



## **2018 Management Discussion & Analysis**

## Management's Discussion and Analysis

This Management's Discussion and Analysis ("MD&A") provides a review by management of the financial position and consolidated results of Pieridae Energy Limited ("Pieridae", "we", "our" or the "Company") for the three months and year ended December 31, 2018, as well as information about our future prospects. This MD&A has been prepared as of April 24, 2019 and should be read in conjunction with the Company's audited consolidated financial statements and the accompanying notes for the years ended December 31, 2018 and 2017, and the Annual Information Form for the year ended December 31, 2018. The financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS"). The reporting currency is the Canadian dollar. All amounts are presented in Canadian dollars unless otherwise stated.

When preparing our MD&A, we consider the materiality of information. Information is considered material if (i) such information results in, or would reasonably be expected to result in, a significant change in the market price or value of our shares; (ii) there is a substantial likelihood that a reasonable investor would consider it important in making an investment decision; or (iii) it would significantly alter the total mix of information available to investors. We evaluate materiality with reference to all relevant circumstances, including potential market sensitivity.

We are publicly traded on the TSX Venture Exchange ("Exchange") under the symbol PEA. Continuous disclosure materials are available on the Company's website, [www.pieridaeenergy.com](http://www.pieridaeenergy.com), or on SEDAR, [www.sedar.com](http://www.sedar.com).

### Cautionary Note Regarding 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") expected 2019 capital 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, and 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 (as defined herein) (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" 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, 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 and 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 estimates 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 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, 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](http://www.sedar.com)), and at Pieridae's website ([www.pieridaeenergy.com](http://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.

### Special Note Regarding Non-IFRS Financial Measures

This MD&A includes references to financial measures such as project expenditures and net working capital, that the Company believes is important to the understanding of the business activities. These financial measures are not defined by International Financial Reporting Standards ("IFRS") and therefore are referred to as non-IFRS measures. The non-IFRS measures used by the Company may not be comparable to similar measures presented by other companies. The Company uses these non-IFRS measures to evaluate its performance. The non-IFRS measures should not be considered an alternative to or more meaningful than measures determined in accordance with IFRS, as an indication of the Company's performance. The non-IFRS measures are reconciled to their closest IFRS measure on page 46 of this MD&A.

## Special Note Regarding Production and Reserves

Reference is made to crude oil and natural gas in common units called barrel of oil equivalent ("BOE"). A BOE is derived by converting six thousand cubic feet ("Mcf") of natural gas to one barrel ("bbl") of crude oil (6 Mcf:1 bbl). This conversion may be misleading, particularly if used in isolation, since the 6 Mcf:1 bbl ratio is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. In comparing the value ratio using current crude oil prices relative to natural gas prices, the 6 Mcf:1 bbl conversion ratio may be misleading as an indication of value.

## Definitions and Abbreviations

<b>AECO</b>	Alberta natural gas reference location	<b>IFRS</b>	International Financial Reporting Standards
<b>AIF</b>	Annual Information Form	<b>Mbbl</b>	Thousand barrels
<b>ARO</b>	Asset retirement obligation	<b>Mbbl/d</b>	Thousand barrels per day
<b>Bbl</b>	Barrels	<b>MBOE</b>	Thousand barrels of oil equivalent
<b>Bbl/d</b>	Barrels per day	<b>MBOE/d</b>	Thousand barrels of oil equivalent per day
<b>Bcf</b>	Billion cubic feet	<b>Mcf</b>	Thousand cubic feet
<b>Bcf/d</b>	Billion cubic feet per day	<b>Mcf/d</b>	Thousand cubic feet per day
<b>Bcm</b>	Billion cubic metres		
<b>BOE</b>	Barrels of oil equivalent	<b>MMbbl</b>	Million barrels
<b>BOE/d</b>	Barrels of oil equivalent per day	<b>MMBOE</b>	Million barrels of oil equivalent
<b>CAD\$</b>	Canadian dollars	<b>MMBtu</b>	Million British thermal units
<b>CAPEX</b>	Capital expenditures	<b>MMcf</b>	Million cubic feet
<b>E&amp;P</b>	Exploration and Production	<b>MMcf/d</b>	Million cubic feet per day
<b>GHG</b>	Greenhouse gas	<b>NGLs</b>	Natural gas liquids
<b>GJ</b>	Gigajoules	<b>USD\$</b>	United States Dollars
<b>GJ/d</b>	Gigajoules per day		
<b>IASB</b>	International Accounting Standards Board		

## Objectives and Strategy

The Company's objective is to monetize Canadian natural gas into European markets through the development of an LNG terminal on the East coast of Canada. We strive to meet this objective by having growth and development plans for each aspect of our integrated strategy from upstream gas exploration to transportation from the field to the facility to the construction and operation of the LNG terminal. The Company takes a long-term approach to growth and investments in order to mirror the long-term nature of the infrastructure and focuses on creating long-term shareholder value.

Operational discipline; safe, effective and efficient operations; community outreach; and cost control are fundamental to the Company. By consistently managing costs, the Company believes it will achieve its long-term objectives. Strategic, accretive acquisitions are a key component of the Company's strategy. The Company has selectively acquired properties generating future cash flows and aligning with its long-term gas supply needs.

## Operational Highlights

### Appointment of Financial Advisors

In February 2018 Pieridae announced that it had engaged Morgan Stanley & Co, LLC and SG Americas Securities, LLC ("SG") to serve as financial advisors for the financial requirements of Goldboro construction. Pieridae intends to raise USD \$10 billion in equity and project financing to fulfill its mandate of becoming the first independently operated, fully-integrated LNG project in North America. Subsequent to year end, the Company terminated its relationship with Morgan Stanley & Co, LLC but continues to work with SG on the debt aspects of the project financing.

In August 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 ("UFK") program.

### Agreement to Negotiate Offtake Agreement for Train 2 Produced LNG

Pieridae announced on May 7, 2018 that it entered into a term sheet to negotiate a binding LNG sale and purchase agreement to supply Canadian-sourced liquefied natural gas to Europe from Train 2 of Goldboro. Under the term sheet with Pieridae, the off taker, AXPO Trading A.G., will purchase up to one million tonnes per annum of LNG commencing from the start of commercial deliveries of LNG from Train 2. The duration of the contract is contemplated to be ten years.

### Regulation changes in the province of Quebec

On September 20, 2018, the Quebec Government adopted the Petroleum Resources Act and its related regulations. The Act governs all aspects of the exploration and exploitation of hydrocarbons in Quebec and replaces the Mining Act previously in force. The regulatory changes have multiple impacts for the Pieridae, including but not limited to:

- A complete prohibition of exploration and production within 1,000 meters of urban areas;
- Restrictions on exploration and development in areas within 1,000 meters of a body of water; and
- A ban on hydraulic fracturing within 1,000 meters of the surface.

Following these changes in regulation, Pieridae reviewed all its permits in the province and determined that it was not possible to continue oil and gas operations on certain properties. Due to these changes, Pieridae took a \$17.0 million impairment charge against its assets in the affected areas. As such, the corporation will seek compensation from the Government of Quebec. Other properties in Quebec will be assessed under the current regulatory regime, and further investment will be at the discretion of the Corporation.

### Additional Conditional Loan Support from the German Government

On October 29, 2018 Pieridae received a written confirmation of eligibility, in principle, for up to an incremental USD \$1.5 billion of untied loan guarantees by the German Federal Government under its UFK program. This confirmation marks an important milestone in advancing Goldboro. This prospective USD \$1.5 billion German Government loan guarantee is in addition to a similar confirmation of UFK eligibility that was previously received, for up to USD \$3.0 billion of prospective German Government loan guarantees to assist in financing construction of Train 1, and all associated infrastructure. The terms and conditions of both guarantees are yet to be negotiated in the context of an overall project financing. The guarantees will be subject to, among other things, a commitment that a specified amount of LNG produced annually from Goldboro will be delivered to Germany over a term of twenty years.

### Permit to Construct Goldboro

The Nova Scotia Utility and Review Board ("NSURB") issued the permit to construct the Goldboro LNG Facility on November 5, 2018. Pieridae expects to satisfy each of the associated conditions of that permit, and to commence the construction of Goldboro in 2019 or in early 2020.

### Engagement with First Nations

Pieridae continued to engage with the Mi'kmaq First Nation to ensure their Aboriginal and Treaty Rights are recognized, respected, and their members will realize on the opportunities contemplated by the Memorandum of Understanding signed in August 2013. Subsequent to the year end, Pieridae signed a formal benefits agreement with the Mi'kmaq First Nation.

### Private Placement

On December 18, 2018 the Company announced that it had completed a non-brokered private placement for proceeds of \$8.0 million. Pieridae used the proceeds of the private placement to refinance certain amounts due at closing of the Arrangement with Ikkuma, to pay for transaction expenses associated with the Arrangement and for general corporate purposes, including exploration expenses.

Pieridae issued 2,358,824 units pursuant to the private placement at a price of \$3.40 per unit. Each unit consists of: (i) one common share of Pieridae; and (ii) one half common share purchase warrant. Each whole warrant entitles the holder to acquire one common share of Pieridae at an exercise price of \$5.67.

### Business Combination with Ikkuma

On December 20, 2018, the Company and Ikkuma announced that they had completed the previously announced strategic combination of the two companies, by way of a plan of arrangement, whereby Pieridae acquired all of the issued and outstanding shares of Ikkuma (the "Arrangement"). The acquisition was accounted for as a business combination whereby the net assets acquired, and liabilities assumed, were recorded at fair value at the acquisition date. Consideration consisted of the issuance of 21.6 million Pieridae common shares valued at approximately \$56.1 million.

The completion of the Arrangement provides Pieridae with ownership of an extensive area of producing and gas-prone reserves and resource properties situated primarily in the central Alberta Foothills and northeast British Columbia. It also represents a transformative step in the execution of Pieridae's integrated business model, as the Company shifts to becoming an upstream natural gas producer, in addition to an LNG development company. Pursuant to the Arrangement, Pieridae acquired the natural gas properties at metrics significantly below the cost of similar reserves and resources in other parts of North America. The Company also acquired deep expertise in the exploration and development of these assets, as it looks to expand its portfolio of natural gas assets in the Western Canadian Sedimentary Basin and exploit its properties in Quebec and New Brunswick. This is expected to provide Pieridae with a long term, competitive advantage for delivering LNG to European and other markets.

### Subsequent Events

On February 4, 2019, the Company announced that the Nova Scotia Mi'kmaq Benefits Agreement, which it negotiated with the Assembly of Nova Scotia Mi'kmaq Chiefs, had been ratified. This Benefits Agreement establishes the framework under which the Mi'kmaq of Nova Scotia will benefit economically from the development, construction and operation of Goldboro.

On February 28, 2019, the Company announced that it had completed a brokered and non-brokered private placement of the Company's common shares at a price of \$2.00 per share. After giving effect to both the brokered and non-brokered tranches of the private placement, the Company issued 9,550,000 common shares for gross proceeds of \$19.1 million.

On April 1, 2019, the Company announced that it had engaged KBR to perform a review of an amended version of the previously prepared FEED study for Goldboro. KBR will also conduct an OBE necessary for entering into a lumpsum EPC contract.

