated in the Keltic Project proposal. There was also no equivalent to the Keltic 200MW co-generation plant within the Goldboro LNG proposal.

ii. Differences between the conditions relating to the projects

Although the Keltic Environmental Assessment could be considered in a review of Goldboro LNG, they remain separate and distinct projects. If the projects were truly identical, or so similar that the assessment of one could automatically be applied to the other, one would expect to see all, or virtually all, of the approval conditions for Keltic being applied as conditions for Goldboro LNG. In reality, there is no indication that the federal approval conditions which applied to the Keltic Project are currently being applied to Goldboro LNG. The only mention of a federal assessment within the Goldboro LNG provincial review are statements that "the Canadian Environmental Assessment Agency has determined that no federal environmental assessment is required." The Nova Scotia Environmental Assessment report for Goldboro LNG states, on the applicability of *CEAA 2012*:

³⁴ Pieridae Energy, *Goldboro LNG - Environmental Assessment*, (accessed April 11 2021) online: http://goldborolng.com/reviews-assessments/ & Nova Scotia Environmental Assessment Review Panel, The Review of the Environmental Assessment Report Goldboro LNG Project Natural Gas Liquefaction Plant and Marine Terminal by Pieridae Energy (Canada) Ltd., (March 2014) online: http://goldborolng.com/wp-content/uploads/2014/03/Goldboro-panel-report-2014-03-07.pdf at p 12.



³⁰ *Ibid* at p 8-17: "The Keltic facilities main contributor to GHG will be the 200 MW co-generation plant however, regasification of LNG is also a source."

³¹ Nova Scotia Environmental Assessment Review Panel, *The Review of the Environmental Assessment Report Goldboro LNG Project Natural Gas Liquefaction Plant and Marine Terminal by Pieridae Energy (Canada) Ltd.*, (March 2014) online: http://goldborolng.com/wp-content/uploads/2014/03/Goldboro-panel-report-2014-03-07.pdf at p 26.

³² Nova Scotia Government webpage, *Sustainable Development Goals Act*, (online): https://novascotia.ca/nse/sustainable-development-goals-act/

³³ Goldboro LNG – Natural Gas Liquefaction Plant and Marine Terminal, Environmental Assessment Report (Class 2 Undertaking), (September 2013), online: https://novascotia.ca/nse/ea/goldboro-lng/10-Environmental-Effects-Assessment.pdf at Section 10.0: Environmental Effects Assessment, p 10-29.

As per section 13 (d) of the new "Regulations Designating Physical Activities" an LNG facility requires an EA pursuant to CEAA 2012 – Goldboro LNG has been exempt due to similarity with CEAA approved Keltic Project.³⁵

The federal Environmental Decision Statement for the Keltic Project said that the project was not likely to cause adverse environmental effects, and that the mitigation measures and follow-up programs described in the federal comprehensive study were appropriate for the proposed project.³⁶ The Keltic comprehensive study report sets out various mitigation measures, including those for air quality and environmental effects.³⁷ The report states that the project's operational air emissions would not result in exceedances of the provincial and CCME ambient air quality objectives and regulations. This would be confirmed through monitoring programs, as would any modifications to mitigation plans and/or operations to prevent unacceptable environmental effects. There would also be a follow-up program with a project air monitoring program. The report states that air emissions from the LNG facility would mainly concern NOx, CO, and CxHy (unburned hydrocarbons) caused by flue gas combustion in the submerged combustion vaporizers. To suppress NOx emissions, the submerged combustion vaporizers would be fitted with low NOx burners, and the Proponent would include energy efficient measures and emissions control technologies.

The above mitigation and follow-up programs with respect to air emissions and environmental effects cannot, and do not, logically apply to Goldboro LNG. Although the provincial environmental approval conditions for Goldboro LNG provides for a GHG Management Plan, including GHG emissions monitoring and reporting, identical conditions for air quality and environmental effects cannot apply to both projects when there are differences in both (a) the total anticipated GHG emissions and (b) the components which will generate the highest levels of GHG emissions.

The federal comprehensive study report³⁸ for the Keltic Project also sets out specific mitigation measures for species at risk. Some species that require specific monitoring plans under the Keltic Assessment are claimed to not be disturbed in the Goldboro LNG assessment. For instance, the Keltic study report sets out specific monitoring and mitigation measures for both the Roseate Tern and Greater Yellowlegs, which do not appear within the Goldboro LNG assessment.³⁹ Under the Keltic report, there are also specific timelines under which construction and maintenance activities

³⁹ *Ibid* at p 5-60; *Supra* note 33; and *Goldboro LNG – Natural Gas Liquefaction Plant and Marine Terminal, Environmental Assessment Report (Class 2 Undertaking)*, (September 2013), online: https://novascotia.ca/nse/ea/goldboro-lng/14-Summary-and-Conclusion.pdf at Section 14.0: Assessment Summary and Conclusion.



³⁵ Goldboro LNG – Natural Gas Liquefaction Plant and Marine Terminal, Environmental Assessment Report (Class 2 Undertaking), (September 2013) online: http://goldborolng.com/wp-content/uploads/2013/03/04-Regularatory-Environment.pdf at section 4.0: Regulatory Environment, Table 4.1-1 Preliminary List of Relevant Legislative and Regulatory Requirements.

³⁶ Canadian Environmental Assessment Agency, *Archived – Environmental Assessment Decision Statement* (March 7 2008), online: https://iaac-aeic.gc.ca/052/document-html-eng.cfm?did=25805. Note: the Minister recommended that the responsible authorities ensure the implementation of the mitigation measures and the follow-up program described in the comprehensive study report, in order to determine the effectiveness of the measures taken to mitigate any adverse environmental effects, and to verify the accuracy of the environmental assessment of the project.

³⁷ AMEC Earth & Environmental, Environmental Assessment: *Keltic Petrochemicals, Petrochemicals and Liquefied Natural Gas Facility* (July 2006), online https://iaac-aeic.gc.ca/050/documents_staticpost/pdfs/23818-05E.pdf at section 5.0: Environmental Effects, Mitigation, Residual Environmental Effects and Follow up.

³⁸ *Ibid* at p 5-57 - 5-60 and p 5-67 - 5-70.

should be avoided to minimize effects on endangered species, which also do not appear within the approval conditions for Goldboro LNG. 40

The Keltic assessment also includes specific mitigation measures for wetlands, including a wetland mitigation plan and site-specific protection plans for the wetlands. ⁴¹ Identical wetland mitigation plans are not provided for within the Goldboro LNG assessment. Instead, the Goldboro LNG assessment provides for a wetland compensation plan. ⁴²

The above paragraphs do not constitute an exhaustive list of differences between the conditions which apply to the Keltic Project and Goldboro LNG. They do demonstrate that approval conditions which would have applied to the Keltic Project (had it proceeded) are not being applied to Goldboro LNG.

Further, the Goldboro LNG Environmental Effects Assessment (Section 10 of the Report) does not reference the federal comprehensive study report for the Keltic Project. It only references the provincial Keltic Project EA Conditions⁴³ once, when considering mitigating the effects of ambient lighting. The Goldboro Assessment states:

A lighting plan was developed by Jacques Whitford (2008) for the Keltic Project to satisfy EA Condition 1.6. The lighting plan addressed: Similar lighting needs will be required for this Project, consequently it is recommended that a lighting plan be developed post FEED.⁴⁴

While the Keltic Project is referenced at times in the assessment of the Goldboro LNG project, and the two projects had some similarities, it is clear that the Keltic Project was not viewed as identical or even similar in all material aspects.

As a result of the misapplication of subsection 128(1)(c) of *CEAA 2012* to Goldboro LNG, this project is proceeding without a necessary federal assessment and/or federal conditions for approval.

c. Goldboro LNG is a designated project under the IAA

On the basis of the above, there has never been a valid federal assessment for the Goldboro LNG Project. We therefore submit that it must undergo an impact assessment under the *IAA*. Projects involving the construction of new LNG facilities, including the one proposed for Goldboro, which involve liquefaction of more than 3,000 tonnes per day⁴⁵ of natural gas, and/or with storage capacity of more than 136,000 m3,⁴⁶ are expressly designated as activities under subsection 37(d) of the Schedule to the *Physical Activities Regulations*, for the purposes of impact assessment under the *IAA*.

