

# Management's Discussion and Analysis

This Management's Discussion and Analysis ("MD&A") of Pieridae Energy Limited ("Pieridae", "we", "our" or the "Company") provides a review by management of the financial performance and position of the Company, as well as the trends and external factors which may impact our prospects. This MD&A has been prepared as of March 23, 2022, and should be read in conjunction with the Company's audited consolidated financial statements and the accompanying notes for the years ended December 31, 2021, and 2020 (the "consolidated financial statements"). The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS"), sometimes referred to in this MD&A as Generally Accepted Accounting Principles ("GAAP") as issued by the International Accounting Standards Board ("IASB"). Pieridae's 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.

Throughout this MD&A, condensate is a natural gas liquid as defined by National Instrument 51-101 *Standards of Disclosure for Oil and Gas Activities*. Natural gas liquids ("NGLs") comprise all NGLs as defined by NI 51-101 other than condensate, which is disclosed separately. 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.

We are publicly traded on the TSX Exchange ("TSX") under the symbol PEA.TO. 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).

## SPECIAL NOTE REGARDING NON-GAAP FINANCIAL MEASURES

This MD&A includes references to financial measures such as net operating income ("NOI"), operating netback or net back, and adjusted funds flow from operations ("AFFO"). The Company feels that these financial measures are important to the understanding of its business activities. These financial measures are not defined by IFRS and therefore are referred to as non-GAAP measures. The non-GAAP measures used by the Company may not be comparable to similar measures presented by other companies. The Company uses these non-GAAP measures to evaluate its performance. The non-GAAP 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-GAAP measures are reconciled to their closest GAAP measure on pages 19 and 20 of this MD&A.

## 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 expected 2021 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 Company 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", "target", "goal" 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.

The forward-looking statements are based on current expectations, estimates and projections about the Company and the industry in which the Company operates, which speak only as of the earlier of the date such statements were made or as of the date of the report or document in which they are contained, and are subject to known and unknown risks and uncertainties that could cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Such risks and uncertainties include, among others: general economic and business conditions (including as a result of demand and supply effects resulting from the COVID-19 virus pandemic and the actions of OPEC and non-OPEC countries)

which will, among other things, impact demand for and market prices of the Company's products; volatility of and assumptions regarding crude oil, natural gas, and natural gas liquids ("NGL") prices.

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 resource 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 numerous factors.

## DEFINITIONS AND ABBREVIATIONS

<b>Bcf</b>	Billion cubic feet	<b>MMcf</b>	Million cubic feet
<b>Bcm</b>	Billion cubic metres	<b>MMBtu</b>	Million British thermal units
<b>Mcf</b>	Thousand cubic feet	<b>Bbl</b>	Barrel
<b>GJ</b>	Gigajoules	<b>USD</b>	United States Dollars

## PIERIDAE'S OBJECTIVES AND STRATEGY

Pieridae is a Canadian energy producing company headquartered in Calgary, Alberta. Through a number of corporate and asset acquisitions, we have grown from inception to managing a significant upstream and midstream portfolio concentrated in the Canadian Foothills, producing conventional natural gas, NGLs, condensate and sulphur.

Since 2011, Pieridae has been focused on becoming the first Canadian owned liquefied natural gas ("LNG") producer to integrate (a) upstream natural gas resource development and production from its western Canadian asset base (the "Upstream Segment") and (b) midstream activities consisting primarily of raw natural gas processing and transportation of the treated natural gas by pipeline to the site of the proposed Goldboro LNG Facility where further processing and liquification is proposed to produce LNG for sale to customers for export (the "Corporate and LNG Segment"). The Corporate and LNG segment together with the Upstream Segment form the "Goldboro LNG Project" or the "Project".

In July 2021, the Company publicly announced that after many years of effort and progress toward realizing its strategy of becoming an integrated LNG entity, we were not able to meet the key conditions necessary to make a positive final investment decision ("FID") on the Project in the scope and configuration previously contemplated. As a result, the Project was suspended.

In late July 2021, as a result of the suspension of the Goldboro LNG Project and approaching debt payment obligations, the Company initiated a formal strategic review process under the supervision of a special committee of the Board of Directors (the "Board") and collaborated with a leading financial advisory firm to identify, examine, and consider a range of strategic alternatives. Such strategic alternatives may have included, but were not limited to, a corporate sale, merger, a sale of a material portion of Pieridae's assets or other transactions, or a combination thereof (the "Strategic Review"). Management and the Board conducted a rigorous process; however, the Strategic Review concluded without a material transaction, as was announced on January 24, 2022. A number of factors contributed to the conclusion of the process including a negotiated amendment with our senior secured lender, Third Eye Capital ("TEC") to the terms of the outstanding credit facility (refer to note 12 of the consolidated financial statements) and the improving outlook for oil and natural gas market fundamentals. Considering these factors, Management and the special committee of the Board determined that the various alternatives presented were not sufficiently compelling relative to the Company's standalone prospects.