### Goldboro LNG Project

The Goldboro LNG Facility will be located on the coast of Nova Scotia, approximately two kilometres from the communities of Goldboro, in the West, and Drum Head, in the East. Plans are for the facility to include two liquefaction trains, each with the annual production capacity of approximately 5 MMTPA of LNG. Plans also include a power plant, which will generate the electricity required to produce LNG; two LNG storage tanks; as well as marine structures and a jetty. The jetty will be equipped to accommodate two LNG carriers with capacities of up to 250,000 m<sup>3</sup> of LNG each.

### Project Background

#### INTEGRATED LNG BUSINESS MODEL

The acquisition of Ikkuma solidifies Pieridae's position as Canada's only fully-integrated LNG enterprise holding key permits and approvals. It also greatly expands its portfolio of natural gas reserves, and its ability to generate sufficient natural gas to supply Goldboro. Plans are in place to add to these reserves in the future. A 20-year, take-or-pay contract with Uniper, together with the additional sales contract with Axpo, ensures that there will be a long-term, stable market for more than half of the planned capacity of Goldboro.

## FINANCING (UFK)

The confirmation in principle on April 25, 2013, that the project financing to be secured for constructing the first train of Goldboro will qualify for a US \$3 billion loan guarantee from the German government provided that, among other things, at least 1.5 MMTPA of the 4.8 MMTPA LNG produced from the first train of Goldboro will be delivered to the German domestic gas market. The loan guarantee is expected to result in a lower cost of capital for Pieridae and enhance the leverage which can be achieved. This should represent a significant advantage over its competitors and translate into a cost of capital lower than an integrated LNG company without such guarantees.

On October 29, 2018 the proposed financing of upstream activities within the Goldboro LNG Project received a written confirmation of eligibility in principle for up to US \$1.5 billion of untied loan guarantee by the German federal government. This confirmation marked an important milestone in advancing the integrated Goldboro LNG Project towards a final investment decision. This prospective US \$1.5 billion German government loan guarantee in relation to the proposed financing of conventional upstream natural gas development is in addition to the US \$3 billion of prospective German government loan guarantees for the proposed financing of the construction of the Goldboro LNG Project train 1 and all associated facilities.

## WORLD DEMAND

According to the International Energy Agency ("IEA"), global natural gas demand is expected to grow from 3,752 Bcm to 5,349 Bcm between 2017 and 2024. Global liquefaction capacity will need to grow to nearly 875 Bcm by 2024 to meet expected demand. Currently the IEA foresees a shortfall in liquefaction capacity of roughly 375 Bcm by 2040. As the closest North American LNG export terminal to Europe, Goldboro will be well-placed to capitalize on this growing demand.

## STRANDED SUPPLY

Part of Pieridae's value chain strategy is to acquire stranded and economically constrained natural gas reserves and move them to world markets, capitalizing on higher global market prices. This strategy contemplates acquisitions and joint ventures to acquire more reserves in Canada and the United States. Pipeline egress constraints in Canada have put significant downward pressure on Canadian benchmark natural gas prices. This represents a significant opportunity for Pieridae to acquire incremental natural gas assets at historically low prices.

## TRANSPORT CAPACITY

The gas supply for Goldboro will be delivered via existing pipelines to the Maritimes and Northeast Pipeline ("M&NP"), located directly alongside the project site. Western Canadian production would move through TransCanada Corporation's Canadian Mainline ("Mainline"). This represents an opportunity for TransCanada Corporation as well, as their Canadian Mainline is currently underutilized. Current capacity of the Mainline is about 6 Bcf/day, but it is running at 2.4 Bcf/day. There are some sections of the subsidiary lines which will require upgrading to meet Pieridae's capacity requirements. Engineering work is ongoing to refine the adjustments required.

## PROJECT SITE

The proposed site for Goldboro is located in the Municipality of Guysboro, Nova Scotia. It consists of approximately 107.5 hectares (265.5 acres) of undeveloped land situated within the Goldboro Industrial Park. The site was chosen as the location for Goldboro for several reasons. Firstly, the Goldboro Industrial Park is the Canadian ending point of the M&NP. It is also landfall for the Sable Natural Gas Pipeline which could eventually provide more feedstock. The site also has sheltered access to the deep water of Isaacs Harbour. The Company has completed some land deforestation and grubbing at the site.

Pieridae has the right, exercisable on sixty (60) days prior notice at any time before March 31, 2020, to require the Municipality to repurchase the site for \$3.2 million on the terms and conditions of a put option registered against title to the site. In addition, the Municipality has the right, exercisable on sixty (60) days prior notice, to repurchase the site for \$3.2 million on the terms and conditions of a call option registered against title to the site if Pieridae either: (a) fails to make a final investment decision to proceed with the construction of the Goldboro LNG Facility on or before December 31, 2019; or (b) fails to obtain all regulatory permits that are necessary to construct the Goldboro LNG Facility on or before December 31, 2019.

**Construction options**

Pieridae has three options to develop Goldboro:

- Approve a 1 train, 5 MMTPA project with smaller utilities and no immediate plans for future expansion ("Smaller Project");
- Approve a 2 train, 10 MMTPA project with full utilities and a phased construction schedule with Train 1 built in the near term and the second train built at a later time ("Phased Approach"); or
- Approve a 2 train, 10 MMTPA project with both trains built concurrently ("Full Project").

The company has decided to implement the phased approach and focus on the development of Train 1 with full utilities for a 2 Train facility.

**Key Milestones**

The following is a discussion of the key milestones for the Phased Approach option. Under the Full Project these milestones would be the same with a modification to staging or the timing. Under the Smaller Project, the milestones around securing sales contracts, natural gas supply, and gas transportation would be adjusted for the lower expected volumes, and the engineering and design would be adjusted for the smaller facility. However, the remaining milestones would be the same as the other options.

Milestone	Status
<p><b>Secure sales contracts for 10 MMTPA (the design capacity of the two trains).</b></p>	<ul style="list-style-type: none"> <li>• Pieridae has an agreement with Uniper which contemplates the sale, on a "take or pay" basis, of 4.8 MMTPA of LNG for a term of 20 years commencing at the start of commercial deliveries of LNG.</li> <li>• Pieridae has a term sheet to negotiate a binding LNG sale and purchase agreement to supply up to 1.0 MMTPA of LNG to Axpo, a Swiss utility.</li> <li>• Negotiations are under way for additional sales agreements.</li> </ul>
<p><b>Secure supply of approximately 1.4 billion cubic feet per day of natural gas, and the related infrastructure improvements required to supply the 10 MMTPA of LNG to the proposed Goldboro LNG Facility.</b></p>	<ul style="list-style-type: none"> <li>• Effective December 20, 2018, Pieridae added 671 million cubic feet of total proved plus probable natural gas reserves through the Ikkuma acquisition.</li> <li>• Confirmation of eligibility in principle for up to US \$1.5 billion of untied loan guarantee by the German federal government under its UFK program to support upstream development.</li> <li>• Pieridae acquired Pétrolia Inc. on October 24, 2017. As a result of this acquisition, Pieridae holds Exploration Licenses for roughly 4,600 km<sup>2</sup> of territory in the eastern part of Quebec.</li> <li>• In partnership with ORLEN Upstream Canada Ltd., Pieridae has working interests in natural gas properties in properties prospective for natural gas in New Brunswick.</li> </ul>



	<ul style="list-style-type: none"> <li>• Pieridae continues to seek additional gas properties through acquisitions or processing agreements, for which negotiations are ongoing.</li> </ul>
<b>Complete engineering and design required for facility construction.</b>	<ul style="list-style-type: none"> <li>• Project site acquired.</li> <li>• Beginning of the land preparation was completed in early 2018.</li> <li>• Preliminary FEED has been completed.</li> <li>• Commencement of open book estimates for the primary EPC contract. This work has been awarded to KBR.</li> </ul>
<b>Secure transportation agreements to deliver natural gas to the Goldboro LNG Facility</b>	<ul style="list-style-type: none"> <li>• Memorandums of understanding have been completed with owners of the respective pipelines for long-term capacity.</li> <li>• The Company is eligible to request, at any time, an open season process to finalize these agreements.</li> </ul>
<b>Obtain all permits and authorizations required to proceed with construction.</b>	<ul style="list-style-type: none"> <li>• The NSURB issued the permit to construct the Goldboro LNG Facility on November 5, 2018.</li> <li>• The Minister of the Environment of Nova Scotia, issued an Environmental Assessment Approval to Pieridae Energy for the Goldboro LNG Natural Gas Liquefaction Plant and Marine Terminal, on March 31, 2014. Extensions were granted in August 2015 and October 2017. As per the 2017 extension, The Environment Assessment Approval requires construction to start before March 21, 2019. This condition was satisfied as a result of the completion of the site clearing which occurred in early 2018.</li> <li>• The Canadian Environmental Assessment Agency determined that a federal environmental assessment was not required.</li> <li>• Export Licence GL-313 approved the export from Canada up to 16.675 billion cubic meters (589 Bcf) of natural gas each year for a period of twenty years commencing on the date of first export.</li> <li>• Import Licence GL-314 approved the import up to 11.845 billion cubic meters (418 Bcf) of natural gas each year for a period of twenty years commencing on the date of first import.</li> <li>• Department of Energy of the United States (the "US DOE") issued an order ("Order No. 3639") granting authorization to export annually, by pipeline, up to 292 Bcf of natural gas sourced from the United States to Canada for end use in Canada or, after liquefaction in Canada, to export, by vessel.</li> <li>• US DOE issued an order ("Order No. 3768") granting authorization to export annually, using the capacity of the U.S. portion of the M&amp;NP that is in service as of February 5, 2016, up to 292 Bcf of natural gas sourced from the United States to Canada for liquefaction and to re-export as LNG to countries with which the United States does not have a free-trade agreement.</li> </ul>

<p><b>Obtain agreement from organized labour and local indigenous groups to mitigate the risk of disruption during construction.</b></p>	<ul style="list-style-type: none"> <li>• Project special needs collective agreements (the "Collective Agreement") have been negotiated with 15 of the relevant trade unions in Nova Scotia, of which 13 have signed and ratified the Collective Agreement.</li> <li>• The Labour Board (Nova Scotia) issued order LB-1322 and order LB-1323 declaring that the Collective Agreement is a project agreement and that it is effective commencing July 27, 2017.</li> <li>• Have signed a Benefits Agreement with The Assembly of Nova Scotia Mi'kmaq Chiefs to cooperate on Goldboro and facilitate meaningful Mi'kmaq participation in and support for Goldboro.</li> </ul>
<p><b>Secure the required funding.</b></p>	<ul style="list-style-type: none"> <li>• Confirmation of eligibility in principle for up to US \$4.5 billion of untied loan guarantee by the German federal government under its UFK program to support both midstream and upstream development.</li> <li>• Pieridae has engaged the following financial advisors - SG Americas Securities (debt); KfW bank (debt) .</li> </ul>

More information on the above noted contracts and regulatory efforts can be found in the Company's 2018 AIF which can be found on [www.sedar.com](http://www.sedar.com).