While an impact assessment is required in respect of Goldboro LNG, in other situations, where appropriate the Agency may decide under section 16 of the *IAA* that an impact assessment of another designated project may not be required. However, even in that scenario, the *IAA* requires that the



⁴⁰ *Supra* note 37. For instance, the Keltic assessment states that in order to minimize effects on potential nesting by Greater Yellowlegs in the Dung Cove area, avoid construction, maintenance activities at the pipeline during the sensitive nesting period (June to August) at p 5-60. Also see mitigation measures for vertebrate animal reproduction at p 5-67-8.

⁴¹ *Ibid* at p 5-75.

⁴² Supra note 33 at 10-78, 10-81-84.

⁴³ Nova Scotia, Environmental Assessment Approval – Keltic Petrochemicals LNG and Petrochemicals Plant Facilities, online: https://novascotia.ca/nse/ea/kelticpetro/KelticPetro Conditions.pdf at Condition 1.6.

⁴⁴ *Supra* note 33 at 10-62 - 10-63.

⁴⁵ The Goldboro LNG is projected to process 10,000,000 tonnes of LNG per year, which averages to over 27,000 tonnes per day.

⁴⁶ The project is to have total storage capacity of 690,000 tonnes of LNG.

Agency provide the public with opportunities to participate meaningfully. To make a section 16 determination, the Agency would be required first to take into consideration various factors such as: public comments, comments from any jurisdiction or Indigenous group consulted with under section 12, the possibility that the designated project would cause adverse effects in federal jurisdiction or adverse direct or incidental effects, and "any other factor" that it considers relevant. The Agency would also be statutorily required to post a notice of its decision and the reasons for it on the Registry, so that it is publicly available. In contrast, the process described above not only unlawfully purported to exempt Goldboro LNG from federal assessment, but also unlawfully and unreasonably excluded the public from knowing that such a determination would be made, and from providing any submissions and commenting as to whether a federal assessment should take place.

As noted above, there was no statutory basis under *CEAA 2012* to bypass federal assessment due to marginal and superficial similarities between two different projects. Therefore, no operative legal decision exempts Goldboro LNG from federal assessment. If no federal assessment of Goldboro LNG is now undertaken under the *IAA*, legal remedies may be available to our clients.

d. Current and anticipated construction by Pieridae contravenes section 7 of the IAA

We also write to alert you to potential contraventions of section 7 of the *IAA*. Under subsection 7(1), a proponent of a designated project must not do any act or thing in connection with carrying out the designated project, in whole or in part if that act or thing may cause effects such as changes to the environment within legislative authority of Parliament and changes on federal lands. Subsection 7(3) sets out the exception to subsection (1), whereby the proponent may do an act or thing in connection with carrying out the designated project under specified conditions. None of these conditions apply in this context.

Again, there has been no lawful decision under subsection 16(1) of the *IAA*, or under *CEAA 2012*, exempting Goldboro LNG from federal assessment. Yet Pieridae has already begun clearing the site of its planned Goldboro LNG project. In March 2021, Pieridae also registered for a provincial environmental assessment for permanent realignment of Highway 316 to re-route the highway around the plant's proposed site. The Nova Scotia Environment Minister very recently approved the project under the province's *Environment Act* on April 29, 2021. As stated above, despite this provincial approval, the proponent may not move forward until full compliance with the *IAA* has been confirmed.

e. Financial assistance would contravene section 8 of the IAA

Pieridae has said publicly that it is seeking federal financial assistance for the Goldboro LNG project. If such financial assistance is under consideration by any Minister, Department or Agency of the Government of Canada, granting it without an assessment would contravene section 8 of the *IAA*:

- 8. A federal authority must not exercise any power or perform any duty or function conferred on it under any Act of Parliament other than this Act that could permit a designated project to be carried out in whole or in part and <u>must not provide financial assistance to any person for the purpose of enabling that designated project to be carried out,</u> in whole or in part, unless
 - (a) the Agency makes a decision under subsection 16(1) that no impact assessment of the designated project is required and posts that decision on the Internet site; or



(b) the decision statement with respect to the designated project that is issued to the proponent of the designated project under section 65 sets out that the effects that are indicated in the report with respect to the impact assessment of that project are in the public interest. [emphasis added]

The *IAA* requires that an impact assessment of this designated activity be conducted in respect of the project before it can be determined that any such financial assistance may be granted. Alternatively, there must be a publicly accessible statutory decision that no federal assessment was required.⁴⁷ In the context of Goldboro LNG, there is no operative decision that the designated project is exempted from federal assessment.

2. There have been substantial changes in the understanding of the potential adverse impacts of the Goldboro LNG Project on climate change, methane and GHG emissions reduction commitments and the economic benefits associated with LNG projects

It is also crucial that there be a federal assessment of Goldboro LNG due to substantial changes in climate science, advances in understanding the need to reduce methane emissions, new GHG emissions reduction commitments and concern regarding the viability of economic benefits of LNG projects, all of which have changed significantly since the assessment of the Keltic Project. The provincial environmental assessment for Goldboro LNG recognized in 2014 that "the Project would increase Nova Scotia's greenhouse gas emissions by approximately 18% (above 2010 emission levels)" and "would be the largest single GHG emitter in the province." This estimated increase in GHG emissions does not take into account several factors, such as upstream and downstream emissions, the combustion of the gas itself, methane loss, and methane emissions at the plant.

Climate change was not a significant factor in the provincial environmental assessment. The project was said to have several positive effects for the community economically, creating thousands of jobs. These alleged benefits, which did not take into account the social cost of the associated GHG emissions which would have allowed for a more realistic and accurate evaluation of the economic impacts, ⁴⁹ were given more significance than the emissions themselves. The provincial environmental assessment from 2014 included only a cursory assessment of cumulative effects and impacts of the Project on climate change. The report states that:

Overall impact on GHG emissions for the province will be negative, with emissions increasing as a result of the Goldboro LNG Project and any other regional LNG projects... The cumulative effects of increased GHG emissions of the Goldboro LNG Project, in combination with other proposed or planned regional LNG facilities or other power generation facilities, on provincial GHG emissions and targets must be carefully considered. NSE has noted that 2011 GHG emission levels were 20.4 million tonnes (Mt), while the provincial target by 2020 is 10% below 1990 levels, or 17.1 Mt. The Goldboro LNG Project alone is expected to increase the present emission level for Nova Scotia by 18%...Other than for GHG emissions, there will not likely be other significant cumulative effects with other planned or foreseeable projects. ⁵⁰

⁴⁹ Government of Canada, *Pricing Carbon Pollution*, (2021) online:

https://www.canada.ca/content/dam/eccc/documents/pdf/climate-change/climate-plan/annex_pricing_carbon_pollution.pdf; and Government of Canada, *Technical Update to Environment and Climate Change Canada's Social Costs of Greenhouse Gas Estimates* (March 2016), online:

http://publications.gc.ca/collections/collection_2016/eccc/En14-202-2016-eng.pdf

⁵⁰ Supra note 31 at p 60.



⁴⁷ IAA, section 8, and the *Physical Activities Regulations*, SOR/2019-285, Schedule, subsection 37(d).

⁴⁸ *Supra* note 31 at p 26.

To address these impacts, the panel recommended that the proponent work with Nova Scotia Environment in order to comply with provincial and federal GHG emissions regulations and proposed new federal regulations for the oil and gas sector. 51 Under the approval conditions, Pieridae must submit a GHG Management Plan, developed in consultation with Nova Scotia Environment.⁵² A draft plan was prepared in 2016, but there has been no federal assessment of the cumulative GHG emissions of the Goldboro LNG Project. The draft plan was never made public and there is no indication of any public consultation or opportunity for public comment on the plan. A federal assessment must evaluate whether its cumulative emissions could ever be compatible with Canada's environmental obligations and commitments in respect of climate change, especially in light of the province's stated commitment to reduce emissions to 53% of 2005 levels, 53 and the recently announced increased federal target of 40-45% of 2005 levels, ⁵⁴ both by 2030. As well, both jurisdictions have committed to, or expressed their intention to commit to, reaching net-zero GHG emissions by 2050.⁵⁵ As stated above, the panel recognized that, despite the GHG Management Plan, the Project would likely compromise even the now obsolete GHG reductions goals laid out in the EGSPA. ⁵⁶ It stands to reason that the Project is likely to threaten the even more stringent 2030 and 2050 targets.

