Annual Information Form

For the Year Ended
December 31, 2020

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SPECIAL NOTES TO READER

FORWARD LOOKING INFORMATION

Certain of the statements contained herein including, without limitation, management plans and assessments of future plans and operations, Pieridae Energy Limited's ("**Pieridae**" or the "**Corporation**") 2021 outlook and budget, Pieridae's future business plan and strategy, Pieridae's criteria for evaluating acquisitions and other opportunities, Pieridae's intentions with respect to future acquisitions and other opportunities, plans and timing for development of undeveloped and probable resources, timing of when the Corporation may be taxable, estimated abandonment and reclamation costs, plans regarding hedging, wells to be drilled, the weighting of commodity expenses, expected production and performance of oil and natural gas properties, results and timing of projects, access to adequate pipeline capacity and third-party infrastructure, growth expectations, supply and demand for oil, natural gas liquids, and natural gas, industry conditions, government regulations and regimes, capital expenditures and the nature of capital expenditures and the timing and method of financing thereof, may constitute "forward-looking statements" or "forward-looking information" within the meaning of applicable securities laws (collectively "**forward-looking statements**"). Words such as "may", "will", "should", "could", "anticipate", "believe", "expect", "intend", "plan", "potential", "continue", "shall", "estimate", "expect", "propose", "might", "project", "predict", "forecast", "goal", "target", and similar expressions may be used to identify these forward-looking statements. These statements reflect management's current beliefs and are based on information currently available to management.

Forward-looking statements involve significant risk and uncertainties. A number of factors could cause actual results to differ materially from the results discussed in the forward-looking statements including, but not limited to, the continued extent and impact of the novel coronavirus (COVID-19) outbreak on our business, the risks associated with oil and gas exploration, development, exploitation, production, marketing and transportation, loss of markets, volatility of commodity prices, currency fluctuations, imprecision of resources estimates, environmental risks, competition from other producers, incorrect assessment of the value of acquisitions, failure to realize the anticipated benefits of acquisitions, delays resulting from or inability to obtain required regulatory approvals, ability to access sufficient capital from internal and external sources and the risk factors outlined under "Risk Factors" and elsewhere herein. The recovery and resources estimate of Pieridae's reserves provided herein are estimates only and there is no guarantee that the estimated resources will be recovered. As a consequence, actual results may differ materially from those anticipated in the forward-looking statements.

Forward-looking statements are based on a number of factors and assumptions which have been used to develop such forward-looking statements, but which may prove to be incorrect. Although Pieridae believes that the expectations reflected in such forward-looking statements are reasonable, undue reliance should not be placed on forward-looking statements because Pieridae can give no assurance that such expectations will prove to be correct. In addition to other factors and assumptions which may be identified in this document, assumptions have been made regarding, among other things: the impact of increasing competition; the general stability of the economic and political environment in which Pieridae operates; the timely receipt of any required regulatory approvals; the ability of Pieridae to obtain and retain qualified staff, equipment and services in a timely and cost efficient manner; the ability of the operator of the projects which Pieridae has an interest in to operate the field in a safe, efficient and effective manner; the ability of Pieridae to obtain financing on acceptable terms; the ability to replace and expand oil and natural gas resources through acquisition, development and exploration; the timing and costs of pipeline, storage and facility construction and expansion and the ability of Pieridae to secure adequate product transportation; future oil and natural gas prices; currency, exchange and interest rates; the regulatory framework regarding royalties, taxes and environmental matters in the jurisdictions in which Pieridae operates; timing and amount of capital expenditures; future sources of funding; the ability of Pieridae to execute a EPCC contract with a creditworthy counterparty; production levels; weather conditions; success of exploration and development activities; access to gathering, processing and pipeline systems; advancing technologies; and the ability of Pieridae to successfully market its oil and natural gas products.

Readers are cautioned that the foregoing list of factors is not exhaustive. Additional information on these and other factors that could affect Pieridae's operations and financial results are included in reports on file with Canadian securities regulatory authorities and may be accessed through the SEDAR website (www.sedar.com), and at Pieridae's website (www.pieridaeenergy.com).

Although the forward-looking statements contained herein are based upon what management believes to be reasonable assumptions, management cannot assure that actual results will be consistent with these forward-looking statements. Investors should not place undue reliance on forward-looking statements. These forward-looking statements are made as of the date hereof and Pieridae assumes no obligation to update or review them to reflect new events or circumstances except as required by applicable securities laws.

Forward-looking statements contained herein concerning the oil and gas industry and Pieridae's general expectations concerning this industry are based on estimates prepared by management using data from publicly available industry sources as well as from reserve reports, market research and industry analysis and on assumptions based on data and knowledge of this industry which Pieridae believes to be reasonable. However, this data is inherently imprecise, although generally indicative of relative market positions, market shares and performance characteristics. While Pieridae is not aware of any misstatements regarding any industry data presented herein, the industry involves risks and uncertainties and is subject to change based on various factors.

PRESENTATION OF INFORMATION

The information contained in this Annual Information Form ("**AIF**") is presented as at December 31, 2020 except where otherwise noted.

In this AIF, unless otherwise noted, all dollar amounts are expressed in Canadian dollars.

This AIF and certain documents incorporated by reference herein make reference to certain financial measures that are not recognized by International Financial Reporting Standards ("IFRS"), sometimes referred to as Generally Accepted Accounting Principles ("GAAP"). These financial measures do not have standardized meanings prescribed by IFRS and therefore are referred to a non-GAAP measures. These non-GAAP measures may not be comparable to similar measures presented by other issuers. An example of a Non-GAAP financial measure in this AIF is Netbacks. Netbacks are per boe and per mcf performance measures used in the analysis of operational activities. Pieridae assess netbacks to assess the operational and financial performance of the Corporation versus third party crude oil and natural gas producers. Investors are cautioned that these non-GAAP financial measures should not be construed as alternatives to other measures of financial performance calculated in accordance with GAAP. For information regarding the non-GAAP financial measures used by the Corporation, including a reconciliation to the most comparable GAAP measure for each such non-GAAP measure, see "Non-GAAP Financial Measures" in Pieridae's Management Discussion and Analysis ("**MD&A**") for the years ended December 31, 2020 and 2019. The MD&A is available on SEDAR at www.sedar.com

ABBREVIATIONS AND CONVERSIONS TABLE

The following are abbreviations of terms used in this AIF and a conversion table from Imperial to Metric units. Additional terms relating to reserves and other oil and gas information have the meanings set forth in Appendix E – *Definitions Used for Reserve and Resource Categories*.

ABCA	*Business Corporations Act* (Alberta), as amended, including the regulations promulgated thereunder.
APA	*Partnership Act* (Alberta), as amended, including the regulations promulgated thereunder
BCCA	*Company Act* (British Columbia), as amended, including the regulations promulgated thereunder
CBCA	*Canada Business Corporations Act*, as amended, including the regulations promulgated thereunder
NBBCA	*Business Corporations Act* (New Brunswick), as amended, including the regulations promulgated thereunder
NI 51-101	National Instrument 51-101 - *Standards of Disclosure for Oil and Gas Activities*
QBCA	*Business Corporations Act* (Quebec), as amended, including the regulations promulgated thereunder

Table 1: Conversion Factors

Conversion Factors		
barrels (bbl) (@ 60°F)	x 0.15898	= cubic metres (m^3) (@ 15°C), water
bbl (@ 60°F)	x 0.15798	= m^3 (@ 15°C), ethane
bbl (@ 60°F)	x 0.15873	= m^3 (@ 15°C), propane
bbl (@ 60°F)	x 0.15881	= m^3 (@ 15°C), butanes
bbl (@ 60°F)	x 0.15891	= m^3 (@ 15°C), oil, pentanes plus
thousands of cubic feet (Mcf) (@ 14.65 psia, 60°F)	x 28.17399	= m^3 (@ 101.325 kPaa, 15°C)
Mcf (@ 14.65 psia, 60°F)	x 0.02817399	= 1,000 cubic metres (10^3m^3) (@ 101.325 kPaa, 15°C)
acres	x 0.4046856	= hectares (ha)
acres	x 4.046856	= 1,000 square metres (10^3m^2)
Btu	x 1054.615	= joules (J)
British thermal units per standard cubic foot (Btu/Scf)	x 0.03743222	= megajoules per cubic metre (MJ/m3)
(@ 14.65 psia, 60°F)		(@ 101.325 kPaa, 15°C)
$/Mcf (1,000 Btu gas)	x 0.9482133	= dollars per gigajoule ($/GJ)
$/Mcf (@ 14.65 psia, 60°F) Alta.	x 35.49373	= $/$10^3m^3$ (@ 101.325 kPaa, 15°C)
$/Mcf (@ 15.025 psia, 60°F), B.C.	x 35.494	= $/$10^3m^3$ (@ 101.325 kPaa, 15°C)
feet (ft)	x 0.3048	= metres (m)
miles (mi)	x 1.609344	= kilometers (km)
$/bbl	x 6.29287	= $/$m^3$ (average for 30°-50° API)
GOR (scf/bbl)	x 0.177295	= gas/oil ratio (GOR) (m^3/m^3)
psi	x 6.894757	= kilopascals (kPa)
gallons (Imperial)	x 4.54609	= litres (L) (.001 m^3)
gallons (U.S.)	x 3.785412	= litres (L) (.001 m^3)

PIERIDAE ENERGY LIMITED

NAME, ADDRESS AND INCORPORATION

Pieridae Energy Limited (corporation number 10341223) (the "**Corporation**" or "**Pieridae**") maintains its head office at 308 – 4th Avenue S.W., Suite 3100, Calgary, Alberta, Canada T2P0H7 and an LNG office at 1718 Argyle Street, Suite 730 Halifax, Nova Scotia, Canada B3J 3N6. The registered office of the Corporation is located at 400 – 3rd Avenue S.W., Suite 3700, Calgary, Alberta, Canada T2P 4H2.

The Corporation was formed on October 24, 2017 by the amalgamation of Pétrolia Inc. (corporation number 91126094) and Pieridae Energy Limited (corporation number 8203962) ("**Former Pieridae**") pursuant to a plan of arrangement effected under the CBCA (the "**PEL Arrangement**").

The Corporation acquired all of the issued and outstanding shares of Ikkuma Resources Corp. ("**Ikkuma**") on December 20, 2018 pursuant to a plan of arrangement effected under section 193 of the ABCA (the "**IKK Arrangement**"). In consideration for the shares of Ikkuma, the Corporation issued 21.6 million of its common shares, valued at approximately $56.1 million, to the then shareholders of Ikkuma. On October 17, 2019 Ikkuma changed its name to "Pieridae Alberta Production Ltd.".

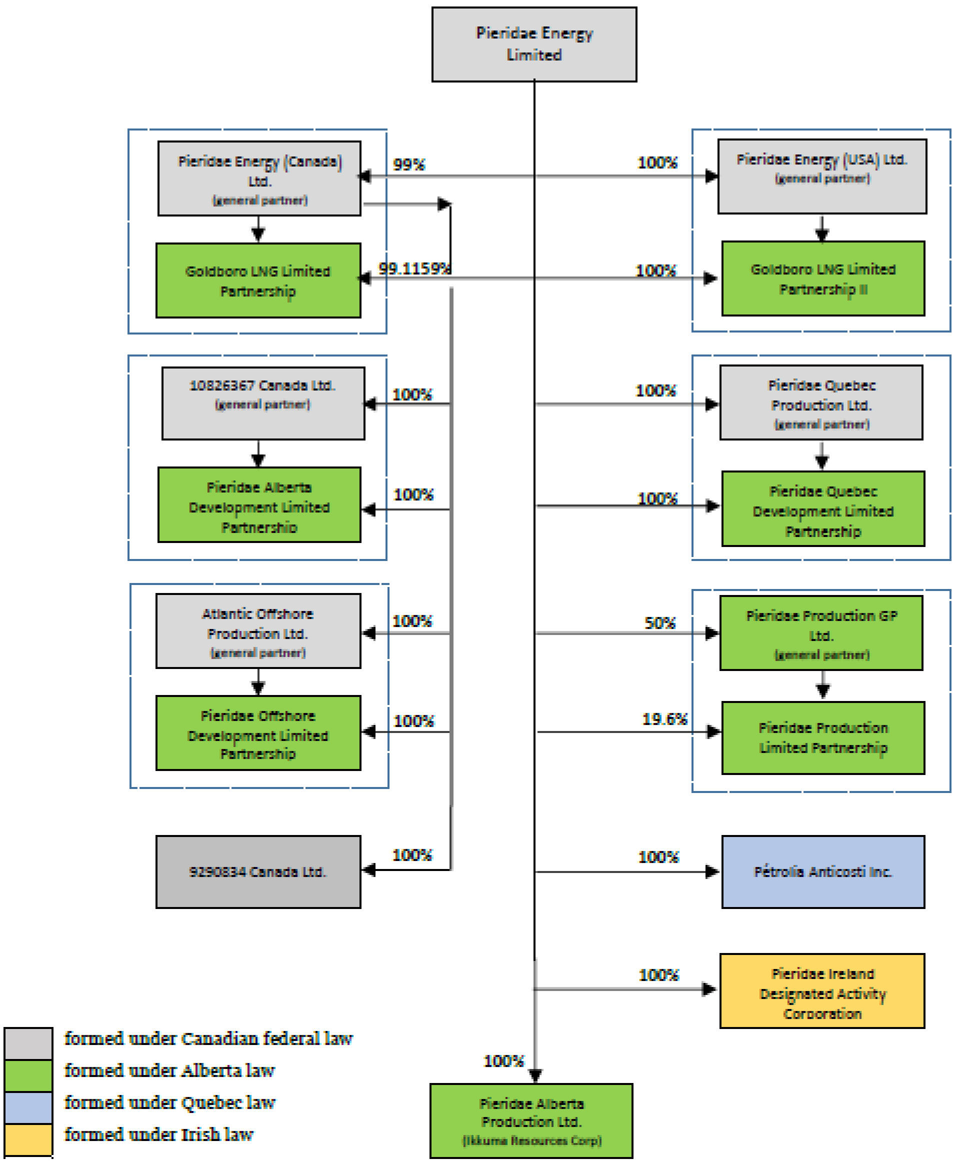
The Corporation is a reporting issuer, or the equivalent, in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Québec, New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland and Labrador. The common shares of the Corporation trade on the TSX under the symbol "PEA". The Corporation is extra-provincially registered in Alberta and Québec.

INTERCORPORATE RELATIONSHIPS

The Table 1 below describes the intercorporate relationships among Pieridae and its subsidiaries.

The percentages indicated in Table 1 represent the percentage of votes that attach to all voting securities of the subsidiary that are beneficially owned, or controlled or directed, directly or indirectly by the Corporation.

Table 1: Corporate Structure



Pieridae Energy Limited

Pieridae, which is described above, is the ultimate majority shareholder or majority voting partner, as the case may be, of the following entities:

Pieridae Energy (Canada) Ltd.

Pieridae Energy (Canada) Ltd. ("**Pieridae Canada**") is the sole general partner of Goldboro LNG Limited Partnership. Pieridae Canada was incorporated on February 14, 2012 under the CBCA and is extra-provincially registered under the ABCA and under the *Corporations Registration Act* (Nova Scotia).

Goldboro LNG Limited Partnership

Goldboro LNG Limited Partnership ("**Goldboro Canada LP**") was formed on December 11, 2012 under the APA for the purposes of developing, constructing and operating the proposed Goldboro LNG Facility (excluding Train Two) and of procuring long-term conventional natural gas supply from its affiliates in Canada and transporting the natural gas to the proposed Goldboro LNG Facility for use as feed gas and fuel in the production of LNG from Train One.

Pieridae Energy (USA) Ltd.

Pieridae Energy (USA) Ltd. ("**Pieridae USA**") is the sole general partner of Goldboro LNG Limited Partnership II. Pieridae USA was incorporated on August 16, 2013 under the CBCA and is extra-provincially registered under the ABCA and under the *Corporations Registration Act* (Nova Scotia).

Goldboro LNG Limited Partnership II

Goldboro LNG Limited Partnership II ("**Goldboro USA LP**") was formed on September 24, 2013 under the APA for the purposes of developing, constructing and operating Train Two of the proposed Goldboro LNG Facility, procuring long-term natural gas supply from its affiliates in Canada and producers in the U.S.A. and transporting the natural gas to the proposed Goldboro LNG Facility for use as feed gas and fuel in the production of LNG from Train Two. No such supply agreement has yet been entered into by Goldboro USA LP with any such producers.

10826367 Canada Ltd.

10826367 Canada Ltd. ("**10826367**") is the sole general partner of Pieridae Alberta Development Limited Partnership. 10826367 was incorporated on June 6, 2018 under the CBCA and is extra-provincially registered under the ABCA. 10826367 is presently inactive.

Pieridae Alberta Development Limited Partnership

Pieridae Alberta Development Limited Partnership ("**Alberta Development LP**") was formed on June 29, 2018 under the APA for the purposes of acquiring and developing natural gas resource properties in Western Canada. Alberta Development LP is presently inactive.

Pieridae Québec Production Ltd.

Pieridae Québec Production Ltd. ("**Québec Production**") is the sole general partner of Pieridae Québec Development Limited Partnership. Québec Production was incorporated on December 27, 2017 under the CBCA and is extra-provincially registered under the ABCA and under the QBCA.

Pieridae Québec Development Limited Partnership

Pieridae Québec Development Limited Partnership ("**Québec Development LP**") was formed on April 13, 2018 under the APA for the purposes of acquiring and developing natural gas resource properties in Québec. Québec Development LP is the owner of the resource properties situated in Québec formerly held by Pétrolia Inc.

Atlantic Offshore Production Ltd.

Atlantic Offshore Production Ltd. ("**Atlantic Production**") is the sole general partner of Pieridae Offshore Development Limited Partnership. Atlantic Production was incorporated on September 23, 2015 under the CBCA and is extra-provincially registered under the ABCA and under the *Corporations Registration Act* (Nova Scotia). Atlantic Production is presently inactive.

Pieridae Offshore Development Limited Partnership

Pieridae Offshore Development Limited Partnership ("**Offshore Development LP**") was formed on October 20, 2015 under the APA for the purposes of acquiring and developing natural gas resource properties in the Atlantic provinces. Offshore Development LP is presently inactive.

Pieridae Production GP Ltd.

Pieridae Production GP Ltd. ("**Production GP**") is the sole general partner of Pieridae Production Limited Partnership. Production GP was incorporated on February 5, 2013 under the ABCA and is extra-provincially registered under the NBBCA.

Pieridae Production Limited Partnership

Pieridae Production Limited Partnership ("**Production LP**") was formed on February 27, 2013 under the APA for the purposes of acquiring and developing natural gas resource properties in New Brunswick.

9290834 Canada Ltd.

9290834 Canada Ltd. ("**9290834**") was incorporated on May 11, 2015 under the CBCA and is extra-provincially registered under the ABCA and under the *Corporations Registration Act* (Nova Scotia). 9290834, in its capacity as agent and bare trustee of Pieridae Canada and Goldboro Canada LP, holds legal title to the lands on which the proposed Goldboro LNG Facility is being developed and is proposed to be constructed and operated.

Pétrolia Anticosti Inc.

Pétrolia Anticosti Inc. ("**Pétrolia Anticosti**") was incorporated on March 17, 2014 under the QBCA and currently provides services in relation to the demobilization of infrastructure and the capping of wells necessitated by a settlement made between Pétrolia Inc. and the Government of Québec pursuant to which the corporation received compensation for the termination by the government of the corporation's right to conduct oil and gas exploration and development activities on Anticosti Island. For additional information concerning the terms of settlement, refer to the joint information circular of Pétrolia and Former Pieridae dated August 29, 2017 filed on SEDAR at www.sedar.com.

Pieridae Alberta Production Ltd.

Pieridae Alberta Production Ltd. ("**Alberta Production**") was incorporated on October 18, 1979 as "Rambler Explorations Ltd." under the BCCA. It changed its name to "Ramcor Resources Inc." on January 11, 1985, to "Rampton Oil Corporation" on June 1, 1993, to "Rampton Resource Corporation" on July 17, 1996, to "PanTerra Exploration Corp." on August 15, 2002 and to "PanTerra Resource Corp." on September 1, 2004. On October 27, 2005 the corporation continued out of British Columbia and into Alberta as "PanTerra Resource Corp.". The corporation changed its name to "Ikkuma Resources Corp." ("**Ikkuma**") on September 19, 2014 and to "Pieridae Alberta Production Ltd." on October 17, 2019. Alberta Production is extra-provincially registered under the ABCA, the *Business Corporations Act* (British Columbia) and *The Business Corporations Act* (Saskatchewan). In addition to the properties that Alberta Production acquired since its incorporation, the corporation recently acquired natural gas resource properties and related infrastructure from Shell Canada Energy ("**Shell**").

Pieridae Ireland Designated Activity Corporation

Pieridae Ireland Designated Activity Corporation was incorporated on January 4, 2021 under the laws of Ireland with company registration number 686057 for the purpose of acting as the sole authorized representative of Pieridae in accordance with Article 27 of the European Union ("**EU**") General Data Protection Regulation.

Reorganizations

Other than the PEL Arrangement and the IKK Arrangement, the Corporation and its subsidiaries have not been subject to any reorganization within the three most recently completed financial years.

THREE YEAR HISTORY OF THE BUSINESS

The following is a summary description of the major events which influenced the general development of the Corporation and its predecessors, and which are material to the current business of the Corporation.

Developments in 2018

Appointment of Financial Advisors

On February 27, 2018, Pieridae announced it had engaged Morgan Stanley & Co, LLC ("**Morgan Stanley**") and SG Americas Securities, LLC to serve as financial advisors for the Goldboro LNG Facility. After year end the engagement with Morgan Stanley was terminated on mutually acceptable terms with effect as of February 19, 2019.

On August 15, 2018 Pieridae announced the appointment of KfW IPEX-Bank as an additional adviser to assist it in finalizing a multibillion US dollar untied loan guarantee from the German federal government under its Bundesgarantien für ungebundene Finanzkredite (federal guarantee for untied finance credit) program (the "**UFK**").

Purchase and Sale Agreement

On May 7, 2018, Pieridae announced that it had entered into a term sheet to negotiate a binding liquefied natural gas ("**LNG**") purchase and sale agreement to supply Canadian-sourced liquefied natural gas to Europe from Train Two of the Goldboro LNG Facility. Under the term sheet with Pieridae, the off taker, AXPO Trading A.G., will purchase up to 1 million tonnes *per annum* of LNG. This arrangement is proposed to begin from the start of commercial deliveries (from the Train 2 production) and last for a 10-year period.

Appointment of New Directors

On June 27, 2018, the Corporation announced the election of Mr. Kjell Pedersen as a new independent director. On December 21, 2018 the Corporation appointed Mr. Tim de Freitas as a new non-independent director.

Arrangement with Ikkuma (now Pieridae Alberta Production Ltd.)

On August 24, 2018, Pieridae and Ikkuma announced that they had entered into the IKK Arrangement, a definitive agreement dated August 23, 2018 providing for the acquisition by Pieridae of all of the issued and outstanding shares of Ikkuma in consideration for shares of Pieridae to be effected by way of a plan of arrangement under section 193 of the ABCA.

On December 20, 2018, the Corporation and Ikkuma announced that they had completed the arrangement, whereby Pieridae acquired of all the issued and outstanding shares of Ikkuma in consideration for the issuance of 21.6 million common shares of Pieridae valued at approximately $56.1 million.

On completion of the IKK Arrangement, each shareholder of Ikkuma received, for each common share of Ikkuma, 0.1926 of a common share of Pieridae and 0.1 of a share of a corporation wholly-owned by Ikkuma immediately prior to the completion, Briko Energy Corp. ("**ExploreCo**") (with Ikkuma shareholders holding 100% of ExploreCo upon completion of the Arrangement). The exchange ratio valued the shares of Ikkuma at $0.86 per share (excluding the value of ExploreCo shares), representing a premium of 188% to the closing price of $0.30 per share as of August 23, 2018 of Ikkuma common shares on the TSXV. Pieridae shareholders owned approximately 70% of the outstanding shares of the Corporation after completion of the IKK Arrangement.

Appointment of CFO

On September 1, 2018 Mr. Mario Racicot resigned as the chief financial officer ("**CFO**") of Pieridae, and on September 14, 2018 Pieridae announced the appointment of Ms. Melanie Litoski as CFO.

Québec Regulatory Changes

On September 20, 2018 the Government of Québec adopted new regulations aimed at Québec oil and gas development. The new regulations curtail oil and gas development within a 1,000-metre radius of any urban area. The new regulations adversely impacted some of Pieridae's properties in Québec. The carrying value of those properties for accounting purposes have been written down to reflect their economic impairment.

German Loan Guarantee

On October 29, 2018 Pieridae announced that its proposed financing of upstream activities within the Goldboro LNG Project received a written confirmation of eligibility in principle for up to U.S. $1.5 billion of untied loan guarantee by the German federal government under its UFK program. This confirmation satisfied a condition to completion of the IKK Arrangement and marked an important milestone in advancing the Goldboro LNG Project towards a final investment decision ("**FID**"). This prospective U.S. $1.5 billion German government loan guarantee in relation to the proposed financing of conventional upstream natural gas development is in addition to a similar confirmation in principle of UFK eligibility that was previously announced, namely for up to U.S. $3.0 billion of prospective German government loan guarantees in relation to the proposed financing of the construction of the Goldboro LNG Facility (excluding Train Two) and all associated facilities.

The final terms and conditions of both guarantees will be negotiated in the context of an overall project financing. Given that the rationale of Germany´s UFK program is to enhance security of commodity supply, the actual grant of the guarantees will be subject to, among other things, a commitment that a pre-determined amount of LNG produced annually from Train One of the proposed Goldboro LNG Facility over a term of twenty years (with an option for an additional ten years) will be delivered to, and be regasified in, Europe. In 2013, Uniper Global Commodities S.E. ("**Uniper**") entered into a twenty-year agreement with Goldboro Canada LP to purchase approximately 4.8 million tons per annum of LNG produced from Train One of the proposed Goldboro LNG Facility. This agreement was subsequently amended on February 3, 2016, June 2, 2017, November 1, 2018 and July 9, 2019 thereby extending the deadline imposed on Pieridae for satisfying certain conditions thereunder. The amendment of this agreement on November 1, 2018 satisfied a condition to the completion of the IKK Arrangement.

Goldboro Construction Permit

On November 5, 2018 the Nova Scotia Utility and Review Board issued the permit to construct the Goldboro LNG Facility. Pieridae expects to proceed to satisfy each of the associated conditions of that permit and to commence the construction of the Goldboro LNG Facility as soon as a positive FID is taken by Pieridae.

AIMCo Financing

On November 15, 2018, the Corporation announced that it has completed a financing for a $20.0 million senior secured term loan (the "**Term Loan**") with AIMCo. The Term Loan bore annual interest at 9.5% and matured on the earliest of the closing of the Shell Acquisition, as defined below, and March 31, 2022. Proceeds from the Term Loan were used to repay Ikkuma's existing syndicated credit facility of $4.0 million and proceed with Ikkuma's flow-through drilling program of $12.0 million to be spent by December 31, 2018. As a result of completing the Term Loan with AIMCo and repaying all outstanding bank debt, Ikkuma terminated its amended and restated syndicated credit agreement with its banking syndicate.

Private Placement

On December 18, 2018 Pieridae announced the closing of a private placement, under which the Corporation issued 2,358,824 units at $3.40 per unit, for total consideration of $8.0 million. Each unit consists of: (i) one common share in the capital of Pieridae ("**Common Shares**"); and (ii) one half common share purchase warrant (the "**Warrants**"), with each whole Warrant entitling the holder thereof to acquire one Common Share at an exercise price of $5.67, representing a premium of approximately 167% to the unit price, at any time prior to the second anniversary of December 18, 2018.

Developments in 2019

Ratification of Benefits Agreement

On February 4, 2019 Pieridae and the Assembly of Nova Scotia Mi'kmaq Chiefs ratified the previously negotiated Nova Scotia Mi'kmaq Benefits Agreement (the "**Benefits Agreement**"). This Benefits Agreement establishes the framework under which the Mi'kmaq of Nova Scotia will benefit economically from the development, construction and operation of the Goldboro LNG Project. A Memorandum of Understanding signed in 2013 originally outlined the relationship between Pieridae and the Mi'kmaq in Nova Scotia and this new Benefits Agreement underscores Pieridae's commitment to ongoing engagement and relationship building with the First Nations communities in Nova Scotia.

Private Placements

Between February 12, 2019 and March 6, 2019 the Corporation raised an aggregate of $17.9 million through the issuance of 8,956,000 common shares at a price of $2.00 per common share in concurrent brokered and non-brokered private placements, including shares issued under an overallotment option granted to a syndicate of investment dealers co-led by KES 7 Capital Inc., National Bank Financial Inc. and Laurentian Bank Securities Inc. Within this offering, certain officers and directors of Pieridae subscribed for a total of 150,000 common shares pursuant to the non-brokered offering for aggregate gross proceeds of $0.3 million. In addition, AIMCo made a strategic investment in Pieridae by purchasing 5,000,000 common shares on behalf of certain of its clients.

Engagement of KBR

On April 1, 2019, Pieridae engaged Kellogg Brown & Root Limited ("**KBR**") to perform a review of an amended version of the previously prepared front-end engineering and design ("**FEED**") study for the proposed Goldboro LNG Facility. KBR was also retained to conduct an open-book estimate ("**OBE**") necessary for entering into a project specific, fixed price engineering, procurement, construction and commissioning ("**EPCC**") contract.