### Project Economics

Pieridae has developed robust economic models to forecast the future economics of Goldboro. With a focus on Train 1 under the phased approach to construction, we estimate future operating costs to be approximately USD \$4.50/mmbtu. Operating costs include operating cash costs such as upstream costs net of non gas revenues (i.e. Sulphur and Condensate), pipeline Tolls, LNG plant costs and contractually obligated costs associated with the Train 1 Offtake agreement (Buyer's margin, shipping and regas costs). Adding expected debt and equity return costs total costs are expected to be approximately USD \$7.50/mmbtu. We forecast a potential sales price of over USD \$8.00/mmbtu. Overall the project has the potential to achieve an unlevered project IRR in the range of 15-20%.

### Final Investment Decision ("FID")

The total cost of the project is expected to be approximately USD \$10.0 billion, split US \$4.5 billion for Train 1, USD \$3.5 billion for Train 2, and US \$2.0 billion for upstream development. These costs will be refined as we get closer to project construction. Construction phases include, but are not limited to, site preparation, road detour, procurement, camp design and construction, module fabrication and train installation, jetty construction and installation, tank construction, utilities and off-site installation and commissioning.

Pieridae expected to make a soft FID during the first half of 2019. This soft FID would have allowed the Company to start the process of identifying capital partners and funding sources. Milestones for this decision include 1) securing natural gas transportation from Western Canada to Goldboro, 2) obtaining additional support from the German government to support upstream development, and 3) receiving the Permit to Construct from the Nova Scotia government. These milestones have all been met. In addition to these activities, Pieridae continues to negotiate a firm, lump-sum EPC agreement for construction of Goldboro. Subsequent to year end, the Company decided to award an engagement to validate the FEED and complete the OBE to EPC contractor KBR. As the original FEED was completed by McDermott CB&I, this change in EPC partner has delayed the declaration of soft FID. This declaration is still expected to occur in 2019. Final FID milestones and timing will be determined after the completion of the Open Book Estimate and finalization of the firm, lump-sum EPC contract.

## Financing

The Company will be looking to initially raise approximately USD \$6.0 billion to fund the construction of the project under the Phased Approach. Expectations are that it will be structured with a high debt to equity ratio, and that it will occur in stages. After finalization of the EPC contract and OBE, the lenders will be in position to complete their due diligence and proceed with their respective investment decisions. Lenders are expected to provide cash on an ongoing basis throughout construction. Financing will also be required to bridge to the lenders' investment decisions. This bridge financing is expected to be comprised of both debt and equity. The Company believes that it will have the capacity to secure the funding required.

## Upstream Assets

### Western Canada Properties

Through its acquisition of Ikkuma, Pieridae now holds conventional Foothills reservoirs in Western Canada. Ikkuma pursued exploration plays that were high growth, low decline, gas weighted, oil upside in conventional by-passed reservoirs. Ikkuma's crude oil, natural gas and NGL production is sold primarily through marketing companies at current market prices. Crude oil contracts are generally month to month and cancellable on 30 days' notice, NGL contracts are generally for a period of up to one year and are cancellable on 90 days' notice and natural gas contracts are generally for one year.

Pieridae continues to evaluate other gas assets in the Alberta Foothills where it believes further exploitation, development and exploration opportunities exist.

### Quebec Properties

Pieridae holds Exploration Licenses for territory in Eastern Quebec. As mentioned earlier, in September 2018, the Quebec Government adopted the Petroleum Resources Act. This Act, in addition to the ongoing moratorium on exploration and development, put severe restrictions on the exploration and exploitation of oil and gas reserves in the province, and caused management to re-evaluate its prospects in the province. Management concluded that components of the legislation dealing with the proximity of exploration activity to urban areas and bodies of water would restrict its ability to capitalize on certain licenses, and consequently that indicators of impairment were present. Concurrently, in light of pending fivefold increases in Exploration License Fees, management extended its impairment assessment to include those licenses that would be sub-optimal targets for additional expenditures. Upon completion of this evaluation, the Company relinquished nearly half of the land area covered by the Exploration Licenses held at December 31, 2017, and recorded impairment of \$17.0 million. This impairment was recorded in Q3 2018. The Company will be seeking compensation from the Quebec government. As of December 31, 2018, no oil or natural gas reserves from Quebec have been assigned to any of the properties in which Pieridae has an interest.

### New Brunswick Properties

Pieridae also holds a 20 percent interest in Pieridae Production LP, which has a working interest in certain natural gas resource properties in New Brunswick. However, an ongoing government-imposed moratorium on the use of hydraulic fracturing in New Brunswick prevents any exploration and development in the province at this time. And while the newly elected government in the province committed to selectively allowing hydraulic fracturing to occur in the province, it has not done so yet.

## Business Environment

	(Yearly average)	2018	2017
Dated Brent benchmark price (USD\$/bbl)	\$	71.12	\$ 54.38
WCS heavy differential from WTI (USD\$/bbl)	\$	26.29	\$ 11.97
Condensate benchmark price (USD\$/bbl)	\$	60.98	\$ 51.65
NYMEX benchmark price (USD\$/MMBtu)	\$	3.08	\$ 3.11
AECO benchmark price (CAD\$/GJ)	\$	1.45	\$ 2.30
NBP UK natural gas benchmark price (USD\$/MMBtu)	\$	7.93	\$ 5.83
US/Canadian dollar average exchange rate (USD\$)		0.7717	0.7701
US/Canadian dollar year end exchange rate (USD\$)		0.7328	0.7988

Substantially all of the Company's long-term production is expected to be sold based on US dollar benchmark pricing. Specifically, international natural gas prices closely correlate to Brent indices. Canadian natural gas pricing is primarily based on Alberta AECO reference pricing, which is derived from the NYMEX reference pricing and adjusted for its basis or location differential to the NYMEX delivery point at Henry Hub. The Company's realized prices can be sensitive to fluctuations in market prices and foreign exchange rates.

## Consolidated Financial Highlights

Prior to its acquisition of Ikkuma, Pieridae was predominantly a development company focused on obtaining approvals, customers and financing for Goldboro. The Company held upstream assets in Quebec and New Brunswick, however efforts to develop those properties have been constrained due to regulatory restrictions in Quebec and a moratorium in New Brunswick on hydraulic fracturing. With the Ikkuma acquisition, Pieridae now has active upstream petroleum and natural gas operations. Prior to the Ikkuma acquisition, Pieridae's only revenue was earned as a service provider in Quebec. Going forward, the majority of the Company's revenues will come from the sale of natural gas, and sulphur and other petroleum by-products generated from the production of natural gas.

(\$000s, except per share amounts)	For the year ended			For the 3-months ended		
	2018	2017		2018	2017	
Revenue	\$ 2,730	\$ 90	\$	\$ 2,432	\$ 90	\$
Operating Expenses	\$ 9,144	\$ 1,549	\$	\$ 5,093	\$ 785	\$
Administrative Expenses	\$ 7,499	\$ 898	\$	\$ 3,971	\$ 248	\$
Net loss	\$ 34,915	\$ 8,924	\$	\$ 8,870	\$ 3,152	\$
Net loss per common share – basic and diluted	\$ 0.68	\$ 0.24	\$	\$ 0.17	\$ 0.08	\$
Cash flow from operating activities	\$ (8,407)	\$ (10,239)	\$	\$ (1,335)	\$ (11,879)	\$
Capital expenditures	\$ 2,234	\$ 22	\$	\$ 258	\$ 22	\$
Project expenditures <sup>(1)</sup>	\$ 9,286	\$ 6,640	\$	\$ 2,981	\$ 6,512	\$
Net Working Capital <sup>(1)</sup>	\$ (84,061)	\$ 10,989	\$	\$ (84,061)	\$ 10,989	\$
Shareholders' equity	\$ 91,900	\$ 59,469	\$	\$ 91,900	\$ 59,469	\$

(1) Non-IFRS measure. See page47 in the MD&A.

Pieridae's financial results for 2018 reflect the fact the Company was still predominantly a development stage company for most of the year. The Company's 2018 consolidated financial statements include the results of operations of Ikkuma for the eleven-day period after the December 20, 2018, closing date. This still represents a significant milestone for the Company as it recorded its first ever petroleum and natural gas operating revenue. The Company recognized a portion of Ikkuma's petroleum and natural gas revenue, as well as operating, administrative and transportation expenses. This, coupled with the impairment of \$17.0 million recorded in Q3 of 2018, resulted in a loss before taxes of \$34.9 million for the year. This compares to a loss of \$9.3 million in 2017. Overall the acquisition of Ikkuma contributed revenues of \$2.5 million and a net loss of \$1.0 million. Had the acquisition occurred on January 1, 2018, revenues would have increased by \$80.0 million and the net loss would have increased by \$38.1 million.

The acquisition of Ikkuma contributed to a significant increase in the assets and liabilities of the Company. The addition of Ikkuma's resource properties (assessed fair value \$298.0 million) and accounts receivable (assessed fair value \$15.4 million) caused total assets to grow from \$74.0 million at December 31, 2017 to \$370.7 million at December 31, 2018. Ikkuma's accounts payable (assessed fair value \$53.2 million) and provision for site restoration (assessed fair value \$155.0 million) caused total liabilities to increase to \$278.9 million at December 31, 2018, compared to \$14.7 million at December 31, 2017. The increase also reflects the \$50.0 million of term debt undertaken by the Company to repay Ikkuma's outstanding debt on closing. Share capital increased by \$64.5 million over the same period reflecting the \$56.1 million of equity issued on the Ikkuma acquisition, and the concurrent closing of a private placement for \$8.0 million.

Excluding the working capital deficit of \$35.7 million acquired from Ikkuma, the Company's cash flows related to operating activities were negative \$8.4 million for the year ended December 31, 2018. This compares to negative \$10.2 million in 2017. Restrictions on exploration in both Quebec and New Brunswick limited capital expenditures to \$2.2 million in 2018 compared to \$12.4 million in 2017.

## Revenues

	For the year ended				For the 3-months ended			
		2018		2017		2018		2017
	(\$000s)							
Petroleum and natural gas, net of royalties	\$	2,321	\$	-	\$	2,321	\$	-
Project management	\$	331	\$	90	\$	33	\$	90
Other income	\$	78	\$	-	\$	78	\$	-
<b>Total</b>	<b>\$</b>	<b>2,730</b>	<b>\$</b>	<b>90</b>	<b>\$</b>	<b>2,432</b>	<b>\$</b>	<b>90</b>

The Company recognized petroleum and natural gas revenue of \$2.3 million for the eleven days ended December 31, 2018. For the year ended December 31, 2018, the Company's results of operations include Ikkuma's revenues and expenses estimated to have occurred from December 21 to 31, 2018. Petroleum and natural gas revenues (net of royalties) for the year ended December 31, 2018 were \$2.3 million. There were no comparable sales in 2017. Project management revenues are management fees invoiced by the Company as a project operator for restoration work in Quebec. The decrease in Q4 2018 reflects the winding down of activity due to the ongoing moratorium on exploration and development in Quebec and Anticosti. Other income represents processing and contract operating income attributed to the Company since the acquisition of Ikkuma.