It is essential that the public receive an overall, comprehensive assessment of the environmental impacts of Goldboro LNG. Seven years have passed since the provincial assessment of Goldboro LNG, and thirteen years have passed since the federal assessment of the Keltic Project. Climate change science and commitments as well as the economic implications of further investments in LNG infrastructure have rapidly evolved in the last decade.

a. The evolution of climate science

The Intergovernmental Panel on Climate Change (IPCC) Special Report on Global Warming of 1.5°C was released in 2019 within a timeline of unprecedented severity. The IPCC made several key findings with respect to the urgency of climate change, including the fact that limiting warming to 1.5°C requires major and immediate transformation because the world is currently not on track to limit temperature rise. The report found that achieving a 1.5°C target is possible but would require deep emissions reductions in all sectors and unprecedented transitions in all aspects of society.⁵⁷ It also stated that making this unprecedented shift requires substantial new investments in low-carbon

⁵⁷ IPCC, 2018: Global Warming of 1.5°C.An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty (2019), online: https://www.ipcc.ch/site/assets/uploads/sites/2/2019/06/SR15_Full_Report_Low_Res.pdf at Foreword.



⁵¹ *Ibid*.

⁵² Nova Scotia, Minister of Environment, *Environmental Assessment Approval* (March 21, 2014), online: https://novascotia.ca/nse/ea/goldboro-lng/conditions.pdf

⁵³ Government of Nova Scotia website, *Climate Change Nova Scotia - What Nova Scotia is Doing* (accessed May 5, 2021), online at: https://climatechange.novascotia.ca/what-ns-is-doing.

⁵⁴ Prime Minister of Canada, *Prime Minister Trudeau announces increased climate ambition* (April 22, 2021), https://pm.gc.ca/en/news/news-releases/2021/04/22/prime-minister-trudeau-announces-increased-climate-ambition
⁵⁵ Government of Canada, Net-Zero Emissions by 2050 (April 6 2021), online:

https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/net-zero-emissions-2050.html; Bill C-12, *An Act respecting transparency and accountability in Canada's efforts to achieve net-zero greenhouse gas emissions by the year 2050*, 43rd Parl, 2nd Sess, Federal, 2020 online:

https://www.parl.ca/LegisInfo/BillDetails.aspx?Language=E&billId=10959361; and Sustainable Development Goals Act, SNS 2019, c 26, online:

 $[\]underline{\underline{https://nslegislature.ca/sites/default/files/legc/PDFs/annual\%20 statutes/2019\%20 Fall/c026.pdf}$

⁵⁶ *Supra* note 31 at p 26.

technologies and efficiency.⁵⁸ The report emphasized the urgent need global cooperation for "rapid and profound" near-term decarbonization of energy supply in order to meet a 1.5°C pathway. Lack of global cooperation was identified as a barrier to achieving a 1.5°C or 2°C global temperature reduction goal.⁵⁹ The report also stated that net CO₂ emissions will on average need to be reduced to zero by mid-century to avoid 1.5°C of warming.⁶⁰

The evidence is clear that urgent action is needed to keep global average temperature rise to 1.5°C. Deep impacts of climate change are already evident in many parts of Canada, and are projected to intensify. Canada's Changing Climate Report, ⁶¹ released in 2019, demonstrates that Canada is warming at twice the rate of the rest of the world and that northern Canada is warming even more quickly, at nearly three times the global rate. At the time of the report (2019), the years 2015 – 2017 were the warmest on record. This report demonstrated the potentially devastating effects of climate change. Adapting to climate change is both urgent and imperative.

To proceed with Goldboro LNG, without a federal assessment or cumulative assessment of the project's GHG emissions, is fundamentally inconsistent with the recent Supreme Court decision, *Reference re Greenhouse Gas Pollution Pricing Act*, 2021 SCC 11. This decision emphasized the growing urgency of climate change mitigation in Canada. The Supreme Court held:

[2] Climate change is real. It is caused by greenhouse gas emissions resulting from human activities, and it poses a grave threat to humanity's future. The only way to address the threat of climate change is to reduce greenhouse gas emissions.

...

[167] ... To begin, this matter's importance to Canada as a whole must be understood in light of the seriousness of the underlying problem. All parties to this proceeding agree that climate change is an existential challenge. It is a threat of the highest order to the country, and indeed to the world...

...

[190] While each province's emissions do contribute to climate change, there is no denying that climate change is an "inherently global problem" that neither Canada nor any one province acting alone can wholly address. This weighs in favour of a finding of provincial inability. As a global problem, climate change can realistically be addressed only through international efforts. Any province's failure to act threatens Canada's ability to meet its international obligations, which in turn hinders Canada's ability to push for international action to reduce GHG emissions. Therefore, a provincial failure to act directly threatens Canada as a whole.

The Supreme Court recognized that to date, significant emissions reductions in some provinces have failed the goals of any cooperative scheme because they were offset by increased emissions in other provinces. ⁶² The Court recognized that each province's emissions are clearly measurable and



⁵⁸ Ibid.

⁵⁹ *Ibid* at vi, p 32, and Chapter 2: *Mitigation Pathways Compatible with 1.5°C in the Context of Sustainable Development*, see p 129 at section 2.4.1.

⁶⁰ *Ibid* at p 33.

⁶¹ Government of Canada, *Canada's Changing Climate Report* (2019), online: https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/energy/Climate-change/pdf/CCCR FULLREPORT-EN-FINAL.pdf

⁶² Reference re Greenhouse Gas Pollution Pricing Act, 2021 SCC 11 at para 184.

contribute to climate change.⁶³ The emissions of Goldboro LNG in Nova Scotia would impact not only Nova Scotia's GHG emissions, but also risk threatening Canada's commitments to reducing its GHG emissions by 40-45% below 2005 levels by 2030 and to net-zero by 2050.

b. LNG projects are incompatible with methane emissions reduction targets

Goldboro LNG would not only increase carbon dioxide emissions, but would also be a significant contributor to methane emissions. Methane emissions are the second largest cause of climate change 64 and we now have an updated understanding of the importance of addressing them. Several experts have recently stated that unexpected growth in methane has significantly negated the impact of progress in terms of controlling carbon dioxide emissions and that methane is contributing significantly to acceleration of global warming. If this continues, experts state that it will become impossible to meet the Paris Agreement targets 65 and that methane mitigation is essential to slow the rate of warming and achieve those targets. 66 This is, in part, due to the fact that although methane is more short-lived than carbon dioxide, it is many times more potent at trapping heat in the atmosphere. 67

In November 2020, the Government of Canada announced that reducing methane pollution from the oil and gas sector "is an essential pillar of Canada's climate plan."⁶⁸ The Government is committed to reducing methane emissions from the oil and gas sector by 40 to 45 percent below 2012 levels, by 2025. Regulations supporting this target came into effect in early 2020.⁶⁹

Goldboro LNG will contribute significantly to carbon and methane emissions now and in the future. A significant amount of methane is emitted in the extraction and transportation of natural gas,

⁶⁹ *Ibid.*, and *Regulations Respecting Reduction in the Release of Methane and Certain Volatile Organic Compounds (Upstream Oil and Gas Sector)*, SOR/2018-66, online: https://pollution-waste.canada.ca/environmental-protection-registry/regulations/view?Id=146



⁶³ *Ibid* at para 188.

⁶⁴ E.G. Nisbet, *Methane Mitigation: Methods to Reduce Emissions, on the Path to the Paris Agreement* (January 2020), Reviews of Geophysics, 58, online:

https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2019RG000675 [Nisbet: 2020].