Acquisition of Foothills Assets from Shell, Loan with Third Eye Capital and Private Placement

On June 26, *2019, Pieridae* signed a purchase and sale agreement ("**Shell PSA**") with Shell to purchase all of Shell's midstream and upstream assets in the southern Alberta foothills (the "**Shell Foothills Assets**") for a purchase price of $190.0 million, subject to normal adjustments (the "**Shell Acquisition**"). The Shell Acquisition more than doubled Pieridae's production, added three deep cut, sour gas processing plants (Jumping Pound Gas plant, Caroline Gas Complex and Waterton Complex) with combined processing capacity of approximately 750 mmcf/d, and upon closing on October 16, 2019 positioned Pieridae as the dominant foothills natural gas producer in the Western Canada Sedimentary Basin. As part of the consideration, 15,219,619 common shares of the Corporation were issued to Shell. In conjunction with the signing of the Shell PSA, the Corporation *launched:*

(i) a non-brokered private placement of a secured convertible debenture of the Corporation for aggregate gross proceeds of $10.0 million;
(ii) a non-brokered private placement of common shares at a price of $0.86 per common share, for gross proceeds of up to $2.2 million;
(iii) a non-brokered private placement of 711,967 subscription receipts of the Corporation at a price of $0.86 per subscription receipt, for aggregate gross proceeds of $612,291.62; and
(iv) a brokered private placement of 38,225,883 subscription receipts of the Corporation at a price of $0.86 per subscription receipt, for aggregate gross proceeds of approximately $32 million. This includes a subscription of 23,255,813 subscription

receipts from Erikson National Energy Inc. (“**Erikson**”), through its agent, Third Eye Capital Corporation (“**TEC**”). This resulted in Erikson becoming a significant shareholder of the Corporation.

The proceeds of these private placements were used to partly fund the Shell Acquisition. On the closing of the Shell Acquisition, each subscription receipt issued was automatically converted into one common share of Pieridae, on a one-to-one basis, without any further action on the part of the subscriber and without the payment of additional consideration.

Concurrently, TEC, as agent of the lenders, issued a senior secured non-revolving term loan facility in the aggregate amount of $206.0 million (the “**TEC Term Loan**”), at a fixed rate of 15% *per annum*. The advance under the TEC Term Loan was used to partially fund the Shell Acquisition, to repay Ikkuma’s then current outstanding debt owed to AIMCo pursuant to the term loan entered into with AIMCo on December 20, 2018, to fund letters of credit required for existing and purchased assets, and to satisfy all fees and expenses associated with the TEC Term Loan and Shell Acquisition. As part of the conditions of the TEC Term Loan, Mark Horrox, a Principal at TEC, was appointed to the Board of Directors on November 1, 2019.

Extension of Key Deadlines with Uniper

On July 9, 2019 Uniper and Pieridae negotiated an extension of key deadlines under its 20-year offtake agreement to September 30, 2020.

Appointment of CFO

On November 11, 2019, Robert Dargewitcz was appointed CFO.

Developments in 2020

Extension of Key Deadlines with Uniper

On May 5, 2020 Uniper and Pieridae negotiated a further extension of key deadlines under its 20-year offtake agreement to June 30, 2021, by which date the corporation is required to make a positive FID for the Corporation’s proposed Goldboro LNG facility. Under the agreement, the expected date for the first commercial deliveries of gas to Uniper is between August 31, 2025 and February 28, 2026.

AER Decision Regarding the Transfer of Licenses Associated with the Shell Foothills Assets

On May 15, 2020 the Alberta Energy Regulator (“**AER**”) rejected Shell’s application to transfer the licenses associated with the Shell Foothills Assets to Alberta Production and create new licenses for Shell for equipment being retained by Shell under the Shell Acquisition. The decision was based on the AER’s interpretation that it did not have the authority to create the new licenses for Shell and there were practical and regulatory consequences to having Pieridae and Shell each having AER licenses for equipment and plant on the same site. This issue only applies to the Waterton and Jumping Pound gas plants.

Shell and Alberta Production moved swiftly to evaluate options on the transfer applications and sought clarity from the AER on an appropriate path forward.

On January 4, 2021 Shell resubmitted the applications to transfer the licenses for the Shell Foothills Assets to Alberta Production and the AER is processing the applications in the normal course.

Pieridae Graduates to the TSX

On June 1, 2020 Pieridae’s common shares were approved for listing on the Toronto Stock Exchange ("**TSX**") and began trading on the TSX at the opening of the market on July 3, 2020 under the symbol “PEA”. Concurrent with the TSX listing, the common shares of Pieridae were de-listed from the TSXV.

KBR Alters its Position Regarding the Goldboro LNG Contract

On July 13, 2020 Pieridae received written notice from KBR regarding the firm’s exit from fixed price energy projects in order to refocus on its government services business, resulting in them no longer being prepared to negotiate and conclude a lump-sum turnkey Engineering, Procurement, Construction and Commissioning (“EPCC”) contract in relation to the proposed Goldboro LNG Facility.

Pieridae Secures a $6 Million Account-Security Guarantee Facility from Export Development Canada

On July 29, 2020 Pieridae announced it had received approval from Export Development Canada (“**EDC**”) for a CAD$6 million guarantee facility as part of EDC’s Account Performance Security Guarantee (“**APSG**”) program. The program provides a 100%

guarantee to the issuing bank of certain of Pieridae's existing and future letters of credit ("**LCs**"). The APSG allowed Pieridae to release certain cash collateral requirements provided as security for certain existing and potential future LCs.

Appointment of SVP, LNG

Effective August 27, 2020 Pieridae engaged Andy Mukherjee as Senior Vice-President LNG.

Engagement of Bechtel

On September 29, 2020 Pieridae signed a services agreement with Bechtel related to Pieridae's Goldboro LNG Facility. Some of the key deliverables in the services agreement are:

i. Initiating a detailed review of the scope and design of the Goldboro LNG Facility and developing a comprehensive EPCC execution plan by March 31, 2021;
ii. Delivering a final lump sum, turnkey EPCC contract price proposal by May 31, 2021; and
iii. Conducting a meaningful engagement with the Nova Scotia Mi'kmaq First Nations including their participation in the construction of a large-scale work camp at the Goldboro LNG Facility site.

On September 30, 2020 Pieridae signed a Letter of Award selecting Black Diamond Group and 13 Nova Scotia Mi'ikmaq communities to exclusively negotiate the contract to build a $720 million workforce lodge and amenities during the four-year construction phase of the Goldboro LNG Facility. The lodge will be home to approximately 5,000 workers who will build the multi-billion-dollar Goldboro LNG Facility. Black Diamond will be responsible for the lodge, and the Mi'kmaq will provide hospitality services such as catering, housekeeping and guest services.

Recent Developments

For 2021, the Corporation is committed to meeting its goals and targets across a number of key focus areas. The following corporate goals have been approved by the Board of Directors:

Priority	Description	Measurement
Achieve EBITDA target	Maximize revenue through production volumes, cost control and governance across all cost areas	• Meet 2021 Budget and Guidance
Maintain and improve Health, Safety, Environment & Regulatory **("HSE-R")** performance	Progress and improve our HSE-R culture and uphold our reputation through safeguarding of our employees, assets, environment & communities	• Meet HSE-R Key Performance Indicators • Meet ESG goals as set in inaugural ESG report • Not on the enforcement ladder and 0 RAM 4 events
Improve capital use and efficiency	Implement development plan of Foothills production and secure additional resource supply required for Goldboro LNG Train 2	• Drilling and completion costs and volumes on budget • Growth opportunities identified
Advance Goldboro LNG Project to construction phase	Complete project planning requirements including EPCC contracts, financing (debt & equity) and labour models	• FID achieved and site construction has commenced
Strengthen organizational infrastructure	Build a sustainable "One Pieridae" culture and improve external stakeholders' interest in the Corporation	• Implement Pieridae Leadership Development plans, compensation philosophy and framework. • Measure turnover and employee engagement and implement corrective actions. • Publish an inaugural ESG report • increase investor analyst coverage.

DESCRIPTION OF OUR BUSINESS

Mission & Strategy

The Corporation is focused on becoming the first Canadian-owned LNG producer that integrates (a) upstream activities consisting primarily of the acquisition and development of natural gas resource properties situated primarily in Alberta, the extraction of natural gas and other commodities from those properties and the initial processing of the natural gas in or near the field (the "**Upstream Sector**") and (b) midstream activities consisting primarily on the delivery of natural gas by pipeline to the site of the proposed Goldboro LNG Facility where it is further processed and liquefied to produce LNG for sale to customers for export to international markets and to specific markets in North America (the "**LNG Sector**" and together with the Upstream Sector, the "**Goldboro LNG Project**").

The Corporation's fundamental strategy is to acquire currently under-valued natural gas reserves (primarily in Alberta), and exploit these properties for the purpose of supplying natural gas to the proposed Goldboro LNG Facility, to construct the Goldboro LNG Facility and develop the natural gas reserves with low-cost project financing (which is supported to a substantial degree by government guarantees) and to operate the Goldboro LNG Facility to produce high-valued LNG for sale in international markets.

The Corporation intends to construct the Goldboro LNG Facility near the community of Goldboro situated in the Municipality of the District of Guysborough on the north eastern coast of Nova Scotia. The Goldboro LNG Facility will be constructed in phases and will include (a) two trains ("**Train One**" and "**Train Two**", respectively), each with the capacity to produce approximately 4.8 million tonnes of LNG annually, (b) a power plant which will generate the electricity required to operate the Goldboro LNG Facility, (c) two LNG storage tanks and (d) marine structures and a jetty which will be equipped to accommodate concurrently two LNG vessels, each with a cargo capacity of up to 250,000 m^3 of LNG.

Many key elements of the Goldboro LNG Project are already in place including:

i. the Corporation's acquisition of natural gas reserves (discussed below) achieved through the 2018 acquisition of Ikkuma (re-named Pieridae Alberta Production Ltd.), a foothills natural gas producer based in Alberta and BC, and the 2019 purchase of natural gas resource properties and related infrastructure from Shell;
ii. an environmental assessment issued to the Corporation in relation to the Goldboro LNG Facility by the Government of Nova Scotia;
iii. a permit to construct the Goldboro LNG Facility granted by the Nova Scotia Utility Review Board to the Corporation;
iv. the execution of a project special needs collective agreement which establishes the applicable rates of the various trades personnel who will be engaged to construct the Goldboro LNG Facility;
v. the execution of a First Nations benefits agreement;
vi. the execution of a long-term (twenty-year) LNG offtake agreement contemplating the sale of 5 million tons of LNG *per annum* to Uniper, a major German energy enterprise; and
vii. the written confirmation of eligibility in principle of up to U.S. $4.5 billion loan guarantees by the German federal government under its UFK program.

Pieridae believes strongly in the responsible development of its natural gas resource properties and to that end, the Corporation has committed that none of the LNG that will be produced from Train One and sold to Uniper under its long-term LNG offtake agreement will be produced from natural gas that has been extracted using multistage fracturing stimulation.

Moreover, Pieridae's production of LNG supports the global trend of generating electricity increasingly from natural gas as an alternative to coal. The International Energy Agency has stated that the rate of global carbon dioxide emissions did not increase in 2019 as many governments across the world embarked on an ambitious energy transition. The agency attributed the flat growth to the greater role of renewable sources in power generation, fuel switching from coal to natural gas, and higher nuclear power generation.

The Goldboro LNG Project is anticipated to directly generate long-term employment in the Upstream Sector (primarily in Alberta) as a consequence of the sustained development of the Corporation's natural gas resource properties over the next twenty-five to thirty years and in the LNG Sector (primarily in Nova Scotia) as a consequence of the construction and operation of the Goldboro LNG Facility.

The Corporation is presently focused on achieving the following additional objectives during 2021, leading to a positive financial investment decision for the construction of the Goldboro LNG Facility:

i. procure additional long-term supply of natural gas from sources located in Western and Eastern Canada;
ii. procure long-term transportation capacity on the existing pipeline systems that connect Empress, Alberta to Goldboro, Nova Scotia;
iii. negotiating and executing a fixed-price EPCC Contract with a creditworthy counterparty; and

iv. procure the capital (in the form of both project financing and equity) which is required to finance the construction of the Goldboro LNG Facility and the development of the natural gas reserves.

The Corporation's senior management is comprised of an experienced team of professionals in all key operational areas of the organization. Refer to "*Directors and Executive Officers*" in this AIF.

BUSINESS SEGMENTS

The Corporation's reportable segments are the Upstream Segment and the LNG Segment, as follows:

The Upstream Segment includes the ownership of natural gas resource properties, exploration, development and production of gas and natural gas liquids ("**NGLs**"), and gas transportation and processing facilities and associated infrastructure located primarily in the Western Canadian foothills. The Upstream Segment also includes unrealized gains and losses recorded on derivative financial instruments, and financing activities related to the upstream properties. The LNG Segment includes the development of the Goldboro LNG Facility. This segment also includes the corporate activities of the Corporation, and other corporate-wide costs for general and administrative expenses.

Upstream Segment

Through a series of mergers and acquisitions, Pieridae has become a significant mid-sized capitalized oil and gas entity including midstream operatorship, and now owns three large, deep cut, sour gas plants and associated sulphur forming facilities, together with various pipelines which are connected to the TC Energy NOVA pipeline system in Alberta (the "**NOVA system**"). All assets have been well managed, and will continue to be under Pieridae's stewardship, but are currently operating at below maximum throughput capacity. Pieridae's intent is in the short term to market available capacity for optimization and to ultimately maximize throughput of these facilities during the anticipated drilling program required to supply natural gas for liquefaction at the proposed Goldboro LNG Facility.

Pieridae's extensive footprint associated with the foothills gas fields will be revitalized to expand production by drilling shallow, deep, or offset reservoirs, reducing environmental impact by limiting further footprint expansion. The majority of Pieridae's reservoirs are "conventional" and occur within the complexly deformed part of the basin. As such, drilling technologies and subsurface understanding of these areas requires unique technical skills which Pieridae possesses but is rare within much of the Western Canada Sedimentary Basin.

Property description

As at December 31, 2020 the Corporation's land holdings are located in the provinces of Alberta, British Columbia ("**BC**"), Saskatchewan, Québec and New Brunswick. These lands cover a total area of approximately 1,610,901 acres on a gross basis and approximately 1,194,191 acres on a net basis. The following table describes the Corporation's land holdings categorized by province, and by cash generating unit ("**CGU**"). The Corporation did not have proved reserves or production during the year ended December 31, 2020 in Saskatchewan, New Brunswick or Quebec.

Table 2: Land Holdings

Areas	Gross Acres	Net Acres	Working Interest (%)
BC NORTH EAST (1)	100,236	92,056	92%
NORTHERN ALBERTA	270,457	200,948	74%
CENTRAL ALBERTA	590,549	421,791	71%
SOUTHERN ALBERTA	118,450	113,227	96%
SASKATCHEWAN	485	485	100%
Total Western Canada (2)	1,080,177	828,507	77%
NEW BRUNSWICK (3)	35,927	35,927	100%
QUÉBEC (4)	494,798	329,757	67%
Total Eastern Canada	530,725	365,684	69%
GRAND TOTAL	1,610,902	1,194,191	74%

(1) Included in the Northern Alberta CGU
(2) Pieridae Alberta Production Ltd.
(3) Pieridae Production Limited Partnership – Pieridae Energy Limited owns 19.656% of the partnership
(4) Pieridae Québec Development Limited Partnership – see the note below with respect to abandonments of exploration permits in Québec

British Columbia

BC North East

The Sierra and Ekwan areas are located roughly between 45km and 85km east of Fort Nelson, BC which was acquired as part of an acquisition from Husky Energy in 2017. Pieridae's working interest in the Sierra asset consists of approximately 26.2mmcf/d of production from the Pine Point Formation and is currently shut-in due to infrastructure constraints. Ekwan is currently producing approximately 7.5mmcf/d from the Jean Marie Formation which is transported southward in the NOVA system.

The Ojay area is non-operated and located on the border between BC and Alberta, approximately 100 km southwest of Grande Prairie, Alberta. The Corporation has a 40% working interest in a dehydration and compression station and various working interests in gas gathering systems. After compression and dehydration, gas produced from this location flows into Alberta to be processed at the Canadian Natural Resources Limited Narraway Gas Plant, in which the Corporation is a minority owner.

Combined, these properties represent approximately 5.5% of the Corporation's production for the year ended December 31, 2020 and consist of approximately 100,236 gross acres (approximately 92,056 net acres) representing an average working interest of 92%.

Alberta

Northern Alberta

The Northern Alberta area starts at the Alberta and BC border approximately 100 km southwest of Grande Prairie, Alberta and continues southeast to Hinton, Alberta. Assets in this area comprised the bulk of Alberta Production's production base prior to its acquisition by Pieridae. The area represents approximately 5.6% of the Corporation's production for the year ended December 31, 2020 and consists of approximately 270,457 gross acres (approximately 201,948 net acres) representing an average 74% working interest. The area has multiple gas dehydrators, compressors, transportation pipelines and gas gathering systems connected to the NOVA system. All production of conventional gas and NGLs from the Northern Alberta CGU are processed at non-operated processing facilities.

Central Alberta

The Central Alberta area straddles the areas north of the town of Rocky Mountain House and south along the Foothills to the Jumping Pound field west of Cochrane Alberta, including the Jumping Pound Gas Plant and the Caroline Gas Complex as further described below. As at December 31, 2020, the Corporation had an interest in approximately 590,549 gross acres (approximately 421,791 net acres) representing an average 71% working interest. Central Alberta represented 64.8% of the Corporation's production for the year ended December 31, 2020. Conventional natural gas and NGLs from the Central Alberta CGU are processed by Pieridae-owned and non-operated processing facilities.

Southern Alberta

The Southern Alberta area consists of the Waterton field in south west Alberta. As of December 31, 2020, the area consists of approximately 118,450 gross acres (approximately 113,227 net acres) representing an average 96% working interest. Southern Alberta represented 24.1% of the Corporation's production for the year ended December 31, 2020. The area includes the Waterton Complex as further described below. These production assets represent some of the most prolific natural gas fields in North American history with continued, long term remaining reserves.

Facilities and Infrastructure

Pieridae owns three large sour natural gas processing facilities: the Jumping Pound Gas Plant (100% working interest), the Waterton Complex (100% working interest) and the Caroline Gas Complex (74% working interest). Combined they represent over 750mmcf/d of potential processing capacity and have NGL fractionation capabilities. For the year ended December 31, 2020 these facilities operated at an average of 66**%** of current throughput capacity, representing significant opportunities for Pieridae for future development or acquisition of additional connected reserves.

The facilities are connected to the NOVA system and possess the capability to recover NGLs and Sulphur. They are also connected to CP Rail and have the ability to transport LPG's and sulphur to all points in North America. Additionally, Pieridae owns a significant amount of upstream transportation pipelines that interconnect with these facilities and provide sales points at multiple locations along NOVA system.

New Brunswick

On March 4, 2013, Former Pieridae entered into an agreement with Contact Exploration Inc. (subsequently Kicking Horse Energy Inc., which was subsequently acquired by ORLEN Upstream Canada Ltd.) to establish Production LP to acquire and develop natural gas resources in New Brunswick. The Corporation originally held a 16.98% interest in Production LP, which increased as a result of additional investments in 2015 to 19.656%. Pieridae is entitled to contribute an additional $14.1 million to Production LP prior to any further funding by the other partner, thereby increasing its ownership to 50%.

As of December 31, 2020, the Corporation held a 19.656% interest, as a limited partner, in Production LP and held a 50% interest, as a shareholder, in Production LP's general partner, Production GP. The Corporation's interest in Production LP and in Production GP are accounted for in the Corporation's consolidated financial statements using the equity method.

Québec

During the year the Corporation reduced its holdings in Québec and now holds approximately 497,798 gross acres (approximately 329,757 net acres) as at December 31, 2020. The Quebec lands are not anticipated to contribute to the Corporation's future LNG business, and abandoning some of the permits is expected to save approximately $0.5 million annually. The remaining properties of Haldimand and Bourque represent prospective opportunities for oil development and are not included in the abandonment plans. There continues to be no production or revenue generated from any of the Corporation's Québec assets.

Oil and Gas Wells

The following table sets forth the number and status of wells in which Pieridae has a working interest as at December 31, 2020.

TABLE 3: Oil and Gas Wells

	PRODUCING				NON-PRODUCING					
	Oil		Natural Gas		Oil		Natural Gas		SERVICE WELLS	
LOCATION	Gross[(1)]	Net[(2)]	Gross	Net	Gross	Net	Gross	Net	Gross	Net
ALBERTA	2	2	480	358	12	7	294	217	5	4
BRITISH COLUMBIA	-	-	102	94	-	-	54	45	3	3
SASKATCHEWAN	-	-	-	-	-	-	5	5	-	-
QUÉBEC	-	-	-	-	9	7	-	-	-	-
TOTAL	**2**	**2**	**582**	**452**	**21**	**14**	**353**	**267**	**8**	**7**

(1) "Gross" wells mean the number of wells in which Pieridae has a working interest or a royalty interest that may be convertible to a working interest.

(2) "Net" wells mean the aggregate number of wells obtained by multiplying each gross well by Pieridae's percentage working interest therein.

LNG Segment

The Goldboro LNG Facility site is near the community of Goldboro in Guysborough county in Nova Scotia. The site was selected to make use of existing infrastructure and is aligned with the Corporation's goal to minimize capital exposure by reusing existing, underutilized energy midstream infrastructure. The site is near to a decommissioned sour gas processing facility which gathered and processed gas from the offshore Scotia shelf at the Sable Island project, and it is tied into an existing sales pipeline (the "**Maritimes Northeast Pipeline**") which is conveniently located next to the site, and which will be used to deliver supply gas to the Goldboro LNG facility.

Pieridae has engaged Bechtel to carry out the Goldboro LNG Facility FEED verification and OBE followed by a lumpsum cost estimate, which is anticipated to be followed by a lumpsum turnkey EPCC award to Bechtel at FID. A joint venture between BESIX and Van Oord ("**BVOJV**") has prepared the FEED and OBE for the marine works comprising of a material offloading facility ("**MOF**") and two LNG tanker loading jetties. A lumpsum turnkey EPCC contract is anticipated to be awarded to BVOJV for this scope of work post FID. Pieridae has contracted a joint venture with Mi'kmaq, Black Diamond and Kent Homes ("**MBK**") to construct a worker's camp for 4,500 to 5,000 persons. Pieridae will also contract for the main site preparation and causeway, raw water pipeline and Highway-316 diversion for which a design request for quotation is being developed. These individual subprojects will be financed concurrently with a positive FID, and project execution will commence thereafter.

The Goldboro LNG Facility FEED is based on the Air Products and Chemicals, Inc. C3MR (propane mixed refrigerant) liquefaction technology in a split mixed refrigerant configuration with two Baker Hughes GE Frame 7EA Gas Turbine Drivers per train. Each LNG train will have a nominal LNG production capability of 4.8 Mtpa to provide an overall annual LNG production of 9.6 Mtpa over two trains. A two-train construction project is contemplated to span approximately 56 months. It is anticipated that much of the construction execution will be by assembling modules built in offshore yards while employing 4,500 to 5,000 local workers on site during the peak construction phase.

OTHER BUSINESS INFORMATION

Forward Contracts and Marketing

The Corporation has established a commodity hedging policy which requires management to achieve a hedge position of at least 60% of expected production on an 18-month rolling basis under normal circumstances. This requirement was waived for a portion of 2020 and 2021. Other than as disclosed in the financial statements of the Corporation for the year ended December 31, 2020, Pieridae is not bound by any agreement (including any transportation agreement), directly or through an aggregator, under which it is precluded from fully realizing, or may be protected from the full effect of, future market prices for natural gas or NGLs. Refer to Note19 “Financial Instruments and Risk Management – Market Risk” in the recently filed Consolidated Financial Statements of the Corporation as at and for the years ended December 31, 2020 and 2019 for further discussion on the Corporation's commodity hedging activities. Pieridae’s obligations or commitments for future physical deliveries of natural gas and NGLs are not expected to vary significantly from Pieridae’s future forecasted production.

Competitive Conditions

The oil and natural gas industry is very competitive. Pieridae has a strong competitive position in its core areas (see “Description of Properties”). Companies operating in the petroleum industry must manage risks which are beyond the direct control of Corporation personnel. Among these risks are those associated with exploration, environmental damage, commodity prices, foreign exchange rates, international political or economic conditions and interest rates. The oil and natural gas industry is competitive and Pieridae competes with a substantial number of other entities, some of which have greater technical or financial resources. Pieridae attempts to enhance its competitive position by operating in areas where it believes its technical personnel are able to reduce some of the risks associated with exploration, production and marketing because they are familiar with the areas of operation. Management believes that Pieridae will be able to explore for and develop new production and reserves with the objective of increasing its cash flow and reserve base. See “Risk Factors – Competition”.

Additionally, there are many inherent risks that must be considered in the development of an LNG export project, including worker productivity, weather, access to financing, international LNG pricing and access to construction yards. Other risks are outlined in the “Risk Factors” section of this AIF. LNG pricing following plant commissioning is of particular risk, in the financing phase of the project. For example, a low-price forecast at the time of forecasting may significantly delay the project. There are also non-commercial risks related to changes in government regulation, some of which have challenged major energy projects in Canada over the last number of years. The Corporation has undertaken many pre-emptive initiatives to procure First Nations support and support from all levels of government and the local community. This has included active company participation in policy creation and intensive work with governments to allow for the accommodation of LNG export projects within prescribed legislation.

Seasonality

The level of activity in the Canadian oil and gas industry is influenced by seasonal weather patterns. Wet weather and spring thaw can make the ground unstable. Consequently, municipalities and provincial transportation departments enforce road bans that restrict the movement of rigs and other heavy equipment, thereby reducing activity levels. Also, certain oil and gas producing areas are located in areas that are inaccessible other than during the winter months because the ground surrounding the sites consists of swampy terrain. There can be no assurance that these seasonal factors will not adversely affect the timing and scope of Pieridae’s exploration and development activities, which could in turn have an adverse impact on Pieridae’s business, operations and prospects. Refer to the “Risks Inherent to our Business” section of this AIF. Additionally, the realized price for natural gas produced by the Corporation has a component of cyclicality relating to the demand for natural gas in peak heating and cooling seasons during the year.

Environmental, Social and Governance Policies

The Corporation endeavors to be responsible stewards of the environment, foster beneficial relationships with Indigenous Peoples of Canada and our stakeholders, and be leaders in demonstrating good governance in order to establish trust, act with purpose, and support Pieridae’s business vision and strategy. In 2020, the Corporation undertook to formalize and centralize all its various environmental, social and governance (“**ESG**”) activities and actions into an umbrella ESG policy, and partnered with a global leader in ESG strategy development within the energy sector to facilitate and guide the Corporation towards formulating and implementing our ESG strategy. Their strong knowledge of key stakeholders including Indigenous Peoples, investors, government and others is important in developing our ESG program as we pursue FID and financing of our Goldboro LNG Project.

The target is to issue an inaugural Pieridae ESG Report in the second quarter of 2021.

Additionally, The Corporation’s operations are regulated by laws with respect to, among others, environmental protection. Environmental consequences can be difficult to identify, whether in terms of level, timeline or impact. Compliance with such legislation may require significant expenditures or result in operational restrictions. Breach of such requirements may result in suspension or revocation of necessary licenses and authorizations, civil liability for pollution damage and the imposition of material fines and penalties, all of which might have a significant negative impact on earnings and overall competitiveness of the Corporation. For a description of the financial and operational effects of environmental protection requirements on the capital expenditures, earnings and competitive position of the Corporation see "Industry Conditions – Environmental Regulations" and "Risk Factors – Environmental Incidents".

The Corporation has adopted policies relating to health, safety and environmental matters. The Corporation’s objective is to pursue its business strategy while ensuring that its operations meet applicable laws and safety standards and account for environmental and social impacts. Occupational and community health and safety are key concerns in the planning and performance of exploration work. Special attention is also paid to local community and business relationships, as well as environmental protection.

In Alberta, the Corporation’s Senior Vice President, Drilling, Completions & HSE and a Manager of HSE oversee all of the Health, Safety and Environmental policy development, implementation and enforcement for the Corporation and report regularly to the senior management team and the Board of Directors. Based on the Shell Acquisition personnel with supplementary strengths in environmental compliance and regulatory reporting have been added to the group. The Pieridae HSE structure includes personnel health, safety, emergency response and environmental roles stationed at each of the main facilities supporting the large network of dedicated and competent employees.

In Nova Scotia, under the Environmental Assessment Approval, the Corporation has established Community Liaison and Fisheries Advisory Committees. In addition, the Corporation has developed a complaint resolution plan, along with a Mi’kmaq Communication Plan, Community Communication Plan, and Archaeology and Heritage Resources Monitoring and Contingency Plan which are updated periodically.

Employees, and Specialized Skill and Knowledge

The following table summarizes Pieridae’s full-time equivalent (“**FTE**”) employees as at December 31, 2020:

Table 4: Pieridae Employees

Business Segment	Employees
Upstream (1)	252
LNG	37
Total	**289**

(1) Includes 5 employees on long term leaves of absence

Pieridae also engages contractors and service providers. Pieridae employs individuals with various professional skills in the course of pursuing its strategy including geology, geophysics, engineering, financial and business skills. Drawing on significant experience in the oil and gas industry, with a particular focus on exploration and development of natural gas reserves in the Alberta and BC Foothills play, Pieridae’s management team has a demonstrated track record of bringing together all of the key components required to realize it’s potential as a fully integrated LNG company.

Refer to the section entitled “Risk Management and Risk Factors” in the Corporation’s 2020 MD&A, which section of the MD&A is incorporated by reference into this AIF, for further information on employee and other workforce related risks affecting Pieridae.