## Operating expenses

(\$000s)	For the year ended				For the 3-months ended			
		2018		2017		2018		2017
Engineering and consulting	\$	4,304	\$	945	\$	2,214	\$	160
Production expenses	\$	1,577	\$	-	\$	1,577	\$	-
Land improvements	\$	491	\$	-	\$	275	\$	-
Salaries and benefits	\$	1,729	\$	503	\$	364	\$	503
Other	\$	1,043	\$	101	\$	663	\$	101
<b>Total</b>	<b>\$</b>	<b>9,144</b>	<b>\$</b>	<b>1,549</b>	<b>\$</b>	<b>5,093</b>	<b>\$</b>	<b>764</b>

Operating expenses for the three months and year ended December 31, 2018, increased by \$4.3 million and \$7.6 million, respectively, compared to equivalent periods in 2017. Part of this increase was attributable to the \$2.1 million of Ikkuma's operating expenses recognized for the eleven days ended December 31, 2018. The balance of the increases were due to the Company's efforts to satisfy various additional requirements for Goldboro, including construction approvals, environmental assessments and the FEED Engineering Compliance Certification. Many consultants and engineering firms were engaged on these endeavours throughout the quarter and the year. The increase is also due to 2018 reflecting a full year of operating costs associated with the Company's 2017 acquisition of Pétrolia, versus the roughly two months of activity that were included in 2017.

## Administrative expenses

(\$000s)	For the year ended				For the 3-months ended			
		2018		2017		2018		2017
Salaries and benefits	\$	2,069	\$	462	\$	1,051	\$	72
Professional Fees	\$	4,210	\$	244	\$	2,318	\$	176
Other	\$	1,220	\$	192	\$	602	\$	-
<b>Total</b>	<b>\$</b>	<b>7,499</b>	<b>\$</b>	<b>898</b>	<b>\$</b>	<b>3,971</b>	<b>\$</b>	<b>248</b>

Administrative expenses for the three months and year ended December 31, 2018, increased by \$3.7 million and \$6.6 million, respectively, compared to the same periods in 2017. Ikkuma added \$0.3 million of administrative expenses in the quarter. The balance of the increases were attributable to a number of other factors. The Company engaged three different financial advisors to assist with the debt and equity financing efforts. This accounted for roughly \$1.5 million of the increase. The Company also engaged a number of external advisors to assist with the close of the Ikkuma acquisition. Transaction costs were approximately \$1.7 million. The balance of the increase would be due to the Company reflecting twelve months of Pétrolia operations in 2018, compared to the two months of activity included in 2017.

## Transportation expenses

(\$000s)	For the year ended				For the 3-months ended			
		2018		2017		2018		2017
Transportation	\$	206	\$	-	\$	206	\$	-

Transportation expenses reflect Ikkuma's transportation expenses for the ten days ended December 31, 2018. There were no similar charges in the prior quarter or the prior year.

## Depletion and depreciation

	For the year ended				For the 3-months ended			
	(\$000s)	2018	2017		2018	2017		
Depletion and depreciation	\$	700	\$	20	\$	650	\$	15

Depletion and depreciation for the three months and year ended December 31, 2018, includes \$632 thousand of depletion associated with Ikkuma's production for the eleven days ended December 31, 2018. There was no comparable charge in 2017. Depreciation expense increased from \$20 thousand in 2017 to \$68 thousand in 2018. The increase is due to the Company recording a full year's depreciation on the assets it acquired in the Pétrolia acquisition which closed in October 2017.

## Impairment

	For the year ended				For the 3-months ended			
	(\$000s)	2018	2017		2018	2017		
Impairment	\$	16,985	\$	-	\$	-	\$	-

As discussed earlier, the \$17.0 million of impairment recognized in 2018 resulted from the Company evaluating the impact of new legislation on its Exploration Licenses in Quebec. Management concluded that the changes would profoundly impact its ability to obtain any future benefits associated with certain licenses. These licenses were relinquished, and the costs capitalized to date were written-off. There was no impairment recorded in either Q4 2017 or Q4 2018.

## Share-based compensation

	For the year ended				For the 3-months ended			
	(\$000s)	2018	2017		2018	2017		
Share-based compensation	\$	3,164	\$	3,615	\$	1,036	\$	2,550

Share-based compensation for the three months and year ended December 31, 2018, decreased by \$1.5 million and \$451 thousand, respectively, from 2017 to 2018. Despite no options being granted in 2017, the 2017 share-based compensation expense exceeded 2018 due to the continued recognition, in 2017, of 2015 and 2016 option grants. These both vested over four years. Options that were granted in 2018 vest over five years. Consequently, the expense is recognized over a longer period. The decrease is also due to the number of options that were forfeited and cancelled due to resignations which occurred in late 2017 and 2018.

## Financial income and expenses

	For the year ended				For the 3-months ended			
	(\$000s)	2018	2017		2018	2017		
Interest Expense	\$	304	\$	844	\$	274	\$	85
Interest Income	\$	(405)	\$	(71)	\$	(236)	\$	(71)
Accretion	\$	53	\$	398	\$	13	\$	-
Loss on conversion right	\$	-	\$	2,257	\$	-	\$	730
Other	\$	-	\$	(253)	\$	-	\$	(725)
Net financial expense (income)	\$	(48)	\$	3,175	\$	51	\$	19

The decrease in financial income and expenses for the year ended December 31, 2018, is almost entirely attributable to the fact that the Company recorded a \$2.3 million loss on conversion right in 2017. The loss resulted from a US \$5.0 million shareholder loan being converted to equity in October 2017. There was also interest expense of \$1.2 million related to the loan recorded in 2017, offset by a foreign exchange gain of \$1.0 million.

## Segmented Information

With the acquisition of Ikkuma, the Company has active upstream operations. Therefore, management now evaluates its operations in two segments – Upstream and LNG. As integration activities for Ikkuma were not completed for December 31, 2018, Ikkuma’s corporate costs are included in the Upstream segment and Pieridae’s corporate costs are included in the LNG segment.

	For the year ended and as at December 31			For the 3-months ended and as at December 31		
	(\$000s)	2018	2017	2018	2017	
Revenue						
Upstream	\$	2,730	\$ 90	\$ 2,432	\$ 90	
LNG	\$	-	\$ -	\$ -	\$ -	
	\$	2,730	\$ 90	\$ 2,432	\$ 90	
Expenses						
Upstream	\$	27,282	\$ 91	\$ 10,049	\$ 91	
LNG	\$	10,384	\$ 9,286	\$ 1,252	\$ 3,514	
	\$	37,666	\$ 9,377	\$ 11,301	\$ 3,605	
Net loss						
Upstream	\$	24,552	\$ 1	\$ 7,618	\$ 1	
LNG	\$	10,363	\$ 8,923	\$ 1,252	\$ 3,151	
	\$	34,915	\$ 8,924	\$ 8,870	\$ 3,152	
Assets						
Upstream	\$	357,287	\$ 44,057	\$ 357,287	\$ 44,057	
LNG	\$	13,386	\$ 29,988	\$ 13,386	\$ 29,988	
	\$	370,673	\$ 74,045	\$ 370,673	\$ 74,045	

## Upstream Segment

The upstream segment includes the operations and assets of Ikkuma’s Western Canadian operations as well as Pieridae’s Quebec and New Brunswick upstream activities. The financial results of Ikkuma have been included from the date of acquisition on December 20, 2018 to December 31, 2018.

## REVENUE

	For the year ended			For the 3-months ended		
	(\$000s)	2018	2017	2018	2017	
Crude Oil and NGLs	\$	660	\$ -	\$ 660	\$ -	
Natural Gas	\$	1,796	\$ -	\$ 1,796	\$ -	
Royalties	\$	(135)	\$ -	\$ (135)	\$ -	
Total petroleum and natural gas	\$	2,321	\$ -	\$ 2,321	\$ -	
Project management	\$	331	\$ 90	\$ 34	\$ 90	
Other income	\$	78	\$ -	\$ 78	\$ -	
<b>Total</b>	\$	2,730	\$ 90	\$ 2,433	\$ 90	

For the year ended December 31, 2018, the Company’s results of operations include Ikkuma’s revenues and expenses from December 21 to 31, 2018. Petroleum and natural gas revenues (net of royalties) for the year ended December 31, 2018 were \$2.3 million. There were no comparable revenues in 2017. Project management revenues are management fees invoiced by the Company as a project operator for restoration work in Quebec. The decrease in Q4 2018 reflects the winding down of activity due to the ongoing moratorium on exploration and development in Quebec. Other income represents processing and contract operating income attributed to the Company since the acquisition of Ikkuma.



## DAILY PRODUCTION

Daily production was measured from December 21 to December 31, 2018 based on the production assets acquired in the Ikkuma transaction.

	As at December 31,	
	2018	2017
Crude Oil and NGLs (bbl/d)	350	-
Natural gas (Mcf/d)	102,952	-
Total barrels of oil equivalent (BOE/d)	17,509	-
Product Mix:		
Light and medium crude oil and NGLs	2%	-
Natural gas	98%	-

## EXPENSES

	(\$000s)	For the year ended		For the 3-months ended	
		2018	2017	2018	2017
Operating expenses	\$	3,054	\$ 72	\$ 3,051	\$ 72
Administrative expenses	\$	6,198	\$ -	\$ 5,950	\$ -
Transportation	\$	206	\$ -	\$ 206	\$ -
Impairment of assets	\$	16,985	\$ -	\$ -	\$ -
Depletion and depreciation	\$	700	\$ 19	\$ 650	\$ 15
Financial expenses (income)	\$	139	\$ -	\$ 255	\$ -
<b>Total</b>	\$	<b>27,282</b>	\$ <b>91</b>	\$ <b>10,112</b>	\$ <b>87</b>

Operating expenses for the three months and year ended December 31, 2018, increased by \$3.0 million for both the three- and twelve-month periods, compared to equivalent periods in 2017. Most of this increase was attributable to the \$2.1 million of Ikkuma's operating expenses recognized for the period from acquisition to December 31, 2018. The increase is also due to 2018 reflecting a full year of operating costs associated with the Company's 2017 acquisition of Quebec based Pétrolia Inc., versus the roughly two months of activity that were included in 2017. The balance of the increases were due to the Company's efforts to satisfy various Quebec regulatory requirements.

Administrative expenses for the year ended December 31, 2018, increased by \$6.2 million, compared to the same period in 2017. Ikkuma added \$0.3 million of administrative expenses in the quarter. The balance of the increases were attributable to a number of other factors. The Company also engaged a number of external advisors to assist with the close of the Ikkuma acquisition. Transaction costs were approximately \$1.7 million. The balance of the increase would be due to the Company reflecting twelve months of Quebec based Pétrolia operations in 2018, compared to the two months of activity included in 2017.

Transportation expenses reflect Ikkuma's transportation expenses for the ten days ended December 31, 2018. There were no similar charges in the prior quarter or the prior year.