⁶⁵ *Ibid* [Nisbet: 2020]; Nisbet et al, *Very Strong Atmospheric Methane Growth in the 4 Years 2014–2017: Implications for the Paris Agreement* (February 2019), Global Biogeochemical Cycles, 33 318-342, online: https://doi.org/10.1029/2018GB006009; Marielle Saunois et al, *The Global Methane Budget 2000-2017*, Earth Syst. Sci. Data, 12, 1561–1623, 2020, online: https://doi.org/10.5194/essd-12-1561-2020; Haustein, et al. *A real-time Global Warming Index*, (2017) Scientific Reports 7, 15417, online: https://doi.org/10.1038/s41598-017-14828-5; and Global Carbon Budget, *Global Methane Budget 2020* (July 15 2020), online: https://www.globalcarbonproject.org/methanebudget/

⁶⁶ Supra note 64 [Nisbet: 2020], & IEA, Methane Tracker 2021: Helping tackle the urgent global challenge of reducing methane leaks (January 2021), online: https://www.iea.org/reports/methane-tracker-2021 & Illisa Bonnie Ocko et al, Acting rapidly to deploy readily available methane mitigation measures by sector can immediately slow global warming (2021), Environmental Research Letters, online: https://iopscience.iop.org/article/10.1088/1748-9326/abf9c8/pdf

⁶⁷ United States Environmental Protection Agency, *Importance of Methane* (October 2020), online: https://www.epa.gov/gmi/importance-

methane#:~:text=Methane%20is%20more%20than%2025,trapping%20heat%20in%20the%20atmosphere.&text=Be cause%20methane%20is%20both%20a,effect%20on%20atmospheric%20warming%20potential

⁶⁸ Government of Canada, *Government of Canada working with provinces to reduce methane emissions from oil and gas operations* (November 5, 2020), online: https://www.canada.ca/en/environment-climate-change/news/2020/11/government-of-canada-working-with-provinces-to-reduce-methane-emissions-from-oil-and-gas-operations.html

especially in the liquefaction process.⁷⁰ Methane leaks during drilling for natural gas also directly contribute to climate change. One study found that methane losses must be kept below 3.2 percent for natural gas power plants to have lower life cycle emissions than new coal plants over short time frames of 20 years or fewer.⁷¹ The significant increase in methane emissions which would result from the Goldboro LNG project is inconsistent with the Government of Canada's publicly stated goals of reducing those emissions and fighting climate change.

c. LNG projects will prevent Canada and Nova Scotia from achieving GHG emissions reduction targets

The Nova Scotia Government has also demonstrated its commitment to fighting climate change by setting the "most ambitious targets in the country" for reducing GHG emissions. ⁷² Nova Scotia's *Sustainable Development Goals Act* (*SDGA*), ⁷³ passed over a year ago ⁷⁴ but not yet in force, mandates minimum targets for future GHG emissions in the province: at least 53% of 2005 levels by 2030 and net zero with offsets by 2050, to be set within regulations. The *SDGA* also mandates the creation of a strategic plan called the "Climate Change Plan for Clean Growth", which must address the means to achieve these GHG targets. While public consultation has already occurred on the *SDGA*, ⁷⁵ further consultation required for the regulations has been delayed due to Covid-19, which is said to be the obstacle to the *SDGA* being proclaimed in force. ⁷⁶ Although its proclamation has been delayed, the Act will ultimately come into force and is already referred to by the province as part of its action on fighting climate change. ⁷⁷

The *SDGA* embodies Nova Scotia's clear commitment to setting ambitious GHG emissions reduction targets. These targets will be threatened if Goldboro LNG goes forward. As stated above, the provincial environmental assessment process found that Goldboro LNG would increase Nova Scotia's emissions by about 20%, and would represent the largest single GHG emitter in the



⁷⁰ Union of Concerned Scientists, *Environmental Impacts of Natural Gas* (January 19, 2014), online: https://www.ucsusa.org/resources/environmental-impacts-natural-gas: and Myhre, G., et al. *Anthropogenic and natural radiative forcing*, Climate change 2013: The physical science basis: Contribution of Working Group I to the fifth assessment report of the Intergovernmental Panel on Climate Change, p 659–740, online: www.climatechange2013.org/images/report/WG1AR5 Chapter08 FINAL.pdf

⁷¹ Alvarez, R.A., et al, *Greater focus needed on methane leakage from natural gas infrastructure. Proceedings of the National Academy of Sciences* (2012) 109:6435–6440, online: https://doi.org/10.1073/pnas.1202407109; IEA, *The environmental case for natural gas* (October 2017), online: https://www.iea.org/commentaries/the-environmental-case-for-natural-gas. Note: Recent studies have found that the level of methane emissions, and methane leakage, in both United States and Canada's oil and has sector are higher than previously thought: GreenPath Energy Ltd, *GreenPath 2016 Alberta Fugitive and Vented Emissions Inventory Study*">https://www.iea.org/commentaries/the-environmental-case-for-natural-gas. Note: Recent studies have found that the level of methane emissions, and methane leakage, in both United States and Canada's oil and has sector are higher than previously thought: GreenPath Energy Ltd, *GreenPath 2016 Alberta Fugitive and Vented Emissions Inventory Study*, online:

https://www.methanealliance.com/documents/alberta-fugitive-and-vented-emissions-inventory-study.pdf; and Alvarez et al, *Assessment of methane emissions from the U.S. oil and gas supply chain* (July 2018), online: https://science.sciencemag.org/content/361/6398/186

 $^{^{72}}$ Supra note 53.

⁷³ Bill No 213, *An Act to Achieve Environmental Goals and Sustainable Prosperity*, 2nd Sess, 63rd General Assembly NS, 2019: https://nslegislature.ca/fr/sites/default/files/legc/PDFs/annual%20statutes/2019%20Fall/c026.pdf

⁷⁴ Nova Scotia Legislature website, *Sustainable Development Goals Act – Bill 213* (accessed April 12th 2021), online: https://nslegislature.ca/legislative-business/bills-statutes/bills/assembly-63-session-2/bill-213

⁷⁵ Nova Scotia Government website, *Sustainable Development Goals Act*, (online): https://novascotia.ca/nse/sustainable-development-goals-act/

⁷⁶ CBC News, *New emissions reduction bill won't be ready by end of year as planned* (October 2020), online: https://www.cbc.ca/news/canada/nova-scotia/covid-19-gordon-wilson-environment-emmissions-legislation-1.5782627

⁷⁷ *Supra* note 53.

province. ⁷⁸ One source indicates that if Goldboro LNG begins operations as planned in 2026, Nova Scotia's emissions will exceed the 2030 cap set out in the *SDGA* by about one third if Pieridae does not reduce the terminal's emissions. ⁷⁹ It is difficult to see how the projected 3.78 Mt of GHGs emitted annually by the project ⁸⁰ would be compatible with the province's medium- and long-term targets.

Canada also has a long history of failing to meet climate targets. After failing to meet its commitments under multiple United Nations Framework Convention on Climate Change (UNFCCC) agreements, including the Kyoto Protocol and the Copenhagen Accord, Canada agreed to the Paris Agreement in 2015. Recognizing that "climate change represents an urgent and potentially irreversible threat to human societies and the planet and thus requires the widest possible cooperation by all countries", the participating states agreed to hold the global average temperature increase to well below 2.0°C above pre-industrial levels and to pursue efforts to limit that increase to 1.5°C. 81 Canada ratified the Paris Agreement in 2016, and it came into force that same year. 82

Under the Paris Agreement, Canada committed to reducing its GHG emissions by 30% below 2005 levels by 2030. This requires a reduction in emissions of 142 Mt CO₂e. ⁸³ Very recently, Canada has committed to even more significant reductions of 40-45% below 2005 levels by 2030. ⁸⁴ Canada has also committed to moving to net-zero emissions by 2050 ⁸⁵ and indicated its intention to enshrine this target in legislation through Bill C-12. If passed by Parliament, it will become *The Canadian Net-Zero Emissions Accountability Act*. ⁸⁶ Building this facility would be incompatible with directives from international climate scientists to lower emissions and fossil fuel production in order to meet climate targets.

The UNEP Emissions Gap Report 2020⁸⁷ found that the world is still heading for catastrophic temperature rise in excess of 3°C this century – far beyond the Paris Agreement goals of limiting global warming to well below 2°C and pursuing 1.5°C. The report states that Canada's projected emissions are 15 percent or more above the NDC target, and Canada will miss targets, unless policies are strengthened. Report States of Canada and Canada and making it even more difficult to make essential emissions reductions over time. Canada's continued expansion of

https://wedocs.unep.org/bitstream/handle/20.500.11822/34438/EGR20ESE.pdf at p 10, 15, & Table 2.3 at p 16. 88 *Ibid*.



⁷⁸ Supra note 31.