PRESENTATION OF OIL AND GAS RESERVES AND PRODUCTION INFORMATION

Pieridae has adopted the standard of 6 Mcf:1 bbl when converting natural gas to barrel of oil equivalent. Condensate and other NGLs are converted to oil equivalent at a ratio of 1 bbl:1 bbl. Barrels of Oil Equivalent (“**BOEs**”) may be misleading, particularly if used in isolation. A boe conversion ratio of 6 Mcf:1 bbl is based roughly on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the Corporation’s sales point. Given the value ratio based on the current price of oil as compared to natural gas and NGLs are significantly different from the energy equivalency of 6 Mcf:1 bbl and 1 bbl:1 bbl, respectively, utilizing a conversion ratio at 6 Mcf:1 bbl for natural gas and 1 bbl:1 bbl for NGLs may be misleading as an indication of value.

The discounted and undiscounted net present value of future net revenues attributable to Pieridae’s reserves do not represent the fair market value of Pieridae’s reserves. There is no assurance that the forecast prices and costs assumptions applied by Pieridae’s independent reserves evaluator in evaluating the reserves of the Corporation will be attained and variances could be material. The estimates of Pieridae’s oil, conventional natural gas and NGLs provided in this AIF or otherwise referred to in this

AIF are estimates only and there is no guarantee that the estimated reserves will be recovered. Actual oil, conventional natural gas and NGLs may be greater than or less than the estimates provided in this AIF or otherwise referred to in this AIF, and the difference may be material.

The determination of oil, conventional natural gas and NGLs involves the preparation of estimates that have an inherent degree of associated risk and uncertainty. The estimation and classification of reserves is a complex process involving the application of professional judgment combined with geological and engineering knowledge to assess whether specific classification criteria have been satisfied. Knowledge of concepts including uncertainty and risk, probability and statistics, and deterministic and probabilistic estimation methods is required to properly use and apply reserves definitions. In addition, rules set forth in the Canadian Oil and Gas Evaluation Handbook (the "**COGE Handbook"**) and NI 51-101 override professional judgments as to volumes of recovery, well productivity and other factors.

The information set forth in this AIF relating to Pieridae's reserves and future net revenues constitutes forward-looking statements which are subject to certain risks and uncertainties. See "Forward-Looking Statements" and "Risk Factors". Unless otherwise specified, the NGLs reported by Deloitte Touche Tohmatsu Limited ("**Deloitte**"), the Corporation's independent qualified reserves evaluator, that are referred to in this AIF are reported on a combined basis with any condensate as required under NI 51-101.

Reserves Disclosure

Reserves are classified as proved reserves, probable reserves or possible reserves according to the certainty associated with the estimates. Each of the reserves categories (proved, probable and possible) may be divided into developed and undeveloped categories. Additional clarification of the classification of reserves, the certainty levels associated with reserves estimates and the effect of aggregation are provided in the COGE Handbook. Refer to *Appendix C "Definitions Used for Reserve Categories*".

The qualitative certainty levels referred to in the definitions of proved reserves, probable reserves, possible reserves, developed reserves, developed non-producing reserves, developed producing reserves and undeveloped reserves are applicable to individual reserves entities (which refers to the lowest level at which reserves calculations are performed) and to reported reserves (which refers to the highest-level sum of individual entity estimates for which reserves are presented). Reported reserves should target the following levels of certainty under a specific set of economic conditions:

- at least a 90% probability that the quantities actually recovered will equal or exceed the estimated proved reserves
- at least a 50% probability that the quantities actually recovered will equal or exceed the sum of the estimated proved plus probable reserves
- at least a 10% probability that the quantities actually recovered will equal or exceed the sum of the estimated proved plus probable plus possible reserves.

A qualitative measure of the certainty levels pertaining to estimates prepared for the various reserves categories is desirable to provide a clearer understanding of the associated risks and uncertainties. However, the majority of reserves estimates are prepared using deterministic methods that do not provide a mathematically derived quantitative measure of probability. In principle, there should be no difference between estimates prepared using probabilistic or deterministic methods.

In multi-well pools, it may be appropriate to allocate total pool reserves between the developed and undeveloped categories or to sub-divide the developed reserves for the pool between developed producing and developed non-producing. This allocation should be based on the estimator's assessment as to the reserves that will be recovered from specific wells, facilities and completion intervals in the pool and their respective development and production status.

STATEMENT OF RESERVES DATA AND OTHER OIL AND GAS INFORMATION

Disclosure of Reserves Data

The following tables are based on the Reserves Report prepared by Deloitte*,* an independent qualified reserves evaluator, effective as of December 31, 2020 and dated and prepared as of March 4 2020 (the "**Deloitte Reserves Report**"). The tables show the estimated share of Pieridae's oil, natural gas and NGL reserves in its properties and the present value of estimated future net revenue for these reserves, after provision for Alberta gas cost allowance, using forecast price and cost assumptions. All evaluations of the present worth of estimated future net revenue in the Deloitte Reserve Report are stated after provision for estimated future capital expenditures, both before and after income taxes, but, except where otherwise indicated, prior to indirect costs, well abandonment and disconnect costs and surface lease reclamation costs and do not necessarily represent the fair market value of the reserves. The Deloitte Reserves Report was prepared in accordance with the standards included in the COGE Handbook and NI 51-101.

It should not be assumed that the estimates of future net revenues presented in the tables below represent the fair market value of the reserves. There are numerous uncertainties inherent in estimating quantities of crude oil, NGL and natural gas reserves and the future cash flows attributed to such reserves. The reserve and associated cash flow information set forth in this AIF are estimates only. The recovery and reserve estimates of the crude oil, NGL and natural gas reserves provided herein are estimates only and there is no guarantee that the estimated reserves will be recovered. Actual crude oil, natural gas and NGL reserves may be greater than or less than the estimates provided herein. In general, estimates of economically recoverable crude oil and natural gas reserves and the future net cash flows therefrom are based upon a number of variable factors and assumptions, such as historical production from the properties, production rates, ultimate reserve recovery, timing and amount of capital expenditures, marketability of crude oil and natural gas, royalty rates, the assumed effects of regulation by governmental agencies and future operating costs, all of which may vary materially from actual results. For those reasons, among others, estimates of the economically recoverable crude oil and natural gas reserves attributable to any particular group of properties, classification of such reserves based on risk of recovery and estimates of future net revenues associated with reserves may vary and such variations may be material. The actual production, revenues, taxes and development and operating expenditures with respect to the reserves associated with Pieridae's assets may vary from the information presented herein and such variations could be material. See "Risk Factors" in this AIF.

The present value of future net revenue before and after income taxes has been estimated by Deloitte. The estimates of the after-income tax value of future net revenue have been prepared based on before income tax reserves information and includes assumptions and estimates of Pieridae's tax pools provided by management of the Corporation and the sequences of claims and rates of claim thereon. The values shown may not be representative of future income tax obligations, applicable tax horizon or after-tax valuation. The after tax net present value of Pieridae's oil and natural gas properties reflects the tax burden of its properties on a stand-alone basis. It does not provide an estimate of the value of Pieridae as a business entity, which may be significantly different.

All evaluations of future net revenue contained in the Deloitte Reserves Report are after the deduction of royalties, development costs, production costs and abandonment and reclamation costs but before consideration of indirect costs such as administrative, overhead and other miscellaneous expenses. It should not be assumed that the undiscounted or discounted net present value of future net revenue attributable to reserves estimated by Deloitte represent the fair market value of those reserves. There is no assurance that the forecast price and cost assumptions contained in the Deloitte Reserves Report will be attained and variations could be material. Other assumptions and qualifications relating to costs and other matters are summarized herein. The recovery and reserves estimates described herein are estimates only. The actual reserves associated with Pieridae's properties may be greater or less than those calculated. See "Risk Factors".

The historical production information used by Deloitte came from Pieridae. The Corporation also provided Deloitte with other required information, such as operating statements and land data. Deloitte incorporated all this data into its analysis in accordance with standards set out in the COGE Handbook. The standards in the COGE Handbook require Deloitte to plan and perform an assessment of the Corporation's reserves data in order to obtain reasonable assurance as to whether such reserves data are free of material misstatement.

Throughout the following summary tables differences may arise due to rounding.

In accordance with the requirements of NI 51-101, attached hereto are the following appendices:

Appendix A:	NI 51-101F2 Report on Reserves Data by Independent Qualified Reserves Evaluator
Appendix B:	NI 51-101F3 Report of Management and Directors on Oil and Gas Disclosure
Appendix C:	Definitions Used for Reserve Categories

TABLE 5: Summary of Oil and Gas Reserves as of December 31, 2020

	Light/Medium Crude Oil		Conventional Natural Gas (1)		Natural Gas Liquids	
Reserves Category	**Gross (Mbbl)**	**Net (Mbbl)**	**Gross (Mmcf)**	**Net (Mmcf)**	**Gross (Mbbl)**	**Net (Mbbl)**
Proved						
Developed Producing (2)	-	-	613,188	533,913	25,512	19,576
Developed Non-Producing (3)	-	-	106,114	89,174	1,058	839
Undeveloped (4)	-	-	122,943	111,174	8,882	7,299
Total Proved	**-**	**-**	**842,245**	**734,261**	**35,452**	**27,714**
Total Probable	**-**	**-**	**303,582**	**264,392**	**12,414**	**9,812**
Total Proved + Probable	**-**	**-**	**1,145,827**	**998,653**	**47,866**	**37,526**

(1) Natural gas volumes include associated, and non-associated gas.

(2) "Developed Producing" reserves are those reserves that are expected to be recovered from completion intervals open at the time of the estimate. These reserves may be currently producing or, if shut-in, they must have previously been on production, and the date of resumption of production must be known with reasonable certainty.

(3) "Developed Non-Producing" reserves are those reserves that either have not been on production, or have previously been on production, but are shut in, and the date of resumption of production is unknown.

(4) "Undeveloped" reserves are those reserves expected to be recovered from known accumulations where a significant expenditure (e.g., when compared to the cost of drilling a well) is required to render them capable of production. They must fully meet the requirements of the reserves classification (proved, probable, possible) to which they are assigned.

The following tables summarize the undiscounted value and the present value, discounted at 5%, 10%, 15% and 20%, of Pieridae's estimated future net revenue based on forecast price and cost assumptions as of December 31, 2020.

TABLE 6: Summary of Before-Tax Present Value of Future Net Revenue at December 31, 2020 (1)

	Before Income Tax, Discounted at (%/year)					Unit Value Before Income Tax, Discounted at 10%/year
Reserves Category (2)	0% (M$)	5% (M$)	10% (M$)	15% (M$)	20% (M$)	$/BOE
Proved						
Developed Producing	481,894	599,193	505,243	429,275	373,791	4.65
Developed Non-Producing	93,368	64,718	46,726	34,871	26,730	2.98
Undeveloped	333,552	232,655	166,527	121,572	89,987	6.45
Total Proved	**908,814**	**896,566**	**718,496**	**585,718**	**490,508**	**4.79**
Total Probable	**712,622**	**403,978**	**257,651**	**177,626**	**129,460**	**4.78**
Total Proved + Probable	**1,621,436**	**1,300,544**	**976,147**	**763,344**	**619,968**	**4.79**

(1) Future net revenue is estimated using forecast prices and costs – see "Pricing Assumptions – Forecast Prices and Costs – December 31, 2020" in this AIF.

(2) Values reflect abandonment and reclamation costs for all wells, facilities, and pipelines and for all future locations assigned reserves in the Deloitte Reserves Report in the aggregate amount of $445.7 million (undiscounted) for total proved reserves and $455.9 million (undiscounted) for total proved plus probable reserves.

TABLE 7: Summary of After-Tax Present Value of Future Net Revenue as of December 31, 2020 (1)

	After Income Tax, Discounted at (%/year)				
Reserves Category (2)	0% (M$)	5% (M$)	10% (M$)	15% (M$)	20% (M$)
Proved					
Developed Producing	415,803	552,786	471,492	404,001	354,394
Developed Non-Producing	71,066	48,975	35,071	25,926	19,668
Undeveloped	254,633	175,409	123,251	87,834	63,050
Total Proved	**741,502**	**777,170**	**629,814**	**517,761**	**437,112**
Total Probable	**551,125**	**310,709**	**197,844**	**136,361**	**99,430**
Total Proved + Probable	**1,292,627**	**1,087,879**	**827,658**	**654,122**	**536,542**

(1) Future net revenue is estimated using forecast prices and costs – see "Pricing Assumptions – Forecast Prices and Costs – December 31, 2020" in this AIF.

(2) Values reflect abandonment and reclamation costs for all wells, facilities, and pipelines and for all future locations assigned reserves in the Deloitte Reserves Report in the aggregate amount of $445.7 million (undiscounted) for total proved reserves and $455.9 million (undiscounted) for total proved plus probable reserves.

TABLE 8: Total Future Net Revenue (Undiscounted) as of December 31, 2020 (1)

Reserves Category	Revenue (2) (M$)	Royalties (M$)	Operating Costs (M$)	Develop-ment Costs (M$)	Well Abandonment and Reclamation Costs (M$)	Future Net Revenue Before Income Taxes (M$)	Future Income Taxes (M$)	Future Net Revenue After Income Taxes (M$)
Proved Reserves	4,339,019	248,044	2,532,861	203,563	445,737	908,814	167,312	741,502
Proved + Probable Reserves	6,216,360	353,901	3,559,051	226,024	455,947	1,621,436	328,809	1,292,627

(1) Future net revenue is estimated using forecast prices and costs – see "Pricing Assumptions – Forecast Prices and Costs – December 31, 2020" in this AIF.

(2) Revenue includes product revenue and other income from facilities, wells and corporate if specified.

TABLE 9: Future Net Revenue by Product Type as of December 31, 2020 (1)

Reserve Category	Product Type	Future Net Revenue Before Income Taxes (discounted at 10%/year) (M$)	Unit Value Before Income Taxes (discounted at 10%/Year) ($/BOE)
Proved Reserves	Conventional Natural Gas (including associated by-products)	718,495	4.79
Proved + Probable Reserves	Conventional Natural Gas (including associated by-products)	976,146	4.79

(1) Future net revenue is estimated using forecast prices and costs – see "Pricing Assumptions – Forecast Prices and Costs – December 31, 2020" in this AIF.

Costs Incurred

The following table summarizes the capital expenditures made by Pieridae on oil and gas properties for the year ended December 31, 2020.

TABLE 10: Capital Expenditures Made by Pieridae on Oil and Gas Properties for the Year Ended December 31, 2020

Nature of Cost	Amount (M$)
Acquisition Costs for Proved Properties (1)	2,674
Acquisition Costs for Unproved Properties (1)	-
Exploration Costs	2,178
Total Costs	4,852

(1) *Acquisition of the majority of proved and unproved reserves in 2020 per Table 14 were on a "quit claim" basis for no monetary consideration*

Pricing Assumptions

Forecast Prices and Costs - December 31, 2020

Deloitte employed the following pricing, exchange rate and inflation rate assumptions in estimating Pieridae's reserves data using forecast prices and costs as of December 31, 2020.

TABLE 11: Canadian Domestic Forecast (1)

	Light Oil		Natural Gas	Natural Gas Liquids			
Year	Canadian Light Sweet Crude (2) 40° API ($Cdn/Bbl)	Alberta AECO ($Cdn/Mcf)	Edmonton Propane ($Cdn/Bbl)	Edmonton Butane ($Cdn/Bbl	Edmonton Pentanes Plus ($Cdn/Bbl)	Operating Cost Inflation Rate (%/Year)	Exchange Rate ($US/$Cdn)
Historical							
2013	93.36	3.17	38.54	77.44	103.52	0.90%	0.97
2014	94.00	4.50	42.93	59.43	101.47	1.90%	0.91
2015	57.00	2.69	5.35	33.70	55.15	1.10%	0.78
2016	52.22	2.16	8.71	31.45	52.43	1.40%	0.75
2017	62.11	2.16	27.56	40.96	62.85	1.60%	0.77
2018	75.39	1.61	29.54	45.93	81.62	2.30%	0.77
2019	66.93	1.80	27.00	39.40	62.65	1.50%	0.75
2020	45.90	2.25	15.81	20.82	46.58	0. 75%	0.75
Forecast							
2021	55.13	2.75	18.30	25.76	57.75	0.00%	0.77
2022	60.62	2.70	23.49	33.27	63.10	1.50%	0.77
2023	64.68	2.65	26.11	40.49	67.58	2.00%	0.77
2024	66.73	2.69	26.94	41.80	69.74	2.00%	0.77
2025	68.11	2.74	27.50	42.66	71.15	2.00%	0.77
2026	69.52	2.81	28.07	43.55	72.58	2.00%	0.77
2027	70.95	2.86	28.64	44.44	74.04	2.00%	0.77
2028	72.40	2.91	29.23	45.36	75.52	2.00%	0.77
2029	73.89	2.97	29.82	46.28	77.03	2.00%	0.77
2030	75.37	3.02	30.42	47.21	78.58	2.00%	0.77
Escalation rate of 2% thereafter							

(1) Forecast prices were estimated using the average of the escalated price forecasts of four independent reserve evaluators, namely Deloitte LLP, GLJ Petroleum Consultants Ltd., McDaniels & Associates Consultants Ltd. and Sproule Associates Limited. There is no assurance that the forecast prices and forecast factors used by Deloitte in the Deloitte Report will prove accurate and variances could be material.

(2) Edmonton Par prior to 2014.

Pieridae's weighted average realized sales prices for the year ended December 31, 2020 were $26.54/bbl for NGLs and $2.00/Mcf for natural gas, before considering the impact of derivative financial instruments.

Production Estimates

The following table discloses, by product type, the volume of Pieridae's production estimated for the year ended December 31, 2021 as evaluated by Deloitte.

TABLE 12: 2021 Production Estimates

Reserves Category	Light/Medium Crude Oil (Bbl/d)	Conventional Natural Gas (MMcf/d)	Natural Gas Liquids (Bbl/d)	Combined (BOE/d)
Proved				
Developed Producing [(1)]	-	192.0	8,214.6	40,214.6
Developed Non-Producing [(2)]	-	2.9	221.1	698.8
Undeveloped	-	1.1	0.0	183.3
Total Proved	-	196.0	8,435.7	41,096.7
Total Probable	-	4.0	144.7	811.4
Total Proved + Probable	-	200.0	8,580.4	41,908.1

(1) Pieridae's Waterton field 2021 Proved Developed Producing "**PDP**" reserves production forecast comprises 25.2% of the total Corporate 2021 PDP production estimate. Of this amount, natural gas amounts to 39.7MMcf/d and natural gas liquids amounts to 3,527.1Bbl/day, for combined production of 10,139.6 BOE/d

(2) Refer to the discussion of Developed Non- Producing Reserves on page 27 of this AIF

Production History

The following table sets forth certain information in respect of production, product prices received, royalties, production costs and netbacks received by Pieridae for each quarter of its most recently completed financial year:

TABLE 13: 2020 Quarterly Production History

	Three months ended				Twelve months ended
Reserves Category	Mar 31, 2020	Jun 30, 2020	Sep 30, 2020	Dec 31, 2020	Dec 31, 2020
Average Daily Production					
Light/Medium Crude Oil (bbl/d) [(1)]	-	-	-	-	-
Conventional Natural Gas (Mcf/d)	199,234	208,689	184,080	212,220	201,040
Condensate (bbl/d) [(2)]	2,850	3,166	2,807	3,259	3,020
Other NGLs (bbl/d) [(3)]	5,156	5,843	4,722	6,171	5,473
Combined (boe/d)	41,211	43,971	38,209	44,800	42,000
Average Net Prices Received					
Light/Medium Crude Oil ($/bbl)	-	-	-	-	-
Conventional Natural Gas ($/Mcf)	2.25	1.87	1.70	2.16	2.00
Condensate ($/bbl)	67.74	39.94	44.67	53.48	51.24
Other NGLs ($/bbl)	12.36	10.09	14.10	15.11	12.91
Combined ($/boe)	17.27	13.62	13.75	16.71	15.37
Royalties ($/boe)	0.70	0.35	0.34	1.07	0.63
Production Costs ($/boe)	13.59	11.40	14.66	13.28	13.19
Netback [(4)] Received ($/boe)	2.98	1.87	(1.25)	2.36	1.55

(1) The Corporation had no material light and medium crude oil production in 2020

(2) Comprised of the condensate that is extracted in the field or that is otherwise sold separately from other NGLs either delivered to non-operated processing facilities or fractionated and processed at the Corporation's gas processing facilities. See "Property Information – Facilities and Infrastructure" for additional information.

(3) Represents NGLs (other than condensate) either delivered to non-operated processing facilities or fractionated and processed at the Corporation's gas processing facilities. See "Property Information – Facilities and Infrastructure".

(4) Calculated by management by subtracting royalties, operating and transportation costs from sales revenue. These figures have not been adjusted for hedging gains or losses or third party and other income. Netback does not have any standardized meaning and should not be used for the purposes of drawing comparisons among the Corporation and other companies. For additional information regarding netbacks see "Non-GAAP Measures – Operating Netback" in the Corporation's MD&A.

TABLE 13a: Waterton Significant Field 2020 Quarterly Production History

	Three months ended				Twelve months ended
Reserves Category	Mar 31, 2020	Jun 30, 2020	Sep 30, 2020	Dec 31, 2020	Dec 31, 2020
Average Daily Production					
Light/Medium Crude Oil (bbl/d) (1)	-	-	-	-	-
Conventional Natural Gas (Mcf/d)	35,263	38,334	41,849	46,322	40,462
Condensate (bbl/d) (2)	1,147	1,468	1,299	1,638	1,388
Other NGLs (bbl/d) (3)	1,365	2,022	1,823	2,752	1,992
Combined (boe/d)	8,389	9,879	10,097	12,110	10,124
Percentage of Total Production	20%	22%	26%	27%	24%

(1) The Corporation had no material light and medium crude oil production in 2020

(2) Comprised of the condensate that is extracted in the field or that is otherwise sold separately from other NGLs either delivered to non-operated processing facilities or fractionated and processed at the Corporation's gas processing facilities. See "Property Information – Facilities and Infrastructure" for additional information.

(3) Represents NGLs (other than condensate) either delivered to non-operated processing facilities or fractionated and processed at the Corporation's gas processing facilities. See "Property Information – Facilities and Infrastructure" for additional information.

Reconciliation of Changes in Reserves and Future Net Revenue

Reserves Reconciliation

The following table outlines the primary drivers of reserve changes during 2020, as at December 31, 2020:

Table 14: Reserve Reconciliation

	Light & Medium Oil			Conventional Gas			Natural Gas Liquids		
	Proved	Probable	Proved + Probable	Proved	Probable	Proved + Probable	Proved	Probable	Proved + Probable
	Mstb	Mstb	Mstb	MMcf	MMcf	MMcf	Mstb	Mstb	Mstb
Opening Balance	-	-	-	885,875	331,393	1,217,267	35,921	13,154	49,075
Production	(1)	-	(1)	(73,911)	-	(73,911)	(3,157)	-	(3,157)
Technical Revisions	1	-	1	(13,022)	(3,788)	(90,721)	(4,593)	(2,201)	(9,951)
Extensions	-	-	-	67,687	4,029	71,715	5,236	775	6,011
Acquisitions	-	-	-	28,156	32,299	60,455	4,085	3,216	7,301
Economic Factors	-	-	-	(52,539)	13,561	(38,978)	(2,041)	626	(1,415)
Closing Balance	-	-	-	842,245	303,582	1,145,827	35,451	12,412	47,865

Additional Information Relating to Reserves Data

Undeveloped Reserves

Undeveloped reserves are attributed by Deloitte in accordance with standards and procedures contained in the COGE Handbook. Proved undeveloped reserves are those reserves that can be estimated with a high degree of certainty and are expected to be recovered from known accumulations where a significant expenditure is required to render them capable of production. Probable undeveloped reserves are those reserves that are less certain to be recovered than proved reserves and are expected to be recovered from known accumulations where a significant expenditure is required to render them capable of production. Proved and probable undeveloped reserves have been assigned in accordance with engineering and geological practices as defined under NI 51-101. In general, undeveloped reserves associated with Pieridae's assets are planned to be developed over the next five years.

In some cases, it will take longer than five years to develop these reserves. There are a number of factors that could result in delayed or cancelled development, including the following: (i) changing economic conditions (due to pricing, operating and capital expenditure fluctuations); (ii) changing technical conditions (including production anomalies, such as water breakthrough or accelerated depletion, or to changes in geological interpretation, including reservoir continuity and quality); (iii) multi-zone developments (for instance, a prospective formation completion may be delayed until the initial completion formation is no longer economic); (iv) a larger development program may need to be spread out over several years to optimize capital allocation and facility utilization; and (v) surface access issues (including those relating to land owners, weather conditions and regulatory approvals). For more information, see "Risk Factors" in this AIF.

Developed Non-Producing Reserves

The Deep Basin area includes assets in the Sierra and Ekwan areas roughly 45km east of Fort Nelson, British Columbia stretching 85 km east towards the Alberta border and as was acquired as part of the 2017 acquisition from Husky. The Sierra asset consists of ~25mmcf/d of production from the Pine Point formation and was shut in due to infrastructure constraints in September 2017. The restart is scheduled for 2023 and is estimated to require $21.6MM of capital primarily for sour gas related plant upgrades and pipelines. Sierra represents 13.5MMboe in reserves and $11.4MM NPV10 value within the proved non-producing category.

Significant Factors or Uncertainties

The process of estimating reserves is complex. It requires significant judgments and decisions based on available geological, geophysical, engineering and economic data. These estimates may change substantially as additional data from ongoing development activities and production performance becomes available and as economic conditions impacting oil and gas prices and costs change. The reserve estimates contained herein are based on current production forecasts, commodity prices and economic conditions. Pieridae's reserves are evaluated by Deloitte, an independent engineering firm.

Estimates made are reviewed and revised, either upward or downward, as warranted by new information. Revisions are often required due to changes in well performance, commodity prices, economic conditions and governmental restrictions. Although every reasonable effort is made to ensure that reserve estimates are accurate, reserve estimation is an inferential science. Pieridae's actual production, revenues, taxes, development and operating expenditures with respect to its reserves may vary from such estimates, and such variances could be material. See "Risk Factors – Reserves Estimates" in this AIF.

Pieridae estimates the total cost of future abandonment and reclamation for its existing wells, pipelines, associated production facilities and infrastructure and the expected timing of the costs to be incurred in future periods. The Corporation has a process for estimating these costs, which considers past experience, applicable current regulations, technology and industry standards, actual and anticipated costs, the type and depth of the well (or the nature and size of the pipeline or facility), and the geographic location. Pieridae expects to incur abandonment and reclamation costs on 996 gross (742 net) wells. As at December 31, 2020, the Corporation has estimated its share of the total abandonment and reclamation costs for its existing active and economic wells, pipelines and facilities to be $455.9 million undiscounted (approximately $19.8 million discounted at 10%), of which Pieridae expects to pay approximately $3.0 million over the next five financial years.

Of the discounted future abandonment and reclamation costs to be incurred over the life of Pieridae's proved plus probable reserves, approximately $19.8 million have been deducted in estimating the discounted future net revenue in the Deloitte Report, which represents the Corporation's active, economic existing estimated abandonment and reclamation costs, plus all forecast estimates of abandonment and reclamation costs attributable to future development activity associated with the reserves.

Future Development Costs

The following table sets forth development costs deducted in the estimation of the future net revenue attributable to the reserve categories noted below, using forecast prices and costs.

TABLE 15: Future Development Costs [(1)]

Year	Undiscounted Forecast Prices and Costs	
	Proved Undeveloped Reserves (M$)	Proved + Probable Undeveloped Reserves (M$)
2021	9.1	9.1
2022	48.8	48.8
2023	39.4	41.9
2024	36.8	36.8
2025	20.8	37.9
Remaining Years	0	0
Total Undiscounted	**154.9**	**174.5**

(1) Future net revenue estimated using forecast prices and costs – see "Pricing Assumptions – Forecast Prices and Costs – December 31, 2020" in this AIF.

Pieridae expects to fund the development costs of these reserves through a combination of the funds available from internally generated cash flow, non-core asset dispositions and the issuance of new equity and/or debt where and when the Board of Directors believes it is appropriate.

There can be no guarantee that funds will be available or that the Corporation will allocate funding to develop all of the reserves attributable in the Deloitte Report. Failure to develop those reserves could have a negative impact on Pieridae's future cash flow.

The interest or other costs of external funding are not included in the reserves and future net revenue estimates set forth above and would reduce the reserves and future net revenue to some degree depending upon the funding sources utilized. Pieridae does not anticipate that interest or other funding costs would make further development of any of Pieridae's assets uneconomic.

See "Risk Factors –Liquidity" in this AIF.

Properties with no Attributed Reserves

The following table sets forth the gross and net acres of unproved properties held by Pieridae as at December 31, 2020 and the net area of unproved property for which Pieridae expects its rights to explore, develop and exploit to expire during the next year. Pieridae has an 72% working interest in its undeveloped land.

TABLE 16: Unproved Properties – Undeveloped Land

Location	Undeveloped Gross Acres [(1)]	Undeveloped Net Acres [(2)]	Net Area to Expire in 2021
Western Canada	562,013	426,195	23,235
Eastern Canada	529,444	364,644	-
Total	**1,091,547**	**790,839**	**23,235**

(1) "Gross Acres" are the total acres in which Pieridae has or had an interest.
(2) "Net Acres" is the aggregate of the total acres in which Pieridae has or had an interest multiplied by Pieridae's working interest percentage held therein.

There are no costs or work commitments associated with Pieridae's Western Canada non-producing properties except for annual lease rental payments. Pieridae's Québec non-producing properties are all subject to annual license fees and work obligations. However, the work commitment obligation was suspended in June 2011 upon the imposition of the Québec government's moratorium on oil and gas exploration and development activity in the province. Pieridae had complied with the requirement to that point. It is not clear if or when this moratorium will be lifted.