Following conclusion of the Strategic Review, Management and the Board have reexamined Pieridae's strategy. During the past year Pieridae has transformed from being LNG project-focused to primarily focusing on sustaining and growing its upstream exploration and production ("E&P") business, while maintaining a compelling LNG project option. Management is excited about the current and future growth prospects of Pieridae's existing asset base in the Canadian Foothills and believes it is prudent to pivot toward growing a sustainable and profitable conventional Foothills oil and natural gas business. To do so, we will focus on the following core pillars of our evolving corporate strategy:

- Simplify and focus Pieridae's producing asset base through smart asset rationalization and commercial optimization initiatives
- Streamline and reduce operating and overhead costs and actively mitigate inflationary pressures across the business
- Develop and execute a carbon management plan which is aligned to our environmental, social and governance ("ESG") vision
- Prove our Foothills resource development plan by successfully investing in our identified drilling opportunities
- Reduce cost of capital by pursuing debt refinancing opportunities, balance capital allocation between drilling investment and debt reduction

Management continues to take a strategic approach to growth and capital allocation to fully utilize the advantages of the long-term nature of Pieridae's low-decline reserve base and supporting infrastructure, and to focus on creating long lasting shareholder value. Operational discipline, safe, effective, and efficient operations, community and Indigenous partnerships, cost control, and pursuing opportunities to further embed ESG considerations into our corporate strategy are fundamental to the Company's strategic vision, in addition to seeking opportunities to further integrate ESG considerations into our corporate strategy.

## ANNUAL HIGHLIGHTS

(\$ 000s unless otherwise noted)	2021	2020	2019
<b>Production</b>			
Natural gas (mcf/day)	199,793	201,040	121,263
Condensate (bbl/day)	2,877	3,020	807
NGLs (bbl/day)	4,386	5,473	1,379
Sulphur (ton/day)	1,530	1,985	410
Total production (boe/d) <sup>(1)</sup>	40,562	42,000	22,397
<b>Reserves</b>			
Net proved plus probable ("2P") reserves NPV10 <sup>(2)</sup>	1,002,134	976,147	1,062,453
<b>Financial</b>			
Net loss	(39,790)	(100,693)	(71,573)
Net loss per share basic and diluted	(0.25)	(0.64)	(0.73)
Net operating income <sup>(3)</sup>	84,085	50,723	25,001
Cashflow provided by (used in) operating activities	51,117	2,234	(51,772)
Adjusted funds flow from operations <sup>(3)</sup>	57,692	26,866	608
Total assets	622,540	612,651	602,474
Working capital deficit	(87,666)	(19,615)	19,105
Capital expenditures	34,972	17,243	169,167
Development expenses	4,750	18,742	9,150
Long-term debt <sup>(4)</sup>	231,581	219,555	202,913

<sup>(1)</sup> Total production excludes sulphur

<sup>(2)</sup> Estimated pre-tax net present value of discounted cash flows from reserves using a 10% discount rate

<sup>(3)</sup> Refer to the "non-GAAP measures" section of this MD&A.

<sup>(4)</sup> Long-term debt includes current and long-term portion and reflects accretion of the \$50 million deferred fee over the four-year term of the loan; refer to note 12 of the consolidated financial statements.

## QUARTERLY HIGHLIGHTS

The tables below provide a summary of the consolidated financial results for the quarters of 2020 and 2021:

(\$ 000s unless otherwise noted)	2021				2020			
	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
<b>Production</b>								
Natural gas (mcf/day)	198,596	191,439	194,232	215,179	212,220	184,080	208,689	199,234
Condensate (bbl/day)	2,851	2,555	2,950	3,158	3,259	2,807	3,166	2,850
NGLs (bbl/day)	5,354	4,133	3,083	4,975	6,171	4,722	5,843	5,156
Sulphur (ton/day)	1,185	1,518	1,710	1,713	1,829	2,232	1,970	1,906
Total production (boe/d)	41,304	38,595	38,404	43,997	44,800	38,209	43,791	41,211
<b>Financial</b>								
Realized natural gas price (\$/mcf)	3.67	2.70	2.59	2.63	2.16	1.70	1.87	2.25
Benchmark natural gas price (\$/mcf)	4.69	3.59	3.11	3.16	2.67	2.14	1.98	1.94
Realized condensate price (\$/bbl)	69.71	65.33	68.08	58.40	53.48	44.67	39.94	67.74
Benchmark condensate price (\$/bbl)	100.10	70.25	64.82	59.05	56.01	38.40	35.83	46.83
Net income (loss)	4,661	(14,846)	(10,058)	(19,547)	(45,968)	(29,845)	(13,396)	(11,484)
Net income (loss) per share, basic	0.03	(0.09)	(0.06)	(0.12)	(0.29)	(0.19)	(0.09)	(0.07)
Net income (loss) per share, diluted	0.03	(0.09)	(0.06)	(0.12)	(0.29)	(0.19)	(0.09)	(0.07)
Net operating income (loss) <sup>(1)</sup>	30,845	17,920	14,444	20,876	12,829	(646)	19,301	19,239
Cashflow provided by (used in)								
operating activities	21,139	6,885	12,093	11,000	2,362	(4,541)	(2,013)	6,426
Adjusted funds flow from operations <sup>(1)</sup>	23,317	10,981	8,516	14,878	8,535	(6,779)	12,466	12,644
Total assets	622,540	560,782	575,690	557,696	612,651	583,942	588,415	609,437
Working capital (deficit) surplus	(87,665)	(52,534)	(47,862)	(28,314)	(19,615)	(9,164)	15,109	15,596
Capital expenditures	1,493	9,852	17,959	5,668	8,926	6,033	264	2,020
Development expenses	225	783	(4,862)	8,604	8,682	2,472	4,129	3,459

<sup>(1)</sup> Refer to the "non-GAAP measures" section of this MD&A.

## 2021 OPERATIONAL AND FINANCIAL HIGHLIGHTS

During 2021, the Company generated cashflow from operating activities of \$51.1 million, and AFFO of \$57.7 million compared to \$2.2 million and \$26.9 million respectively during 2020. Higher realized prices for natural gas, NGLs and condensate contributed significantly to higher cashflows, offset by marginally lower production increased royalties largely also driven by the increase in commodity prices, and first-half development costs associated with the Goldboro LNG Project.