⁷⁹ Larry Hughes, *Nova Scotia's Sustainable Development Goals and Pieridae Energy* (October 2020), online: http://dclh.electricalandcomputerengineering.dal.ca/enen/2020/201020_CH_Pieridae_in_Goldboro.pdf

⁸⁰ *Ibid*, and *Goldboro LNG – Natural Gas Liquefaction Plant and Marine Terminal, Environmental Assessment Report (Class 2 Undertaking)*, (September 2013), online: https://novascotia.ca/nse/ea/goldboro-lng/10-
Environmental-Effects-Assessment.pdf at Section 10.0: Environmental Effects Assessment, p 10-29.

⁸¹ United Nations, Framework Convention on Climate Change, Report of the Conference of the Parties on its twenty-first session, U.N. Doc. FCCC/CP/2015/10/Add.1, January 29, 2016, at p 2; and Paris Agreement to the United Nations Framework Convention on Climate Change, Dec. 12, 2015, T.I.A.S. No. 16-1104, at art. 2(1)(a).

Reference re Greenhouse Gas Pollution Pricing Act, 2021 SCC 11 at para 13.
 Environmental Commissioner of Ontario, 2018 Greenhouse Gas Emissions Report, (2018)

http://docs.assets.eco.on.ca/reports/climate-change/2018/Climate-Action-in-Ontario.pdf at p 116.

⁸⁴ Supra note 54.

⁸⁵ Government of Canada, Net-Zero Emissions by 2050 (April 6 2021), online:

https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/net-zero-emissions-2050.html. 86 Bill C-12, *An Act respecting transparency and accountability in Canada's efforts to achieve net-zero greenhouse*

gas emissions by the year 2050, 2nd Sess, 43rd Parl, Federal, 2020, online: https://www.parl.ca/LegisInfo/BillDetails.aspx?Language=E&billId=10959361

⁸⁷ UN Environment Programme, Emissions Gap Report (2020), online:

LNG production and exportation of large quantities of LNG contradicts and negates its promises to scale up climate action in order to achieve net zero emissions by 2050.

Without a federal impact assessment, it will not be known if the project could be compatible with Canada's climate change commitments or what the impact of the project would be on the long-term ability of Canada to meet its climate targets. On this basis, we strongly urge the federal government to conduct a comprehensive assessment of Goldboro LNG, including a full assessment of the cumulative effects of the Project, and impacts on Canada's climate targets.

It is increasingly evident that LNG Projects are incompatible with climate change targets, and that LNG industry could be as disastrous for the climate as coal. Recently, the Quebec *Bureau d'audiences publiques sur l'environnement* (BAPE) conducted an inquiry and public hearing of the Énergie Saguenay LNG project and recently published a report including its recommendations to the provincial government (the "Report"). The BAPE found that the sum of the risks related to the LNG project outweigh its advantages:

Dans toute l'histoire du BAPE, l'audience sur le projet Énergie Saguenay a suscité la plus forte participation citoyenne, notamment en matière de mémoires déposés. Cela reflète l'intérêt et la grande mobilisation que ce projet a entraîné, tant chez ses détracteurs que chez ceux qui l'appuient...Ainsi, considérant ce débat fortement polarisé dans le milieu d'accueil, mais aussi dans l'ensemble du Québec, la commission n'a pas été en mesure de se prononcer sur l'acceptabilité sociale à l'égard du projet Énergie Saguenay même si globalement, selon l'analyse qu'elle en a faite, la somme des risques afférents au projet dépasse celle de ses avantages. 91

Unofficial translation:

In the entire history of the BAPE, the hearing on the Énergie Saguenay project attracted the highest level of citizen participation, particularly with regard to the briefs submitted. This reflects the interest and the great mobilization that this project has generated, both among its critics and among those who support it ... Therefore, considering this strongly polarized debate in the host community, but also in Quebec as a whole, the commission was not in a position to comment on the social acceptability of the Énergie Saguenay project even if overall, according to its analysis of the project, the sum of the risks associated with the project exceeds that of its advantages.

The 501-page Report covers all of the points covered in information and consultation sessions, including opinions expressed in 2580 briefs submitted by the public and organizations. The authors express reservations with respect to any environmental benefits of the project. The Report cites a study published in the journal Nature, to which the Secretariat of the UNFCCC refers, finding that a third of all oil reserves, half of gas reserves and more than 80% of coal reserves would need to remain in the ground for the international community to meet its goal of limiting global warming to

⁹⁰ Bureau d'audiences publiques sur l'environnement, *Rapport 358, Projet de construction d'un complexe de liquéfaction de gaz naturel à Saguenay* (March 2021), online: https://voute.bape.gouv.qc.ca/dl?id=00000241203 ⁹¹ *Ibid* at p 320.



⁸⁹ The Guardian, *Booming LNG industry could be as bad for climate as coal, experts warn* (July 2019), online: https://www.theguardian.com/environment/2019/jul/03/booming-lng-industry-could-be-as-bad-for-climate-as-coal-experts-warn; & Canadian Centre for Policy Alternatives, *Why LNG exports doom emissions-reduction targets and compromise Canada's long-term energy security* (July 9 2020), online: https://www.policyalternatives.ca/bc-carbon-conundrum: and Bureau d'audiences publiques sur l'environnement, *Rapport 358*, *Projet de construction d'un complexe de liquéfaction de gaz naturel à Saguenay* (March 2021), online: https://voute.bape.gouv.qc.ca/dl?id=00000241203

below two degrees Celsius. ⁹² The International Energy Agency (IEA) confirms that the combustion of all untapped fossil fuel reserves would result in three times more CO₂ emissions than the CO₂ budget remaining to meet the Paris Agreement target. According to the IEA, it would be necessary to leave large volumes of hydrocarbon reserves in the ground, even in the most conservative scenarios. ⁹³ Citing this study, the BAPE states:

La commission d'enquête note, en tenant compte de l'approvisionnement en gaz naturel du projet Énergie Saguenay, que celui-ci contribuerait au maintien ou à la croissance du secteur pétrolier et gazier de l'Ouest canadien alors qu'il serait nécessaire, selon l'Agence internationale de l'énergie que d'importantes quantités de réserves d'hydrocarbures demeurent non exploitées pour atteindre l'objectif central de l'Accord de Paris. 94

Unofficial translation:

The commission of inquiry notes, taking into account the natural gas supply of the Énergie Saguenay project, that it would contribute to the maintenance or growth of the oil and gas sector in Western Canada when it is in fact necessary, according to the International Energy Agency, that significant quantities of hydrocarbon reserves remain untapped to achieve the central objective of the Paris Agreement.

The Report also discusses the natural gas paradox and the lock-in of energy choices. The report states:

Le projet Énergie Saguenay s'inscrit dans un paradoxe. Les engagements des pays signataires de l'Accord de Paris commandent un déclin nécessaire du recours aux hydrocarbures et une accélération de l'utilisation des énergies renouvelables et, dans ce contexte, le gaz naturel apparaît comme une source d'énergie complémentaire efficace, flexible et moins polluante que d'autres sources d'énergies fossiles.

Ce constat permet à GNLQ d'affirmer qu'il offrirait une énergie de transition qui vise à soutenir les efforts de lutte aux changements climatiques en Europe, en Asie et ailleurs dans le monde. La commission est d'avis que si cette affirmation peut apparaître vraie à court ou moyen termes, le temps que les technologies de stockage et de production d'énergies renouvelables soient économiquement accessibles, elle serait difficilement soutenable à long terme.

En effet, la commission considère que la mise en place de nouvelles infrastructures d'échange de GNL pourrait constituer un frein à la transition énergétique sur les marchés visés par le projet Énergie Saguenay. L'adhésion à cette chaîne d'approvisionnement, suivant le modèle d'affaires de GNLQ, aurait pour conséquence de verrouiller à long terme les choix énergétiques des pays clients et, conséquemment, les émissions de GES associées à la combustion du gaz naturel qui y serait livré. Ce faisant, la transition de ces pays vers une économie sobre en carbone pourrait en être retardée. ⁹⁵ [emphasis added]

Unofficial translation:

The Énergie Saguenay project is part of a paradox. The commitments of the signatory countries of the Paris Agreement demand a necessary decline in the use of hydrocarbons and an acceleration of the use of renewable energies. In this context, natural gas appears to be an



⁹² Ibid at p 112-113, and section 3.6 « le projet Énergie Saguenay et la transition énergétique ».