As discussed earlier, the \$17.0 million of impairment recognized in 2018 resulted from the Company evaluating the impact of new legislation on its Exploration Licenses in Quebec. Management concluded that the changes would profoundly impact its ability to obtain any future benefits associated with certain licenses. These licenses were relinquished, and the costs capitalized to date were written-off. There was no impairment recorded in either Q4 2017 or Q4 2018.

Depletion and depreciation for the three months and year ended December 31, 2018, includes \$0.6 million of depletion associated with Ikkuma's production for the eleven days ended December 31, 2018. The balance of the increase is due to the Company recording a full year's depreciation on the assets it acquired in the Pétrolia acquisition which closed in October 2017.

Financial expenses increased \$0.1 million for the year ended December 31, 2018 compared to the prior year. This was primarily driven by accretion of decommissioning obligations related to the Ikkuma assets.

## ASSETS

	As at December 31			
	2018		2017	
	(\$000s, except per share amounts)			
Petroleum and natural gas properties and equipment	\$	301,603	\$	-
Exploration and evaluation assets	\$	27,573	\$	42,827
Other assets	\$	28,111	\$	1,230
	\$	357,287	\$	44,057

With the Ikkuma acquisition, acquired assets were recognized at a value of \$298.0 million. In Q3, an asset impairment of \$17.0 million was recognized on the Quebec assets.

## LNG Segment

The LNG segment includes the development activities on Goldboro and the corporate costs related to Pieridae. As this segment is in the developmental stage, there is no revenue being generated.

## EXPENSES

	For the year ended				For the 3-months ended			
	2018		2017		2018		2017	
	(\$000s)							
Operating expenses	\$	6,090	\$	1,477	\$	1,667	\$	692
Administrative expenses	\$	1,301	\$	898	\$	1,143	\$	248
Share-based compensation	\$	3,164	\$	3,615	\$	1,036	\$	2,550
Loss on foreign exchange	\$	4	\$	-	\$	292	\$	-
Depletion and depreciation	\$	-	\$	1	\$	-	\$	-
Financial expenses (income)	\$	(187)	\$	3,175	\$	(306)	\$	19
Share of net loss of associate	\$	12	\$	120	\$	3	\$	30
<b>Total</b>	\$	10,384	\$	9,286	\$	3,835	\$	3,539

Operating expenses for the three months and year ended December 31, 2018, increased by \$1.0 million and \$4.6 million, respectively, compared to equivalent periods in 2017. The increases were due to the Company's efforts to satisfy various requirements for Goldboro, including construction approvals, environmental assessments and the FEED Engineering Compliance Certification. Many consultants and engineering firms were engaged on these endeavours throughout the quarter and the year.

Administrative expenses for the three months and year ended December 31, 2018, increased by \$0.9 million and \$0.4 million, respectively, compared to the same period in 2017. This reflects the increasing head count and professional fees versus 2017.

The decrease in financial expenses for the year ended December 31, 2018, is almost entirely attributable to the fact that the Company recorded a \$2.3 million loss on conversion right in 2017. The loss resulted from a US \$5.0 million shareholder loan being converted to equity in October 2017. There was also interest expense of \$1.2 million related to the loan recorded in 2017, offset by a foreign exchange gain of \$1.0 million.

## Summary of quarterly results

The Company's quarterly results may fluctuate significantly from quarter to quarter owing to the fact that the Company's activities have been primarily in the development stage.

(\$000s, except per share amounts)	Q4 2018	Q3 2018	Q2 2018	Q1 2018	Q4 2017	Q3 2017	Q2 2017	Q1 2017
Revenues	\$ 2,432	215	66	16	90	-	-	-
Operating expenses	\$ 5,093	2,018	1,575	1,013	2,493	877	48	733
Administrative expenses	\$ 3,971	1,707	1,759	1,682	1,063	44	631	193
Net loss attributable to equity holders	\$ (8,848)	(20,368)	(2,711)	(2,942)	(3,091)	(2,131)	(1,572)	(2,058)
Net loss per share attributable to equity holders (basic and diluted)	\$ (0.17)	(0.40)	(0.05)	(0.06)	(0.06)	(0.06)	(0.05)	(0.06)

Prior to Q4 2017, Pieridae was solely involved in the development of Goldboro so the operations during those quarters reflect that activity. In Q4 2017, Pieridae acquire Quebec based Petrolia which had primarily undeveloped upstream properties with the operating and administrative costs related to those activities. In Q3 2018, Pieridae recognized an impairment on some of those Quebec assets as explained previously which resulted in an increase in the net loss. In Q4 2018, Pieridae acquired upstream producer, Ikkuma, which results in eleven days of revenue and costs being recognized for that operation. With the evolution of the organization, historical results are not indicative of, and should not be relied upon to estimate, future financial results.

## Project Investment

(\$000s)	For the year ended				For the 3-months ended			
	2018		2017		2018		2017	
Capex	\$	2,234	\$	211	\$	258	\$	211
Business acquisitions	\$	297,998	\$	42,616	\$	297,998	\$	42,616
Goldboro spending <sup>(1)</sup>	\$	6,714	\$	6,857	\$	2,385	\$	2,569
<b>Total</b>	\$	<b>306,946</b>	\$	<b>49,684</b>	\$	<b>300,641</b>	\$	<b>45,396</b>

(1) Non-IFRS measure. See page 46 in the MD&A.

The company has invested more than \$60 million to date in Goldboro. Expenses have been mostly incurred to complete the FEED and to obtaining the environmental assessment approval. In 2018, the company incurred expenses related to Goldboro for the design appraisal performed in the process of obtaining the permit to construct and the beginning of the open book estimate. Fees will continue to be incurred to address all the environmental conditions related to the environmental assessment approval. In order to keep the project on schedule, certain site preparation work will also need to be completed in 2019 including completion of the land preparation and a road detour. The completion of this early work will be dependent on the company obtaining further financing.

## Capital Resources and Liquidity

	(\$000s)	As at December 31	
		2018	2017
Cash and cash equivalents	\$	7,651	\$ 19,619
Cash and cash equivalents held for exploration purposes	\$	1,461	\$ 1,619
Restricted cash	\$	8,626	\$ -
Accounts receivable	\$	16,187	\$ 1,092
Prepaid expenses	\$	2,250	\$ 122
Trade and other payables	\$	(60,922)	\$ (2,210)
Current portion of deferred lease inducements	\$	(20)	\$ (19)
Current portion of term debt	\$	(50,007)	\$ (7)
Partner advances for planned exploration work	\$	(624)	\$ (679)
Provision for contingent liability	\$	(530)	\$ (583)
Current portion of the provision for site restoration	\$	-	\$ -
Flow-through shares premium	\$	(82)	\$ (104)
Promissory notes	\$	-	\$ (25)
Deferred accounts payable	\$	(8,051)	\$ (7,836)
<b>Net working capital (deficit)</b>	\$	<b>(84,061)</b>	\$ <b>10,989</b>

As at December 31, 2018, Pieridae had a consolidated cash position of 9.1 million compared to a cash position of \$21.2 million as at December 31, 2017. The working capital deficit was \$84.1 million compared to net working capital of \$11.0 million at December 31, 2017. The \$95.2 million decrease in working capital is primarily attributable to the \$50.0 million in term debt due in September 2019, plus the \$35.7 million working capital deficit Pieridae assumed on the Ikkuma acquisition. The Company is actively working with its financial advisors to source sufficient funding to allow it to meet these obligations, to grow its upstream asset base, and to allow it to proceed with construction of the Goldboro LNG Facility once an FID has been made. Although there is no guarantee that it will be successful, Management believes the Company presents a compelling opportunity to potential lenders and investors due to the status of approvals for the project, the loan guarantees being offered by the German government and the strong business case for Goldboro. These factors all contributed to its ability secure \$50 million in term debt to close the Ikkuma acquisition, and to close two private placements in the past four months.

Pieridae's capital strategy is aligned with its business strategy and is focused on ensuring that we have sufficient liquidity to fund our operations and project development. Prior to the Ikkuma acquisition, Pieridae's principal sources of liquidity were equity offerings. With the Ikkuma acquisition, the Company will also have a source of potential liquidity from cashflows attributable to active operations. At December 31, 2018, our capital structure was comprised of share capital, working capital and term debt.

## Sources and Uses of Cash Flows

	(\$000s)	For the year ended	
		2018	2017
Cash flows related to operating activities	\$	(8,407)	\$ (10,239)
Cash flows related to investing activities	\$	5,173	\$ 12,418
Cash flows related to financing activities	\$	(8,759)	\$ 18,769

Cash flows related to operating activities decreased from \$10.2 million in 2017 to \$8.4 million in 2018. This decrease is primarily related to the \$2.3 million loss on conversion right which occurred in 2017.

Cash flows related to investing activities decreased from \$12.4 million in 2017 to \$5.2 million in 2018. Both years reflect cash added through business combinations. In 2017 \$12.6 million was added through Pieridae's reverse takeover of Petrolia. In 2018 Pieridae recorded \$6.1 million in additional cash from the Ikkuma acquisition, and \$8.0 million in restricted cash. Slightly reduced capital expenditures in 2018 accounted for the rest of the difference.

Cash flows related to financing activities decreased from a net inflow of \$18.8 in 2017 to a net outflow of \$8.8 in 2018. This large outflow primarily due to the net \$15.9 million in payments made to repay Ikkuma's outstanding debt at close.

### Capital resources

Our capital structure is composed of total shareholders' equity, and loans and term debt, less cash and cash equivalents. The following table summarizes our capital structure at December 31, 2018.

	As at December 31				
	(\$000s)	2018		2017	
Cash and cash equivalents	\$	9,112	\$	21,238	
Less: loans and term debt	\$	(50,007)	\$	(14)	
Net cash and cash equivalents (debt)	\$	(40,895)	\$	21,224	
Shareholders' equity	\$	91,900	\$	59,469	

### CASH AND CASH EQUIVALENTS

The balance of \$9.1 million in cash and cash equivalents at December 31, 2018 does not include \$8.6 million pledged as security for various Letters of Credit ("LC's") required to be posted with provincial agencies and other companies, to facilitate the Company's ongoing operations. These LC's have varying maturities. Restricted cash of \$5.5 million related to Ikkuma's former hedging program was still outstanding at December 31, 2018. These funds were returned in January 2019 when the hedging program was collapsed. LC's worth \$2.5 million renew automatically every anniversary date. LC's worth \$0.6 million mature within one year. A \$1.0 million LC matures in 2020 and are recorded in non-current assets.

An additional \$0.7 million of the cash and cash equivalents are held for exploration purposes related to flow-through shares, representing the unexpended proceeds of a flow-through share financing. According to restrictions imposed under financing arrangement, the Company was required to spend these funds on the exploration of oil and gas properties in Quebec. of the Company also holds \$0.7 million related to the Bourque project in Quebec. This represents the remaining cash from partner advances which must be spent on exploration work on the Bourque property. The net cash and cash equivalents not restricted is \$7.7million.

### LOANS AND TERM DEBT

On December 20, 2018, the Company entered into a Senior Secured Credit Agreement for a \$50.0 million non-revolving, term credit facility. The facility is secured by a fixed and floating debenture over all the assets of the Company. It bears interest at 9.5%, which is payable upon maturity. The facility is repayable on September 30, 2019. The Company used the proceeds to fund the repayment of Ikkuma's outstanding debt facilities of \$65.7 million on the close of the acquisition.