2021 was a year of dramatic change for Pieridae, with exceptional challenges faced on a number of fronts. The following events impacted our business, operations, cash flows and net income (loss) during the past four quarters. Throughout these events Pieridae remained committed to and impressed by the operational resilience of our assets and our team.

### First quarter of 2021

- Production averaged 43,997 boe/day and average realized natural gas price was \$2.63/mcf.
- Net loss was impacted by \$8.6 million of development expenses incurred on advancing the Goldboro LNG Project.
- During the quarter Pieridae issued 5,000,000 warrants at an exercise price of \$0.70 per warrant to its lender as consideration for certain amendments to our credit facility; refer to notes 12 and 14 of the consolidated financial statements.

### Second quarter of 2021

- Production averaged 38,404 boe/day and average realized natural gas price was \$2.59/mcf.
- Primary cause of the production decline as compared to the first quarter was the successful completion of a major sustaining capital turnaround (“TAR”) at Pieridae’s wholly owned Jumping Pound gas processing facility (Jumping Pound”), a 36-day two-phase project in which the first phase was completed during the third quarter of 2020. Totalling \$19.4 million over both phases, this was the largest capital project conducted in Pieridae’s history.
- In April, Pieridae announced the appointment of Darcy Reding as Chief Operating Officer.
- In June, Pieridae released its inaugural ESG report, which can be found on the Company’s website.

### Third quarter of 2021

- Production averaged 38,595 boe/day and average realized natural gas price was \$2.70/mcf.
- Shortly following June 30 Pieridae announced it had been unable to meet the conditions necessary to declare the Goldboro LNG Project FID, and certain associated liabilities were reversed, resulting in negative development expense of \$4.9 million.
- Later in July, the Strategic Review was initiated, as previously discussed.
- A second major TAR was completed at Pieridae’s operated Caroline gas processing facility (“Caroline”), requiring total net expenditure of \$7.9 million. Previously delayed by the impacts of the COVID-19 pandemic, the critical capital maintenance activities required at Caroline could no longer be deferred.
- Scheduled third party pipeline maintenance required the Company’s Waterton gas processing facility (“Waterton”) to be down for eight days, during which certain maintenance projects were successfully completed.

### Fourth quarter of 2021

- Production strengthened to 41,304 boe/day on return of all Pieridae’s gas processing facilities to full operation and average realized natural gas price was \$3.67/mcf.
- In December, Pieridae and its lender came to an agreement which, among other things, allowed for the deferral of certain debt obligations from 2021 to October 2023; refer to note 12 of the consolidated financial statements.

Throughout the significant capital projects completed in 2021, Pieridae successfully maintained its focus on safety, as evidenced by the total reportable injury frequency (“TRIF”) of 0.26 as compared to an annual target of 0.34 and 2020 annual TRIF of 0.34.

The Company continues to execute a commodity risk management program governed by its hedge policy. Over the past 12 months, our debt lender temporarily waived and/or amended their requirement to have 60% of forecast base production hedged on an 18-month rolling average basis, in order to allow the Company to take advantage of strengthening natural gas and NGL prices, and to recognize the credit implications of hedging into a rising commodity price market. During 2021 the Company’s primary hedging tools were physical fixed price forward sales contracts. As at December 31, 2021, 56,900 GJ/d of fixed price natural gas contracts were in place at a weighted-average price of \$2.50/GJ over a term of 15 months, as further described in note 19 of the consolidated financial statements. As of March 23, 2022, physical fixed-price forward sales contract representing 92,007 GJ/d of natural gas hedged at an average price of \$2.92/GJ for 2022 and 17,500 GJ/d for Q1 2023 at \$2.88/GJ are in place. In addition, condensate hedges (C\$WTI basis) averaging 659 bbl/d for 2022 at an average price of C\$107.98/bbl are in place.

## OUTLOOK

Pieridae's near-term priority is to strengthen its balance sheet through sustaining production, rigorous cost control across its operations and administration, and execution of accretive non-core asset dispositions and related commercial optimization activities. Execution of a drilling program in the second half of 2022 is planned and will be approved upon achievement of certain balance sheet and capital allocation metrics.

Pieridae's Board of Directors approved our 2022 budget in November 2021. As of the date of this MD&A Pieridae's 2022 outlook is as follows:

(\$ 000s unless otherwise noted)	2021	2022
	Actual Results	Guidance
Total production (boe/d)	40,562	39,000 – 42,000
Net operating income <sup>(1)(2)</sup>	84,085	100,000 – 130,000
Implied Operating Netback (\$/boe) <sup>(2)</sup>	5.68	7.02 – 8.48
Sustaining capital expenditures <sup>(3)</sup>	26,488	17,000 – 22,000
Development capital expenditures <sup>(4)</sup>	7,212	17,000 – 25,000

<sup>(1)</sup> Refer to the "non-GAAP measures" section of this MD&A.

<sup>(2)</sup> 2022 outlook assumes average 2022 AECO price of \$3.83/mcf and average 2022 WTI price of USD\$80.28/bbl and accounts for fixed price forward commodity sales contracts as of March 23, 2022

<sup>(3)</sup> Comprised of facility maintenance and turnaround capital expenditures

<sup>(4)</sup> Comprised of seismic, development and land capital expenditures

## SEGMENTED DISCLOSURE

Pieridae reports business results in two segments: Upstream and LNG.