⁹³ *Ibid*.

⁹⁴ *Ibid* at p 114.

⁹⁵ *Ibid* at p ix, and p 113.

efficient, flexible and less polluting complementary energy source than other fossil energy sources.

This observation allows GNLQ to assert that it would offer transitional energy that aims to support efforts to fight climate change in Europe, Asia and elsewhere in the world. The commission is of the opinion that while this statement may appear to be true in the short or medium term, while renewable energy storage and production technologies become economically accessible, it would be difficult to support in the long term.

Indeed, the commission considers that the establishment of new LNG trading infrastructures could hinder the energy transition in the markets targeted by the Énergie Saguenay project. Joining this supply chain, following the GNLQ business model, would have the consequence of locking in the energy choices of client countries over the long term and, consequently, the GHG emissions associated with the combustion of the natural gas that would be delivered. As a result, the transition of these countries to a low-carbon economy could be delayed. [emphasis added]

The report also discusses the GHG emissions of the Énergie Saguenay Project:

...Dans ce contexte, la commission est d'avis, en vertu des principes précaution et prévention de la Loi sur le développement durable, que la prise de décision gouvernementale relative au projet Énergie Saguenay ne peut s'appuyer sur une réduction nette des émissions de GES à l'échelle mondiale. Elle est plutôt d'avis qu'en vertu de ces principes, la valeur de référence associée au projet qui devrait être retenue pour la prise de décision serait celle de l'ajout net d'émissions de GES, bien que la commission ne puisse l'établir précisément. 96

Unofficial translation:

In this context, the commission is of the opinion, in accordance with the precaution and prevention principles of the Sustainable Development Act, that government decision-making on the Énergie Saguenay project cannot be based on a net reduction in global GHG emissions. Rather, the commission believes that under these principles, the baseline value associated with the project that should be used for decision-making would be the net addition of GHG emissions, although the commission cannot determine this precisely.

This is an example of a sound environmental assessment, desperately needed in 2021. A sound environmental assessment must consider long-term effects of a Project, including the protection of the environment in a manner that benefits both present and future generations.

d. Investing in LNG infrastructure has negative economic consequences

Additionally, the now-dated environmental assessment from 2014 must necessarily include a substantially different cost-benefit analysis than an assessment in the year 2021, as our understanding of the costs of climate change and the risks of continued investment in fossil fuel infrastructure such as LNG has evolved dramatically since 2014. For instance, the 2020 report from the Canadian Institute for Climate Choices entitled *Tip of the Iceberg: Navigating the Known and Unknown Costs of Climate Change* acknowledged that "[p]ublic and private-sector decision-making has yet to fully reflect climate-related risks" due in part to "the absence of a current and comprehensive understanding of the future costs and risks associated with climate change." The report sets out the

⁹⁷ Canadian Institute for Climate Choices, *Tip of the Iceberg, Navigating the Known and Unknown Costs of Climate Change for Canada* (December 2020), online: https://climatechoices.ca/wp-content/uploads/2020/12/Tip-of-the-Iceberg-_-CoCC_-Institute_-Full.pdf at p 1.



⁹⁶ *Ibid* at "Les émissions de gaz à effet de serre" at p x. and p 314.

extensive economic costs and risks to Canada such as weather-related disasters, for which insured catastrophic losses were calculated at \$20.1 billion between 2010 and 2019. This was nearly double the costs of the three previous decades combined. 98 This increased understanding of the full economic impacts of climate change should be factored into any cost-benefit analysis of a project which will have implications for Canada's economy for decades.

New analysis by the Global Commission on the Economy and Climate discusses the global benefits of a decisive shift to a low-carbon economy. The Commission found that transitioning to low-carbon, sustainable growth could deliver a direct economic gain of US \$26 trillion through to 2030 compared to business-as-usual. Taking ambitious climate action could also generate over 65 million new low-carbon jobs in 2030, equivalent to today's entire workforces of the UK and Egypt combined, as well as avoid over 700,000 premature deaths from air pollution compared with business-as-usual. ⁹⁹ The Commission states, "the benefits of climate action are greater than ever before, while the costs of inaction continue to mount. It is time for a decisive shift to a new climate economy." ¹⁰⁰

These benefits are in stark contrast with recent findings regarding the risks of investing in fossil fuel infrastructure such as LNG at a time when Canada and the world are committing to deep GHG emissions reductions. For instance, the recent BAPE Report on the Énergie Saguenay LNG project found that there is already significant global competition for LNG production and export and the project may not be needed by the time construction is finished and the plant is up and running. ¹⁰¹ The report states that some observers are of the opinion that new LNG capacity, to meet the global demand, would not be necessary before 2030. For instance, the report states:

De nombreux projets concurrents partout dans le monde, mais notamment en Amérique du Nord, cherchent à satisfaire la nouvelle demande en GNL et le projet de GNLQ en fait partie. Un nombre record de décisions finales d'investissement ont été prises en 2019 par des initiateurs de projets concurrents. Une partie de ceux-ci sont déjà en phase de construction ou devraient l'être sous peu. Conséquemment, certains observateurs du marché sont d'avis qu'une nouvelle capacité de production de GNL, pour répondre à la demande mondiale, ne serait pas nécessaire avant 2030...Dans ce contexte concurrentiel et considérant l'incertitude quant à la demande mondiale de GNL à moyen et long termes ainsi que la frilosité croissante des investisseurs pour ce type de projets, la commission considère que la fenêtre d'opportunité pour le projet Énergie Saguenay semble s'être considérablement réduite depuis l'annonce initiale du projet, en 2014... 102

Unofficial translation:

Many competing projects around the world, but particularly in North America, seek to meet the new demand for LNG and the GNLQ project is one of them. A record number of final investment decisions were made in 2019 by initiators of competing projects. A part of these are already in the construction phase or should be soon. Consequently, some market observers are of the opinion that new LNG production capacity, to meet the global demand, would not be necessary before 2030... In this competitive context and considering the uncertainty regarding global LNG demand in the medium and long term as well as the

¹⁰² *Ibid* at « Énergie Saguenay et ses concurrents » at viii & see discussion at p 101-104.



⁹⁸ *Ibid*, at p 10.

⁹⁹ The Global Commission on the Economy and Climate, *Unlocking the Inclusive Growth Story of the 21st Century: Accelerating Climate Action in Urgent Times* (August 2018), online: https://newclimateeconomy.report/2018/wp-content/uploads/sites/6/2018/09/NCE_2018_FULL-REPORT.pdf at p 22. ¹⁰⁰ *Ibid.*

¹⁰¹ Supra note 90.

growing reluctance of investors for this type of project, the commission considers that the window of opportunity for the Énergie Saguenay project seems to have been considerably reduced since the initial announcement of the project in 2014...

Recent analysis published on the website of the *Institut de recherche et d'informations socioéconomiques* (IRIS) identified several similarities between the Énergie Saguenay and the Goldboro LNG projects. Both LNG project are dependent on public funds and would face the highest production costs in North America due to additional natural gas transportation costs and the high cost of infrastructure compared to competitors.¹⁰³

For further illustration, a recent study from Simon Fraser University estimated that Canada's investment in the Trans Mountain pipeline expansion project would be at a loss of \$11.9 billion due in part to the creation of excess pipeline capacity in relation to demand and that it would be more economically advantageous to stop construction altogether. The study also concluded that there is no likely scenario under which the expansion project would provide a net benefit to Canada in light of significantly weaker oil markets and new climate change policies announced by Canada that lower the need for new pipeline capacity and reduce global demand and prices for oil products. 105

The cost-benefit analysis of LNG projects should not rely on stale, outdated information that has significantly evolved in the past decade. A contemporary federal assessment of the Goldboro LNG Project is required to take into account the heightened understanding of the economic risks involved.

3. There is significant public concern regarding the Project and its impacts

There is significant and growing public concern regarding the Goldboro LNG project and its impacts, and in respect of the growth of LNG Projects within Canada.