### Share Capital

As of December 31, 2018, the Company had 74,516,594 common shares outstanding (December 31, 2017: 50,481,197). During the year the Company issued 94,172 shares pursuant to its share-based compensation program, 21,582,401 on closing of the Ikkuma acquisition, and 2,358,824 shares in a private placement.

As of December 31, 2018, 1,179,410 warrants (December 31, 2017: 343,747) were outstanding. During the year 343,747 warrants expired, 1,179,410 warrants were issued with the private placement, and 1,300,050 warrants were issued with the Ikkuma acquisition.

As at December 31, 2018, there were 2,653,394 stock options outstanding. Exercise prices range from \$0.01 to \$8.04 During the year, 52,446 stock options were exercised for proceeds of \$148 thousand.

At April 24, 2019, 84,121,990 common shares were outstanding, 1,889,755 warrants were outstanding, and 2,653,394 stock options were outstanding with exercise prices ranging from \$0.01 to \$8.04.

## Commitments and Contingencies

The Company has a number of financial obligations that are incurred in the ordinary course of business. As of December 31, 2018, these obligations, and the expected timing of these obligations, are detailed below:

(\$000s)	2019	2020	2021	2022	Thereafter	Total
Leases	\$ 537	217	125	126	706	1,711
Quebec license fees	\$ 241	241	241	-	-	723
Interest on debt	\$ 3,562	-	-	-	-	3,562
Firm transportation	\$ 6,913	4,174	1,591	1,228	3,730	17,636
<b>Total</b>	<b>\$ 11,253</b>	<b>4,632</b>	<b>1,957</b>	<b>1,354</b>	<b>4,436</b>	<b>23,632</b>

The Company is financed in part by the issuance of flow-through shares. However, although it has taken all the necessary measures in this regard, there is no guarantee that the funds spent by the Company regarding these shares will be deemed eligible by tax authorities in the event of an audit. Refusal of certain expenses by the tax authorities would have a negative tax impact for investors. As at December 31, 2018, the balance of eligible expenses to be incurred amounted to \$0.5 million (December 31, 2017: \$0.6 million). The eligible expenses were to be incurred no later than December 31, 2018. However, due to the moratorium on exploration and development activity in the province of Quebec, Pieridae was not able to fulfill its obligations.

## Contingencies

The Company is involved in various claims and litigation arising in the normal course of business. While the outcome of these matters is uncertain and there can be no assurance that such matters will be resolved in the Company's favor, the Company does not currently believe that the outcome of adverse decisions in any pending or threatened proceeding related to these and other matters or any amount which it may be required to pay by reason thereof would have a material adverse impact on its financial position or results of operations.

## Off Balance Sheet Transactions

We do not have any financial arrangements that are excluded from the consolidated financial statements as at December 31, 2018, nor are any such arrangements outstanding as of the date of this MD&A.

## Financial Instruments and Risk Management

The Company's financial assets and liabilities expose it to various risks. The following analysis provides an assessment of those risks as at December 31, 2018.

### Credit risk

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations. It arises principally from the Company's receivables from partners in jointly owned assets, and natural gas marketers.

Substantially all the Company's petroleum and natural gas production is marketed under standard industry terms. Sales from petroleum and natural gas marketers are normally collected on the 25th day of the month following production. The Company's policy to mitigate credit risk associated with these balances is to establish marketing relationships with creditworthy purchasers. The Company historically has not experienced any collection issues with its petroleum and natural gas marketers. Receivables from partners in jointly owned assets are typically collected within one to three months of the bill being issued to the partner. The Company attempts to mitigate the risk from receivables from partners in jointly owned assets by obtaining partner approval of significant capital expenditures prior to the expenditure. However, the receivables are from participants in the petroleum and natural gas sector, and collection of the outstanding balances can be impacted by industry factors such as commodity price fluctuations, limited capital availability and unsuccessful drilling programs. The Company does not typically obtain collateral from petroleum and natural gas marketers or partners in jointly owned assets; however, the Company can cash call for major projects and does have the ability, in most cases, to withhold production from these partners in the event of non-payment.

The carrying amount of accounts receivable represents the Company's maximum credit exposure. As at December 31, 2018 and 2017, the Corporation's accounts receivables consisted of:

	As at December 31				
	(\$000s)	2018		2017	
Petroleum and natural gas marketers	\$	9,832	\$	-	
Receivables from partners in jointly owned assets	\$	4,069	\$	885	
Other (primarily government receivables)	\$	2,286	\$	207	
<b>Total</b>	\$	<b>16,187</b>	\$	<b>1,092</b>	

As at December 31, 2018 and 2017, the Corporation's accounts receivables are aged as follows:

	As at December 31				
	(\$000s)	2018		2017	
Current (less than 90 days)	\$	14,954	\$	1,092	
Past due (more than 90 days)	\$	1,233	\$	-	
<b>Total</b>	\$	<b>16,187</b>	\$	<b>1,092</b>	

### Market risk

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market conditions. Market risk comprises three types of risk: interest rate risk, currency risk and price risk.

### Interest rate risk

The Company is potentially exposed to fair value risk through increases in interest rates. While central banks have taken pause on rate increases of late, there is no guarantee that that situation will persist. Any rate increases will have an impact on any debt financing negotiated by Pieridae as it looks to raise capital to fund its Goldboro LNG project.

### Currency risk

The Company is also exposed to fluctuations in foreign exchange rates as certain accounts payable and accrued liabilities and commitments are denominated in US dollar, UK pound sterling and Euro. These risks will be materially enhanced if the Company secures debt financing denominated in any currency other than Canadian dollars. If the Canadian dollar was to change by five percent against the various currency exposures, the impact to the foreign exchange gain or loss would have been approximately \$0.3 million for the year ended December 31, 2018. To date, the Company has not entered into any foreign currency transactions or financial instruments to manage currency risks.

## Price risk

Now that the Company is has upstream natural gas assets, it is vulnerable to fluctuations in commodity prices. Fluctuations in commodity prices, specifically the prices for natural gas and LNG, will have a significant impact on the Company's cash flows and its final investment decision for the LNG project. These commodity prices also have a significant impact on the Company's ability to attract the necessary investment to ultimately construct the proposed Goldboro LNG Facility. As the Company advances toward a final investment decision, and pursues the required financing, it will evaluate a number of options to potentially manage this risk.

## Critical Accounting Policies, Estimates and Judgements

The timely preparation of the financial statements requires management to make judgments, estimates and assumptions that affect the application of accounting policies and reported amounts of assets and liabilities and income and expenses. Accordingly, actual results may differ from these estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected. Significant judgments and estimates made by management in the preparation of these financial statements are outlined below.

### Critical accounting judgments

The following are the critical accounting judgments that management has made in the process of applying the Company's accounting policies and that have the most significant effect on the amounts recognized in these financial statements:

#### IDENTIFICATION OF CASH GENERATING UNITS

Some of Pieridae's assets are aggregated into cash-generating units, for the purpose of calculating impairment, based on their ability to generate largely independent cash inflows. By their nature, these estimates and assumptions are subject to measurement uncertainty and may impact the carrying value of the Company's assets in future periods.

#### IDENTIFICATION OF IMPAIRMENT INDICATORS

Judgments are required to assess when impairment indicators, or reversal indicators, exist and impairment testing is required. In determining the recoverable amount of assets, in the absence of quoted market prices, impairment tests are based on estimates of reserves, production rates, future oil and natural gas prices, future costs, discount rates, market value of land and other relevant assumptions.

#### EXPLORATION AND EVALUATION

The application of the Company's accounting policy for exploration and evaluation requires management to make certain judgments as to future events and circumstances as to whether economic quantities of reserves have been found in assessing commercial viability and technical feasibility.

#### DEFERRED TAXES

Judgments are made by management to determine the likelihood of whether deferred income tax assets at the end of the reporting period will be realized from future taxable earnings. To the extent that assumptions regarding future profitability change, there can be an increase or decrease in the amounts recognized in respect of deferred tax assets as well as the amount recognized in income or loss for the period in which the change occurs.

### Critical accounting estimates

The following are the key assumptions concerning the sources of estimating uncertainty at the end of the reporting period, that have a significant risk of causing adjustments to the carrying amounts of assets and liabilities.



## RESERVES

The assessment of reported recoverable quantities of proved and probable reserves include estimates regarding production profile, commodity prices, exchange rates, remediation costs, timing and amount of future development costs and production, transportation and marketing costs for future cash flows. It also requires interpretation of geological and geophysical models in anticipated recoveries. The economical, geological and technical factors used to estimate reserves may change from period to period. Changes in reported reserves can impact the carrying values of the Company's property, plant and equipment, the calculation of depletion and depreciation, the provision for decommissioning obligations and the recognition of deferred tax assets due to changes in expected future cash flows. The recoverable quantities of reserves and estimated cash flows from Pieridae's petroleum and natural gas interests are independently evaluated by qualified reserve evaluators at least annually.

The Company's petroleum and natural gas reserves represent the estimated quantities of petroleum and natural gas and natural gas liquids which geological, geophysical and engineering data demonstrate with a specified degree of certainty to be economically recoverable in future years from known reservoirs and which are considered economically producible. Such reserves may be considered commercially producible if management has the intention of developing and producing them and such intention is based upon (i) a reasonable assessment of the future economics of such production; (ii) a reasonable expectation that there is a market for all or substantially all the expected petroleum and natural gas production; and (iii) evidence that the necessary production, transmission and transportation facilities are available or can be made available. Reserves may only be considered proven and probable if the ability to produce is supported by either production or conclusive formation tests. Pieridae's petroleum and gas reserves are determined pursuant to National Instrument 51-101, Standard for Disclosures for Oil and Gas Activities.

## BUSINESS COMBINATIONS

In a business combination, management makes estimates of the fair value of assets acquired and liabilities assumed which includes assessing the value of oil and gas properties based upon the estimation of recoverable quantities of proven and probable reserves acquired.

## DECOMMISSIONING OBLIGATION

The Company estimates future remediation costs of production facilities, wells and pipelines at different stages of development and construction of assets or facilities. In most instances, removal of assets occurs many years into the future. This requires assumptions regarding abandonment date, future environmental and regulatory legislation, the extent of reclamation activities, the engineering methodology for estimating costs, future removal technologies in determining the removal cost and liability-specific discount rates to determine present value of these cash flows.

## SHARE-BASED COMPENSATION

All equity-settled, share-based awards issued by the Company are fair valued using the Black-Scholes option-pricing model. In assessing the fair value of equity-based compensation, estimates have to be made regarding the expected volatility in share price, weighted average expected life of the instrument, expected dividend yield, risk-free interest rate and estimated forfeitures at the initial grant date.

## IMPAIRMENT OF NON-FINANCIAL ASSETS

For the purposes of determining the extent of any impairment or its reversal, estimates must be made regarding future cash flows taking into account key assumptions including future petroleum and natural gas prices, expected forecasted production volumes and anticipated recoverable quantities of proved and probable reserves. These assumptions are subject to change as new information becomes available. Changes in economic conditions can also affect the rate used to discount future cash flow estimates. Changes in the aforementioned assumptions could affect the carrying amount of the Company's assets, and impairment charges and reversals will affect income or loss.