### UPSTREAM SEGMENT

The upstream segment is primarily comprised of the activities of Pieridae's wholly owned subsidiary Pieridae Alberta Production Ltd, which owns Pieridae's petroleum and natural gas production operations and properties in Western Canada; refer to note 6 of the consolidated financial statements. Upstream is currently the only segment generating operating revenues.

#### Net Operating Income

(\$ 000s)	Three months ended December 31			Year ended December 31		
	2021	2020	% Change	2021	2020	% Change
Total revenue	107,803	77,009	40	353,210	279,482	26
Royalties	(17,687)	(4,402)	302	(31,405)	(9,609)	227
Operating	(53,862)	(55,485)	(3)	(218,631)	(203,432)	7
Transportation	(5,409)	(4,293)	26	(19,089)	(15,718)	21
<b>Net Operating Income <sup>(1)</sup></b>	<b>30,845</b>	<b>12,829</b>	<b>140</b>	<b>84,085</b>	<b>42,000</b>	<b>66</b>

<sup>(1)</sup> Refer to the "non-GAAP measures" section of this MD&A.

#### Netback Per Boe

	Three months ended December 31			Year ended December 31		
	2021	2020	% Change	2021	2020	% Change
Total revenue	28.37	18.69	52	23.86	18.19	32
Royalties	(4.65)	(1.07)	336	(2.12)	(0.63)	239
Operating	(14.17)	(13.46)	5	(14.77)	(13.23)	12
Transportation	(1.42)	(1.04)	37	(1.29)	(1.02)	26
<b>Netback (\$/boe) <sup>(1)</sup></b>	<b>8.13</b>	<b>3.12</b>	<b>161</b>	<b>5.68</b>	<b>3.31</b>	<b>72</b>

<sup>(1)</sup> Refer to the "non-GAAP measures" section of this MD&A.

## Net Operating Income Sensitivity Analysis

	2021 Actual <sup>(1)</sup>	%Change	Impact on Net Operating Income	
			Impact (\$000)	Impact %
<b>Business Environment</b> <sup>(1) (2)</sup>				
WTI price (US\$/bbl) <sup>(3)</sup>	68.01	10%	6,682	7.9%
AECO price (\$/mcf)	3.63	10%	5,560	6.6%
Sulphur price (\$/ton)	182.74	10%	1,101	1.3%
US\$/C\$ exchange rate <sup>(4)</sup>	0.80	1%	662	0.8%
<b>Operational</b> <sup>(1) (5)</sup>				
NGL & condensate production (bbl/d)	7,263	10%	5,234	6.2%
Natural gas production (mcf/d)	199,793	10%	3,672	4.4%
Sulphur production (ton/d)	1,185	10%	1,101	1.3%
Royalty burden	8.89%	1%	3,532	4.2%
Operating expense (\$/boe)	14.77	1%	2,186	2.6%

<sup>(1)</sup> Calculations are performed independently and may not be indicative of actual results that would occur when multiple variables change simultaneously.

<sup>(2)</sup> The indicative impact on net operating income would only be applicable within a limited range of these amounts as royalty burden is held constant.

<sup>(3)</sup> Includes the impact of WTI price on NGL (C2, C3, C4) and condensate (C5) prices assuming a correlation to US\$WTI

<sup>(4)</sup> Includes the impact of foreign exchange on NGL and Condensate prices assuming a correlation to US\$WTI

<sup>(5)</sup> Operational assumptions are based upon the results for the year ended December 31, 2021, and the calculated impact on Net operating income would only be applicable within a limited range of these amounts.

## Production

	Three months ended December 31			Year ended December 31		
	2021	2020	% Change	2021	2020	% Change
Natural gas (mcf/day)	198,596	212,220	(6)	199,793	201,040	(1)
Condensate (bbl/day)	2,851	3,259	(13)	2,877	3,020	(5)
NGLs (bbl/day)	5,354	6,171	(13)	4,386	5,473	(20)
Sulphur (ton/day) <sup>(1)</sup>	1,185	1,829	(35)	1,530	1,985	(23)
<b>Total production (boe/day)</b>	<b>41,304</b>	<b>44,800</b>	<b>(8)</b>	<b>40,562</b>	<b>42,000</b>	<b>(3)</b>

<sup>(1)</sup> Total production excludes sulphur

Production in the fourth quarter of 2021 decreased 8% compared to the same quarter in 2020 due to temporary shut-in of production in Central Alberta due to partner disputes, unplanned downtime at Waterton for maintenance repairs, unseasonably cold weather in December 2021, and normal production declines.

During 2021, production decreased 3% compared to 2020. The calculated 2021 decline rate in independent reserve evaluator's year-end 2020 reserve report was 8% of a total proved plus probable basis. During 2021 the Company endeavoured to mitigate this decline through numerous optimization and maintenance activities. These low-cost investments generated significant internal rates of return. Production was negatively impacted during 2021 by the major planned facility turnarounds at Jumping Pound and Caroline in April and September respectively, mitigated to the extent possible by volume re-direction to third-party facilities during the turnarounds. During 2021 Pieridae also increased production from minor working interest acquisitions in the Waterton and Jumping Pound areas.