CAPITAL STRUCTURE

Common Shares

The authorized capital of the Corporation consists of an unlimited number of common shares without nominal value, of which 157,641,871 were issued and outstanding as of the date of this AIF. The common shares do not carry any exchange, exercise, conversion, redemption or retraction rights.

The holders of the common shares are entitled to one vote per share at all meetings of shareholders of the Corporation and are entitled to dividends, if and when declared by the Board of the Corporation, and to the distribution of the residual assets of the Corporation in the event of the liquidation, dissolution or winding-up of the Corporation.

Common Share Issuances

The following table discloses the securities of the Corporation that have been issued in the 12 months prior to the date of this AIF:

TABLE 17: Share Issuances

Date of Issuance	Issue Price per Share	Number of Shares Issued (1)
2020		
February 5 (1)	$0.79	80,697

(1) Pieridae common shares issued to directors in accordance with Director Compensation Policy.

Below is a list of the unlisted securities of the Corporation issued during the year ended December 31, 2020, including price per security, quantity issued and date of issuance.

TABLE 18: Stock Options

Quantity	Exercise Price ($)	Issuance Date	Expiry
1,710,100	0.86	October 8, 2020	October 8, 2025
490,000	0.86	November 17, 2020	November 17, 2025

Market for Securities

The common shares of the Corporation were listed on the TSXV under the symbol “PEA” until July 2, 2020. On July 3, 2020 they were listed and began trading on the TSX under the symbol “PEA” and were correspondingly delisted from the TSXV.

The following table sets forth the reported price range and trading volume of the Common Shares on the TSXV, or TSX as applicable, for the periods indicated.

TABLE 19: Price Range and Trading Volume

	Price Range		
	High ($/share)	Low ($/share)	Shares Traded
April	2.03	1.50	744,200
May	1.70	0.90	1,017,300
June	1.00	0.75	741,000
July	1.60	0.71	2,934,300
August	1.00	0.75	733,100
September	1.09	0.75	1,047,900
October	1.00	0.81	1,516,600
November	0.93	0.74	352,300
December	0.88	0.71	1,178,200
2020			
January	*0.83*	*0.70*	*946,400*
February	0.73	0.30	1,510,200
March	*0.38*	*0.12*	*3,263,500*
April	*0.45*	*0.18*	*2,080,000*
May	*0.39*	*0.27*	*1,177,100*

Price Range			
	High ($/share)	Low ($/share)	Shares Traded
June	0.56	0.29	2,292,500
July	*0.37*	*0.33*	*683,100*
August	0.40	0.30	959,300
September	*0.45*	*0.35*	*969,300*
October	0.74	0.61	1,735,800
November	*0.67*	*0.46*	*1,578,900*
December	*0.55*	*0.39*	*1.311.700*
2021			
January	*0.62*	*0.43*	*2,286,600*
February	0.58	0.44	3,065,200
March 1 - 15	0.61	0.49	2,055,900

Dividends and Dividend Policy

The Corporation is currently committed to retaining its earnings in order to finance future growth, including the remaining development activities required to reach FID for the Goldboro LNG Facility. As a result, the Corporation does not anticipate paying dividends in the foreseeable future. Any future decision to pay dividends will be at the discretion of the Board of Directors and will depend on the financial position of the Corporation, its results of operations and its capital requirements and such other factors as the Board of Directors considers relevant.

DIRECTORS AND EXECUTIVE OFFICERS

Directors of Pieridae

The following table presents the name and municipality of residence of the directors of the Corporation, their office held with the Corporation, the date on which they became directors and their principal occupations. Each director holds office until the next annual meeting of the shareholders of Pieridae or until his or her successor has been duly elected or appointed, unless they resign, or their office becomes vacant for any reason.

TABLE 20: Directors of the Corporation

Name, City and Province of Residence and Age	Position within the Corporation	Principal Occupation	Director Since	Number of Shares Owned or Controlled (1)
Myron A. Tétreault (3) Calgary, Alberta, Canada Age: 53	Chair	Board Chair of Calafate Holdings Ltd. since 1999, Board Chair of Pieridae Energy Ltd., Lead Director of PHX Energy Services Corp. Co-founder and director of Fitzroy Developments Ltd., Fitzroyalty Land Opportunities Fund LP, and Board Chair of West Aspen Holdings Ltd. and Stoked Oats Ltd.	March 20, 2009	683,284 (5) (0.43%)
Alfred Sorensen Calgary, Alberta, Canada Age: 59	Chief Executive Officer and Director	President and CEO of Pieridae Energy Ltd. since its founding in 2012. Director of Canadian Spirit Resources Inc. from 2012 until March, 2020.	May 20, 2012	12,299,053 (6) (7.80%)
Charles Boulanger (2) (4) Québec City, Québec, Canada Age: 63	Director	CEO of Leddartech Inc. President of Moody Management Inc. Director at Chimie Parachem and LeddarTech.	December 11, 2012	352,795 (7) (0.22%)
Charle Gamba (2)(4) Bogota S.F., Columbia Age: 56	Director	Current President and CEO of Canacol Energy Ltd., which he founded in 2008.	June 18, 2019	26,344 (8) (0.02%)

Name, city and province of residence and age	Position within the Corporation	Principal occupation	Director since	Number of shares owned or controlled (1)
Mark Horrox Toronto, Ontario, Canada Age: 42	Director	Principal at TEC. Director of Erikson National Energy Inc. Director of other TEC-backed resource companies.	November 1, 2019	Nil (9)
Andrew Judson (2)(3) Calgary, Alberta, Canada Age: 53	Director	Director of Condor Petroleum Inc. and of Pieridae Energy Ltd.	June 12, 2015	332,697 (10) (0.21%)
Kjell Pedersen (3)(4) Stavanger, Norway Age: 68	Director	Corporate Director	June 27, 2018	46,829 (11) (0.03%)
Kiren Singh Calgary, Alberta Age: 56	Director	Board Chair of Dynamic Risk Assessment Systems Inc. and Travel Alberta, Director at Agriculture Financial Services Corp. and Pieridae Energy Ltd.	May 26, 2020	232,800 (12) (0.15%)

(1) The directors have provided the information concerning the shares that they control.
(2) Members of the Audit Committee. Additional information about the members of the Audit Committee and their financial literacy is contained on pages 34 of this AIF
(3) Members of the Compensation and Governance Committee.
(4) Members of the Reserve and Health, Safety and Environment Committee.
(5) Not including 383,953 shares that may be issued to him through options.
(6) Not including 578,934 shares that may be issued to him through options.
(7) Not including 278,333 shares that may be issued to him through options.
(8) Not including 130,000 shares that may be issued to him through options.
(9) Mr. Horrox is a director of Erikson National Energy Inc., which owns 23,255,813 common shares of the Corporation.
(10) Not including 586,150 shares that may be issued to him through options.
(11) Not including 270,000 shares that may be issued to him through options.
(12) Not including 165,000 shares that may be issued to her through options.

Myron A. Tétreault — Chairman of the Board

Mr. Tétreault has been chairman of Calafate Holdings Ltd. since 1999 and serves as the Lead Director of PHX Energy Services Corp. He is also a co-founder and director of Fitzroy Developments Ltd., Fitzroyalty Land Opportunities Fund LP, and the Chairman of West Aspen Holdings Ltd. and Stoked Oats Ltd. In the recent past, Mr. Tétreault was co-founder and director of Northern Vision Development Corp. for 14 years and a co-founder and director of Webber Academy Foundation for 24 years. Mr. Tétreault obtained his Bachelor of Business Administration degree (*cum laude*) from the University of Ottawa in 1988 and his Juris Doctor degree (with distinction) from the University of Saskatchewan in 1992. He is also a member of the Law Society of Alberta.

Alfred Sorensen – Chief Executive Officer and Director

Mr. Sorensen is the chief executive officer of Pieridae Energy Limited and has been since its founding in 2012. He is a chartered accountant and a leader in the energy industry with over 30 years of Canadian and international experience. Mr. Sorensen served as the chief executive officer of Canadian Spirit Resources from 2013 to 2015.

Charles Boulanger — Director

Mr. Boulanger is the chief executive officer of Leddartech Inc., a private company with a unique, patented solid-state LiDAR technology. He is also the president of Moody Management Inc., a private investment firm. Mr. Boulanger has over 35 years of experience in senior management positions in several industrial sectors with companies such Shell Canada Limited, a subsidiary of Royal Dutch Shell, Irving Oil, a subsidiary of Irving Group of Companies, GSI Environmental Inc. and Prolab Technolub Inc. He currently sits on the boards of Chimie Parachem s.e.c., and LeddarTech Inc. Mr. Boulanger earned a degree in mechanical engineering from Université Laval in 1981 and graduated from the senior management program at the International Center for Research and Studies in Management (CIREM) in 1990.

Charle Gamba — Director

Mr. Gamba is currently chief executive officer and president of Canacol Energy Ltd., which he founded in 2008. He has held a variety of technical and management roles with major and mid-sized international oil companies, with most of his professional career focused on exploration and production in South America. He holds an M.Sc. and a Ph.D. in geology.

Mark Horrox – Director

Mr. Horrox is a Principal at Third Eye Capital Corporation. He has 20 years of global experience investing in companies undergoing change or growth. His responsibilities at TEC include advancing the firm's investment activities in the Canadian energy market. Mr. Horrox is the director of Erikson National Energy Inc., a portfolio company of TEC, and is a director of other TEC-backed resource companies. He holds a Master of Business Administration (M.B.A.) from London Business School.

Andrew Judson – Director

Mr. Judson is a director of Condor Petroleum Inc., a public Canadian company operating oil and gas developments in Turkey and Kazakhstan. Previously, Mr. Judson was a director of and senior advisor to Daytona Power Corp., a corporation developing pumped hydro storage projects in the South Western U.S.A. and was managing director of Camcor Partners Inc. Mr. Judson has more than 25 years of experience in Canadian energy capital markets and has advised some of the largest institutional investors in Canada, the U.S.A. and Europe on energy investments.

Kjell Pedersen — Director

A citizen of Norway, Mr. Pedersen has 40 years of experience in oil and gas exploration and production in Europe and North America. Mr. Pedersen has been director of Det Norske Oljeselskap AS (currently AkerBP), chairman of the construction company Aibel AS, vice-chair of Anticosti Hydrocarbons (Canada) and chief executive officer of Petoro AS from 2001 until retirement in 2013. He began his career as a drilling engineer with Exxon Corporation and during his 23 years with ExxonMobil Corporation. held various high management positions in engineering, operations and gas commercial areas in Norway, the U.S.A., Germany and the U.K.

Kiren Singh — Director

Ms. Singh is a financial executive and corporate director. Ms. Singh served as Chief Financial Officer, Vice President Risk Management and Treasurer during her 30-year career in the energy sector where she led and participated in more than $4.5B corporate financings and $11B of global project financings and insurance programs representing privately held and publicly traded Canadian (Toronto Stock Exchange) and US (New York Stock Exchange) corporations including Gibson Energy Inc., OPTI Canada Inc., Value Creation Inc., Exxon Mobil Corporation and Mobil Corporation. Ms. Singh serves on the boards of Dynamic Risk Assessment Systems Inc. (Chair, Finance and Risk Committee); Agriculture Financial Services Corp. (Chair, Audit and Risk Committee); and Travel Alberta (Chair, Audit and Finance Committee). She holds an MBA and Bachelor of Commerce (University of Calgary); and a CFA (CFA Institute), CRM (Global Risk Management Institute) and ICD.D (University of Toronto).

Officers of Pieridae

The following table sets forth the name and municipality of residence of the executive officers of the Corporation, the office they hold with the Corporation and their principal occupation during the last five years.

TABLE 21: Officers of the Corporation

NAME, CITY, PROVINCE AND COUNTRY OF RESIDENCE AND AGE	OFFICE HELD WITH THE CORPORATION	PRINCIPAL OCCUPATION DURING THE LAST 5 YEARS	NUMBER OF SHARES OWNED OR CONTROLLED
Alfred Sorensen **Calgary, Alberta, Canada** **Age: 59**	President, Chief Executive Officer and Director	President and CEO of Pieridae since its founding in 2012. Interim COO effective January 4, 2021.	12,299,053 (1) (7.80%)
Tim De Freitas **Calgary, Alberta, Canada** **Age: 59**	Chief Operating Officer	President and Chief Executive Officer of Ikkuma from May 2014 to December 21, 2018. Departed Pieridae effective January 4, 2021.	n/a

Name, city, province and country of residence and age	Office held with the Corporation	Principal occupation during the last 5 years	Number of shares owned or controlled
Robert Dargewitcz **Calgary, Alberta, Canada** **Age: 53**	Chief Financial Officer	Appointed Chief Financial Officer November 11, 2019, previously Interim Chief Financial Officer, and Senior Vice President Risk & Treasury since September 6, 2018. Treasurer of North West Redwater Partnership 2013-2018.	365,250[3] (0.23%)
Thomas Ciz **Vancouver, British Columbia, Canada** **Age: 61**	General Counsel and Corporate Secretary	General Counsel to Pieridae (and its predecessors) since August 1, 2015.	778,277[4] (0.49%)
Yvonne McLeod **Calgary, AB, Canada** **Age: 50**	Senior Vice President, Completions and HSE	Senior Vice President, Engineering at Ikkuma Resources Corp since May 2014.	83,523[5] (0.05%)
Thomas Dawson **Calgary, AB, Canada** **Age: 58**	Senior Vice President, Marketing and Business Development	Senior Vice President, Marketing and Business Development of Pieridae since May 2012.	2,606,415[6] (1.65%)

(1) Not including 578,934 shares that may be issued to him through options.
(2) Not including 319,809 shares that may be issued to him through options.
(3) Not including 281,148 shares that may be issued to him through options.
(4) Not including 703,619 shares that may be issued to him through options.
(5) Not including 246,612 shares that may be issued to her through options.
(6) Not including 396,612 shares that may be issued to him through options.

As at the date of this information form, the Corporation's directors and officers beneficially owned, or controlled or directed, directly or indirectly, as a group, a total of 17,807,267 issued and outstanding shares, representing approximately 11.30% of the Corporation's issued and outstanding shares.

Cease Trade Orders, Bankruptcies, Penalties or Sanctions

Other than as disclosed below, to the knowledge of the Corporation, and according to the information that the directors and officers have provided to it, none of them is or has been, within the ten years preceding the date of this AIF, a director, chief executive officer or chief financial officer of a company that was subject to an order that was issued while the director or executive officer was acting in the capacity as director, chief executive officer or chief financial officer, or was subject to an order that was issued after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer. For the purposes of this paragraph, "order" refers to (i) a cease trade order, (ii) an order similar to a cease trade order, or (iii) an order that denied the relevant entity to any exemption under securities legislation.

Charle Gamba was formerly a director of Solimar Energy Limited ("**Solimar**") from September 12, 2011 to December 12, 2014, upon which date all of the directors and officers resigned. On December 3, 2015, December 8, 2015 and December 21, 2015, the common shares of Solimar were cease traded by the Alberta Securities Commission, the British Columbia Securities Commission and the Ontario Securities Commission, respectively, as a result of the failure by Solimar to file various continuous disclosure documents, including interim financial statements and related management's discussion and analysis for the three-month period ended September 30, 2014, together with the related certification of filings thereto.

To the knowledge of the Corporation, none of its directors, executive officers or a shareholder holding a sufficient number of securities of the Corporation to affect materially its control:

a) is, as at the date of this AIF, or has been within the 10 years before the date hereof, a director or executive officer of any entity (including the Corporation) that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets, state the fact; or

b) has, within the 10 years before the date of this AIF, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director, executive officer or shareholder;

To the knowledge of the Corporation, none of its directors or executive officers, or any shareholder holding a sufficient number of securities to affect materially the control of the Corporation, has been subject to:

a) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or

b) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

Interest of Management and Others in Material Transactions

Except as disclosed in the notes to the financial statements of the Corporation for the year ended December 31, 2020, there is no material interest, direct or indirect, of any director, executive officer, shareholder who beneficially owns, directly or indirectly, more than 10 percent of the Corporation’s outstanding common shares, or of any associates or affiliates of such persons, in any transaction within the three most recently completed fiscal years or during the current fiscal year which has materially affected or will materially affect the Corporation.

CONFLICTS OF INTEREST, AND INTERESTS OF EXPERTS

The fact that certain directors and officers of the Corporation are associated with other resource companies may lead to conflict of interest situations. If a director or officer is placed in a situation of conflict of interest, he or she shall abstain from taking part in discussions, decisions, and voting. There are currently no existing or potential material conflicts of interest between the Corporation and any director or officer.

Ernst & Young LLP (“**EY**”) are the external auditors who have prepared the independent auditors’ report to shareholders of the Corporation regarding the financial statements of Pieridae for the year ended December 31, 2020. EY confirmed to the Corporation that they are independent from the Corporation within the meaning of the code of ethics of the Institute of Chartered Professional Accountants of Alberta.

Deloitte is the petroleum consulting firm who has reviewed the technical report on the properties of the Corporation as at December 31, 2020, and which is referred to under “Properties of the Corporation”. At the time of preparation of such report, Deloitte did not own any common shares of the Corporation.

AUDIT COMMITTEE INFORMATION

Audit Committee Mandate

The Board has adopted a written mandate for the Audit Committee, which sets out the Audit Committee’s responsibility for (among other things) reviewing the Corporation’s financial statements and the Corporation’s public disclosure documents containing financial information and reporting on such review to the Board, ensuring the Corporation’s compliance with legal and regulatory requirements, overseeing qualifications, engagement, compensation, performance and independence of the Corporation’s external auditors, and reviewing, evaluating and approving the internal control systems that are implemented and maintained by management. A copy of the Audit Committee Mandate is attached to this AIF as Appendix “D”.

Composition of the Audit Committee and Relevant Education and Experience

The Audit Committee is comprised of Charles Boulanger, who serves as the chair of that committee, Andrew Judson and Charle Gamba (each of whom is considered to be independent member of that committee) and all members are financially literate as defined in National Instrument 52-110 *Audit Committees* (“**NI 52-110**”). According to NI 52-110, an individual is financially literate if he or she has the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the issuer’s financial statements.

Relevant Training and Experience

The training and experience of each member of the Audit Committee relevant to his/her responsibilities as members of the Audit Committee are as follows:

Charles Boulanger

Mr. Boulanger acquired a foundational level of knowledge of accounting and audit principles by completing the Executive Program from CIREM (Centre for International Research and Studies in Management). That knowledge was further enhanced by his thirty-five years of experience in corporate leadership which included the management and implementation of several complex corporate structures (such as international joint ventures) and financings (totalling over $700 million) as well as initial public offerings and a leveraged buy-out. As a consequence, Mr. Boulanger has gained first-hand knowledge of the accounting treatment, financial statement presentation and audit implications, of these structures, financings and transactions. His knowledge base has been further supplemented through his prior service (since 2012) on the audit committee of Pétrolia Inc. and more recently of the Corporation.

Charle Gamba

Mr. Gamba is the chief executive officer of Canacol Energy Ltd, a leading oil and gas production company based in Columbia. Mr. Gamba has over thirty years of experience in the oil and gas industries and has had extensive exposure to oil and gas financial reporting based on IFRS. Mr. Gamba's experience also includes the identification and assessment of financial risk and its mitigation and has been responsible for the audit function.

Andrew Judson

Mr. Judson holds an M.B.A. and has been employed in the investment industry on both the buy and sell sides for over twenty five years. His business experience includes the critical review of financial statements and information of companies engaged in the oil and gas industries. Mr. Judson has served on the audit committee of both for-profit and not-for-profit organizations.

Pre-Approval Policies and Procedures for the Engagement of Non-Audit Services

The Audit Committee must pre-approve all non-audit services to be provided to the Corporation by its external auditors, EY. The Audit Committee may delegate such pre-approval authority, if and to the extent permitted by law.

External Auditor Fees

The following table summarizes the fees paid by the Corporation to its external auditors, EY, for external audit and other services during the years ended December 31, 2020 and December 31, 2019. The amounts disclosed exclude administrative charges.

Table 22: External Auditor Fees

	2020	2019
Audit fees (1)	290,000	348,400
Audit-related fees (2)	-	-
Tax fees (3)	-	3,177
All other fees	2,000	-
Total	**292,000**	**351,577**

(1) Represents the aggregate fees billed for services related to the audit of the Corporation's annual financial statement and review of quarterly financial statements

(2) Represents aggregate fees billed for services rendered in connection with providing assurance over accounting policy matters and complex transactions.

(3) Represents the aggregate fees billed for tax compliance and planning.

LEGAL PROCEEDINGS AND REGULATORY ACTION

The Corporation was not a party to any material legal proceedings, and its assets were not the subject of material legal proceedings, during the year ended December 31, 2020. The Corporation is not aware that any such material legal proceeding is threatened. As described in the "Developments in 2020" section of this AIF, on January 4, 2021 Shell resubmitted the applications to transfer the licenses for the Shell Foothills Assets to Alberta Production and the AER is processing the applications in the normal course.

There are no: (a) penalties or sanctions imposed against the Corporation by a court relating to securities legislation or by a securities regulatory authority; (b) other penalties or sanctions imposed by a court or regulatory body against the Corporation that would likely be considered important to a reasonable investor in making an investment decision; or (c) settlement agreements the Corporation entered into before a court relating to securities legislation or with a securities regulatory authority since the Corporation's inception.

INDUSTRY CONDITIONS

Legislative Framework

The oil and gas industry is subject to extensive controls and regulations imposed by various levels of government. Oil and gas operations are subject to Canadian federal, provincial, territorial and local laws and regulations, which regulate, among other things, land tenure and the exploration, development, production, handling, storage, transportation and disposal of oil and gas, oil and gas by-products, waste and other substances and materials produced or used in connection with oil and gas operations. These laws and regulations may change in response to changing economic or political conditions.

Regulatory approval is required for, among other things, the drilling of oil and natural gas wells, construction and operations of facilities and pipelines, the storage, injection and disposal of substances, the abandonment and reclamation of well-sites, and the decommissioning and reclamation of facilities and pipelines. In order to conduct oil and gas operations and remain in good standing with the applicable regulator, the Corporation must comply with applicable legislation, regulations, orders, directives and other directions (all of which are subject to governmental oversight, review and revision, from time to time).

Failure to comply with the laws and regulations may result in administrative, civil and criminal penalties, revocation or suspension of permits, remedial obligations and injunctions that could delay, limit or prohibit certain operations. All laws and regulations are a matter of public record and Pieridae is unable to predict what additional laws, regulations or amendments may be enacted.

Pieridae conducts business in the following provinces, each with its own legislative frameworks:

Alberta

The Alberta Energy Regulation ("**AER**") is the regulator responsible for all provincial oil and gas development in Alberta. The AER ensures the safe, efficient, orderly and environmentally responsible development of hydrocarbon resources including allocating and conserving water resources, managing public lands, and protecting the environment. The AER's responsibilities exclude the functions of the Alberta Utilities Commission and the Surface Rights Board, as well as Alberta Energy's responsibility for mineral tenure. The objective behind a single regulator is an enhanced regulatory regime that is efficient, attractive to business and investors, and effective in supporting public safety, environmental management and resource conservation while respecting the rights of landowners.

The AER administers the *Oil and Gas Conservation Act*, the *Pipeline Act*, the *Responsible Energy Development Act* and other statutes and regulations.

British Columbia

In British Columbia, the *Oil and Gas Activities Act* (the "**OGAA**") regulates oil and gas producers in British Columbia. The British Columbia Oil and Gas Commission (the "**BC Commission**") administer the OGAA and is responsible for granting permits and authorizations for wells, pipelines, facilities and other oil and gas activities.

Québec

On December 10, 2016, *Bill 106: An Act to implement the 2030 Energy Policy and amending various legislative provisions* was adopted at the Québec National Assembly. This law provides a legislative framework for oil and gas exploration and exploitation activities, which were previously governed by the *Mining Act*.

The *Petroleum Resources Act* and its regulations were published on September 5, 2018 and came into force on September 20, 2018. It governs the management of oil and gas activities carried out pursuant to exploration, production and petroleum storage licenses, including drilling, completion, production of wells, the construction and use of pipelines and fees and duties on the substances produced.

Nova Scotia

In Nova Scotia, provincial environmental permits are issued under the *Environment Act* which applies to LNG. Also, other provincial departments such as Lands and Forestry, Transportation and Infrastructure Renewal along with the Department of

Energy and Mines also have legislation which applies to or is associated with LNG. This legislation includes the *Crown Lands Act*, the *Endangered Species Act*, and the *Pipeline Act*. In addition, federal departments and agencies administer legislation associated with LNG, such as Transport Canada and the Department of Fisheries and Oceans. This legislation includes the *Department of Transport Act*, the *Canada Shipping Act* and the *Fisheries Act*. LNG projects require a Nova Scotia Environmental Assessment Approval from the Minister of Nova Scotia Environment.

New Brunswick

The *Oil and Natural Gas Act* regulates oil and gas activities in New Brunswick. The Government of New Brunswick introduced a moratorium on the use of hydraulic fracturing on December 18, 2014 which effectively prevents any further exploration and development by Production LP of its natural gas resource properties in that province. On June 19, 2019 the Minister was granted authority to exempt certain parts of the province from the moratorium.

Land Tenure

Provincial and federal governments grant rights to explore for and produce oil and natural gas over government owned mineral rights pursuant to leases, licenses, and permits for varying terms, and on conditions set in provincial legislation including requirements to perform specific work or make payments.

Continuing interests in petroleum and natural gas leases are earned by drilling wells. A lease can be extended indefinitely at the end of its initial term by drilling and producing a successful well, being part of a unit agreement or paying offset compensation. The tenure comes to an end when the holder can no longer prove its well is capable of producing oil or gas.

Many jurisdictions in Canada have legislation in place for mineral rights reversion to the Crown of stratigraphic formations that cannot be shown to be productive at the end of their initial term. In some provinces, energy companies are able to continue lease terms for non-productive lands if certain criteria are met under the relevant legislation.

Certain oil and natural gas mineral interests are privately-owned and rights to explore and produce on such lands are granted by leases on the terms and conditions negotiated between the landowner and the lessee.

The Corporation is a leaseholder on a number of properties governed by the Indian Oil and Gas Commission ("**IOGC**"). Canada has been working in partnership with oil and gas producing First Nations to modernize the legislative and regulatory regime for oil and gas activity on First Nations lands. With the formal proclamation of the *Indian Oil and Gas Regulations, 2019* ("**2019 Regulations**"), the *Indian Oil and Gas Act, 2009* and its 2019 Regulations both became law August 1, 2019. The IOGA and the 2019 Regulations govern both surface and subsurface and leases establish the terms and conditions with which an IOGC leaseholder must comply.

Royalties and Incentives

General

In addition to federal regulations, each province has legislation which govern land tenure, royalties, production rates and other matters. The royalty regimes in Alberta and BC are a significant factor in the profitability of crude oil, NGLs, sulphur and natural gas production in Alberta and BC. Royalties payable on production from private lands are determined by negotiation between the mineral freehold owner and the lessee, although production from such lands is subject to certain provincial taxes and royalties. Royalties from production on Crown lands are determined by governmental regulation and are generally calculated as a percentage of the value of gross production. Royalty rates generally depend in part on prescribed reference prices, well productivity and depth, geographical location, field discovery date, method of recovery and the type or quality of the petroleum product produced. Other royalties and royalty-like interests are, from time to time, carved out of the working interest owner's interest through non-public transactions. These are often referred to as overriding royalties, gross overriding royalties, net profits interests, or net carried interests.

Occasionally some Canadian provinces create incentive programs for exploration and development. Such programs often provide for royalty rate reductions, royalty holidays or royalty tax credits and are generally introduced when commodity prices are low to encourage exploration and development activity by improving earnings and cash flow within the industry.

The federal government has signaled it will phase out certain subsidies for the oil and gas industry, which include only allowing the use of the Canadian Exploration Expenses tax deduction in cases of successful exploration. The federal government has also implemented a more stringent review for pipelines and major energy projects, and established a pan-Canadian legislative framework for combating climate change. These policies can affect earnings of companies operating in the oil and natural gas industry. Pieridae conducts business in the following provinces, each with its own royalties framework:

Alberta

On January 1, 2017, the Government of Alberta adopted a "Modernized Royalty Framework" for Alberta (the "**MRF**"). Wells drilled prior to January 1, 2017 will continue to be governed by the previous "Alberta Royalty Framework" for a period of 10 years until December 31, 2026. The MRF is structured in three phases: (i) Pre-Payout, (ii) Mid-Life, and (iii) Mature. During the Pre-Payout phase, a fixed 5% royalty applies until the well reaches payout. Well payout occurs when the cumulative undiscounted revenue from a well is equal to the Drilling and Completion Cost Allowance (determined by a formula that approximates drilling and completion costs for wells based on depth, length, historical costs and placed proppant). The Pre-Payout royalty rate is payable on gross revenue generated from all production streams (oil, gas and NGLs), eliminating the need to label a well as "oil" or "gas." Post-payout, during the Mid-Life phase the royalty rate is determined by reference to the current commodity prices of the substances the well is producing, with the royalty rate ranging from 5% - 40%. The metrics for calculating the Mid-Life phase royalty are intended, on average, to yield the same internal rate of return as under the previous Alberta Royalty Framework. In the Mature phase, once a well's production falls below a Maturity Threshold (40 boe/d or 345,500m3 of gas per month), the royalty rate is on a sliding scale (based on volume and price) with a minimum royalty rate of 5%. The downward adjustment of the royalty rate in the Mature phase is intended to account for the higher per-unit fixed cost involved in operating an older well.