In August 2018, the Nova Scotia Fracking Resource and Action Coalition (NOFRAC) and Guysborough Communities Coalition wrote to two German ministers asking that the German government not award Pieridae a financial guarantee to build the LNG terminal in Goldboro, Nova Scotia. Then, in the same month, 26 additional groups, from Canada and Germany, sent an open letter to German ministers expressing concerns about the Goldboro project. The groups were concerned about negative impacts on the transition to renewable energy, tackling the climate crisis, that the gas to be liquefied in Goldboro might be largely obtained by hydraulic fracturing (fracking), as well as "sharp criticism from [I]ndigenous and other affected groups, human rights and environmental organizations." 108

¹⁰⁸ *Ibid*; & Daniel Schwartz & Mark Gollom, *N.B. fracking protests and the fight for aboriginal rights* (October 2013), online: https://www.cbc.ca/news/canada/n-b-fracking-protests-and-the-fight-for-aboriginal-rights-1.2126515



¹⁰³ Institut de recherche et d'informations socioéconomiques, *Exportation de gaz naturel liquéfié en Nouvelle-Écosse : Les projets se suivent et se ressemblent* (May 2021) online: https://iris-recherche.qc.ca/blogue/exportation-de-gaz-naturel-liquefie-en-nouvelle-ecosse-les-projets-se-suivent-et-se-ressemblent

¹⁰⁴ Thomas Gunton et al, *Evaluation of the Trans Mountain Expansion Project* (March 2021) online: https://www.documentcloud.org/documents/20534119-tmx-cba-report-final-march-21 at p 68-69. https://www.documentcloud.org/documents/20534119-tmx-cba-report-final-march-21 at p 68-69. https://www.documentcloud.org/documents/20534119-tmx-cba-report-final-march-21 at p 68-69.

¹⁰⁶ NOFRAC & Guysborough Communities Coalition, *Undertaking Financial Guarantee for Goldboro LNG Financially Risky for Germany* (August 27 2018), online: https://www.foodandwatereurope.org/wp-content/uploads/2018/09/NOFRACLettertoGermanyAug272018.pdf

¹⁰⁷ NOFRAC et al., *Open Letter : No German support for the import and promotion of fracked gas* (August 2018), online: https://www.foodandwatereurope.org/wp-

content/uploads/2018/09/OpenlettertopreventtheLNGterminalinGoldborofin.pdf

Two years later, in September 2020, a letter signed by the heads of four Canadian environmental groups and supported by more than 100 environmental and Indigenous groups from North America, Europe and the United Kingdom, was sent to the German ambassador to Canada and copied to 13 German politicians. This letter raised concerns about Goldboro LNG and alleged that Pieridae may not have shared all the "economic, regulatory, financial, supply, climate and environmental, and human rights risks" associated with its project. ¹⁰⁹ Since then, this letter has been made available online for members of the public to support and has been signed by more than 15,000 people. ¹¹⁰

Although we are unclear as to the extent that Goldboro LNG would have to be supplied with fracked gas, this concern is frequently raised by environmental groups.¹¹¹

Recently, on March 10, 2021, the Nova Scotia Fracking Resource and Action Coalition, the Alberta-based Citizens' Oil and Gas Council, Environnement Vert Plus from Quebec, and the New Brunswick Anti-Shale Gas Alliance, along with a German campaigner and consultant for climate and environmental protection, wrote a joint letter to Prime Minister Trudeau and other Canadian federal and provincial politicians in response to Pieridae's request for federal funding. The letter raised concerns about the Goldboro LNG project and urged the federal government not to fund the project. There has also been considerable public response to campaigns asking federal MPs and key members of cabinet to reject requests for funding from Pieridae: for instance, the Council of Canadians' campaign launched April 14th 2021¹¹³ has received at least 5061 responses from the public while Ecojustice's campaign launched May 3rd 2021¹¹⁴ has received at least 2815 responses.

While we are also not certain as to whether the Goldboro LNG Project will require new pipeline construction, there is increasing public concern that Pieridae will be unable to transport 800M ft³ of natural gas per day from Western Canada to Goldboro using its existing pipeline systems. Calgary-based pipeline expert Cameron Gingrich has said that the Portland Natural Gas Transportation System will not be able to carry the 600-700 million cubic feet per day needed by the first production train at Goldboro without new pipe. ¹¹⁵

There are growing concerns in regions of Quebec, where environmentalists in the region of Estrie fear that construction of a second pipeline will be inevitable when the project is carried out. Environmentalists have raised concerns that there is no alternate route to Nova Scotia through the

¹¹⁵ Ken Summers, *Goldboro LNG far from a done deal*, (October 2018) online: https://nsadvocate.org/2018/10/08/ken-summers-goldboro-lng-far-from-a-done-deal/



¹⁰⁹ NOFRAC et al, *Letter re: German Government Financing of the Pieridae Energy Goldboro LNG Project* (September 28 2020), online: https://nsadvocate.org/wp-content/uploads/2020/09/English-letter-and-briefing-note-to-German-Government-final.pdf

¹¹⁰ The Council of Canadians, *Fight against Goldboro LNG turns international* (2018), online: https://canadians.org/analysis/fight-against-goldboro-lng-turns-international

¹¹¹ Supra note 109; and Jack Leonard, *Goldboro LNG – Nor a Good idea, and not just because of climate change* (November 2 2018), online: https://nsadvocate.org/2018/11/02/goldboro-lng-not-a-good-idea-and-not-just-because-of-climate-change/

of-climate-change/

112 Frances Willick, Goldboro LNG project 'would be difficult' without federal funding, says Pieridae (March 17 2021), online: https://www.cbc.ca/news/canada/nova-scotia/pieridae-goldboro-lng-negotiating-with-ottawa1.5953360 & Nova Scotia Advocate, Open letter to Prime Minister Justin Trudeau and Nova Scotia Premier Iain
Rankin re \$925 million funding request for Goldboro LNG (March 18 2021), online:

 $[\]frac{https://nsadvocate.org/2021/03/18/open-letter-to-prime-minister-justin-trudeau-and-nova-scotia-premier-iain-rankin-re-925-million-funding-request-for-goldboro-lng/$

¹¹³ The Council of Canadians, *Reject Pieridae Energy's Billion-Dollar LNG Subsidy*, online: https://canadians.org/action/reject-pieridae-energys-billion-dollar-lng-subsidy

¹¹⁴ Ecojustice, Stop Bankrolling Big Oil, online: https://www.support.ecojustice.ca/page/81542/action/1

existing pipelines and that existing pipelines are already at full capacity. Activist Alexandre Ouellet founded the environmental group *Goldboro*, *parlons-en* in 2019 to raise concerns about the potential need for a new gas pipeline, and the impacts this would have on the environment. From information sessions to press releases, this environmental collective has been raising awareness among Quebecers of the impact of the Goldboro LNG project, particularly in Estrie. The group has held public information sessions, issued press releases and posted an online petition expressing concerns with the Goldboro project. The petition has at least 2121 signatures. The petition notes that the planned pipeline is already operating at full capacity and unfractured gas reserves in Alberta are in decline. Public concern has also been growing public concerns around LNG Projects more broadly in Canada. As noted above, there has been strong public opposition in Quebec to the Énergie Saguenay project, a proposed natural gas liquefaction, storage and transshipment facility that proposed the export of 11 million tons of LNG per year. The BAPE Report demonstrates that the project is highly contested. It received the highest response of any BAPE review, with more than 2,500 briefs presented at the hearings. Of the 2,500 public submissions to the BAPE, over 90% opposed the project. This was the strongest showing on record in such environmental consultations.

Conclusion

There has been no valid federal assessment for the Goldboro LNG Project under *CEAA 2012* or the *IAA*, and the project remains out of compliance with the requirements of the *IAA*. This situation is untenable in light of the global climate crisis and both Nova Scotia and Canada's climate commitments.

Seven years have passed since the provincial assessment of Goldboro LNG. Thirteen years have passed since the federal assessment of the Keltic Project. Climate evidence and the urgency of climate change has rapidly evolved in the last decade. The cumulative effects of increased GHG emissions of the Goldboro LNG Project, in combination with all other existing, proposed or planned sources of emissions, on provincial and federal GHG emissions and targets must be carefully considered. The Goldboro LNG Project alone is expected to increase the present GHG emissions level for Nova Scotia by 18% and projected to cause the province to exceed its 2030 emissions cap by a third.