## DEFERRED TAXES

Tax provisions are based on enacted or substantively enacted laws. Changes in those laws could affect amounts recognized in profit or loss both in the period of change, which would include any impact on cumulative provisions, and in future periods. Deferred tax assets are recognized only to the extent it is considered probable that those assets will be recoverable. This involves an assessment of when those deferred tax assets are likely to reverse.

## CHANGES IN ACCOUNTING POLICIES

The Company has applied the following new and revised accounting pronouncements in preparing the December 31, 2018 consolidated financial statements. The Company has not early adopted any standard, interpretation or amendment that has been issued but is not yet effective.

## IFRS 9 FINANCIAL INSTRUMENTS

As of January 1, 2018, the Company adopted IFRS 9 Financial Instruments, which is the result of the first phase of the IASB project to replace IAS 39 Financial Instruments: Recognition and Measurement. The new standard replaces the current multiple classification and measurement models for financial assets and liabilities with a single model that has two classification categories: amortized cost and fair value. The classification of financial assets under IFRS 9 is generally based on the business model for managing the financial assets and the financial asset's contractual cash flow characteristics. IFRS-9 eliminates the previous IFRS 39 categories of held to maturity, loans and receivables and available for sale. The new standard introduces changes to hedge accounting requirements in order to align accounting with an entity's risk management activities.

The transition to IFRS 9 had no material effect on the Company's consolidated financial statements. Cash and cash equivalents, accounts receivables, accounts payables, term debt continue to be measured at amortized cost and are now classified as amortized cost.

## IFRS 15 REVENUE FROM CONTRACTS WITH CUSTOMERS

As of January 1, 2018, the Company adopted IFRS 15 Revenue from Contracts with Customers. The standard replaces IAS 11 Construction Contracts; IAS 18 Revenue, IFRIC 13 Customer Loyalty Programmes, IFRIC 15 Agreements for the Construction of Real Estate, IFRIC 18 Transfers of Assets from Customers and SIC-31 Revenue-Barter Transactions Involving Advertising Services. The standard dictates the recognition and measurement requirements for reporting the nature, amount, timing and uncertainty of revenue resulting from an entity's contracts with customers. The Company adopted IFRS 15 via the modified retrospective adoption approach effective January 1, 2018. Pieridae has reviewed its revenue streams and underlying contracts with customers using the IFRS 15 five-step model, which did not result in any changes to the comparative period or the opening deficit.

## FUTURE ACCOUNTING POLICIES

As of January 1, 2019, the Company will adopt IFRS-16 Leases. IFRS 16 replaces IAS 17 - "Leases". IFRS 16 eliminates the distinction between operating leases and financing leases for lessees and requires balance sheet recognition for all leases. For lessees applying IFRS 16, a single recognition and measurement model for leases will apply, with the recognition of right-of-use ("ROU") assets and lease liabilities for most leases. All contracts that meet the definition of a lease under IFRS 16, including those presently accounted for as operating leases, will be recorded on the balance sheet. Certain short-term (less than 12 months), and low-value leases (as defined in the standard) are exempt from the requirements and may continue to be treated as an expense. Leases to explore for or use crude oil, natural gas, minerals and similar non-regenerative resources are exempt from the standard.

The standard may be applied retrospectively or using a modified retrospective approach. The Company has elected to use the modified retrospective approach which does not require restatement of prior period financial information. On initial adoption, Pieridae will elect to use the following practical expedients permitted under the standard:

- Certain short-term leases, and leases of low value assets that have been identified at January 1, 2019, will not be recognized on the balance sheet.
- At January 1, 2019, Pieridae will not recognize leases with terms ending within 12 months.

On adoption of IFRS 16, the Company will recognize lease liabilities in relation to leases under the principles of the new standard measured at the present value of the remaining lease payments, discounted using the Company's incremental borrowing rate as at January 1, 2019. The associated ROU assets will be measured at the amount equal to the lease liability on January 1, 2019, with no impact on retained earnings.

The Company's leases that will be recognized on its balance sheet at January 1, 2019 include office leases, equipment leases and vehicle leases.

The impact on the statement of income (loss) and comprehensive income (loss) will be as follows:

- Lower administrative expenses and operating costs.
- Higher finance expenses due to the interest recognized on the lease obligations; and
- Higher depreciation expense related to the ROU assets.

Under the new standard, the Company will report cash outflows for repayment of the principal portion of the lease liability as cash flows from financing activities. The interest portion of the lease payments will be classified as cash flows from operating activities.

The Company continues to finalize its evaluation of its contracts that are potentially leases under IFRS 16, as well as implementing changes to policies, internal controls, information systems, and business accounting processes.

## Related Party Transactions

The Company's related parties include key management personnel, as described below. None of the transactions with related parties involve special terms or conditions, and no guarantees were given or received. Outstanding balances are usually settled in cash or shares. Key management personnel compensation includes the following:

	(\$000s)	For the year ended	
		2018	2017
Salaries and employee benefits	\$	1,309	\$ 520
Director's fees	\$	239	\$ 35
Total short-term employee benefits	\$	1,548	\$ 555
Share-based compensation	\$	1,869	\$ 450
Fees	\$	52	\$ 63
<b>Total compensation</b>	<b>\$</b>	<b>3,469</b>	<b>\$ 1,068</b>

During the year, no options granted under the stock option plan were exercised by key management personnel of the Company.

## Risk Factors

### Risks inherent to the industry

This includes risks normally incident to the natural gas and LNG industries. It includes the fact that such industries are competitive, and the Company competes with numerous other participants to attract and retain customers for its LNG production. There is no assurance that the Company 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, of which the Company will be substantially dependent upon, and that the Company 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.

It also includes risks inherent to the oil and natural gas exploration industry, such as the requirement of additional financing to support its operations. The Company will also compete with other companies that have greater financial resources in the context of 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 Company, or to properties owned by third parties, which could lead to potential liability toward third parties. There can be no assurance that the development projects and exploration activities that may be undertaken in the future will result in additional reserves, or that the Company will succeed in drilling productive wells at low exploration costs. The Company is not able to plan with certainty regarding the impact that regulations implemented by the various levels of government will have on the Company'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 ecological, environmental, aboriginal and even political groups, and some properties may be subject to land claims by First Nations. Access restrictions may affect the Company'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 are also expected to continue to be volatile throughout 2019 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 and 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, and are anticipated to continue to reduce the Corporation's cash flow which could result in a reduced capital expenditure budget. 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 it may be on unfavourable and highly dilutive terms.

### Additional financing

The Company will require additional financing to support its operations. A source of future funds available to the Company is the issuance of additional shares. The Company's operations may also be financed in whole or in part with debt, a partnership agreement or a sale of an interest in an oil or natural gas property. Debt financing may increase the Company's debt levels above industry standards. Depending on future development and exploration plans, the Company may require additional equity and/or debt financing that may not be available, or available on favourable terms. The level of the Company's indebtedness that may occur from time to time could impair the Company's ability to obtain additional financing in the future, impairing its ability 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 Company in the properties in respect of which the financing is obtained. There can be no assurance that such financing will be available to the Company. Furthermore, even if such financing is successfully secured, there can be no assurance it will be obtained on terms favourable to the Company or provide the Company with sufficient funds to meet its objectives. This may adversely affect the Company's business and financial position. If financing is obtained by issuing additional equity, control of the Company may be affected.

### Substantial Capital Requirements; 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 operations could have a material adverse effect on Pieridae's financial condition, results of operations or prospects.

### Capital Markets

Pieridae, along with all other oil and gas entities, may have restricted access to capital, bank debt and equity. The lending capacity of all financial institutions has diminished, and risk premiums have increased. As future capital expenditures will be financed out of funds generated from operations, non-core property dispositions, term debt and possible future equity sales, Pieridae's ability to do so is dependent on, among other factors, the overall state of capital 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.

### Share Price Volatility

The price of common shares is subject to changes owing to numerous factors beyond the Corporation's control, including reports pertaining to new information, changes in the Corporation's financial position, sales of the Corporation's shares in the market, Corporation announcements or LNG, oil and natural gas prices. There can be no assurance that the market price of the Corporation's shares will be protected from such fluctuations in the future.

### 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 or the issuance of debt instruments or securities convertible into Common Shares. The Corporation cannot predict the size of future issuances of Common Shares or the issuance 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 Company competes with other companies that have ongoing LNG projects. Competition may affect the Company's ability to land customers, obtain sufficient supply or access to transportation.

### Environmental Issues

The LNG, oil and natural gas operations involve natural risks that could cause damage to the environment 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 toward third parties. The industry is subject to extensive environmental local, provincial and federal legislations 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 land, wells and facility sites that are abandoned be 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 and the issuance of injunctions that could limit or prohibit our operations. All of these 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. It is likely the trend to stricter environmental legislation will continue. 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 a trend towards stricter standards in environmental legislation will continue and the Company anticipates making increased expenditures of both a capital and operating nature as a result of increasingly stringent environmental laws. As such, legislation is likely to have a material adverse effect on its business, financial condition, results of operations and cash flows.

### Prices, Markets and Marketing of Crude Oil and Natural Gas

The Company's operating results and financial position are very dependent on the prices obtained for the commodities it produces. There have been significant fluctuations in LNG, oil and natural gas prices in recent years. 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 Company's control. Any change in LNG, oil and natural gas prices could have material adverse effects on the Company'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) global energy supply, production and policies, including the ability of OPEC to set and maintain production levels in order to influence prices for oil; (ii) political conditions, instability and hostilities; (iii) global and domestic economic conditions, including currency fluctuations; (iv) 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; (v) 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; (vi) weather conditions; (vii) the proximity of reserves and resources to, and capacity of, transportation facilities and the availability of refining and fractionation capacity; (viii) the ability, considering regulation and market demand, to export oil and liquefied natural gas and NGLs from North America; (ix) the effect of world-wide energy conservation and greenhouse gas reduction measures and the price and availability of alternative fuels; and (x) 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.

## Exploration, Development and Production Risks

The future success of the exploration work will depend on Corporation's ability to discover or acquire natural gas reserves that are economically recoverable. 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 especially the 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 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 and resources. Without the continual addition of new reserves or resources, the Corporation's existing reserves and resources, and the production from them, will decline over time as the Corporation produces from such reserves. A future increase in the Corporation's reserves and resources 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, 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.

### Insurable risks

Where possible, the Corporation will purchase liability insurance that will insure against risks and provide coverage in accordance with industry standards. The Corporation or the other entities in which the Corporation will invest can suffer damages resulting from incidents such as pollution, fires, blowouts, geological formation damage, oil spills as well as personal injury, against which they may not be insured or they may choose not to be insured in light of high premium costs or other reasons. In addition, indemnities could exceed the policy limits. The costs of repairing such damages or paying such indemnities could cause the ongoing operation of the Corporation’s business to become unprofitable and/or impossible.