## Production By Area

The following tables summarizes the Company's production by core area for the three months ended December 31, 2021, and 2020:

Three months ended December 31, 2021					
	Total (boe/d)	Natural Gas (mcf/d)	Condensate (bbl/d)	NGLs (bbl/d)	Sulphur (ton/d)
Waterton	10,952	42,945	1,353	2,442	688
Jumping Pound	8,750	39,900	574	1,526	238
Central Alberta Foothills	16,793	87,341	855	1,381	249
Northern Alberta Foothills	2,638	15,726	12	5	10
Northeast BC	2,171	12,684	57	-	-
<b>Total</b>	<b>41,304</b>	<b>198,596</b>	<b>2,851</b>	<b>5,354</b>	<b>1,185</b>

Three months ended December 31, 2020					
	Total (boe/d)	Natural Gas (mcf/d)	Condensate (bbl/d)	NGLs (bbl/d)	Sulphur (ton/d)
Waterton	12,110	46,322	1,638	2,752	710
Jumping Pound	8,985	40,180	578	1,711	314
Central Alberta Foothills	19,122	98,445	1,011	1,702	797
Northern Alberta Foothills	3,638	21,745	8	6	8
Northeast BC	945	5,528	24	-	-
<b>Total</b>	<b>44,800</b>	<b>212,200</b>	<b>3,259</b>	<b>6,171</b>	<b>1,829</b>

The following tables summarizes the Company's production by core area for the years ended December 31, 2021, and 2020:

Year ended December 31, 2021					
	Total (boe/d)	Natural Gas (mcf/d)	Condensate (bbl/d)	NGLs (bbl/d)	Sulphur (ton/d)
Waterton	11,057	45,192	1,441	2,083	673
Jumping Pound	7,358	35,224	510	977	194
Central Alberta Foothills	17,136	89,684	869	1,320	653
Northern Alberta Foothills	2,722	16,241	10	6	10
Northeast BC	2,289	13,452	47	-	-
<b>Total</b>	<b>40,562</b>	<b>199,793</b>	<b>2,877</b>	<b>4,386</b>	<b>1,530</b>

Year ended December 31, 2020					
	Total (boe/d)	Natural Gas (mcf/d)	Condensate (bbl/d)	NGLs (bbl/d)	Sulphur (ton/d)
Waterton	10,124	40,462	1,388	1,992	710
Jumping Pound	8,782	39,317	544	1,685	180
Central Alberta Foothills	18,448	93,613	1,056	1,791	1,087
Northern Alberta Foothills	3,514	21,000	7	5	8
Northeast BC	1,133	6,648	25	-	-
<b>Total</b>	<b>42,000</b>	<b>201,040</b>	<b>3,020</b>	<b>5,473</b>	<b>1,985</b>

## RESERVES

Deloitte Touche Tohmatsu Limited (“Deloitte”), Pieridae’s independent, qualified reserves evaluator, performed reserves evaluations of the Company’s assets as at December 31, 2021, and December 31, 2020. The following table summarizes Pieridae’s reserves based on the Deloitte reserves report:

Reserves Category <sup>(2)</sup>	Year ended December 31			Year ended December 31		
	2021	2020	% Change	2021	2020	% Change
			MMboe			\$000, NPV10 <sup>(1)</sup>
Net proved developed producing (“PDP”) reserves	131.3	127.7	3	427,675	505,243	(15)
Net proved (“1P”) reserves	202.6	175.8	15	752,202	718,495	5
Net proved plus probable (“2P”) reserves	269.2	238.8	13	1,002,134	976,147	3

<sup>(1)</sup> Estimated pre-tax net present value of discounted cash flows from reserves using a 10% discount rate.

<sup>(2)</sup> Net reserves reflect working interest share of the asset prior to the deduction of royalties

Reserve replacement ratio (“2P”) reserves	Year ended December 31		
	2021	2020	% Change
Reserve replacement ratio (“2P”) reserves	9%	44%	(80)
Reserve life index (“2P”) reserves	17.7	15.6	13

Pieridae’s net PDP reserve volumes at December 31, 2021, are 131.3 MMboe, an increase of 3% year over year. Economic factors, led by price forecast increases partially offset by higher operating and capital maintenance assumptions, contributed 12.4 MMboe, resource acquisitions contributed 1.3 MMboe and technical revisions a further 4.7 MMboe, offset by production during 2021 of 14.8 MMboe.

Total net 1P reserve volumes were 202.6 MMboe, an increase of 15% compared to the prior year. The increase is primarily due to the addition of proved undeveloped drilling locations, offset by 2021 production and higher operating and capital maintenance assumptions. Pieridae’s total net 2P reserve volumes were 269.2 MMboe, an increase of 13% compared to the prior year with increases primarily due to the addition of proved plus probable undeveloped drilling locations, offset by 2021 production and higher operating and capital maintenance assumptions.

Pieridae added eight new gross proved undeveloped reserve locations (“PUD”s) and eight new gross proved plus probable reserve locations (“P+PUD”s) in 2021, for a total of 26 and 28 respective gross undeveloped drilling locations. Total undiscounted future development capital included in our reserve estimate is \$300.8 million 1P and \$439.1 million 2P.

The Company’s 2P reserves as at December 31, 2021, were estimated to have a pre-tax net present value of approximately \$1,002.1 million using a 10% discount rate, compared to \$976.1 million in the prior year. The increase in value was primarily due to higher commodity price forecasts, partially offset by modifications to certain operating cost, capital maintenance and royalty assumptions.

Refer to the Company’s Annual Information Form for the year ended December 31, 2021, for more information on reserves.