The potential GHG emissions associated with Goldboro LNG may seriously hinder the ability of both the Government of Nova Scotia and the Government of Canada to meet their commitments in respect of climate change, including in the context of Canada's newly increased 2030 and soon-to-be legislated 2050 GHG emissions reduction targets. The environmental assessment of the project to

¹¹⁹ *Ibid*; & CTV News, *Risks from LNG Quebec project far outweigh benefits: environmental review board* (March 24 2021), online: https://montreal.ctvnews.ca/risks-from-lng-quebec-project-far-outweigh-benefits-environmental-review-board-1.5360592



¹¹⁶ Radio Canada, Flou entourant la possible construction d'un pipeline en Estrie (March 7 2020), online : https://ici.radio-canada.ca/nouvelle/1653778/environnement-goldboro-pipeline-pieridae-energy-estrie and Change.Org, Pétition contre le projet Goldboro LNG de Pieridae Energy Ltd., online: https://www.change.org/p/contre-le-projet-de-gaz-naturel-goldboro-lng; and Daniel Campeau, Un pipeline de gaz naturel contesté en Estrie (February 13, 2020), online : http://estrieplus.com/contenu-gazoduc_goldboro_coalition_environnementale_estrie-1355-47740.html

¹¹⁸ *Supra* note 90. Note: Similarly, Goldboro is anticipated to produce approximately **ten million** metric tonnes of LNG per year.

date has not adequately considered the potential for the project to cause significant increases in GHG emissions and further delay the transition to a low-carbon economy.

There is now an opportunity for the federal government to conduct a thorough and balanced environmental assessment. In the absence of a federal impact assessment process there will be no assessment of the cumulative effects of the project nor an assessment of the impacts of this project on Canada's ability to meet its climate change commitments. Though we do not have a mandate to represent any Indigenous communities or groups in this matter and so we do not purport to speak on their behalf, we note that any decision taken in response to this letter must respect any and all consultation and accommodation obligations that the law imposes upon the Crown.

Climate change was recently deemed a "grave threat to humanity's future" by the Supreme Court of Canada. ¹²⁰ Today, in 2021, a comprehensive assessment of Goldboro LNG is both urgent and critical. On this basis, we request that an impact assessment be conducted of the Goldboro LNG Project under the *IAA*. We request that the Minister respond to this letter, with reasons, within 90 days.

Sincerely,

James Gunvaldsen Klaassen Barrister and Solicitor Danielle Gallant Barrister and Solicitor

cc: Minister of Natural Resources, NRCan.Minister-Ministre.RNCan@Canada.ca

ecojustice

 $^{^{120}}$ Reference re Greenhouse Gas Pollution Pricing Act, 2021 SCC 11, at para 2.

APPENDIX A

Ecology Action Centre

The Ecology Action Centre is a Nova Scotia-based environmental organization established in 1971 with over 5000 members across the province. The Centre aims to create a society in Nova Scotia that respects and protects nature and provides environmentally and economically sustainable and just solutions for its citizens. The Centre works with its partners to provide current environmental information, promote researched solutions, and act as a watch-dog for the environment. The Centre has participated in numerous provincial and federal environmental assessments including many reviews of onshore and offshore fossil fuel projects.

The EAC was an active intervenor and participant in the 1997 review of the Sable Offshore Energy Project, the 2006 review of the Keltic Petrochemicals Inc. LNG and Petrochemical Facility proposed for Goldboro, Nova Scotia, the 2014 review of the Goldboro LNG Project and the 2021 review of the highway realignment project at the site. In reviewing these projects, the Centre focused on the impacts of these projects on the climate, plants and wildlife, aquatic systems, marine and fresh, and on local communities and Indigenous Peoples' rights.

Nova Scotia Fracking Resource and Action Coalition

The Nova Scotia Fracking Resource and Action Coalition (NOFRAC) comprises over 100 individual members and 15 environmental and community organizations. The Coalition was formed in December 2010 to share information about the risks of hydraulic fracturing and the development of shale gas in Nova Scotia, and to raise public awareness about the risks of these practices. It is guided by a steering committee of dedicated long-term members who meet regularly to discuss local, provincial and regional issues around fracking and shale gas.

Since 2014, its members have played a leading role in highlighting the potential impacts of the proposed Goldboro LNG project. The Coalition also participated in the 2021 review of the highway realignment project at the Goldboro LNG site.

Sierra Club Canada Foundation

The Sierra Club Canada Foundation empowers people to be leaders in protecting, restoring and enjoying healthy and safe ecosystems. The Foundation is a grassroots organization with a "think globally, act locally" philosophy. Members are encouraged to actively contribute to environmental causes that engage or inspire them, in a capacity that best suits their capabilities. The Foundation has four regional Chapters, including an Atlantic Chapter based in Halifax, and a youth-led Chapter, Sierra Youth. It engages in projects designed to connect children to nature, protect wildlife and wild spaces, and to offer solutions to climate change. The Foundation also participated in the 2021 review of the highway realignment project at the Goldboro LNG site.



Council of Canadians

Since 1985, The Council of Canadians has brought people together through collective action and grassroots organizing to challenge corporate power and advocate for people, the planet, and our democracy. Alongside opposing new fossil fuel infrastructure, the Council has also been working for a just transition and a just recovery at a community level.

The request by Pieridae for \$1 billion in public funds to support the Goldboro LNG project would amount to a massive fossil fuel subsidy. The federal government has promised to phase out these types of subsidies by 2025 and the Council of Canadians is working to hold them to this promise. To build awareness and action, the Council has been working with our Nova Scotia chapters, as well as local, national, and international allies, to stop the Canadian government from making this ill-advised financing agreement. The Council has written analysis, hosted a webinar and so far, more than 5,000 people have written letters of opposition, targeting MPs and federal ministers including Chrystia Freeland and Marc Miller.

New Brunswick Anti-Shale Gas Alliance

The New Brunswick Anti-Shale Gas Alliance (NBASGA) is an umbrella organization representing both Anglophone and Francophone groups, of all types, across the province. Its mandates are to keep unconventional fossil fuels out of the province, and to promote the move to a clean energy economy in light of the climate emergency. In the past, the group has filed suit against the province leading to a moratorium on fracking, and recently it has successfully intervened in two provincial appeals courts cases supporting federal carbon pricing, and intervened on the same issue at the Supreme Court. NBASGA and its member groups work closely with First Nations on the shale gas and climate issues.

NBASGA became involved in the Goldboro project because New Brunswick was initially designated as a potential source for shale gas in Pieridae's original plans. Pieridae still possesses gas leases in New Brunswick, despite there being a moratorium of fracking. The province has indicated it may lift the moratorium under certain conditions. NBASGA also participated in the 2021 review of the highway realignment project at the Goldboro LNG site.

Environnement Vert Plus

Environnement Vert Plus (EVP) is an environmental advocacy group that has been present in Gaspésie and based in the Baie-des-Chaleurs for over 30 years. EVP's resistance to the invasion of the territory by oil and gas drilling companies led it to closely watch Pieridae following its merger with Petrolia in the fall of 2017. Since then, EVP has been busy weaving a web of international solidarity to prevent the disbursement of a US\$4.5 billion loan guarantee from the German commercial bank KfW. The web now extends to broad-based opposition to all aspects of the proposed liquefaction terminal project in Goldboro, Nova Scotia.



Citizens' Oil & Gas Council

Calgary based Citizens' Oil & Gas Council (COGC) has a 30-year history of advocacy with respect to oil and gas and most recently LNG issues, provincially, nationally and internationally. Its advocacy has focused on science-based public outreach and education, regulatory interventions and litigation. The COGC has participated in numerous provincial and federal regulatory proceedings and has appealed flawed regulatory decisions to both provincial and federal Courts of Appeal.

Greenpeace Canada

Created in 1971, Greenpeace is a global, independent campaigning organization that uses peaceful protest and creative communication to expose global environmental problems and promote solutions that are essential to a green and peaceful future. It has offices in over 55 countries, including Canada. Greenpeace has been closely following the LNG file, in particular the GNL-Quebec/Gazoduq project, for over two years. It has participated in all stages of the evaluation of the project by the *Bureau d'audiences publiques sur l'environnement* (BAPE) and has written a brief that it presented and that dealt, among other things, with the climate impact of this project. Greenpeace is also collaborating with organizations in Quebec, Canada (particularly in the East) and overseas that are working on the Goldboro LNG file.