The *Royalty Guarantee Act* came into effect on July 18, 2019 and provides that no major changes will be made to the current oil and natural gas royalty structure for a period of at least 10 years.

Currently, producers of oil and natural gas from Crown lands in Alberta are required to pay annual rental payments, currently at a rate of $3.50 per hectare, and make monthly royalty payments in respect of oil and natural gas produced.

Royalties for wells drilled prior to January 1, 2017 are paid pursuant to the "Alberta Royalty Framework" ("**ARF**") until January 1, 2027.

Under the ARF royalty rates for conventional oil are set by a single sliding rate formula, which is applied monthly and incorporates separate variables to account for production rates and market prices. The maximum royalty payable under the royalty regime for conventional oil is 40%. Royalty rates for natural gas also use a single sliding rate formula incorporating separate variables to account for production rates and market prices. The maximum royalty payable for natural gas is 36%. Royalties on NGLs are levied at a flat rate of 30% of the sales volume for propane and butane and 40% for pentanes plus with field condensate at a rate equivalent to oil.

Producers of oil and natural gas from freehold lands in Alberta are required to pay annual freehold mineral taxes levied by the Government of Alberta under the *Freehold Mineral Tax Act* (Alberta) on the value of oil and natural gas production from non-Crown lands. The freehold mineral tax uses a tax formula that depends on, among other things, the amount of production, the value of each unit of production, the tax rate and the percentage that the owner hold in the title. On average, the tax levied is 4% of revenues reported from fee simple mineral title properties.

British Columbia

Producers of oil and natural gas from Crown lands in British Columbia are required to pay rental payments, currently at a rate of $3.50 per hectare per year for licenses and $7.50 per hectare per year for leases and make monthly royalty payments in respect of oil and natural gas produced. The amount payable as a royalty in respect of oil depends on the type and vintage of the oil, the quantity of oil produced in a month and the value of that oil. Generally, oil is classified as either light or heavy and the vintage of oil is based on whether the oil is produced from a pool discovered before October 31, 1975, between October 31, 1975 and June 1, 1998, or after June 1, 1998 or through an enhanced oil recovery scheme ("**Third-Tier Oil**"). The royalty calculation takes into account the production of oil on a well-by-well basis, the specified royalty rate for a given vintage of oil, the average unit selling price of the oil and any applicable royalty exemptions. Royalty rates are reduced on low productivity wells, reflecting the higher unit costs of extraction, and are the lowest for Third-Tier Oil, reflecting the higher unit costs of both exploration and extraction.

The royalty payable in respect of natural gas produced on Crown lands is determined by a sliding scale formula based on a reference price, which is the greater of the average net price obtained by the producer and a prescribed minimum price, and if the gas is classified as conservation or non-conservation gas. For non-conservation gas (not produced in association with oil), the royalty rate depends on the date of acquisition of the oil and natural gas tenure rights, the spud date of the well and the select price, which is a parameter used in the royalty rate formula to account for inflation. Royalty rates are fixed for certain classes of non-conservation gas when the reference price is below the select price. Conservation gas is subject to a lower royalty rate than non-conservation gas. Royalties on natural gas liquids are levied at a flat rate of 20% of the sales volume.

Producers of oil and natural gas from freehold lands in British Columbia are required to pay monthly freehold production taxes. For oil, the freehold production tax is based on the volume of monthly production and is either a flat rate, or, at certain production levels, is determined using a sliding scale formula based on the reference price similar to that applied to oil production on Crown land. For natural gas, the freehold production tax is either a flat rate, or, at certain production levels, is determined using a sliding scale formula based on the reference price similar to that applied to natural gas production on Crown land, and depends on whether the natural gas is conservation gas or non-conservation gas. The freehold production tax rate for NGLs is a flat 12.25%.

Québec

Before September 20, 2018, Québec did not have a legislative and regulatory regime that is specific to the oil and gas industry. Its oil and gas resources were regulated principally under the province's mining laws and regulations pursuant to which royalty rates of 5 to 12.5% of the market value of petroleum and natural gas production apply, depending on the average daily production at the wellhead.

In December 2016, Québec passed *An Act to implement the 2030 Energy Policy* and amend various legislative provisions. This legislation included the new *Petroleum Resources Act*, which, once in force on September 20, 2018, replaced existing provisions of the *Mining Act* and established a license and authorization system for the development of petroleum resources in Québec. Under Québec's new regulations to the Petroleum Resources Act, the royalty regime remains the same as under the *Mining Act* and its regulations. The royalty for oil production varies from 5% to 12% and for natural gas from 10% to 12.5%.

Nova Scotia

Nova Scotia has an off-shore petroleum royalty regime based upon revenue and profits. The royalty is initially set as an increasing percentage of gross revenues but then switches to an increasing percentage of net revenues. Royalty rates increase with project profitability. Once a net revenue royalty level is achieved, then the royalty cannot be less than a specified level of gross revenues. Prescribed royalties on petroleum products range from 2% to 50% according to regulations made under the *Offshore Petroleum Royalty Act*.

New Brunswick

New Brunswick uses a two-tier royalty regime for natural gas production. The basic royalty rate is equal to the greater of 4% of the wellhead price or 2% of gross revenues. After a project has recovered all its eligible costs and begins to make a profit, the producer must also pay 25% of the excess of revenues over eligible costs.

The royalty rate for NGLs is 10% of gross revenues.

Governmental Licenses and Partnerships

The adoption of the *Petroleum Resources Act* in Québec in 2018 has had a profound impact on the Corporation’s holdings in the province. The multitude of new restrictions in the legislation caused the Corporation to re-evaluate its Quebec license holdings. Currently Pieridae has an interest in 13 licenses located near Gaspe, in eastern Québec covering 1,393km2. The areas retained by the Corporation are considered to offer the highest potential of discovering oil, natural gas and possibly NGLs in commercial quantities. However, in the opinion of the Corporation, the *Petroleum Resources Act* and the associated regulations have had the effect of a deemed expropriation and prohibit the Corporation from developing certain assets. This matter is subject to various legal actions currently before the courts.

In 2019 management re-evaluated the Corporation’s prospects in Québec and compared these to other opportunities available to the Corporation. Management concluded that renewing some petroleum licenses in Québec was not in the best interests of the Corporation. Consequently, only licenses for properties which held the most promise, and likelihood of exploratory success, were renewed. The other licenses were relinquished.

Pricing and Marketing

Natural Gas

The price of natural gas is determined by negotiations between buyers and sellers. In Canada there is a robust and liquid marketplace for natural gas. Natural gas prices depend, in part, on natural gas quality produced, the price of competing fuels such as coal or distillates, the distance to market, the ability access pipeline transportation to markets, the length of contract term, seasonal weather conditions, the supply/demand balance for natural gas and the economy in general.

Natural gas exported from Canada is subject to regulation by the federal Canada Energy Regulator (“**CER**”). In general exporters are free to negotiate prices and terms with counterparties, provided the export contracts meet certain other criteria prescribed by the CER and the Government of Canada. Natural gas exports for a term of two years or less require Order from the CER and the exporter must report the volumes of natural gas that have been exported. The majority of natural gas is exported from Canada under such orders. For longer terms the proponent requires an export license from the CER. As part considering an export license request the CER considers if Canada will still have adequate supplies domestically if the license is granted.

Alberta's natural gas market has been deregulated since 1985. Natural gas supply and demand determine the market price of natural gas. Sales from natural gas can occur at the wellhead, the outlet of a gas processing plant, on a gas transmission system such as the NOVA system known as Alberta "NIT" (Nova Inventory Transfer), at a storage facility, at the inlet to a utility system or at the point of receipt by the consumer. Accordingly, the price for natural gas is dependent upon such producer's own arrangements (whether long or short-term contracts and the specific point of sale). As natural gas is also traded on electronic trading platforms such as the Natural Gas Exchange ("**NGX**") which is owned by the Intercontinental Exchange or on the New York Mercantile Exchange ("**NYMEX**") in the United States, spot and future prices can also be influenced by supply and demand fundamentals on these platforms.

British Columbia's natural gas market has also been deregulated since 1985. British Columbia is a much smaller producing basin than Alberta and has less of a large industrial load than Alberta. Pricing for BC natural gas is similar to Alberta, with two major pricing points. The first is in Northern BC on the Spectra (Enbridge) pipeline system at a point known as Station 2. This point tends to trade at a discount to Alberta prices normally. The second location is at the BC-US border where gas is exported into Washington State. This point also carries a differential relationship with Alberta gas, but not to the same extent as at Station 2. BC natural gas is also traded on electronic trading platforms such as the NGX.

Natural Gas Liquids

In Canada, the price of NGLs sold in intra-provincial, interprovincial and international trade is determined by negotiation between buyers and sellers across many markets in North America. Such price depends, in part, on the quality of the NGL, prices of competing chemical feed stock, distance to market, access to downstream transportation, length of contract term, the supply/demand balance and other contractual terms. There are also electronic exchanges for the sale of NGLs on the NYMEX. NGLs exported from Canada are subject to regulation by the CER and require an order from the CER. Exporters are free to negotiate prices and other terms with purchasers, provided that the export contracts meet the criteria prescribed by the CER. Propane and butane may be exported under an order for a term of no more than one year, and ethane may be exported under an order for no more than two years. All exports of NGLs require an order of the CER.

Condensate

Condensate, also included as part of NGLs, is a low-density mixture of hydrocarbon liquids in the raw natural gas produced from many natural gas fields. It is also called condensate, gas condensate, or natural gasoline. In Alberta, condensate is commonly blended with heavy oil to create lighter oils for shipment by pipeline or rail, which is why condensate is referred to as a diluent for heavy oil. Condensate pricing in Alberta is typically priced as a differential to the NYMEX futures exchange WTI crude oil contract and can provide a very visible and liquid hedging instrument to use. Hedging is typically done with fixed priced sales, over the counter hedge contracts or futures contracts.

Sulphur

Alberta is one of the world's largest producers of elemental sulphur. Most Alberta sulphur production comes from the production of oil and natural gas. Most sulphur produced in Alberta is exported, mainly to the US or Asia. In general, the sulphur markets worldwide are a very illiquid market, with very poor price discovery. Typically, contracts are on a one-off basis between counterparties. Currently there are not any financial instruments which would allow a sulphur producer to hedge prices. Pieridae sells sulphur to markets in the US and to Asia. It normally negotiates prices with a price floor and cap in order to manage its price risk.

International Trade

The United States-Mexico-Canada Agreement

On November 30, 2018, the United States, Mexico and Canada reached a new trade agreement called the United States-Mexico-Canada Agreement ("**USMCA**"). On April 3, 2020 Canada announced that it had ratified the USMCA. The USMCA came into force on July 1, 2020.

The Comprehensive and Progressive Agreement for Trans-Pacific Partnership

In October 2015, Canada concluded negotiations for a free trade agreement between the members of the Trans-Pacific Partnership ("**TPP**"), which includes Canada, Australia, Brunei, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States and Vietnam. All 12 countries signed the TPP in 2016. However, in 2017, the United States withdrew from TPP and the remaining 11 countries agreed to try to revive the deal without United States participation. On March 8, 2018, representatives from the 11 remaining countries met in Santiago, Chile to sign the Comprehensive and Progressive Agreement for Trans-Pacific Partnership ("**CPTPP"**). When the CPTPP comes fully into force, almost all tariffs between CPTPP member countries are expected to be reduced or eliminated, and non-tariff barriers to trade are expected to be removed.

Other International Agreements

Canada has also pursued a number of other international free trade agreements with other countries around the world. As a result, a number of free trade or similar agreements are in force between Canada and certain other countries while in other circumstances Canada has been unsuccessful in its efforts. Canada and the European Union recently agreed to the Comprehensive Economic and Trade Agreement ("**CETA**"), which provides for duty-free, quota-free market access for Canadian oil and gas products to the European Union. Although CETA remains subject to ratification by certain national legislatures in the European Union, provisional application of CETA commenced on September 21, 2017.

While it is uncertain what effect CETA or any other trade agreements will have on the oil and gas industry in Canada, the lack of available infrastructure for the offshore export of oil and gas may limit the ability of Canadian oil and gas producers to benefit from such trade agreements.

Environmental Regulations

The oil and natural gas industry is currently subject to environmental regulations pursuant to a variety of provincial and federal legislation, all of which is subject to governmental review and revision from time to time. Such legislation provides for, among other things, restrictions and prohibitions on the spill, release or emission of various substances produced or used in association with certain oil and gas industry operations, such as sulphur dioxide and nitrous oxide. In addition, such legislation sets out the requirements with respect to oilfield waste handling and disposal, habitat protection and the satisfactory operation, maintenance, abandonment and reclamation of well, facility, and pipeline sites. Compliance with such legislation can require significant expenditures and a breach of such requirements may result in the suspension or revocation of necessary licenses and authorizations, civil liability for pollution damage, and the imposition of material fines and penalties. In addition to these specific, known requirements, future changes to environmental legislation may impose further requirements on operators and other companies in the oil and natural gas industry.

Pieridae conducts business in the following jurisdictions, each with its own environmental regulatory framework:

Federal

On November 19, 2020, the Government of Canada tabled climate "accountability" legislation that set greenhouse gas ("**GHG**") emissions targets into law. Bill C-12, the "Canadian Net-Zero Emissions Accountability Act," creates a legal requirement for the federal government to release action plans to hit a series of GHG targets on the path to net-zero emissions by 2050.

On December 11, 2020, the Government of Canada released an updated climate plan with a $15 per tonne per year increase in carbon pricing starting in 2022, reaching $170 per tonne in 2030. The plan will also raise the cost of gasoline, natural gas for heating and other goods dependent on fossil fuels.

On August 28, 2019, the new federal *Impact Assessment Act* ("**IAA**"), replaced the *Canadian Environmental Assessment Act, 2012*, ("**CEAA 2012**"). The IAA broadens the scope of the assessment of large projects and requires proponents to take more steps to manage their project's environmental, socio-economic, cultural and health impacts.

The federal Impact Assessment Agency of Canada administers all impact assessments, including assessments of projects regulated by the CER.

The IAA emphasizes early engagement with Indigenous groups and stakeholders potentially affected by a project so their interests can be factored into the planning and ongoing life of the project. Under the IAA, the nature and extent of assessment is tailored for each project during a new 180-day planning phase.

The IAA contemplates a role for regional and strategic assessments, undertaken by the federal government, potentially in partnership with other jurisdictions, designed to help understand cumulative impacts on a regional scale. Once a regional assessment is completed, conditions may be set through regulations that can exempt certain designated projects from a federal review.

Other federal environmental legislation that applies to oil and gas development includes the *Fisheries Act*, the *Migratory Birds Convention Act*, 1994, the *Species of Risk Act*, the *Navigation Protection Act* and the *Canadian Environmental Protection Act, 1999*.

Alberta

The Government of Canada adopted regulations that came into force on January 1, 2020, meaning Alberta now falls under the federal GHG pricing system, with a carbon pollution price of $20 per tonne of CO_2 equivalent. The Government of Alberta had repealed its provincial carbon tax in June of 2019.

The *Technology Innovation and Emissions Reduction Regulation* (the "**TIER Regulation**" or "**TIER**") is Alberta's industrial greenhouse gas emissions pricing regulation and emissions trading system. Facilities regulated under the TIER Regulation must reduce emissions to meet facility benchmarks. The TIER Regulation replaced the *Carbon Competitiveness Incentive Regulation* (CCIR) on January 1, 2020.

On May 12, 2020, a new version of AER Directive 017: Measurement Requirements for Oil and Gas Operations came into effect in Alberta. To meet federal requirements under the *Canadian Environmental Protection Act, 1999*, the AER now requires companies to measure, monitor, report and reduce methane releases. In 2018, the province committed to reduce methane emissions from upstream oil and gas sites by 45 per cent from 2014 levels by 2025.

Alberta relies on regional planning to accomplish its resource development goals. Alberta's Integrated Resource Management System provides for engagement and consultation with stakeholders and the public and examines the cumulative impacts of development on the environment and communities, by incorporating the management of all resources, including energy, minerals, land, air, water and biodiversity. While the AER is the primary regulator for oil and gas development, other governmental departments and agencies may be involved in land use and other issues, including Alberta Environment and Parks, Alberta Energy, the Aboriginal Consultation Office and the Land Use Secretariat.

Alberta environmental legislation that applies to oil and gas development includes the *Environmental Protection and Enhancement Act*, the *Water Act*, the *Wildlife Act*, the *Climate Change and Emissions Management Act* and the *Alberta Land Stewardship Act*.

British Columbia

In British Columbia, the *Environmental Management Act* regulates pollution, waste, contaminated sites, emissions and other environmental activities. The government has established environmental objectives and laws for water, riparian habitats, wildlife and wildlife habitat, old-growth forests and cultural heritage resources. The OGAA requires the BC Commission to consider these environmental objectives and laws when authorizing oil and gas activities. In addition the OGAA requires proponents to obtain various permits and authorizations before undertaking exploration or production work, such as geophysical licenses, geophysical exploration project approvals and permits and well, test hole and water-source well authorizations. Such permits and authorizations are given subject to environmental protection conditions and permits and project approvals can be suspended or cancelled for non-compliance.

Québec

Environmental laws in Québec are largely set out in the *Environment Quality Act*, which requires proponents of certain commercial and industrial activities to first obtain a certification of authorization from the Québec Minister of Environment and the Fight Against Climate Change. The legislation can apply to erecting or altering a structure, carrying on certain activities, using an industrial process or increasing the production of goods or services if certain activities will result in the emission of contaminants or change the quality of the environment. The *Environment Quality Act* applies to the majority of oil and gas operations in Québec.

In September 2018, Government of Québec brought into force the *Petroleum Resources Act*. This legislation and its regulations govern oil and gas activities in Québec and require licenses for activities like the exploration, development and storage of petroleum and pipeline construction.

Nova Scotia

Environmental laws in Nova Scotia are largely set out in the *Environment Act* and it applies to LNG activities. Other provincial departments such as Lands and Forestry and the Department of Energy and Mines also administer legislation which applies to LNG projects and concerns environmental protection. In addition, federal departments and agencies administer legislation associated with LNG, such as Transport Canada and the Department of Fisheries and Oceans. Many large projects are subject to the Nova Scotia environmental assessment approval process.

New Brunswick

New Brunswick environmental laws are largely set out in the *Clean Environment Ac*t, the *Clean Air Act,* the *Clean Water Act* and the *Climate Change Act*. New Brunswick has an indefinite legislated moratorium on hydraulic fracturing although the Minister of Natural Resources and Energy Development has authority to exempt certain parts of the province from the moratorium.

Liability Management Rating Programs

Alberta

In Alberta, the AER administers the Liability Management Rating Program (the "**AB LMR Program**") to manage the abandonment and reclamation liabilities associated with oil and gas wells, pipelines and facilities. The *Oil and Gas Conservation Act* established an orphan fund (the "**Orphan Fund**") to pay the costs to suspend, abandon, remediate and reclaim a well, pipeline or facility included in the AB LMR Program if a licensee or working interest participant becomes defunct. The Orphan Fund is funded through a levy administered by the AER on AER licensees. The AB LMR Program is designed to minimize the risk to the Orphan Fund posed by unfunded liabilities of licensees and to prevent the taxpayers of Alberta from incurring costs to suspend, abandon, remediate and reclaim wells, pipelines and facilities. The AB LMR Program requires a licensee whose deemed liabilities exceed its deemed assets to provide the AER with a security deposit. The ratio of deemed liabilities to deemed assets is assessed once each month and upon the transfer of any well or facility licenses to another operator. Failure to post a required security deposit may result in enforcement action by the AER.

There is an expectation that the AER will alter the LMR program the future to create a more fulsome risk management framework, but the full details have yet to be released.

On February 1, 2019, the Supreme Court of Canada ("**SCC**") overturned a decision of the Alberta Court of Appeal regarding the interests of secured creditors in bankruptcy over the fulfillment of oil and gas industry abandonment and reclamation obligations. At issue was whether the AB LMR Program and the laws for wells, pipelines and facilities frustrated the purpose of Canada's federal bankruptcy laws. The SCC ruled there was no conflict. As a result, trustees of bankrupt oil and gas companies can no longer disclaim abandonment, reclamation and remediation liabilities for uneconomic oil and gas sites and abandonment reclamation and environmental clean-up obligations now take priority over payments to creditors.

The SCC decision has introduced further uncertainty for secured lenders in the oil and gas sector.

British Columbia

In British Columbia, the BC Commission implements the Liability Management Rating Program (the "BC LMR Program"), designed to manage public liability exposure related to oil and gas activities by ensuring that permit holders carry the financial risks and regulatory responsibility of their operations through to regulatory closure. Under the BC LMR Program, the BC Commission determines the required security deposits for permit holders under the OGAA. The LMR is the ratio of a permit holder's deemed assets to its deemed liabilities. Permit holders whose deemed liabilities exceed their deemed assets are considered higher risk and may be required to pay a security deposit for their abandonment and reclamation obligations. Permit holders who fail to pay a required security deposit may be in non-compliance with the OGAA.

Climate Change Regulations

Pieridae conducts business is the following jurisdictions, each with its own climate change regulatory framework.

Federal

Canada has been a signatory to the United Nations Framework Convention on Climate Change (the "**UNFCCC**") since 1992. Since its inception, the UNFCCC has instigated numerous policies with respect to climate governance. On April 22, 2016, 197 countries signed the Paris Agreement, committing to prevent global temperatures from rising more than 2° Celsius above pre-industrial levels and to pursue efforts to limit this rise to no more than 1.5° Celsius. To date, 190 of the 197 parties to the UNFCCC have ratified the Paris Agreement. Canada ratified the Paris Agreement on October 5, 2016 and pledged to cut its emissions by 30% from 2005 levels by 2030.

Additionally, on December 9, 2016, the federal government announced the Pan-Canadian Framework on Clean Growth and Climate Change (the "**PCF**") and on April 1, 2019 implemented a Canada-wide GHG pricing scheme through the *Greenhouse Gas Pollution Pricing Act* (the "**GGPPA**"). It requires each province to adopt a GHG cap and trade system or a carbon tax regime which will result in emission reductions equivalent to the federal scheme. In 2018, the federal government imposed a price on GHG of $20 per tonne on any province or territory which failed to implement its own system and as of April 1, 2020 the federal GHG price is $30 per tonne. This amount will increase by $10 annually until it reaches $50 per tonne in 2022. The federal government has announced that in 2022 the GHG price will increase by $15 per tonne per year until it reaches $170 per tonne in 2030. Several provinces have challenged the federal GHG pricing scheme in court.

On January 1, 2020, the federal *Regulations Respecting Reduction in the Release of Methane and Certain Volatile Organic Compound*s *(Upstream Oil and Gas Sector*) (the "**Federal Methane Regulations**") came into force. The Federal Methane Regulations require methane emissions from the oil and natural gas industry be reduced by introducing new control measures, such as the reduction of unintentional leaks and intentional venting of methane, as well as ensuring that oil and natural gas operations use low-emission equipment and processes. The Federal Methane Regulations do not apply in Alberta as the federal government has deemed Alberta's methane emission reduction requirements as equivalent to the Federal Methane Regulations.

Alberta

Alberta enacted the *Climate Change and Emissions Management Act* on December 4, 2003. The TIER Regulation came into force January 1, 2020. The TIER Regulation applies to facilities that emitted 100,000 tonnes or more of GHGs per year in 2016 or a subsequent year. Under the TIER Regulation, a facility is required to reduce the GHG emission intensity of stationary fuel combustion emissions in 2020 by 10% relative to the facility's historical baseline. The reduction requirement will increase by 1% each year. If the facility does not do so, it must pay $40 per tonne of excess GHG emissions into a TIER fund for 2021 or, subject to limits, use emission performance credits generated by facilities which have exceeded their emission reduction targets or offset credits generated by facilities not required to reduce their GHG emissions by the TIER Regulation. The federal government has agreed Alberta's system will result in emission reductions equivalent to the federal scheme for large emitters.

On June 4, 2019, the *Carbon Tax Repeal Act* repealed the Alberta carbon tax, which had been in effect since January 1, 2017. The federal government subsequently imposed the federal carbon tax on Alberta on January 1, 2020, as it had done in Ontario, New Brunswick, Manitoba and Saskatchewan.

British Columbia

British Columbia enacted a revenue-neutral carbon tax that took effect July 1, 2008. The tax is consumption-based and applied at the time of retail sale or consumption of virtually all fossil fuels purchased or used in British Columbia. The current tax level is $40 per tonne of GHG emissions equivalent.

In May 2018, the Government of British Columbia updated its Climate Leadership Plan (the "**Plan**") with a goal to reduce net annual GHG emissions by up to 40% from 2007 levels by 2030, 60% by 2040 and 80% by 2050. The Plan includes various measures across the economy that are designed to incentivize the growth of the renewable energy sector, the use of low GHG emitting technologies, and the improvement of energy efficiency. Further, the Plan sets out a strategy to reduce methane emissions in the upstream natural gas sector, beginning with a target of a 45% reduction in fugitive and vented emissions by 2025 relative to 2014 levels. On January 1, 2020 the BC Commission brought into force regulations that will require mandatory methane leak detection and repair and equipment performance standards.

Québec

Québec operates under its 2013-2020 Climate Change Action Plan, which calls for a 20% reduction in GHG emissions below 1990 levels by 2020 and 37.5% by 2030. Québec passed the *Environmental Quality Act*, which empowers the government to set emission limits, establish reporting requirements for GHG emitters and establish a cap-and-trade system.

Regulations under the *Environmental Quality Act* established Québec's cap-and-trade system in 2012. Under this system, the province sets GHG reduction targets and businesses that emit 25,000 tonnes or more of GHGs per year must cover their emissions with an equivalent number of emissions allowances.

Québec's comprehensive Energy Policy 2030 ("**Policy 2030**") seeks to significantly alter Québec's energy profile by 2030 through five consumption targets: enhance energy efficiency by 15%, reduce petroleum product consumption by 40%, eliminate the use of thermal coal, increase overall renewable energy output by 25% and increase bioenergy production by 50%. Policy 2030 involves the implementation of numerous new regulations.

In the previous several years the Government of Québec announced new regulations to the *Environment Quality Acts*, as part of the modernization of its environmental approval scheme.

Nova Scotia

Nova Scotia enacted the *Sustainable Development Goals Act* on October 30, 2019 but has not declared it in force. It requires that emissions to be reduced by 53% below 2005 levels by 2030, moving the province to a net-zero carbon footprint by 2050 and creating a new fund to help communities fight climate change and grow the economy.

Nova Scotia's cap-and-trade program began in January 2018 and sets a cap on the total amount of GHG emissions allowed in covered sectors in the province for the years 2019-2022 (compliance period). The program regulates the industrial, power, heat (buildings), and transport sectors and covers approximately 80% of GHG emissions in Nova Scotia.

New Brunswick

In March 2018, New Brunswick brought into force the *Climate Change Act*. This legislation introduced a modified carbon pricing system using an output-based pricing scheme that regulates GHG emissions from industrial and electrical sources. On April 1, 2020 New Brunswick introduced a provincial carbon tax that replaced the federal government's back stop carbon pricing system.

Accountability and Transparency

The federal *Extractive Sector Transparency Measures Act* (the "**ESTMA**") imposes mandatory reporting requirements on certain entities engaged in the commercial development of oil, gas or minerals, which includes exploration, extraction and holding permits to explore or extract. All companies subject to ESTMA are required to report payments over $100,000 made to any level of a Canadian or foreign government, including royalty payments, taxes (other than consumption taxes and personal income taxes), fees, production entitlements, bonuses, dividends (other than ordinary dividends paid to shareholders) and infrastructure improvement payments. These categories are distinct; regardless of the aggregate payment amount, one or more individual categories must reach the $100,000 threshold for reporting to be required.

Any persons or entities found in violation of the ESTMA (which includes making a false report, failing to make the report public or failing to maintain records for the prescribed period) can be fined up to $250,000 for each day that the offence continues. There is a further fine of up to $250,000 for any person or entity who has structured payments in order to avoid the obligation to report such payments under the ESTMA. Officers or directors who authorized or acquiesced in the commission of an offence can be subject to personal liability, regardless of whether the entity for which they acted has been prosecuted or convicted. The ESTMA contains a due diligence defense whereby no person will be found guilty of an offence under the ESTMA if the person can establish that he or she exercised due diligence to avoid committing the offence. Additionally, there is a five-year limitation period (from the time when the subject matter of the proceeding arises) within which proceedings must be brought for offences under the ESTMA.

RISK FACTORS

The business of exploring for, developing and producing oil and natural gas reserves is inherently risky. The following information is a summary only of certain risk factors relating to the Corporation and should be read in conjunction with the detailed information appearing elsewhere in this AIF. Each section of the below table of risk factors is arranged in order of perceived risk. Prospective investors should carefully consider the risk factors set out below and consider all other information contained in this AIF and in the Corporation's other public filings before making an investment decision. The risks set out below are not an exhaustive list, nor should they be taken as a complete summary or description of all the risks associated with the Corporation's business and the oil and natural gas business generally. Refer also to Pieridae's MD&A and Financial Statements for the years ending December 31, 2020 and 2019, incorporated by reference into this AIF, for additional disclosure on risks.