## Benchmark Prices

	Three months ended December 31			Year ended December 31		
	2021	2020	% Change	2021	2020	% Change
AECO 5A benchmark price (\$/mcf)	4.69	2.67	76	3.63	2.26	61
West Texas Intermediate crude oil (USD/bbl)	77.29	40.92	89	68.01	39.34	73
Condensate benchmark price (\$/bbl)	100.10	56.01	79	85.95	50.17	71
Sulphur (\$/tonne)	230.00	76.00	203	182.74	61.31	198
US/Canadian dollar average exchange rate (USD)	0.7935	0.7675	3	0.7977	0.7455	7

The AECO monthly index increased 76% in the fourth quarter of 2021 compared to the comparative quarter of 2020, and 61% for the year as compared to 2020. Prices trended higher through most of 2021, however shifting fundamentals resulted in heightened volatility. In global natural gas markets, low inventory levels and supply uncertainty pushed prices to record levels, further underpinning favourable market conditions for North American LNG exports.

Average WTI crude oil prices increased 89% in the fourth quarter of 2021 compared to the fourth quarter of 2020, and 73% for the year 2021 as compared to 2020. Global crude oil demand has almost fully recovered to pre-pandemic levels while supply has grown at a more gradual pace due to coordinated production curtailments and limited growth capital spending among independent producers. COVID-19 continues to contribute to volatility and uncertainty in the global crude oil market, but a supportive underlying supply and demand balance during the quarter helped push WTI to its strongest levels since 2014.

Canadian condensate differentials to WTI strengthened compared to the prior quarter due to typical seasonal factors. Strong oil sands production and competition for imported supply continued to strengthen the value of condensate relative to WTI. The recent commencement of service on Enbridge's Line 3 Expansion Project has provided significant incremental egress capacity to accommodate growing Canadian crude oil production.

Global sulphur market prices climbed steadily through 2021. Sulphur supply continues to be tight, due to both planned and unplanned curtailments of production, particularly in the Middle East and mid Central Asian republic countries. Simultaneously, demand has increased primarily from fertilizer manufacturers.

### Realized Prices

	Three months ended December 31			Year ended December 31		
	2021	2020	% Change	2021	2020	% Change
Natural gas (\$/mcf)	3.67	2.16	70	2.90	2.00	45
Condensate (\$/bbl)	69.71	53.48	30	63.21	51.24	23
NGLs (\$/bbl)	30.10	15.11	99	26.62	12.91	106
Sulphur (\$/ton)	38.46	22.97	67	25.49	11.38	124

Pieridae's realized prices reflect the mix of spot sales and physical forward sales contracts entered under our hedging policy; refer to note 19 of the consolidated financial statements. In 2021, volumes sold under physical forward sales contracts represented 69% of total production, and 57% of total revenue. If losses on physical forward sale contracts were removed, the Company's average realized natural gas prices for the three months and year ended December 31, 2021, would have been \$4.61/mcf and \$3.60/mcf respectively, as compared to the AECO 5A benchmark of \$4.69/mcf and \$3.63/mcf respectively.

If losses on physical forward sale contracts were removed, average realized condensate prices for the three months and year ended December 31, 2021, would have been \$91.68/boe and \$80.14/boe respectively, as compared to the condensate benchmark prices of \$100.10/bbl and 85.95/bbl respectively.

Pieridae is obligated to sell the majority of its sulphur production for \$6.00/tonne under a fixed-price physical sales contract which expires on December 31, 2025. During the three and twelve months ended December 31, 2021, this contract represented 78% and 83% of total sulphur sales respectively (76% and 85% for the three and twelve months ended December 31, 2020).

### Petroleum and Natural Gas Revenue

(\$ 000s except per boe)	Three months ended December 31			Year ended December 31		
	2021	2020	% Change	2021	2020	% Change
Natural gas	67,144	42,242	59	211,422	147,300	44
Condensate	18,287	16,033	14	66,370	56,639	17
NGLs	14,823	8,579	73	42,628	25,870	65
Sulphur	4,194	3,866	8	14,235	8,270	72
<b>Petroleum and natural gas revenue</b>	<b>104,448</b>	<b>70,720</b>	<b>48</b>	<b>334,655</b>	<b>238,079</b>	<b>41</b>
Petroleum and natural gas revenue (\$/boe)	27.49	17.16	60	22.60	15.49	46
Third party processing and other income	3,355	6,289	(47)	18,555	28,695	(35)
Realized gain (loss) on risk management contracts	-	-	-	-	12,708	(100)
<b>Total revenue</b>	<b>107,803</b>	<b>77,009</b>	<b>40</b>	<b>353,210</b>	<b>279,482</b>	<b>26</b>

Trends in petroleum and natural gas revenue are primarily associated with fluctuations in the total volume produced and prices the Company receives for its production. As previously described, natural production decline was mitigated to 3% during 2021, and increases in realized prices during the year was the primary driver of the 48% increase in petroleum and natural gas revenue.

Third party processing and other income is primarily derived from fees charged to non-owner third parties for processing their production and sulphur volumes through Pieridae's gas and sulphur processing facilities. This income adds significantly to the economic benefits realized from these facilities by offsetting operating costs, which are highly fixed in nature. Third party processing and other income declined 47% and 35% respectively during the three and twelve months ended December 31, 2021, as a result of changes to the allocation of volumes under certain construction, ownership and operating ("CO&O") agreements during the year, as well as economic shut-in of non-owned production by certain third-party customers.

The Company did not utilize financial derivatives as a risk management tool during the year ended December 31, 2021, so did not recognize any realized gains or losses on financial risk management contracts, compared to a realized gain of \$12.7 million in 2020 due to the monetization of certain WTI-linked commodity forward contracts during early 2020.