### Operational Dependence

Other companies operate some of the assets in which Pieridae has an interest. 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 will therefore depend 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 the current 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 with respect to 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 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.

### Gathering and Processing Facilities and Pipeline Systems

The Corporation delivers its products through gathering, processing and pipeline systems some of which it does not own. The amount of oil and natural gas that the Corporation can produce, and sell is subject to the accessibility, availability, proximity and capacity of these gathering, processing and pipeline systems. The lack of availability of capacity in any of the gathering, processing and pipeline 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 and limit the ability to produce and to market oil and natural gas production. In addition, the pro-rationing of capacity on inter-provincial pipeline systems also continues to affect the ability to export oil and natural gas. Unexpected shut downs or curtailment of capacity of pipelines for maintenance or integrity work because of 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. In recent years, the volume of crude oil shipped by rail in North America has increased dramatically. 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-Mégantic, Quebec 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. In June 2015, as a result of these recommendations, the Government of Canada passed the Safe and Accountable Rail Act which increased insurance obligations on the shipment of crude oil by rail and imposed a per tonne levy of \$1.65 on crude oil shipped by rail to compensate victims and for environmental cleanup in the event of a railway accident. In addition to this legislation, new regulations have implemented the TC-117 standard for all rail tank cars carrying flammable liquids which formalized the commitment to retrofit, and eventually phase out DOT-111 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. On July 13, 2016, the Minister of Transport (Canada) issued Protective Direction No. 38, which directed that the shipping of crude oil on DOT-111 tank cars end by November 1, 2016. Tank cars entering Canada from the United States will be monitored to ensure that they are compliant with Protective Direction No. 38.

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.

### 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 Risks

Pieridae manages a variety of small and large projects in the conduct of its business. Project delays may delay expected revenues from operations. Significant project cost over-runs 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 effects of inclement weather;
- the availability of drilling and related equipment;
- unexpected cost increases;
- accidental events;
- currency fluctuations;
- 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 Company serve on the boards of other companies engaged in natural resource exploration and development operations. Such ties could give rise to conflicts of interest. In making any decisions involving the Company, these directors will satisfy their duties and obligations to deal fairly and in good faith with the Company 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.

### Permits, licenses and approvals

The Company's business requires permits and licences from government authorities. There can be no assurance that the Company will obtain all the permits and licences required to continue exploration and development operations. In addition, if the Company commences commercial LNG operations, it must obtain and comply with all the necessary permits and licences. There can be no assurance that the Company will be able to obtain or comply with the requirements of such permits and licences.

### Title to property

While the Company has taken reasonable steps to ensure it has good and valid title over its properties, there can be no assurance that title to such properties will not be disputed or challenged. Third parties may have valid claims with respect to the Company's properties.

### Litigation

The Company may be held liable for pollution or for other risks for which it cannot be insured, or for risks it may choose not to insure considering high premium costs or other reasons. Payments of amounts in respect thereof may result in the loss of assets of the Company.

### Regulatory

The LNG, oil and natural gas industry is subject to controls and regulations established by municipal, 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. The implementation of new regulations or the modification of existing regulations affecting the oil and natural gas industry could reduce demand for 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 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).

### 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 calculated as a percentage of the gross value of output and, typically, the rate of royalties payable depends in part on the prescribed benchmark price, well productivity, geographical location, field discovery date and the type or quality of the resource produced.

There can be no assurance that the federal government and the provincial governments of the western provinces will not adopt a new or modify the royalty regime which may 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.

## Hydraulic fracturing

The hydraulic fracturing process gives rise to concerns in communities particularly with respect to the drilling fluids used in the fracturing process and their effects on the aquifer, water use in connection with operations, the capability to recycle such water and the seismic effects associated with the process. A number of Canadian provincial governments are currently reviewing aspects of the scientific, regulatory and political framework in which the 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. Pursuant to the new hydrocarbon legislative framework adopted in December 2016 and in force since September 20, 2018, Quebec legislation requires that wells and facility sites be built, operated, maintained, abandoned and restored to the satisfaction of the applicable regulatory authorities. The new MERN regulations govern how hydraulic fracturing is carried out under the Petroleum Resources Act. The Ministère du Développement Durable, de l'Environnement et aux Changements Climatiques is also reviewing its main law, the Loi sur la Qualité de l'Environnement and some of its related regulations in conjunction with the MERN. In province of Quebec, hydraulic fracturing is now prohibited in the geological formation named Utica shale 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.

The government of Nova Scotia has banned hydraulic fracturing since November 2014. The government of New Brunswick has also restrictions on hydraulic fracturing.

Although the Corporation has no way of predicting the impact of any potential regulations on its business, the implementation of new laws, regulations, permits or licenses 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.

## Variations in Foreign Exchange 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 a material decrease 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/United States exchange rates could accordingly impact the future value of Pieridae's reserves and resources as determined by independent evaluators.

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

## Hedging

From time to time Pieridae may enter into agreements to receive fixed prices on its oil and 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 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.

## Tax Horizon

It is expected, based upon current legislation, the projections contained in the Reports and various other assumptions that no cash income taxes are to be paid by Pieridae in the near future. A lower level of capital expenditures than those contained in the Reports 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.

### Seasonality

The level of activity in the Canadian oil and gas industry is influenced by seasonal weather patterns. Wet weather and spring thaw may 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 in these areas 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 a material adverse impact on Pieridae's 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. In the event such entities fail to meet their contractual obligations to Pieridae, such 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 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 Social Risk

LNG, oil and natural gas exploration and development activities may be subject to opposition from ecologist, environmentalist, aboriginal and non-governmental 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.

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 is expected to be 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.

In addition to the political disruption in the United States, the citizens of the United Kingdom voted to withdraw from the European Union and the Government of the United Kingdom has started taking steps to implement such withdrawal. 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 and 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 choke 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.

### Land claims

Some properties may be subject to land claims by First Nations. There can be no assurance that such land claims will not be made against properties in which the Company holds an interest.

### Growth management

The Company may be subject to growth risks including limitations and pressure on its internal control systems and measures. The Company'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 Company's inability to support such growth could have a material adverse impact on its business, operations and prospects.

### 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 particular expertise in the foothills. 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 does not have any "key man" insurance in place.

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 and natural gas 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 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.

### 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.

## International protocols

Canada has signed international protocols and conventions setting forth certain environment requirements that may adversely affect the Company's business.

## Climate change regulations

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. Current greenhouse gas ("GHG") emissions legislation has not resulted in material compliance costs. However, it is not possible to predict what proposed legislation or regulations will be adopted, and whether such future laws and regulations could result in additional compliance costs or additional operating restrictions.

Adverse impacts to the Company's business, as a result of comprehensive GHG legislation or regulation applied to the Company's businesses, may include, but are not limited to: (i) increased compliance costs; (ii) permitting delays; (iii) substantial costs to generate or purchase emission credits or allowances adding costs to the products the Company produces; and (iv) reduced demand for crude oil and certain refined products. Emission allowances or offset credits may not be available for acquisition or may not be available on an economic basis. Required emission reductions may not be technically or economically feasible to implement, in whole or in part. Failure to meet such emission reduction requirements, or other compliance mechanisms, may have a material adverse effect on the Company's business. This could result in, among other things, fines, permitting delays, penalties and the suspensions of operations.

Beyond existing legal requirements, the extent and magnitude of any adverse impacts of any additional programs or additional regulations cannot be reliably or accurately estimated at this time because specific legislative and regulatory requirements have not been finalized and uncertainty exists with respect to the additional measures being considered and the time frames for compliance. Consequently, no assurances can be given that the effect of future climate change regulations will not be significant to the Corporation.

## 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.

## 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, though it is a possibility that the Corporation may pay dividends in the future if it has started generating sufficient positive cash flow. Any future determination to pay dividends will be at the discretion of the Board 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 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 to holders of 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, in order 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.

Although to date the Corporation has not experienced any material losses relating to cyber-attacks or other information security breaches, there can be no assurance that the Corporation will not incur such losses in the future.



## Reputation Risk

The Corporation relies on its reputation to build and maintain positive relationships with stakeholders, to recruit and retain staff, and to be a credible trusted company. Any actions that Pieridae takes that causes a negative public opinion has the potential to negatively impact the Corporation's reputation which may adversely impact its share price, development plans or its ability to continue operations. 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.

## Control Environment

The Company's management, including the President and the Chief Financial Officer evaluated the effectiveness of disclosure controls and procedures as at December 31, 2018, and concluded that disclosure controls and procedures are effective to ensure that information required to be disclosed by the Company in its annual filings and other reports filed with securities regulatory authorities in Canada is recorded, processed, summarized and reported within the time periods specified and such information is accumulated and communicated to the Company's management to allow timely decisions regarding required disclosures.

The Company's management, including the President and the Chief Financial Officer also evaluated the effectiveness of internal control over financial reporting as at December 31, 2018, and concluded that internal control over financial reporting is effective. Further, there were no changes in the Company's internal control over financial reporting during 2018 that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting.

While the Company's management believes that the Company's disclosure controls and procedures and internal control over financial reporting provide a reasonable level of assurance, they are effective, they recognize that all control systems have inherent limitations. Because of its inherent limitations, the Company's control systems may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

## Outlook and Guidance

Guidance for 2019 average daily production is expected to be in the range of 16,000 – 18,000 boe/d. Production guidance excludes potential acquisitions. Pieridae's 2019 Upstream capital program will focus on necessary maintenance, equipping, tie-in and low cost high-return optimization initiatives at a cost of approximately \$8 – 10 million. Depending on funding initiatives, Pieridae would expect to incur up to \$45 million in Goldboro development activities.

## Non-IFRS Measures

### Project expenditures

Project expenditures represent total capital expenditures included in the financial statements plus Goldboro spending (defined below). This information is important as it shows Pieridae's total spending on key long-term initiatives.

### Goldboro spending

Goldboro spending reflects all expenditures associated with the Company's proposed LNG facility in Goldboro, Nova Scotia, that are not of a capital nature. These expenditures are included in administration and operating expenses for the LNG segment. This information is important as it shows Pieridae's continued investment in Goldboro prior to these costs being available for capitalization.



## Net Working Capital

	(\$000s)	As at December 31	
		2018	2017
Cash and cash equivalents	\$	7,651	\$ 19,619
Cash and cash equivalents held for exploration purposes	\$	1,461	\$ 1,619
Restricted cash	\$	8,626	\$ -
Accounts receivable	\$	16,187	\$ 1,092
Prepaid expenses	\$	2,250	\$ 122
Trade and other payables	\$	(60,922)	\$ (2,210)
Current portion of deferred lease inducements	\$	(20)	\$ (19)
Current portion of term debt	\$	(50,007)	\$ (7)
Partner advances for planned exploration work	\$	(624)	\$ (679)
Provision for contingent liability	\$	(530)	\$ (583)
Current portion of the provision for site restoration	\$	-	\$ -
Flow-through shares premium	\$	(82)	\$ (104)
Promissory notes	\$	-	\$ (25)
Deferred accounts payable	\$	(8,051)	\$ (7,836)
<b>Net working capital (deficit)</b>	\$	<b>(84,061)</b>	\$ <b>10,989</b>