TABLE 23: Risk Factors

Risks Related to the Oil and Gas Industry
Weakness in the Oil and Gas Industry
Prices, Markets and Marketing of Crude Oil and Natural Gas
Reserve Decline, Exploration, Development and Production Risk
Reserve Estimates
Liability Management
Royalty Regimes
Alternatives to and Changing Demand for Petroleum Products
Hydraulic Fracturing
Other Risks Inherent to Pieridae's Business
Additional Financing
Liquidity
Access to Capital
Epidemics or Pandemics
Environmental Incidents
Climate Change
Chronic Climate Change Risks
Acute Climate Change Risks
Climate Change Regulations
Permits, Licenses and Approvals
Insurable Risk
Co-ownership of Assets and Operational Dependence
Growth Management
Third Party Credit Risk
Political, Geo-Political and Public Perception Risk
Impact of Future Financings on Market Price
Competition
Availability and Cost of Material and Equipment
Title to Production Assets and Reserves
Estimation of Abandonment and Reclamation Costs
Possible Failure to Realize Anticipated Benefits of Acquisitions
Project Risk
Conflicts of Interest
Litigation
Regulatory
Variations in Foreign Exchange and Interest Rates
Hedging
Tax Horizon
Changes in Risk Profile
Reliance on Key Personnel
Cost of New Technologies
Internal Controls
Breach of Confidentiality
Information Technology Systems and Cyber-Security
Reputation Risk
Estimates and Assumptions
Forward-Looking Statements and Information May Prove Inaccurate
Risks Related to Pieridae's Common Shares
Volatility
Dilution
Return on Investment
Dividends

Risk Related to the Oil and Gas Industry

This section includes risks normally related to the oil, natural gas and LNG industries, including the fact that such industries are competitive, and the Corporation competes with numerous other participants to attract and retain customers for its LNG production. There is no assurance that the Corporation will be able to negotiate LNG sales and purchase agreements with new customers on favourable terms, that Uniper will not terminate the LNG Sale and Purchase Agreement in accordance with its terms, that potential customers (including Uniper) will be able to satisfy their obligations under such purchase and sale agreements, upon which the Corporation will be substantially dependent, or that the Corporation will be able to procure a sufficient long-term supply of natural gas and long-term pipeline transportation capacity for use in the production of LNG.

This section also includes risks inherent to the oil and natural gas exploration industry, such as requiring additional financing to support operations. The Corporation also competes with other companies that have greater financial resources or business opportunities to participate in promising projects. There are natural risks that could cause damage to the environment, accidents or other unforeseen conditions that could result in damage to the properties of the Corporation or to properties owned by third parties which could lead to potential liability to third parties and regulators. There can be no assurance that the development projects and exploration activities that may be implemented in the future will result in reserves or that the Corporation will succeed in drilling productive wells at low exploration costs. The Corporation cannot be certain of the potential impact that controls and regulations established by the various levels of government could have on the Corporation's operations, including with respect to the hydraulic fracturing process. Oil and natural gas exploration and development activities in Canada may be subject to opposition from ecologist, environmentalist, aboriginal and political groups, and some properties may be subject to land claims by First Nations. Access restrictions may affect the Corporation's ability to procure drilling and related equipment and may delay any exploration and development activities.

Weakness in the Oil and Gas Industry

Recent market events and conditions including global excess oil and natural gas supply, actions taken by the Organization of the Petroleum Exporting Countries ("**OPEC**") and non-OPEC member countries' decisions on production growth, slowing growth in emerging economies, market volatility and disruptions in Asia, and sovereign debt levels in various countries have caused significant weakness and volatility in commodity prices. North American crude oil price differentials may continue to be volatile throughout 2021, which will have an impact on crude oil prices for Canadian producers. These events and conditions have caused a significant decrease in the valuation of oil and gas companies and a decrease in confidence in the oil and gas industry. These difficulties have been exacerbated in Canada by the recent changes in government at the federal level and, in the case of Alberta, at the provincial level; the difficulties are further exacerbated by the resultant uncertainty surrounding regulatory, tax and royalty changes that may be implemented by the new governments. In addition, the inability to get the necessary approvals or other delays to build pipelines and other facilities to provide better access to markets for the oil and gas industry in western Canada has led to additional uncertainty and reduced confidence in the oil and gas industry in western Canada. Lower commodity prices may also affect the volume and value of the Corporation's reserves, especially as certain reserves become uneconomic. In addition, lower commodity prices have reduced the Corporation's cash flow and near-term capital expenditure budgeting. As a result, the Corporation may not be able to replace its production with additional reserves and both the Corporation's production and reserves could be reduced on a year -over -year basis. Any decrease in value of the Corporation's reserves may reduce the borrowing base under the credit facilities, which, depending on the level of the Corporation's indebtedness, could result in the Corporation having to repay a portion of its indebtedness. Given the current market conditions and the lack of confidence in the Canadian oil and gas industry, the Corporation may have difficulty raising additional funds in the future, or if it is able to do so it may be on unfavorable and highly dilutive terms.

Prices, Markets and Marketing of Crude Oil and Natural Gas

The Corporation's operating results and financial position are partly dependent on the prices obtained for its production. There have been significant fluctuations in LNG, oil and natural gas prices in recent years and months. These prices are based on international supply and demand, as well as other factors, such as climate, general economic conditions and conditions in other oil and natural gas producing regions, which are beyond the Corporation's control. Any change in LNG, oil and natural gas prices could have material adverse effects on the Corporation's business and financial position.

Oil and natural gas are commodities whose prices are determined based on world demand, supply and other factors, all of which are beyond the control of Pieridae. World prices for oil and natural gas have fluctuated widely in recent years. Any material decline in prices will result in a reduction of net production revenue. Oil and natural gas prices have varied greatly over the last two years, and are expected to remain volatile in the near future in response to a variety of factors beyond the Corporation's control, including, but not limited to: (i) the COVID-19 pandemic; (ii) global energy supply, production and policies, including the ability of OPEC to set and maintain production levels in order to influence prices for oil; (iii) political conditions, instability and hostilities; (iv) global and domestic economic conditions, including currency fluctuations; (v) the level of consumer demand, including demand for different qualities and types of crude oil and liquids and the availability and pricing of alternative fuel sources; (vi) the production and storage levels of North American natural gas and crude oil and the supply and price of imported oil and liquefied natural gas; (vii) weather conditions; (viii) the proximity of reserves to, and capacity of, transportation facilities and the availability of refining and fractionation capacity; (ix) the ability, considering regulation and market demand, to export oil and liquefied natural gas and NGLs from North America; (x) the effect of world-wide energy conservation and GHG reduction measures and the price and availability of alternative fuels; and (xi) government regulations. Certain wells or other projects may become uneconomic as a result of a decline in world oil prices and natural gas prices, leading to a reduction in the future volume of Pieridae's oil and gas production. Pieridae might also elect not to produce from certain wells at lower prices. All these factors could result in a material decrease in Pieridae's future net production revenue, causing a reduction in its oil and gas acquisition and development activities.

In addition to establishing markets for its oil and natural gas, Pieridae must also successfully market its oil and natural gas to prospective buyers. The marketability and price of oil and natural gas which may be acquired or discovered by Pieridae will be affected by numerous factors beyond its control. Pieridae will be affected by the differential between the price paid by refiners for light quality oil and the grades of oil produced by Pieridae. The ability of Pieridae to market natural gas may depend upon its ability to acquire space on pipelines which deliver natural gas to commercial markets. Pieridae will also likely be affected by deliverability uncertainties related to the proximity of its reserves to pipelines and processing facilities and related to operational problems with such pipelines and facilities and extensive government regulation relating to price, taxes, royalties, land tenure, allowable production, the export of oil and natural gas and the management of other aspects of the oil and natural gas business. Pieridae has limited direct experience in the marketing of oil and natural gas.

Reserve Decline, Exploration, Development and Production Risk

Producing oil, NGLs and natural gas reserves are generally characterized by declining production rates that vary depending upon reservoir characteristics and other factors. The Corporation intends to dedicate capital investment in the future to further develop its core producing properties. The future success of the exploration work will depend on the Corporation's ability to discover or acquire natural gas reserves that are economically recoverable. Pieridae has identified prospective drilling locations which are expected to contribute to the Corporation's future production. The Corporation's ability to drill and develop these locations depends on a number of uncertainties, including, but not limited to, the availability of capital, equipment and personnel, oil, NGLs and natural gas prices, inclement weather, capital and operating costs, drilling results and production rate recovery, gathering system and transportation constraints, the net price received for commodities produced and regulatory changes. As a result of these uncertainties, there can be no assurance that the numerous potential drilling locations the Corporation has identified will ever be drilled or that the Corporation will be able to produce oil, NGLs or natural gas from these or any other potential drilling locations.

The Corporation will find or acquire reserves only if it conducts successful exploration or development activities, concludes joint ventures and/or acquires properties containing proven reserves. There can be no assurance that the development projects and exploration activities that may be implemented in the future will result in reserves or that the Corporation will succeed in drilling productive wells at low exploration costs. If prevailing LNG, oil and natural gas prices were to increase significantly, the Corporation's exploration costs to find or acquire reserves would be expected to increase. Drilling oil wells involves a high degree of risk of a dry hole or of a well that is not sufficiently productive to provide a return on the capital expended to drill the well. Thus, the Goldboro LNG Facility supply and the Corporation's financial situation could be impacted by these factors.

Oil and natural gas operations involve many risks that even a combination of experience, knowledge and careful evaluation may not be able to overcome. There is no assurance that expenditures made on exploration by the Corporation will result in new discoveries of oil or natural gas in commercial quantities. It is difficult to project the costs of implementing an exploratory drilling program due to the inherent uncertainties of drilling in unknown formations, the costs associated with encountering various drilling conditions such as over pressured zones and tools lost in the hole, and changes in drilling plans and locations as a result of prior exploratory wells or additional seismic data and interpretations thereof. The long-term commercial success of the Corporation depends on its ability to find, acquire, develop and commercially produce oil and natural gas reserves. Without the continual addition of new reserves, the Corporation's existing reserves, and the production from them, will decline over time as the Corporation produces from such reserves. A future increase in the Corporation's reserves will depend on both the ability of the Corporation to explore and develop its existing properties and on its ability to select and acquire suitable producing properties or prospects. There is no assurance that the Corporation will be able to continue to find satisfactory properties to acquire or participate in. Moreover, management of the Corporation may determine that current markets, terms of acquisition, participation or pricing conditions make potential acquisitions or participations uneconomic. There is also no assurance that the Corporation will discover or acquire further commercial quantities of oil and natural gas.

Future oil and gas exploration may involve unprofitable efforts, not only from dry wells but from wells that are productive but do not produce sufficient net revenues to return a profit after drilling, completing, operating and other costs. Completion of a well does not assure a profit on the investment or recovery of drilling, completion and operating costs.

Drilling hazards or environmental damage could greatly increase the cost of operations and various field operating conditions may adversely affect the production from successful wells. These conditions include, but are not limited to, delays in obtaining governmental approvals or consents, shut-ins of connected wells resulting from extreme weather conditions, wildfires, floods and droughts, insufficient storage or transportation capacity or other geological and mechanical conditions. While diligent well supervision and effective maintenance operations can contribute to maximizing production rates over time, it is not possible to eliminate production delays and declines from normal field operating conditions, which can negatively affect revenue and cash flow levels to varying degrees.

Oil and natural gas exploration, development and production operations are subject to all the risks and hazards typically associated with such operations, including, but not limited to, fire, explosion, blowouts, cratering and spills or other environmental hazards. These typical risks and hazards could result in substantial damage to oil and natural gas wells, production facilities, other property, the environment and personal injury.

Oil and natural gas production operations are also subject to all the risks typically associated with such operations, including encountering unexpected formations or pressures, premature decline of reservoirs and the invasion of water into producing formations. Losses resulting from the occurrence of any of these risks may have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects.

As is standard industry practice, the Corporation is not fully insured against all risks, nor are all risks insurable. Although the Corporation maintains liability insurance in an amount that it considers consistent with industry practice, liabilities associated with certain risks could exceed policy limits or not be covered. In either event the Corporation could incur significant costs. See "Insurable Risks" below.

Reserve Estimates

There are numerous uncertainties inherent in estimating quantities of oil, natural gas and NGL reserves and cash flows to be derived therefrom, including many factors beyond Pieridae's control. The information concerning reserves and associated cash flow set forth in this AIF represents estimates only. In general, estimates of economically recoverable oil and natural gas reserves and the future net cash flows therefrom are based upon a number of variable factors and assumptions, such as historical production from the properties, production rates, ultimate reserve recovery, timing and amount of capital expenditures, marketability of oil and natural gas, royalty rates, the assumed effects of regulation by governmental agencies and future operating costs, all of which may vary from actual results. For those reasons, estimates of the economically recoverable oil and natural gas reserves attributable to any particular group of properties, classification of such reserves based on risk of recovery and estimates of future net revenues expected therefrom prepared by different engineers, or by the same engineers at different times, may vary. Pieridae's actual production, revenues, taxes and development and operating expenditures with respect to its reserves will vary from estimates thereof and such variations could be material. Further, the evaluations are based, in part, on the assumed success of the exploitation activities intended to be undertaken in future years. The reserves and estimated cash flows to be derived therefrom contained in such evaluations will be reduced to the extent that such exploitation activities do not achieve the level of success assumed in the evaluation.

In accordance with applicable securities laws, Deloitte has used forecast price and cost estimates in calculating reserve quantities. Actual future net cash flows will be affected by other factors such as actual production levels, supply and demand for oil and natural gas, curtailments or increases in consumption by oil and natural gas purchasers, changes in governmental regulation, royalties and taxation and the impact of inflation on costs. Actual production and cash flows derived therefrom will vary from the estimates contained in the Deloitte Reserves Report, and such variations could be material. The Deloitte Reserves Report is based in part on the assumed success of activities Pieridae intends to undertake in future years. The reserves and estimated cash flows to be derived therefrom contained in the Deloitte Reserves Report will be reduced to the extent that such activities do not achieve the level of success assumed in the Deloitte Reserves Report.

The Deloitte Reserves Report is effective as of a specific effective date and has not been updated and thus does not reflect changes in Pieridae's reserves since that date.

Liability Management

Liability management programs enacted by regulators in the western provinces may prevent or interfere with the Corporation's ability to acquire properties or require a substantial cash deposit with the regulator. Alberta, Saskatchewan and British Columbia have developed liability management programs designed to prevent taxpayers from incurring costs associated with suspension, abandonment, remediation and reclamation of wells, facilities and pipelines in the event that a licensee or permit holder is unable to satisfy its regulatory obligations. Changes to the AB LMR Program administered by the AER, in BC by the BC Commission, or other changes to the requirements of liability management programs, may result in significant increases to the Corporation's compliance obligations, including the requirement for the Corporation to post or increase cash security.

On June 20, 2016, the AER issued Bulletin 2016-16 Licensee Eligibility - Alberta Energy Regulator Measures to Limit Environmental Impacts Pending Regulatory Changes to Address the Redwater Decision which includes an interim rule that as a condition of transferring existing AER licenses, approvals and permits, the AER requires all transferees to demonstrate that they have a liability management ratio of 2.0 or higher immediately following the transfer. On December 6, 2017, the AER released an updated Directive 067: Eligibility Requirements for Acquiring and Holding Energy Licenses and Approvals which allows the AER greater scrutiny in granting licenses to responsible parties and ensuring existing license holders remain responsible parties and has announced that further changes are being implemented requiring greater financial disclosure by licensees. The AER can deny license eligibility if the applicant poses an unreasonable risk, assessed based on a number of factors related to compliance history, corporate structure, financial health and the experience of its officers and directors. The AER will also consider these factors when considering license transfer applications and may deny an application if it finds that it is not in the public interest. All existing license or approval holders are also required to meet license eligibility requirements on an ongoing basis. Bulletin 2016-16 and Directive 067 may impact acquisitions and dispositions by oil and gas companies, including Pieridae.

Further, the AER has announced that it will be implementing a new liability management framework designed to increase the scrutiny by the AER of licensees and their ability to meet regulatory requirements.

The impact and consequences of the SCC's decision in Redwater on the AER's rules and policies, lending practices in the crude oil and natural gas sector and on the nature and determination of secured lenders to take enforcement proceedings are expected to evolve as the consequences of the decision are evaluated and considered by regulators, lenders and receivers/trustees. In addition, the AB LMR Program may prevent or interfere with the Corporation's ability to acquire or dispose of assets, as both the vendor and the purchaser of oil and natural gas assets must be in compliance with the liability management programs (both before and after the transfer of the assets) for the applicable regulatory agency to allow for the transfer of such assets. See "Industry Conditions – Liability Management Rating Programs".

Royalty Regimes

The royalty program implemented by each province is a significant factor in the profitability of LNG, oil and natural gas production. Royalties payable on output are determined by government regulation; they are typically calculated as a percentage of the gross value of output and, depend in part on prescribed benchmark prices, well productivity, geographical location, field discovery date and the type or quality of the resource produced.

There can be no assurance that the federal or provincial governments will not adopt new or modify the royalty regimes which could have an impact on the economics of the Corporation's projects. An increase in royalties would reduce the Corporation's earnings and could make future capital investments, or the Corporation's operations, less economic.

See "Industry Conditions" in this AIF.

Alternatives to and Changing Demand for Petroleum Products

Fuel conservation measures, alternative fuel requirements, increasing consumer demand for alternatives to oil and natural gas, and technological advances in fuel economy and energy generation devices could reduce the demand for crude oil and other liquid hydrocarbons. Pieridae cannot predict the impact of changing demand for oil and natural gas products, and any major changes may have a material adverse effect on Pieridae's business, financial condition, results of operations and cash flows.

Hydraulic Fracturing

Multistage fracturing stimulation or "hydraulic fracturing" of oil and gas wells has given rise to concerns with respect to the fluids used in the fracturing process and their effects on the water quality in aquifers, water use in connection with operations, the capability to recycle such water and the seismic effects associated with the process. A number of Canadian provinces are currently reviewing the scientific, regulatory and political framework in which hydraulic fracturing operations are carried out. At present, most of these governments are taking part in the collection, review and assessment of technical information regarding the hydraulic fracturing process. In Québec, hydraulic fracturing is prohibited in the Utica shale geological formation in the St. Lawrence Lowlands area. Fracturing in any other geological formation is only permitted at a depth greater than 1,000 meters from the surface. Nova Scotia has and New Brunswick have also restricted hydraulic fracturing.

The Corporation believes strongly in the responsible development of its natural gas resource properties and to that end, the Corporation has committed that none of the LNG developed with the support of the $1.5 billion UFK loan guarantee will be produced using hydraulic fracturing. At this time the Corporation is unable to make a similar commitment in regard to the LNG that will be produced from Train Two and sold to other customers. Accordingly, although the Corporation is unable to fully predict the impact of any potential regulations on its business, the implementation of new laws regarding the use or disposal of water, or hydraulic fracturing in general, could increase the Corporation's compliance costs and the operating and exploration costs of its properties, the litigation risk and environmental liability of the Corporation and, in turn, adversely impact the future prospects of the Corporation and its financial position. Risk to operations is lower than with most corporations because most foothills reservoirs require little or no hydraulic stimulation in order for commercial hydrocarbons to be delivered to surface.

Other Risks Inherent to Pieridae's Business

Additional Financing

The Corporation may require additional financing to support its operations and will require additional financing to construct the Goldboro LNG facility. Sources of additional funds available to the Corporation through financing activities includes, among other options, the issuance of additional shares, debt, a partnership agreement or a sale of an interest in an oil or natural gas property. Debt financing may increase the Corporation's debt levels above industry standards and equity issuances would be dilutive to existing shareholders. Depending on future development and exploration plans, the Corporation may require additional equity and/or debt financing that may not be available or available on favourable terms. The level of the Corporation's indebtedness that may occur from time to time could impair the Corporation's ability to obtain additional financing in the future on a timely basis to take advantage of business opportunities that may arise. Financing by way of a partnership or sale of an interest may reduce the interest held by the Corporation in the properties in respect of which the financing is obtained. There can be no assurance that such financing will be available to the Corporation. Furthermore, even if such financing is successfully secured, there can be no assurance it will be obtained on terms favourable to the Corporation or provide the Corporation with sufficient funds to meet its objectives. This may adversely affect the Corporation's business and financial position. If financing is obtained by issuing additional equity, control of the Corporation may be affected.

Liquidity

Pieridae anticipates that it will make substantial capital expenditures for the acquisition, exploration development and production of LNG production, and oil and natural gas reserves in the future. If Pieridae's future revenues or reserves decline or additional financing is not achieved, Pieridae may have limited ability to expend the capital necessary to undertake or complete future drilling and construction programs. There can be no assurance that debt or equity financing, or cash generated by operations will be available or sufficient to meet these requirements or for other corporate purposes or, if debt or equity financing is available, that it will be on terms acceptable to Pieridae. Moreover, future activities may require Pieridae to alter its capitalization significantly. The inability of Pieridae to access sufficient capital for its business could have a material adverse effect on Pieridae's financial condition, results of operations, growth or prospects.

Access to Capital

Pieridae, along with all other oil and gas entities, may have restricted access to capital, including debt and equity. The willingness of financial institutions to lend has diminished, and risk premiums have increased. As future capital expenditures will be financed out of funds generated from operations, non-core property dispositions, borrowings and possible future equity sales, Pieridae's ability to finance future capital projects is dependent on, among other factors, the overall state of debt markets and investor appetite for investments in the energy industry and Pieridae's securities in particular.

To the extent that external sources of capital become limited or unavailable or available on onerous terms, Pieridae's ability to make capital investments and maintain existing assets may be impaired, and its assets, liabilities, business, financial condition and results of operations may be materially and adversely affected as a result.

Epidemics or Pandemics

Epidemics or pandemics, such as the global outbreak of a novel coronavirus COVID-19, have the potential to disrupt the Corporation's operations, projects and financial condition through the disruption of the local or global supply chain and transportation services, or the loss of manpower resulting from quarantines that affect the Corporation's labour pools in their local communities or operating sites or that are instituted by local health authorities, any of which may require the Corporation to temporarily reduce or shut-down its operations depending on the extent and severity of a potential outbreak and the areas or operations impacted. Depending on the severity, a large-scale global epidemic or pandemic could impact the international demand for commodities and have a corresponding impact on the prices realized by the Corporation, which could have a material adverse effect on the Corporation's financial condition.

In December 2019, COVID-19 was reported to have surfaced in Wuhan, China. On January 30, 2020, the World Health Organization declared the outbreak a global health emergency and on March 11, 2020, the World Health Organization declared the outbreak a pandemic. The outbreak has spread throughout the world and cause large scale economic disruptions as persistent and repeated travel restrictions, work from home requirements and full lock-down style quarantines have limited economic output in many sectors of the economy. These limitations have directly impacted the demand for petroleum and natural gas products and caused significant price disruption for these commodities during the early stages of the pandemic. Conversely, during 2020 economic restrictions and low commodity prices also restricted the economics and practicalities of exploration and development activities globally. In the summer of 2020 progress was announced toward a number of COVID-19 vaccine developments, and vaccine deployment began in late 2020. However, the duration of business disruptions internationally and related financial impact cannot be reasonably estimated at this time. During 2020, the Corporation was negatively impacted by the COVID-19 pandemic in a number of ways including:

- a reduction in realized prices for NGLs and condensate
- required deferral of certain planned capital and operational projects due to the restrictions on travel and density of individuals on worksites
- reduction in the Corporation's ability to conduct business development activities as a result of overall economic uncertainty

The Corporation put certain protocols in place to ensure the safe and reliable operation of the Corporation's assets, the safety of its field and corporate staff and contractors, and compliance with various government laws and regulations associated with the pandemic. As a result, no production losses were experienced during 2020 directly related to the pandemic. However, there is no guarantee that further measures may nevertheless require us to shut down some or all operations. The Corporation's ability to generate revenue would be materially impacted by any shut down of its operations.

Environmental Incidents

LNG, oil and natural gas operations inherently involve risks that could cause damage to the environment or to the properties of the Corporation or owned by third parties which could lead to potential liability toward third parties and regulators. The industry is subject to extensive local, provincial and federal environmental laws providing restrictions and prohibitions on the emissions or release of certain substances produced in various activities within this industry. In addition, the legislation requires that well, pipeline and facility sites and roads and other infrastructure be abandoned and reclaimed to the satisfaction of government authorities at the end of the license validity period.

Compliance with environmental legislation can require significant expenditures and failure to comply with these laws and regulations may result in the assessment of fines and penalties, orders to remediate property contamination, the suspension or revocation of permits and the issuance of injunctions that could limit or prohibit our operations, all of which could have a material impact on Pieridae. The discharge of oil, natural gas or other pollutants into the air, soil or water may give rise to liabilities to governments and third parties and may require Pieridae to incur costs to remedy such discharge. Changes in environmental laws and regulations may be enacted which could impose higher environmental standards which may increase the cost of Pieridae's operations and have a material adverse effect on our business, financial condition, results of operations and cash flows. No assurance can be given that future environmental laws and regulations will not adversely impact Pieridae's ability to develop or operate its properties.

Pieridae believes that it is in material compliance with applicable environmental legislation and is committed to continued compliance. Pieridae believes that it is reasonably likely the trend towards stricter standards in environmental legislation will continue and the Corporation anticipates making increased expenditures of both a capital and an expense nature as a result of increasingly stringent environmental laws, and such legislation may have a material adverse effect on its business, financial condition, results of operations and cash flows.

See "Industry Conditions – Environmental Regulation" in this AIF.

Climate Change

Climate change may pose varied and far-ranging risks to the business and operations of the Corporation, both known and unknown, that may adversely affect the Corporation's business, financial condition, results of operations, prospects, reputation and share price. The Corporation's exploration and production facilities and other operations and activities emit GHGs which may require the Corporation to comply with GHG emissions legislation at the provincial or federal level. Climate change policy is evolving at regional, national and international levels, and political and economic events may significantly affect the scope and timing of climate change measures that are ultimately put in place. As a signatory to the UNFCCC and a signatory to the Paris Agreement, which was ratified in Canada on October 3, 2016, Canada pledged to cut its GHG emissions by 30 per cent from 2005 levels by 2030. Several of the Corporation's large facilities in Alberta are subject to GHG emission reduction requirements and some of the Corporation's other operations may ultimately be subject to future regional, provincial and/or federal climate change regulations to manage GHG emissions. In addition, concerns about climate change have resulted in a number of environmental activists and members of the public opposing the continued exploitation and development of fossil fuels.

In addition, there has been public discussion that climate change may be associated with extreme weather conditions and increased volatility in seasonal temperatures. Extreme weather could interfere with the Corporation's production and increase the Corporation's costs. At this time, the Corporation is unable to determine the extent to which climate change may lead to increased storm or weather hazards affecting its operations.

Climate Change Risks

Chronic Climate Change Risks

The Corporation's exploration and production facilities and other operations and activities emit GHGs which require the Corporation to comply with federal and/or provincial GHG emissions legislation. Climate change policy is evolving at regional, national and international levels, and political and economic events may significantly affect the scope and timing of climate change measures that are ultimately put in place to prevent climate change or mitigate its effects. The direct or indirect costs of compliance with GHG-related regulations may have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects.

Climate change has been linked to long-term shifts in climate patterns, including sustained higher temperatures. As the level of activity in the Canadian oil and natural gas industry is influenced by seasonal weather patterns, long-term shifts in climate patterns pose the risk of exacerbating operational delays and other risks posed by seasonal weather patterns. In addition, long-term shifts in weather patterns such as water scarcity, increased frequency of storm and fire and prolonged heat waves may, among other things, require the Corporation to incur greater expenditures (time and capital) to deal with the challenges posed by such changes to its premises, operations, supply chain, transport needs, and employee safety. Specifically, in the event of water shortages or sourcing issues, the Corporation may not be able to, or will incur greater costs to, carry out hydraulic fracturing operations.

Concerns about climate change have resulted in public opposition to the continued exploration and development of fossil fuels which has influenced investors' willingness to invest in the oil and natural gas industry. Historically, political and legal opposition to the fossil fuel industry focused on public opinion and the regulatory process. More recently, however, there has been a movement to more directly hold governments and oil and natural gas companies responsible for climate change through climate litigation. Some public interest groups and others have started litigation against governments to enact greater GHG emission reduction requirements.

Given the evolving nature of climate change policy and the control of GHGs and resulting requirements, it is expected that current and future climate change regulations will have the effect of increasing the Corporation's operating expenses, and, in the long-term, potentially reducing the demand for oil and natural gas production, resulting in a decrease in the Corporation's profitability and a reduction in the value of its assets or requiring asset impairments for financial statement purposes.

Acute Climate Change Risk

Climate change has been linked to extreme weather conditions. Extreme hot and cold weather, heavy snowfall, heavy rainfall, drought, and wildfires may restrict the Corporation's ability to access its properties, cause operational difficulties including damage to machinery and facilities. Extreme weather also increases the risk of personnel injury as a result of dangerous working conditions. Certain of the Corporation's assets are located in locations that are proximate to forests and rivers and a wildfire and flood may lead to significant downtime and/or damage to such assets. Moreover, extreme weather conditions may lead to disruptions in the Corporation's ability to transport produced oil and natural gas as well as goods and services in its supply chain. Extreme weather could increase the Corporation’s costs to mitigate the effects of climate change on the Corporation’s operations or impact the availability of equipment or raw materials. However, at this time, the Corporation is unable to determine the extent to which climate change may lead to increased storm or weather hazards or other impacts affecting its operations.

Climate Change Regulations

Climate change policies and laws are evolving at regional, national and international levels, and political and economic events may significantly affect the scope and timing of climate change measures that are ultimately put in place.

As a signatory to the UNFCCC and to the Paris Agreement (which set broad goals to, among other things, limit global climate change to not more than two degrees Celsius, preparing, maintaining and publishing national GHG reduction targets and creating a “carbon-neutral” world by 2050), the Government of Canada announced in May 2015, that it will seek a 30% reduction in GHG emissions from 2005 levels by 2030. These GHG emission reduction targets are not binding. The UNFCCC adopted the Paris Agreement on December 12, 2015 and it came into force on November 4, 2016.