## Royalties

(\$ 000s except per boe)	Three months ended December 31			Year ended December 31		
	2021	2020	% Change	2021	2020	% Change
Royalties	17,687	4,402	302	31,405	9,609	227
Royalties (\$/boe)	4.65	1.07	335	2.12	0.63	237
Royalties as percentage of revenue (%)	16.9	6.2	173	9.4	4.0	135

Royalties in the fourth quarter of 2021 were 16.9% of revenue compared to 6.2% of revenue the same quarter in 2020. During 2021, royalties were 9.4% of revenue compared to 4% of revenue in 2020. Increases in realized and benchmark commodity prices during 2021 had a significant impact on royalty expense. Furthermore, gas cost allowance deductions were depleted in 2021 so did not provide as meaningful an offset to gross royalty expense on a percentage of revenue basis as compared to 2020.

## Operating Expense

(\$ 000s except per boe)	Three months ended December 31			Year ended December 31		
	2021	2020	% Change	2021	2020	% Change
Operating expense	53,862	55,485	(3)	218,631	203,432	7
Operating expense (\$/boe)	14.17	13.46	5	14.77	13.23	12

Operating expense in the fourth quarter of 2021 was consistent with the fourth quarter of 2020. During 2021, operating expense increased 7% as compared to 2020 due primarily to inflationary pressures arising from rising commodity prices on AECO price-linked processing fees, power, and chemicals, as well as an increase in carbon taxes in the jurisdictions the Company operates.

The following tables summarizes the Company's operating cost per boe by core area for the three months and year ended December 31, 2021, and 2020:

	Three months ended December 31			Year ended December 31		
	2021	2020	% Change	2021	2020	% Change
Waterton	12.36	10.97	13	12.54	13.07	(4)
Jumping Pound	11.58	11.00	5	15.73	12.70	24
Central Alberta Foothills	17.17	16.95	1	15.86	13.73	15
Northern Alberta Foothills	13.30	11.17	19	13.53	12.65	7
Northeast BC	9.79	7.02	39	18.00	12.55	43

## Transportation Expense

(\$ 000s except per boe)	Three months ended December 31			Year ended December 31		
	2021	2020	% Change	2021	2020	% Change
Transportation expense	5,409	4,293	26	19,089	15,718	21
Transportation expense (\$/boe)	1.42	1.04	37	1.29	1.02	26

The increase in transportation cost during the three and twelve months ended December 31, 2021, is primarily due to higher fuel gas costs associated with pipeline transportation across Pieridae's production portfolio.

Pieridae enters firm transportation service commitments to secure market access for its production. This transportation contract portfolio is monitored on an ongoing basis and contracts are assessed to determine the existence of any contracts that are onerous; none were identified at December 31, 2021. For information regarding Pieridae's payment obligations under its future transportation commitments, refer to note 23 of the consolidated financial statements.

## General and Administrative Expense

(\$ 000s except per boe)	Three months ended December 31			Year ended December 31		
	2021	2020	% Change	2021	2020	% Change
G&A expense – Upstream	6,275	6,142	2	19,312	13,122	47
G&A expense – Corporate and LNG	1,231	(2,195)	(156)	6,556	9,367	(30)
<b>G&amp;A expense – Total</b>	<b>7,506</b>	<b>3,947</b>	<b>90</b>	<b>25,868</b>	<b>22,489</b>	<b>15</b>
G&A expense (\$/boe) – Upstream	1.65	1.49	11	1.30	0.85	53
G&A expense (\$/boe) – Corporate and LNG	0.33	(0.53)	162	0.44	0.61	(28)
<b>G&amp;A expense (\$/boe) – Total</b>	<b>1.98</b>	<b>0.96</b>	<b>106</b>	<b>1.74</b>	<b>1.46</b>	<b>19</b>

Year-to-date 2021 general and administrative (“G&A”) expense increased by 15% primarily as a result of penalties incurred on the deferred payment of property taxes. While property tax is classified as an operating expense, penalties thereon have been classified as G&A. Additionally, insurance expense increased 5% between 2020 and 2021. All Pieridae’s net insurance cost is classified as G&A, representing approximately 17% of total G&A in 2021 (17% in 2020). During 2021, certain reallocations of G&A between the Upstream and Corporate and LNG segments occurred, reflecting the change in Corporate and LNG segment activity following June 30, 2021.

### Finance Expense

(\$ 000s)	Three months ended December 31			Year ended December 31		
	2021	2020	% Change	2021	2020	% Change
Interest expense	9,705	7,365	32	25,340	29,402	(14)
Non-cash interest paid in kind	-	1,557	(100)	7,938	1,557	410
Accretion of financing costs	(11,110)	4,268	(360)	6,537	16,410	(60)
Interest income	-	-	-	(19)	(76)	(75)
Accretion of decommissioning obligations	-	208	(100)	-	840	(100)
Interest on lease liabilities	34	45	(24)	175	155	13
Other charges	128	258	(50)	621	480	29
<b>Total finance expense</b>	<b>(1,243)</b>	<b>13,701</b>	<b>(109)</b>	<b>40,592</b>	<b>48,768</b>	<b>(17)</b>

During the fourth quarter of 2021 Pieridae’s senior secured credit agreement was amended. The amendment reduced the effective interest rate and associated net present value of the loan, resulting in a negative accretion of financing costs during the quarter. Offsetting this reduction, the Company elected to pay \$7.9 million of interest expense in kind during the year, increasing the interest-bearing principal of the loan. Refer to note 12 of the consolidated financial statements for additional information on the long-term debt.

### Depletion and Depreciation

(\$ 000s)	Three months ended December 31			Year ended December 31		
	2021	2020	% Change	2021	2020	% Change
Depletion and depreciation	15,976	15,452	3	48,442	44,013	10

During 2021, depletion and depreciation expense increased 10% compared to 2020 due to an increase in the depletable base, which arose primarily from higher decommissioning costs and future development costs within the Company’s reserve value.