In June 2018, the Government of Canada implemented a Canada wide carbon pricing scheme pursuant to the *Greenhouse Gas Pollution Pricing Act*, which is composed of two elements: (a) a carbon levy applied to fossil fuels, currently set at $30 per tonne of carbon emitted, increasing $10 annually on April 1st of each year, until it reaches $50 per tonne in 2022, and then it is to increase by $15 per tonne each year until it reaches $170 per tonne in 2030; and (b) an output based pricing system for industrial facilities that emit 50,000 tonnes of carbon dioxide equivalent per year or more, with an opt-in capability for smaller facilities with emissions below the threshold. Provinces or territories that did not implement a sufficient carbon pricing scheme, are subject to the federal price on carbon on certain types of fuel (including natural gas, gasoline and gas liquids) and certain large industrial GHG emitters in Canada are subject to another carbon pricing mechanism. Alberta repealed its provincial carbon levy pricing system effective May 30, 2019. Consequently, the federal backstop for the carbon levy under the *Greenhouse Gas Pollution Pricing Act* was applied in Alberta effective January 1, 2020. As a result, the ultimate users of the Corporation’s products in Canada are likely subject to a price on carbon due to a federal, provincial or territorial scheme.

The Government of Alberta set a target of reducing methane emissions from oil and gas operations by 45% relative to 2014 levels by 2025, which is intended to be achieved through the implementation of the *Methane Emission Reduction Regulation* which came into force on January 1, 2020, and changes to certain AER directives establishing new emission design standards for new facilities and requiring mandatory reporting and reductions. On January 1, 2020, the Government of Alberta also enacted the TIER Regulation which replaced the CCIR for large industrial emitters (100,000 tonnes or more of GHGs per year). The TIER Regulation applies to facilities emitting 100,000 tonnes or more of GHGs per year. Facilities below this threshold are permitted to opt-in to TIER if competing against a facility regulated by TIER or emitting 10,000 tonnes of GHGs or more per year and belonging to a sector with high emissions intensity and trade exposure. Subject to scope adjustments for inputs (such as electricity), output-based emissions allocations are calculated by multiplying the actual quantity of end products produced by a regulated facility by each product's specified carbon intensity benchmark, or, at the regulator's discretion, facilities may be measured against such facility's past emissions intensity from 2013 to 2015, with its target set at ten percent below that level for 2020 and decreasing by an additional 1% each year thereafter. In certain cases, two or more conventional oil and gas facilities designated by the AER may have their GHG emissions treated as an aggregate facility under TIER. In addition, regulated facilities that have already made major reductions in their emissions can elect to compare themselves against a high-performance target comprised of the average emissions intensity of the most emissions-efficient facilities.

Under TIER, where a regulated facility exceeds target emissions, compliance may be achieved through a combination of the following, subject to certain limitations for offsets and emissions performance credits: (1) reducing facility emissions; (2) purchasing and retiring emissions offset credits from non-regulated emitters (generated through activities that result in emissions reductions in accordance with established protocols); (3) retiring emissions performance credits resulting from pervious operations or purchased from other regulated emitters; or (4) contributing to the Technology Innovation and Emissions Reduction Fund (currently at $30 per tonne). As a result of the TIER program being granted equivalency by the Government of Canada, any facilities that are subject to TIER are not subject to the federal carbon tax for industrial emitters. The Corporation's Waterton, Jumping Pound and Caroline facilities are subject to the TIER Regulation, and as a result the Corporation was required to apply emission performance credits, emission offsets or fund credits in 2020. The Corporation also successfully applied to combine all of its remaining natural gas gathering and processing infrastructure into an aggregate facility for the purposes of TIER. The Corporation anticipates that its costs to comply with TIER will exceed $10 million in 2021. See "Industry Conditions – Climate Change Regulation" in this AIF.

Although it is not possible at this time to predict how new laws or regulations in Canada would impact the Corporation's business, any such future laws and regulations imposing reporting or permitting obligations on, or limiting emissions of GHGs from, the Corporation's equipment and operations could require the Corporation to incur costs to reduce emissions of GHGs associated with its operations or to purchase emission credits or offset credits as well as delays or restrictions in its ability to permit GHG emissions from new or modified sources. The direct or indirect costs of compliance with these regulations may have a material adverse effect on the business, financial condition, results of operations and prospects of the Corporation. Any such regulations could also increase the cost of consumption, and thereby reduce demand for the oil, NGLs and natural gas the Corporation produces. Given the evolving nature of the discourse related to climate change and the control of GHGs and resulting regulatory requirements, it is not possible to predict with certainty the impact on the Corporation and its operations and financial condition.

Permits, Licenses and Approvals

The Corporation's business requires permits and licenses from government authorities. There can be no assurance that the Corporation will obtain all the permits and licenses required to continue operations or that it will obtain them on acceptable terms or conditions. In addition, if the Corporation commences commercial operation of property, it must obtain and comply with all the necessary permits and licenses. There can be no assurance that the Corporation will be able to obtain or comply with the requirements of such permits and licenses.

The process to obtain approval from the AER for the transfer of licenses associated with the Southern Foothills Assets acquired in 2019 from Shell to Alberta Production remains ongoing, refer to the *Developments in 2020* section of this AIF. This process and the ultimate AER decision remain uncertain. There remains a risk that the AER will deny the license transfer, however the probability of this event and the ultimate impact on the Corporation are unknown.

Insurable Risk

The Corporation's operations are subject to all of the hazards and operating risks associated with drilling for, production and transportation of oil, NGLs and natural gas, including the risk of fire, explosions, blowouts, surface cratering, uncontrollable flows of natural gas, oil and formation water, facility, pipe or pipeline corrosion, damage or failures, abnormally pressured formations, natural disasters, casing collapses and environmental hazards such as oil spills, produced water spills, gas leaks, ruptures, discharges of toxic gases or accidents while the Corporation's products are being processed, stored or transported by pipeline or trucked. In addition, the Corporation's operations are subject to risks associated with the production, transportation and processing of sour gas. Special equipment and operating procedures are deployed by the industry for the production, transportation and processing of sour gas in accordance with applicable regulatory requirements. The occurrence of any of these events could result in substantial losses to the Corporation due to injury or loss of life, severe damage to or destruction of property, natural resources and equipment, pollution or other environmental damage, clean-up responsibilities, regulatory investigation and penalties, suspension of operations, repairs to resume operations and adverse reputational consequences and loss of goodwill. The Corporation has historically maintained insurance against some, but not all, of its business risks.

The Corporation has purchased liability insurance to insure against risks and provide coverage in accordance with industry standards, however this insurance may not be adequate to cover any losses or liabilities it may suffer. Also, insurance may no longer be available to the Corporation or, if it is, its availability may be at a cost, or subject to deductibles and other conditions that do not justify its purchase. The occurrence of a significant uninsured claim, a claim in excess of the insurance coverage limits maintained by the Corporation or a claim at a time when the Corporation is not able to obtain liability insurance could have a material adverse effect on the Corporation's financial condition, results of operations or cash flow. The Corporation may not be able to secure additional insurance or bonding that might be required by governmental regulations. This may cause the Corporation to restrict its operations, which might severely impact its financial position. The Corporation may also be liable for environmental damage caused by previous owners of properties purchased by the Corporation or by working interest partners in jointly owned properties, which liabilities may not be covered by insurance.

Co-ownership of Assets and Operational Dependence

The marketability of the Corporation's oil, NGLs and natural gas production depends in part upon the availability, proximity and capacity of pipeline, trucking and rail systems, as well as processing and storage facilities, some of which are owned by third parties. As a result, Pieridae will have limited ability to exercise influence over the operation of those assets or their associated costs, which could adversely affect Pieridae's financial performance. Pieridae's return on assets operated by others depends upon a number of factors that may be outside of Pieridae's control, including the timing and amount of capital expenditures, the operator's expertise and financial resources, the approval of other participants, the selection of technology and risk management practices.

In addition, due to low and volatile commodity prices, many companies, including companies that may operate some of the assets in which Pieridae has an interest, may be in financial difficulty, which could impact their ability to fund and pursue capital expenditures, carry out their operations in a safe and effective manner and satisfy regulatory requirements, including abandonment and reclamation obligations. If companies that operate some of the assets in which Pieridae has an interest fail to satisfy regulatory requirements with respect to operational and abandonment and reclamation obligations, Pieridae may be required to satisfy such obligations and to seek recourse from such companies. To the extent that any of such companies go bankrupt, become insolvent or make a proposal or institute any proceedings relating to bankruptcy or insolvency, it could result in such assets being shut-in, Pieridae potentially becoming subject to additional liabilities relating to such assets and Pieridae having difficulty collecting revenue due from such operators. Any of these factors could materially adversely affect Pieridae's financial and operational results.

The Corporation delivers its products through gathering, processing, pipeline and storage systems, some of which it does not own. The amount of oil, natural gas and NGLs that the Corporation can produce and sell is subject to the accessibility, availability, proximity and capacity of these gathering, processing, pipeline and storage systems. The lack of availability of capacity in any of the gathering, processing, pipeline and storage systems, and in particular the processing facilities, could result in the Corporation's inability to realize the full economic potential of its production or in a reduction of the price offered for the Corporation's production. Although pipeline expansions are ongoing, the lack of firm pipeline capacity continues to affect the oil and natural gas industry in Western Canada and limit the ability to produce and to market NGL, oil and natural gas production. In addition, the pro-rationing of capacity on inter-provincial pipeline systems may affect the ability to export oil and natural gas. Unexpected shutdowns or curtailment of capacity of pipelines for maintenance or integrity work and actions taken by regulators could also affect the Corporation's production, operations and financial results. Furthermore, producers are increasingly turning to rail as an alternative means of transportation. Any significant change in market factors or other conditions affecting these infrastructure systems and facilities, as well as any delays in constructing new infrastructure systems and facilities could harm the Corporation's business and, in turn, the Corporation's financial condition, results of operations and cash flows.

Following major accidents in Lac-Megantic, Québec and North Dakota, the Transportation Safety Board of Canada and the U.S. National Transportation Board have recommended additional regulations for railway tank cars carrying crude oil. The Government of Canada passed new legislation and regulations implementing new standards for all rail tank cars carrying flammable liquids, and eventually phasing out older tank cars carrying crude oil. The increased regulation of rail transportation may reduce the ability of railway lines to alleviate pipeline capacity issues and add additional costs to the transportation of crude oil by rail.

A portion of the Corporation's production may, from time to time, be processed through facilities owned by third parties and over which the Corporation does not have control. From time to time these facilities may discontinue or decrease operations either as a result of normal servicing requirements or as a result of unexpected events. A discontinuation or decrease of operations could materially adversely affect the Corporation's ability to process its production and to deliver the same for sale.

Growth Management

The Corporation may be subject to growth risks including limitations and pressure on its internal control systems and measures. The Corporation's ability to manage growth effectively will require it to continuously implement and improve its operating and financial systems and expand, train and manage its core workforce. The Corporation's inability to support such growth could have a material adverse impact on its business, operations and prospects.

Third Party Credit Risk

Pieridae is, or may be exposed to, third party credit risk through its contractual arrangements with its current or future joint venture partners, marketers of its petroleum and natural gas production and other parties. If these entities fail to meet their contractual obligations to Pieridae, these failures could have a material adverse effect on Pieridae and its cash flow from operations. In addition, poor credit conditions in the industry and of joint venture partners may impact a joint venture partner's ability to obtain regulating licenses and their willingness to participate in Pieridae's ongoing capital program, potentially delaying the program and the results of such program until Pieridae finds a suitable alternative partner.

Political, Geo-Political and Public Perception Risk

Alberta oil and natural gas and oilsands development and transportation, hydraulic fracturing and fossil fuels in general have figured prominently in recent political, media, investor and activist commentary on the subject of climate change, GHG emissions, water usage and environmental damage. Concerns over heightened GHG emissions, water and land use practices in oil and gas developments may directly or indirectly reduce the profitability of the Corporation's current projects and/or the viability of existing and future projects in Canada and reduce the demand and pricing of the Corporation's products. The Corporation's reputation may be negatively affected by the negative public perception and public protests against oil and natural gas development, water and land usage and transportation. Increased stigmatization of the oil and natural gas industry may result in increased shareholder concern or negative shareholder feedback or reduce the market for the Corporation's Common Shares or the availability of financing to the Corporation.

In the last several years, the United States and certain European countries have experienced significant political events that have cast uncertainty on global financial and economic markets. The United States has withdrawn from the Trans-Pacific Partnership and the NAFTA agreement has been replaced, the imposition of a tax on the importation of goods into the United States, reduction of regulation and taxation in the United States, and introduction of laws to reduce immigration and restrict access into the United States for citizens of certain countries. It is presently unclear exactly what actions the new administration in the United States will implement, and if implemented, how these actions may impact Canada and in particular the oil and gas industry. Any actions taken by the new United States administration may have a negative impact on the Canadian economy and on the businesses, financial conditions, results of operations and the valuation of Canadian oil and natural gas companies, including the Corporation. On September 30, 2018, the United States, Mexico and Canada reached a new trade agreement known as the USMCA. This agreement came into force on July 1, 2020. The Corporation is currently assessing the impacts of the USMCA on its activities.

In addition to the political disruption in the United States, the Government of the United Kingdom has concluded that country's withdrawal from the European Union. Some European countries have also experienced the rise of antiestablishment political parties and public protests held against open-door immigration policies, trade and globalization. To the extent that certain political actions taken in North America, Europe or elsewhere in the world result in a marked decrease in free trade, access to personnel and freedom of movement it could have an adverse effect on the Corporation's ability to market its products internationally, increase costs for goods and services required for third party lessees' operations, reduce their access to skilled labour and as a result, negatively impact the Corporation's business, operations, financial conditions and the market value of the Common Shares.

The marketability and price of oil and natural gas that may be acquired or discovered by Pieridae is and will continue to be affected by political events throughout the world that cause disruptions in the supply of oil. Conflicts, or conversely peaceful developments, arising in the Middle East, and other areas of the world, have a significant impact on the price of oil and natural gas. Any particular event could result in a material decline in prices and therefore result in a reduction of Pieridae's net production revenue.

In addition, Pieridae's expected oil and natural gas properties, wells and facilities could be subject to a terrorist attack. As the oil and gas industry in Canada is a key supplier of energy to the United States, certain terrorist groups may target Canadian oil and gas properties, wells and facilities in an effort to adversely impact the United States' economy. If any of Pieridae's properties, wells or facilities are the subject of terrorist attack it could have a material adverse effect on Pieridae. Pieridae does not have insurance to protect against the risk from terrorism.

LNG, oil and natural gas exploration and development activities may be subject to opposition from politically motivated protest groups or other non-governmental protest groups. Demonstrations or acts of civil disobedience could have an impact on the Corporation's business. There can be no assurance that such activities will not target projects in which the Corporation holds an interest. Similarly, there can be no assurance as to any attitude or behaviour of a political party or a political group (whether municipal, provincial or federal) that could have an impact on the Corporation's business.

Impact of Future Financings on Market Price

In order to finance future operations or acquisition opportunities, the Corporation may raise funds through the issuance of Common Shares, debt instruments or securities convertible into Common Shares. The Corporation cannot predict the size of future issuances of Common Shares or issuances of debt instruments or other securities convertible into Common Shares or the effect, if any, that future issuances and sales of the Corporation's securities will have on the market price of the Common Shares.

Competition

The LNG, oil and natural gas industry is extremely competitive. The Corporation competes with other companies that have ongoing or proposed LNG projects. Competition may affect the Corporation's ability to acquire customers, obtain sufficient supply or access to transportation.

Availability and Cost of Material and Equipment

Restrictions on the availability and cost of materials and equipment may impede the Corporation's exploration, development and operating activities. Oil and natural gas exploration, development and operating activities are dependent on the availability and cost of specialized materials and equipment (typically leased from third parties) in the areas where such activities are conducted. The availability of such material and equipment is limited. An increase in demand or cost, or a decrease in the availability of such materials and equipment may impede the Corporation's exploration, development and operating activities.

Title to Production Assets and Reserves

Unforeseen title defects may result in a loss of entitlement to production and reserves. Ownership of some of the Corporation's properties could be subject to prior undetected claims or interests. The Corporation conducts title reviews from time to time according to industry practice prior to the purchase of most of its oil and natural gas producing properties or the commencement of drilling wells. However, title reviews, if conducted, do not guarantee that an unforeseen defect in the chain of title will not arise to defeat a claim by the Corporation. If any such defect were to arise, the Corporation's entitlement to the production and reserves associated with such properties could be jeopardized and could have a material adverse effect on the Corporation's financial condition, results of operations and the Corporation's ability to execute its business plan in a timely manner.

Indigenous peoples have claimed title and rights to portions of western Canada. The Corporation is not aware of any claims that have been made in respect of its property and assets; however, if a claim arose and was successful, this could have an adverse effect on the Corporation and its operations.

Estimation of Abandonment and Reclamation Costs

The Corporation will need to comply with the terms and conditions of environmental and regulatory approvals and all legislation regarding the abandonment of its projects and reclamation of the project lands at the end of their economic life, which may result in substantial abandonment and reclamation costs. Any failure to comply with the terms and conditions of the Corporation's approvals and legislation may result in the imposition of fines and penalties, which may be material, or suspensions or the revocation of the Corporation's approvals. Generally, abandonment and reclamation costs are substantial and, while the Corporation accrues a liability in its financial statements for such costs in accordance with IFRS, no assurance can be given that such accruals will be sufficient. It is not possible at this time to estimate abandonment and reclamation costs reliably since they will, in part, depend on future regulatory requirements. In addition, in the future, the Corporation may determine it prudent or be required by applicable laws, regulations or regulatory approvals to establish and fund one or more abandonment and reclamation funds to provide for payment of future abandonment and reclamation costs. If the Corporation establishes an abandonment and reclamation fund, its liquidity and cash flow may be adversely affected.

Possible Failure to Realize Anticipated Benefits of Acquisitions

As part of its ongoing strategy, the Corporation may complete acquisitions of assets or other entities in the future. Achieving the benefits of completed and future acquisitions depends in part on successfully consolidating functions and integrating operations, procedures and personnel in a timely and efficient manner, as well as the Corporation's ability to realize the anticipated growth opportunities and synergies from combining the acquired businesses and operations with those of the Corporation. The integration of acquired businesses and entities requires the dedication of substantial management effort, time and resources which may divert management's focus and resources from other strategic opportunities and from operational matters during this process. The integration process may result in the loss of key employees and the disruption of ongoing business, customer and employee relationships that may adversely affect the Corporation's ability to achieve the anticipated benefits of any acquisitions.

Project Risk

Pieridae manages a variety of small and large projects in the conduct of its business. Project delays may impact expected revenues from operations. Significant project cost over-runs and/or schedule delays could make a project uneconomic. Pieridae's ability to execute projects and market LNG, oil and natural gas will depend upon numerous factors beyond Pieridae's control, including:

- the availability of processing capacity;
- the availability and proximity of pipeline capacity;
- the availability of storage capacity;
- the supply of and demand for oil and natural gas;
- the availability of alternative fuel sources;
- the availability of the required project financing;
- currency and interest rate fluctuations;
- the effects of inclement weather;
- the availability of drilling and related equipment;
- unexpected cost increases;
- accidental events;
- changes in regulations;
- the availability and productivity of skilled labour; and
- the regulation of the oil and natural gas industry by various levels of government and governmental agencies.

Because of these factors, Pieridae could be unable to execute projects on time, on budget or at all, and may not be able to effectively market the oil and natural gas that it produces.

Conflicts of Interest

Certain directors of the Corporation serve on the boards of other corporations engaged in natural resource exploration and development operations. Such ties could give rise to conflicts of interest. In making any decisions involving the Corporation, these directors will satisfy their duties and obligations to deal fairly and in good faith with the Corporation and the other entities. In addition, these directors will disclose their interest and refrain from voting on any matter that could give rise to a conflict of interest.

Litigation

The Corporation may be held liable for a variety of issues including pollution or for other risks for which it cannot be insured or for risks it may choose not to insure in light of high premium costs or other reasons. Payments of amounts in respect thereof may result in the loss of assets of the Corporation.

Regulatory

The LNG, oil and natural gas industry is subject to controls and regulations established by local, provincial and federal governments with respect to prices, royalties, land tenure, production quotas, imports and exports of LNG, oil, natural gas and environmental protection.

Various levels of governments impose extensive controls and regulations on oil and natural gas operations (exploration, production, pricing, marketing and transportation). Governments may regulate or intervene with respect to exploration and production activities, prices, taxes, royalties and the exportation of oil and natural gas. Amendments to these controls and regulations may occur from time to time in response to economic or political conditions. See "Industry Conditions" in this AIF. The implementation of new regulations or the modification of existing regulations affecting the oil and natural gas industry could reduce demand for LNG, crude oil and natural gas and increase the Corporation's costs, either of which may have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects.

In addition to regulatory requirements pertaining to the production, marketing and sale of LNG, oil and natural gas mentioned above, the Corporation's business and financial condition could be influenced by federal legislation affecting, in particular, foreign investment, through legislation such as the *Competition Act* (Canada) and the *Investment Canada Act* (Canada).

Canada has signed international protocols and conventions setting forth certain environment requirements that may adversely affect the Corporation's business. See "Industry Conditions" in this AIF.

Variations in Foreign Exchange and Interest Rates

World oil and gas prices are quoted in United States dollars and the price received by Canadian producers is therefore affected by the Canadian/U.S. dollar exchange rate, which will fluctuate over time. In recent years, the Canadian dollar has seen material fluctuations in value against the United States dollar. Any material increases in the value of the Canadian dollar may negatively impacted Pieridae's operating entities production revenues. Any increase in the future Canadian/U.S. exchange rates could accordingly impact the future value of Pieridae's reserves as determined by independent evaluators.

The value of currencies, among other items, will also have an impact on the respective currency's underlying risk-free rate an entity would have to pay for borrowings that have an interest component. This would then have a credit spread component added to it that would then constitute the all-in borrowing rate a company would have to pay. Volatility in the market could impact the interest rate and correspondingly, the profitability of Pieridae

To the extent that Pieridae engages in risk management activities related to foreign exchange and interest rates, there is a credit risk associated with counterparties with which Pieridae may contract.

Hedging

In order to mitigate the effects of commodity price fluctuations, Pieridae is or may become party to agreements to receive fixed prices on its NGL, condensate, sulphur and conventional natural gas production to offset risk of revenue losses if commodity prices decline. However, if commodity prices increase beyond the levels set in such agreements, Pieridae will not benefit from such increases. Similarly, from time to time Pieridae may enter into agreements to fix the exchange or interest rate of Canadian to United States dollars in order to offset the risk of revenue losses if the Canadian dollar increases in value compared to the United States dollar, however, if the Canadian dollar declines in value compared to the United States dollar, Pieridae will not benefit from its fluctuating exchange rate. The same holds true with interest rates rising and falling which creates a monetary exposure for Pieridae.

Tax Horizon

It is expected, based upon current legislation, the projections contained in the Deloitte Report and various other assumptions that no cash income taxes are to be paid by Pieridae in the near future. If a lower level of capital expenditures is expended than those contained in the Deloitte Report or should the assumptions used by Pieridae prove to be inaccurate, Pieridae may be required to pay cash income taxes sooner than anticipated, which will reduce cash flow available to Pieridae.

Changes in Risk Profile

Pieridae's operations are currently focused primarily on oil and natural gas production, exploration and development in Western Canada. As the Goldboro Project progresses, Pieridae may face unexpected risks or alternatively, significantly increase its exposure to one or more existing risk factors, which may in turn result in the future operational and financial conditions of the Corporation being adversely affected.

Reliance on Key Personnel

Pieridae's future success depends in large measure on certain key personnel. The exploration for, and the development and production of oil and natural gas with respect to its assets requires experienced executive and management personnel and operational employees and contractors with expertise in a wide range of areas but have a specific expertise in the areas where Pieridae has its properties. There can be no assurance that all of the required employees and contractors with the necessary expertise will be available. Further, the loss of any key personnel may have a material adverse effect on Pieridae's business, financial condition, results of operations and prospects. Pieridae currently has "key man" insurance in place for its CEO.

Any inability on the part of Pieridae to attract and retain qualified personnel may delay or interrupt the exploration for, and development and production of, oil, natural gas and LNG with respect to Pieridae's assets. Sustained delays or interruptions could have a material adverse effect on the financial condition and performance of Pieridae. In addition, rising personnel costs would adversely impact the costs associated with the exploration for, and development and production of, oil and natural gas in respect of Pieridae's assets, which could be significant and material.

Cost of New Technologies

The oil and gas industry is characterized by rapid and significant technological advancements and introductions of new products and services utilizing new technologies. Other oil and gas companies may have greater financial, technical and personnel resources that allow them to enjoy technological advantages and may in the future allow them to implement new technologies before the Corporation. There can be no assurance that the Corporation will be able to respond to such competitive pressures and implement such technologies on a timely basis or at an acceptable cost. One or more of the technologies currently utilized by the Corporation or implemented in the future may become obsolete. In such case, the Corporation's business, financial condition and results of operations could be materially adversely affected. If the Corporation is unable to utilize the most advanced commercially available technology, its business, financial condition and results of operations could be materially adversely affected.

Internal Controls

Effective internal controls are necessary for Pieridae to provide reliable financial reports and to help prevent fraud. Although Pieridae will undertake a number of procedures in order to help ensure the reliability of its financial reports, including those imposed on it under Canadian securities laws, Pieridae cannot be certain that such measures will ensure that Pieridae will maintain adequate control over financial processes and reporting.

Failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm Pieridae's results of operations or cause it to fail to meet its reporting obligations. If Pieridae or its independent auditors discover a material weakness, the disclosure of that fact, even if quickly remedied, could reduce the market's confidence in Pieridae financial statements and harm the trading price of the Common Shares.

Breach of Confidentiality

While discussing potential business relationships or other transactions with third parties, the Corporation may disclose confidential information relating to the business, operations or affairs of the Corporation. Although confidentiality agreements are signed by third parties prior to the disclosure of any confidential information, a breach could put the Corporation at competitive risk and may cause significant damage to its business. The harm to the Corporation's business from a breach of confidentiality cannot presently be quantified but may be material and may not be compensable in damages. There is no assurance that, in the event of a breach of confidentiality, the Corporation will be able to obtain equitable remedies, such as injunctive relief, from a court of competent jurisdiction in a timely manner, if at all, to prevent or mitigate any damage to its business that such a breach of confidentiality may cause.

Information Technology Systems and Cyber-Security

The Corporation relies heavily on information technology, such as computer hardware and software systems, in order to properly operate its business. In the event the Corporation is unable to regularly deploy software and hardware, effectively upgrade systems and network infrastructure, and take other steps to maintain or improve the efficiency and efficacy of systems, the operation of such systems could be interrupted or result in the loss, corruption, or release of data, compromise confidential customer or employee information, result in the disruption of business, theft or extortion of funds, regulatory infractions, loss of competitive advantage and reputational damage. In addition, information systems could be damaged or interrupted by natural disasters, force majeure events, telecommunications failures, power loss, acts of war or terrorism, computer viruses, malicious code, physical or electronic security breaches, intentional or inadvertent user misuse or error, or similar events or disruptions. Any of these or other events could cause interruptions, delays, loss of critical and/or sensitive data or similar effects, which could have a material adverse impact on the protection of intellectual property, and confidential and proprietary information, and on the Corporation's business, financial condition, results of operations and cash flows.

In the ordinary course of business, the Corporation collects, uses and stores sensitive data, including intellectual property, proprietary business information and personal information of the Corporation's employees and third parties. Despite the Corporation's security measures, its information systems, technology and infrastructure may be vulnerable to attacks by hackers and/or cyberterrorists or breaches due to employee error, malfeasance or other disruptions. Any such breach could compromise information used or stored on the Corporation's systems and/or networks and, as a result, the information could be accessed, publicly disclosed, lost or stolen.

To date the Corporation has not experienced any material losses relating to cyber-attacks or other information security breaches. However, there can be no assurance that the Corporation will not incur such losses in the future. Any such access, disclosure or other loss of information could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, regulatory penalties or other negative consequences, including disruption to the Corporation's operations and damage to its reputation, which could have a material adverse effect on the Corporation's business, financial condition, results of operations and cash flows. Although the Corporation maintains a risk management program, which includes an insurance component that may provide coverage for the operational impacts from an attack to, or breach of, Pieridae's information technology and infrastructure, including process control systems, the Corporation does not maintain stand-alone cyber insurance. Furthermore, not all cyber risks are insurable. As a result, Pieridae's existing insurance may not provide adequate coverage for losses stemming from a cyber-attack to, or breach of, its information technology and infrastructure.

Reputation Risk

The Corporation's business, operations or financial condition may be negatively impacted as a result of any negative public opinion towards the Corporation or as a result of any negative sentiment toward, or in respect of the Corporation's reputation with stakeholders, special interest groups, political leadership, the media, First Nations, or other entities. Public opinion may be influenced by certain media and special interest groups' negative portrayal of the industry in which the Corporation operates as well as their opposition to certain oil and natural gas projects. Potential impacts of negative public opinion or reputational issues may include delays or interruptions in operations, legal or regulatory actions or challenges, blockades, increased regulatory oversight, reduced support for, delays in, challenges to, or the revocation of regulatory approvals, permits and/or licenses and increased costs and/or cost overruns. The Corporation's reputation and public opinion could also be impacted by the actions and activities of other companies operating in the oil and natural gas industry, particularly other producers, over which the Corporation has no control. In particular, the Corporation's reputation could be impacted by negative publicity related to environmental damage, loss of life, injury or damage to property caused by the Corporation's operations, or due to opposition from special interest groups opposed to oil and natural gas development. In addition, if the Corporation develops a reputation of having an unsafe work site it may impact the ability of the Corporation to attract and retain the necessary skilled employees and consultants to operate its business. Opposition from special interest groups opposed to oil and natural gas development and the possibility of climate related litigation against governments and fossil fuel companies may impact the Corporation's reputation.

Reputational risk cannot be managed in isolation from other forms of risk. Credit, market, operational, insurance, regulatory and legal risks, among others, must all be managed effectively to safeguard the Corporation's reputation. Damage to the Corporation's reputation could result in negative investor sentiment towards the Corporation, which may result in limiting the Corporation's access to capital, increasing the cost of capital, and decreasing the price and liquidity of the Corporation's securities.

Estimates and Assumptions

In preparing consolidated financial statements in conformity with IFRS, estimates and assumptions are used by management in determining the reported amounts of assets and liabilities, revenues and expenses recognized during the periods presented and disclosures of contingent assets and liabilities known to exist as of the date of the financial statements. These estimates and assumptions must be made because certain information that is used in the preparation of such financial statements is dependent on future events, cannot be calculated with a high degree of precision from data available, or is not capable of being readily calculated based on generally accepted methodologies. In some cases, these estimates are particularly difficult to determine and the Corporation must exercise significant judgment. Estimates may be used in management's assessment of items such as fair values, income taxes, royalties, share-based compensation, contingent liabilities and asset retirement obligations. Actual results for all estimates could differ materially from the estimates and assumptions used by the Corporation, which could have a material adverse effect on Pieridae's business, financial condition, results of operations, cash flows and future prospects.

Forward-Looking Statements and Information May Prove Inaccurate

Shareholders and prospective investors are cautioned not to place undue reliance on the Corporation's forward-looking statements and information. By its nature, forward-looking statements and information involve numerous assumptions, known and unknown risk and uncertainties, of both a general and specific nature, that could cause actual results to differ materially from those suggested by the forward-looking information or contribute to the possibility that predictions, forecasts or projections will prove to be materially inaccurate. Additional information on the risks, assumptions and uncertainties related to forward-looking statements and information are found under the heading "Forward-Looking Statements and Information" in this AIF.

Risks Related to Pieridae's Common Shares

Volatility

A number of factors could influence the volatility in the trading price of the Common Shares, including changes in the economy or in the financial markets, industry related developments, increased public pressure for institutional investors to divest from fossil fuel companies, the impact of changes in the Corporation's daily operations, and the impacts of climate change on the Corporation's operations and demand for its products. Each of these factors could lead to increased volatility in the market price of the Common Shares. In addition, variations in the Corporation's earnings estimates, production estimates or other financial or operating metrics by securities analysts and the market prices of the securities of the Corporation's competitors may also lead to fluctuations in the trading price of the Common Shares.

Return on Investment

There is no assurance that the business of the Corporation will be operated successfully, or that the business will generate sufficient income to allow investors to recoup all or any portion of their investment. There is no assurance that an investment in the Common Shares will earn a specified rate of return or any return over the life of the investment.

Dividends

To date, Pieridae has not paid any dividends on its Common Shares and does not anticipate the payment of any dividends on its Common Shares for the foreseeable future. Any future determination to pay dividends will be at the discretion of the Board of Directors and will depend on the financial condition, business environment, operating results, capital requirements, any contractual restrictions on the payment of dividends and any other factors that the Board of Directors deems relevant.

Dilution

Pieridae may make future acquisitions or enter into financings or other transactions involving the issuance of securities of Pieridae which may be dilutive. Common Shares, including rights, warrants, special warrants, subscription receipts and other securities to purchase, to convert into or to exchange into Common Shares, may be created, issued, sold and delivered on such terms and conditions and at such times as the Board of Directors may determine. In addition, the Corporation may issue additional Common Shares from time to time pursuant to the Corporation's stock option plan or restricted share unit plan. The issuance of these Common Shares would result in dilution for holders of Common Shares.

AUDITORS, TRANSFER AGENT AND REGISTRAR

Ernst & Young LLP, Calgary, Alberta, are the auditors of the Corporation.

The transfer agent and registrar for the common shares of the Corporation is Computershare Trust Corporation of Canada at its office at 530 – 8th Ave SW, Suite 600, Calgary, AB T2P 3S8.

MATERIAL CONTRACTS

As of the date hereof, the following material contracts entered into by the Corporation are in effect:

Goldboro LNG Agreement

The FOB LNG Sale and Purchase Agreement made as of May 31, 2013 between Uniper, formerly E.ON Global Commodities S.E. (the "**Buyer**") and Pieridae Energy (Canada) Ltd. in its capacity as general partner of Goldboro LNG Limited Partnership (the "**Seller**"), as amended on February 3, 2016; June 2, 2017; November 1, 2018; July 9, 2019, and May 5, 2020 (the "**LNG Purchase and Sale Agreement**"). This firm contract is subject to early termination rights of the Buyer and Seller and certain basic term extension rights of Buyer, the basic term of the LNG Purchase and Sale Agreement commences on May 31, 2013 and terminates on the twentieth anniversary of the Start of Commercial Deliveries. All capitalized terms used below have the meanings given in such agreement.

The LNG Purchase and Sale Agreement contemplates that commencing on the Start of Commercial Deliveries and throughout the balance of the term thereof, Seller will sell to Buyer, and Buyer will purchase from the Seller, LNG having an energy content of 245,000,000 MMBtu per annum (the "**Annual Contract Quantity**"), such Annual Contract Quantity being subject to adjustment in accordance with Clause 5.2 thereof, (the "**Adjusted Annual Contract Quantity**").

Buyer is obliged under the LNG Purchase and Sale Agreement to take and pay, or compensate Seller if not taken, for the applicable Adjusted Annual Contract Quantity, subject to adjustment in accordance with Clause 5.3(a) thereof.

Buyer shall pay to Seller a price for each LNG cargo equal to the amount by which the product obtained when the energy content of the LNG cargo, expressed in MMBtu, is multiplied by a reference price, expressed in MMBtu. The reference price is confidential.

Conditions:

a) the FEED Launch Date must occur not later than April 30th, 2014;
b) Seller must enter into a sufficient number of binding Gas Supply Agreements with Gas Suppliers as specified in Clause 2.2(a)(i) of the LNG Purchase and Sale Agreement not later than March 31, 2021;
c) Seller must enter into a sufficient number of binding Pipeline Capacity Agreements with Pipeline Capacity Suppliers as specified in Clause 2.2(b)(i) the LNG Purchase and Sale Agreement not later than March 31, 2021;
d) Seller must obtain the relevant Canada Export License not later than December 31, 2016;
e) the conditions precedent, if any, in each and every of the Gas Supply Agreements specified in Clause 2.2(a)(i) the LNG Purchase and Sale Agreement must be satisfied in full or waived not later than the FID Date;
f) the conditions precedent, if any, in each and every of the Pipeline Capacity Agreements specified in Clause 2.2(b)(i) the LNG Purchase and Sale Agreement must be satisfied in full or waived not later than the FID Date;

g) the completion of Project Finance Secured must occur not later than the FID Date;
h) the Site Acquisition must occur not later than December 31, 2016;
i) the FID Date must occur not later than June 30, 2021;
j) the acquisition of Permits Issued must occur not later than June 30, 2019;
k) the EPC Launch Date must occur not later than July 31, 2021; and
l) the ordering of Major Components must commence not later than November 30, 2021.

As of the date hereof, conditions a, d, h and j have been satisfied.

ADDITIONAL INFORMATION

Additional financial information is provided in the Financial Statements and MD&A for the financial year end 2020 and is available on SEDAR at www.sedar.com or on our website at https://pieridaeenergy.com/. Additional information including directors' and officers' remuneration and indebtedness, principal holders of the Corporation's securities and securities authorized for issuance under equity compensation plans, if applicable, is contained in our Information Circular in respect of the annual and special meeting of Shareholders to be held on May 27, 2021, which will be available on SEDAR in due course.

Appendices

APPENDIX A: NI 51-101 FORM F2 REPORT ON RESERVES DATA BY INDEPENDENT QUALIFIED RESERVES EVALUATOR

To the Board of Directors of Pieridae Energy Ltd. (the "**Company**"):

1. We have evaluated the Company's reserves data as at December 31, 2020. The reserves data are estimates of proved reserves and probable reserves and related future net revenue as at December 31, 2020, estimated using forecast prices and costs.
2. The reserves data are the responsibility of the Company's management. Our responsibility is to express an opinion on the reserves data based on our evaluation.
3. We carried out our evaluation in accordance with standards set out in the Canadian Oil and Gas Evaluation Handbook as amended from time to time (the "**COGE Handbook**") maintained by the Society of Petroleum Evaluation Engineers (Calgary Chapter).
4. Those standards require that we plan and perform an evaluation to obtain reasonable assurance as to whether the reserves data are free of material misstatement. An evaluation also includes assessing whether the reserves data are in accordance with principles and definitions presented in the COGE Handbook.
5. The following table shows the net present value of future net revenue (before deduction of income taxes) attributed to proved plus probable reserves, estimated using forecast prices and costs and calculated using a discount rate of 10 percent, included in the reserves data of the Company evaluated for the year ended December 31, 2020, and identifies the respective portions thereof that we have evaluated and reported on to the Company's management/Board of Directors:

Independent qualified reserves evaluator or auditor	**Effective date of evaluation report**	**Location of reserves (country or foreign geographic area)**	**Net present value of future net revenue (before income taxes; 10% discount rate)**			
			Audited $MM	**Evaluated $MM**	**Reviewed $MM**	**Total $MM**
Deloitte LLP	Pieridae Alberta Production Ltd. Reserve estimation and economic evaluation December 31, 2020	Canada	-	**976.1**	-	**976.1**

6. In our opinion, the reserves data respectively evaluated by us have, in all material respects, been determined and are in accordance with the COGE Handbook, consistently applied. We express no opinion on the reserves data that we reviewed but did not audit or evaluate.
7. We have no responsibility to update our reports referred to in paragraph 5 for events and circumstances occurring after the effective date of our reports.
8. Because the reserves data are based on judgments regarding future events, actual results will vary and the variations may be material.

Executed as to our report referred to above:

Deloitte LLP
700, 850 – 2nd Street S.W.

Original signed by: "Andrew Botterill"
Calgary, Alberta

Andrew Botterill, P. Eng.
T2P 0R8

Execution date: March 9, 2021

APPENDIX B: FORM 51-101F3 REPORT OF MANAGEMENT AND DIRECTORS ON OIL AND GAS DISCLOSURE

Management of Pieridae Energy Limited (the "**Corporation**") is responsible for the preparation and disclosure of information with respect to the Corporation's oil and gas activities in accordance with the securities regulatory requirements. This information includes reserves data as at December 31, 2020.

An independent qualified reserve evaluator has evaluated and reviewed the Corporation's reserves data. The report of the independent qualified reserves evaluator will be filed with securities regulatory authorities concurrently with this report.

The Reserves and Health, Safety and Environment Committee of the board of directors of the Corporation has:

a) reviewed the Corporation's procedures for providing information to the independent qualified reserves evaluator;

b) met with the independent qualified reserves evaluator to determine whether any restrictions affected the ability of the independent qualified reserves evaluator to report without reservation; and

c) reviewed the reserves data with management and the independent qualified reserves evaluator.

The Reserves and Health, Safety and Environment Committee of the board of directors has reviewed the Corporation's procedures for assembling and reporting other information associated with oil and gas activities and has reviewed that information with management. The board of directors has, on the recommendation of the Reserves and Health, Safety and Environment Committee, approved:

a) the content and filing with securities regulatory authorities of Form 51-101F1 containing reserves data and other oil and gas information;

b) the filing of the Form 51-101F2 which is the report of the independent qualified reserves evaluator on the reserves data; and

c) the content and filing of this report.

Because the reserves data are based on judgments regarding future events, actual results will vary, and the variations may be material.

March 24, 2021

(signed) Alfred Sorensen
Alfred Sorensen,
Chief Executive Officer

(signed) Kjell Pedersen
Kjell Pedersen
Director

(signed) Charle Gamba
Charle Gamba
Director

APPENDIX C: DEFINITIONS USED FOR RESERVE CATEGORIES

The following definitions form the basis of the classification of reserves and values presented in the Deloitte Reserves Report. They have been prepared by the Standing Committee on Reserves Definitions of the Petroleum Society of the CIM incorporated in the COGE Handbook and specified by NI 51-101.

Reserves are estimated remaining quantities of oil and natural gas and related substances anticipated to be recovered from known accumulations, from a given date forward, based on:

- analysis of drilling, geological, geophysical and engineering data;
- the use of established technology;
- specified economic conditions, which are generally accepted as being reasonable, and shall be disclosed; and
- a remaining reserve life of 50 years.

Reserve Classifications

Reserves are classified according to the degree of certainty associated with the estimates.

Proved Reserves

Proved reserves are those reserves that can be estimated with a high degree of certainty to be recoverable. It is likely that the actual remaining quantities recovered will exceed the estimated proved reserves.

Probable Reserves

Probable reserves are those additional reserves that are less certain to be recovered than proved reserves. It is equally likely that the actual remaining quantities recovered will be greater or less than the sum of the estimated proved plus probable reserves.

Possible Reserves

Possible reserves are those additional reserves that are less certain to be recovered than probable reserves. It is unlikely that the actual remaining quantities recovered will exceed the sum of the estimated proved plus probable plus possible reserves. Possible reserves have not been considered in this AIF.

Reserve Categories

Other criteria that must also be met for categorization of reserves are provided in Section 1.3 of the COGE Handbook. Each of the reserve categories (proved, probable, and possible) may be divided into developed or undeveloped categories.

Developed Reserves

Developed reserves are those reserves that are expected to be recovered from existing wells and installed facilities or, if facilities have not been installed, that would involve a low expenditure (e.g., when compared to the cost of drilling a well) to put the reserves on production. The developed category may be subdivided into producing and non-producing.

Developed Producing Reserves

Developed producing reserves are those reserves that are expected to be recovered from completion intervals open at the time of the estimate. These reserves may be currently producing or, if shut in, they must have previously been on production, and the date of resumption of production must be known with reasonable certainty.

Developed Non-Producing Reserves

Developed non-producing reserves are those reserves that either have not been on production, or have previously been on production, but are shut in, and the date of resumption of production is unknown.

Undeveloped Reserves

Undeveloped reserves are those reserves expected to be recovered from known accumulations where a significant expenditure (e.g., when compared to the cost of drilling a well) is required to render them capable of production. They must fully meet the requirements of the reserve classification (proved, probable, possible) to which they are assigned.

In multi-well pools, it may be appropriate to allocate total pool reserves between the developed and undeveloped categories or to subdivide the developed reserves for the pool between developed producing and developed non-producing. This allocation should be based on the estimator’s assessment as to the reserves that will be recovered from specific wells, facilities, and completion intervals in the pool and their respective development and production status.

Levels of Certainty for Reported Reserves

The qualitative certainty levels contained in these definitions are applicable to individual reserves entities, which refers to the lowest level at which reserves estimates are made, and to reported reserves, which refers to the highest level sum of individual entity estimates for which reserve estimates are made.

Reported total reserves estimated by deterministic or probabilistic methods, whether comprised of a single reserves entity or an aggregate estimate for multiple entities, should target the following levels of certainty under a specific set of economic conditions:

There is a 90% probability that at least the estimated proved reserves will be recovered.

There is a 50% probability that at least the sum of the estimated proved reserves plus probable reserves will be recovered.

There is a 10% probability that at least the sum of the estimated proved reserves plus probable reserves plus possible reserves will be recovered.

A quantitative measure of the probability associated with a reserves estimate is generated only when a probabilistic estimate is conducted. The majority of reserves estimates will be performed using deterministic methods that do not provide a quantitative measure of probability. In principle, there should be no difference between estimates prepared using probabilistic or deterministic methods.

Additional clarification of certainty levels associated with reserves estimates and the effect of aggregation is provided in Section 1.3.8.3 of the COGE Handbook. Whether deterministic or probabilistic methods are used, evaluators are expressing their professional judgement as to what are reasonable estimates.

Other Definitions

Gross Reserves

The Corporation’s working interest share of the remaining reserves or resources, before deduction of any royalties.

Net Reserves

The gross remaining reserves or resources of the properties in which the Corporation has an interest, less all Crown, freehold, and overriding royalties and interests owned by others.

Net Production Revenue

Income derived from the sale of net reserves of oil, pipeline gas, and gas by-products, less all capital and operating costs.

Fair Market Value

The price at which a purchaser seeking an economic and commercial return on investment would be willing to buy, and a vendor would be willing to sell, where neither is under compulsion to buy or sell and both are competent and have reasonable knowledge of the facts.

Barrels of Oil Equivalent (BOE) Reserves

The sum of the oil reserves, plus the gas reserves divided by a factor of 6, plus the natural gas liquid reserves, all expressed in barrels or thousands of barrels. Equivalent reserves can also be expressed in thousands of cubic feet of gas equivalent (McfGE) using a conversion ratio of 1 bbl:6 Mcf.

Oil (or Crude Oil)

A mixture consisting mainly of pentanes and heavier hydrocarbons that exists in the liquid phase in reservoirs and remains liquid at atmospheric pressure and temperature. Crude oil may contain small amounts of sulphur and other non-hydrocarbons but does not include liquids obtained from the processing of natural gas.

Gas (or Natural Gas)

A mixture of lighter hydrocarbons that exist either in the gaseous phase or in solution in crude oil in reservoirs but are gaseous at atmospheric conditions. Natural gas may contain sulphur or other non-hydrocarbon compounds.

Non-Associated Gas

An accumulation of natural gas in a reservoir where there is no crude oil.

Associated Gas

The gas cap overlying a crude oil accumulation in a reservoir.

Natural Gas By-Products

Those components that can be removed from natural gas including, but not limited to, ethane, propane, butanes, pentanes plus, condensate, and small quantities of non-hydrocarbons.

Products Types

A sub-classification of the principle product types of petroleum, crude oil, gas and by products, into specific groupings based on the properties of the hydrocarbon and the properties of the accumulation and reservoir rock from which it is found. Regulatory agencies may define in legislation the production types they require to be used for reporting purposes in their jurisdiction. The Canadian Securities Association (CSA) defines the Product Types for reporting purposes in NI 51-101, with the following Product Types referenced in this AIF.

Crude Oil

<u>Light Crude Oil</u>

Crude oil with a relative density greater than 31.1 degrees API gravity.

<u>Medium Crude Oil</u>

Crude oil with a relative density greater than 22.3 degrees API gravity and less than or equal to 31.1 degrees API gravity.

Natural Gas

<u>Conventional Natural Gas</u>

Natural gas that has been generated elsewhere and has migrated as a result of hydrodynamic forces and is trapped in discrete accumulations by seals that may be formed by localized structural, depositional or erosional geological features.

By-Products

Natural Gas Liquids

Those hydrocarbon components that can be recovered from natural gas as a liquid including, but not, limited to, ethane, propane, butanes, pentanes plus and condensates.

APPENDIX D: AUDIT COMMITTEE MANDATE

1. primary objective

The primary objective of the Committee in discharging its mandate on behalf of the Board is to assist the directors of the Corporation in satisfying their responsibilities in respect of the preparation and disclosure of the consolidated financial statements of the Corporation, the satisfactory performance of the independent audit function and the assessment and mitigation by the Corporation of risk attendant on its business and affairs.

Accordingly the Committee will be concerned with such matters as the integrity of the Corporation's financial records and financial reporting, oversight of the audit function and the assessment and mitigation of risk.

2. membership

The Committee shall consist of three or more directors appointed by the Board, each of whom shall qualify as independent of the Corporation for purposes of National Instrument 52-110 [Audit Committees] (unless the Board determines that an exemption contained in NI 52-110 is available and determines to rely thereon).

Each member of the Committee shall be financially literate as such qualification is interpreted by the Board in its business judgment.

The Board shall designate one member of the Committee as Chair.

Any member of the Committee may be removed or replaced at any time by the Board. A member will cease to be a member of the Committee as soon as such member ceases to be a director of the Corporation.

The Board may fill vacancies on the Committee by appointment from among its members. If and whenever a vacancy exists on the Committee, the remaining members may exercise all its powers so long as a quorum remains. Subject to the foregoing, following the appointment as a member of the Committee, each member will hold such office until the Committee is reconstituted.

3. mandate

(a) statutory responsibilities

The Committee has the statutory responsibility to review the consolidated financial statements of the Corporation before they are approved by the Board[1].

(b) financial records and financial reporting

The Committee has the responsibility:

- to review and evaluate accounting systems and procedures including the internal controls over the Corporation's financial records and financial reporting;

- to assess the integrity of the Corporation's financial records;

- to assist the directors in meeting their responsibilities in respect of the preparation and disclosure of financial statements of the Corporation and related matters;

- to review and evaluate the annual consolidated financial statements, the annual non-consolidated financial statements and the interim consolidated and interim non-consolidated financial statements of the Corporation and in so doing, to review and to discuss with management such matters as:

    - any significant issues as to the adequacy of the internal controls and any special steps adopted in light of material control deficiencies;
    - significant accruals, reserves or other estimates such as the ceiling test calculation;
    - accounting treatment of unusual or non-recurring transactions;

[1] Subsection 171(3) of the CBCA

    - compliance with any covenants under loan agreements;
    - disclosure requirements for any commitments and contingencies;
    - disclosure requirements for any impairment of assets;
    - significant variances with comparative reporting periods;
    - significant financial reporting issues and judgments made in connection with the preparation of the annual or interim consolidated financial statements
    - any significant changes in the selection or application of accounting principles;
    - the approval of any reports for inclusion in the annual report, as required by applicable law;

- to review and evaluate management's discussion and analysis, annual information form, any information memoranda and prospectuses and all other public disclosure containing financial information (including press releases disclosing financial information) before release and prior to Board approval;

- to satisfy itself that adequate procedures are in place for the review of the Corporation's public disclosure of financial information extracted or derived from the issuer's financial statements (other than the public disclosure referred to above) and to periodically assess the adequacy of those procedures;

- to conduct an investigation sufficient to provide reasonable grounds for believing that the Corporation's financial statements, management's discussion and analysis, annual information form and all other public disclosure containing financial information are complete in all material respects and consistent with the information known to Committee members;

- to assess whether the annual consolidated financial statements present fairly, in all material respects, the Corporation's financial position, its financial performance and its cash flows in accordance with International Financial Reporting Standards and to recommend to the Board the approval of the annual consolidated financial statements; and

- to review and approve the Corporation's hiring policies regarding partners, employees and former partners and employees of the present and former external auditor of the Corporation.

(c) oversight of the audit function

The Committee has the responsibility:

- to assess the nature and scope of the external audit function as well as any internal audit function;

- to make recommendations to the Board for the appointment and replacement of the external auditor and the setting of their compensation;

- to assess the external auditor's qualifications and independence and to consider whether the auditor's quality controls are adequate, and the provision of permitted non-audit services is compatible with, maintaining the auditor's independence;

- to facilitate and enhance communication between the Board and external auditor in relation to matters concerning the Corporation;

- to pre-approve all non-audit services to be performed by the external auditor including the fees, terms and conditions for the performance of such services;

- to oversee the relationship between the Corporation and its external auditor including the evaluation of the performance of the external auditor, and the lead partner on the external auditor's engagement, in relation to the preparation or issuance of audit reports or the provision of other audit, review, attestation or other services for the Corporation including resolution of any disagreements or disputes between management and the external auditor in regard to financial reporting;

- to discuss with the external auditor matters relating to the conduct of the annual audit including:

    - the scope, planning and staffing of the annual audit;

  - the audit report on the annual consolidated financial statements of the Corporation and any matters required to be communicated by the external auditor;
  - the unaudited interim consolidated financial statements of the Corporation and any matters required to be communicated by the external auditor;
  - adjustments raised by the external auditor, whether or not included in the consolidated financial statements;
  - any difficulties encountered in the course of the audit work, any restrictions on the scope of activities or access to requested information and any significant disagreements with management; and
  - other material written communications between the external auditor and management, such as any management letter or schedule of unadjusted differences;

- to periodically privately consult with the external auditor about internal controls of the Corporation;

- to evaluate whether the Corporation's management is adequately communicating the importance of internal control to all relevant personnel;

- to obtain and to review the external auditor's report regarding the effectiveness of the internal controls of the Corporation and to ensure the adequate disclosure of such matters as required by applicable law including the applicable stock exchanges on which the Corporation's securities are listed and applicable securities regulatory authorities;

- to determine whether and the extent to which any internal control recommendations made by the external auditor are being implemented by management;

- to ensure the rotation of the lead (or coordinating) audit partner having primary responsibility for the audit and the audit partner responsible for reviewing the audit as required by law or corporate policy; and

- when there is to be a change in the auditor, to review all issues relating to the change, including any reportable events, and all information to be included in the required notice to securities regulators of such change.

The external auditor of the Corporation shall communicate with, and report directly to, the Committee.

(d) risk assessment and mitigation

The Committee has the responsibility:

- to review and discuss with management the adequacy of existing policies and procedures governing the risk assessment and risk mitigation processes;

- to review and discuss with management and the external auditor, significant risks and exposures (including commitments associated with farm-in agreements, joint-venture agreements, leases, marketing or transportation arrangements or agreements and all other operational or land agreements, contracts or arrangements) and management's plans and processes to minimize these risks;

- to review the adequacy of the Corporation's insurance coverage; and

- to review all proposed contracts for the supply of property or services that contemplate the payment either by or to the Corporation of consideration exceeding $5,000,000 in aggregate during the term of the contract.

(e) other responsibilities

- to monitor the Corporation's compliance with applicable law;

- to monitor the Corporation's compliance with National Instrument 52-109 [Certification of Disclosure in Issuers' Annual and Interim Filings];

- to monitor the Corporation's compliance with policies adopted by the Corporation including the Code of Ethical Conduct and investigate any concerns expressed regarding a possible breach in accordance with the Whistleblower Policy or otherwise;

- to undertake special investigations, if necessary, and hire special counsel or experts to assist, if appropriate;
- to establish, and review annually, a procedure for:

- the receipt, retention, and treatment of complaints received by the Corporation regarding accounting, internal accounting controls, or auditing matters; and
- the confidential, anonymous submission by employees of the Corporation of concerns regarding questionable accounting or auditing matters and resolution of such concerns, if any;
- to review CEO and CFO expenses and perquisites at least once a year;
- to strengthen the role of the independent directors by facilitating in depth discussions between members of the Committee, management and external auditor; and
- to exercise such other powers and discharge such other responsibilities as are incidental to the purposes, duties and responsibilities specified herein and as may from time to time be delegated to the Committee by the Board;
- to review and assess the adequacy of this mandate periodically and, where necessary, recommend changes to the Governance and Compensation Committee and ultimately to the Board for its approval.

4. procedure governing errors or misstatements in financial statements

In the event a director or an Officer of the Corporation has reason to believe, after discussion with management, that a material error or misstatement exists in financial statements of the Corporation, that director or Officer shall forthwith notify the Committee and the external auditor of the error or misstatement of which the director or Officer becomes aware in a financial statement that the external auditor or a former external auditor has reported on.

If the external auditor or a former external auditor of the Corporation is notified or becomes aware of an error or misstatement in a financial statement on which the auditor or former auditor has reported, and if in the auditor's or former auditor's opinion the error or misstatement is material, the auditor or former auditor shall inform each director accordingly.

When the Committee or the Board is made aware of an error or misstatement in a financial statement the Board shall prepare and issue revised financial statements or otherwise inform the shareholders of the Corporation and file such revised financial statements as required.

5. meetings and operation

The Chair or any two members of the Committee may call a meeting of the Committee, at such time and at such place as they determine, by giving at least forty eight hours' notice of such meeting to all members of the Committee and to the external auditor of the Corporation.

The Committee shall meet as often as it determines, but not less frequently than quarterly.

A quorum for meetings of the Committee will be a majority of its members and the rules for calling, holding, conducting and adjourning meetings of the Committee will be the same as those governing the Board unless otherwise determined by the Committee or the Board.

The affirmative vote of a majority of the members of the Committee participating in any meeting of the Committee is necessary for the adoption of any resolution.

The Chair will preside at all meetings of the Committee, unless the Chair is not present, in which case the members of the Committee that are present will designate from among such members the Chair for the purposes of the meeting.

Agendas, approved by the Chair, will be circulated to the Committee members along with background information on a timely basis prior to the Committee meetings. Minutes of all meetings of the Committee will be taken. The minutes of the Committee will be recorded and maintained and the Committee shall report to the Board on its activities after each of its meetings.

All members of the Committee are expected to allow sufficient time to review meeting materials and be prepared for Committee meetings. Members are expected to attend most, if not all, Committee meetings.

A member or members of the Committee may participate in a meeting of the Committee by means of such telephonic, electronic or other communication facilities that permit all persons participating in the meeting to communicate adequately with each other, and a member participating in such a meeting by any such means is deemed to be present at that meeting.

The CFO will attend meetings of the Committee where matters relating to the functions as the Committee are dealt with, unless otherwise excused from all or part of any such meeting by the Chair. The Committee may invite such other Officers, directors and employees of the Corporation as it sees fit from time to time to attend at meetings of the Committee and assist in the discussion and consideration of the matters being considered by the Committee.

The Committee will meet with the external auditor at least quarterly during each year (in connection with the preparation of the interim and annual consolidated financial statements of the Corporation) and at such other times as the external auditor and the Committee consider appropriate. The Committee is expected to establish and maintain free and open communication with management and the external auditor and shall periodically meet separately with each of them.

Any issues arising from the Committee meetings that bear on the relationship between the Board and management should be communicated to the Chair of the Board by the Committee Chair.

6. independent advisors

The Committee has the authority to retain such independent advisors as it may deem necessary or advisable for its purposes. The expenses related to such engagement shall be funded by the Corporation.

7. limitations on the duties of the members of the committee

Nothing in this mandate is intended, or may be construed, to impose on any member of the Committee a standard of care or diligence that is in any way more onerous or extensive than the standard required by law.