### Impairment

(\$ 000s)	Three months ended December 31			Year ended December 31		
	2021	2020	% Change	2021	2020	% Change
Impairment of property, plant, and equipment	-	16,876	n/a	-	16,876	n/a

As at December 31, 2021, the Company did not identify any indicators of impairment or impairment reversals for the Company’s upstream CGU assets, therefore no impairment tests were performed. Additionally, no indicators of impairment were noted on the Company’s remaining CGUs, exploration, and evaluation assets, or right of use assets at December 31, 2021.

### Capital Expenditures

The following tables summarizes the Company’s capital expenditures for the years ended December 31, 2021, and December 31, 2020:

(\$ 000s)	Three months ended December 31			Year ended December 31		
	2021	2020	% Change	2021	2020	% Change
Seismic	375	307	(22)	2,650	2,178	22
Development	50	441	(89)	2,180	1,791	22
Plant and facilities	50	2,701	(98)	3,728	1,716	117
Turnarounds	917	2,485	(63)	22,932	8,768	162
Land	101	1,502	(93)	2,382	1,234	93
Corporate	-	1,608	(100)	1,100	1,607	32
<b>Capital expenditures</b>	<b>1,493</b>	<b>9,052</b>	<b>(84)</b>	<b>34,972</b>	<b>17,294</b>	<b>102</b>
Abandonment	787	433	(82)	2,537	2,173	17
<b>Total capital expenditures</b>	<b>2,280</b>	<b>9,485</b>	<b>(76)</b>	<b>37,509</b>	<b>19,467</b>	<b>93</b>

## Share-based Compensation

(\$ 000s)	Three months ended December 31			Year ended December 31		
	2021	2020	% Change	2021	2020	% Change
Share-based compensation Upstream	14	221	(94)	300	389	(23)
Share-based compensation Corporate and LNG	8	334	(98)	208	594	(65)
<b>Total</b>	<b>22</b>	<b>555</b>	<b>(96)</b>	<b>508</b>	<b>983</b>	<b>(48)</b>

The Company's stock-based compensation ("SBC") expense is related to the granting of stock options used to incentivize directors, executives, and employees and align these option-holders' interests with shareholders. A total of \$0.5 million in SBC expense was recognized in 2021 compared to \$1.0 million in 2020. During the year ended December 31, 2021, Pieridae granted 2.0 million options at an average price of \$0.30. In addition, 1.8 million options with an average exercise price of \$1.03 were forfeited and 1.4 million options with an average exercise price of \$4.36 expired. Pieridae's stock option plan permits issuances of stock options to a maximum of 10% of total common shares issued and outstanding.

Each option entitles the holder to acquire one Pieridae common share. Stock options granted to non-executive Directors vest and are exercisable immediately whereas options granted to executives and employees vest evenly over five annual tranches, with the first tranche vesting immediately. For further information on Pieridae's stock options, refer to note 16 of the consolidated financial statements.

Upstream and Corporate and LNG share-based compensation expense decreased during the three months and year ended December 31, 2021, as a result of forfeitures during these periods, and the lower value of options granted as compared to those which expired during the year.

## LNG SEGMENT

### Project Background

The LNG segment contains all activities associated with the development of the Company's proposed Facility in Goldboro, Nova Scotia in addition to the majority of Pieridae's corporate overhead activities.

On July 2, 2021, the Company announced that the Goldboro LNG Project was unable to achieve a positive final investment decision and was suspended. The Company had progressed the Project through the open book estimate ("OBE") and nearly finalized negotiation of an engineering, procurement, construction, and commissioning ("EPC") execution plan and a final lump sum, EPC contract price proposal. While discussions continue to take place, including exploration of alternate LNG solutions at the Goldboro site, no further expenditures are planned toward advancing an LNG project.

As previously disclosed, a condition of the Uniper contract is that the Company achieve a favourable FID by June 30, 2021, after which time either party has the right to terminate the contract. As of the date of this MD&A, neither party has provided this notice of termination.

### Development Expense

(\$ 000s)	Three months ended December 31			Year ended December 31		
	2021	2020	% Change	2021	2020	% Change
Development expense	225	8,682	(97)	4,750	18,742	(75)

As described above, the Goldboro LNG project development was suspended in July of 2021. Certain development expenses were incurred during the wind down of project activities in the months following.

## LIQUIDITY AND CAPITAL RESOURCES

### Cash and Cash Equivalents

Pieridae held \$26.2 million in cash and cash equivalents and restricted cash of \$1.3 million as at December 31, 2021. Restricted cash is comprised of security pledged for various letters of credit which are required to be posted with provincial agencies and other companies to facilitate the Company's ongoing operations.

### Guarantee Facility from Export Development Canada ("EDC")

In July 2020, the Company received a \$6 million guarantee facility from Export Development Canada which was increased to \$8 million in June 2021. This guarantee facility provides for 100% guarantee to the issuing banks of the Company's existing and future letters of credit, of which \$7.8 million was drawn at December 31, 2021.

## Long-Term Debt

On October 16, 2019, the Company entered a \$206.0 million senior secured fully drawn non-revolving long term loan facility ("long-term debt"). The long-term debt bears interest at a fixed rate of 15.0% per annum from the date of issue, accrued daily and payable quarterly, of which a certain portion is payable quarterly in cash or, subject to the lender's approval, payable in kind ("PIK") by way of accruing to the principal outstanding. The PIK calculation was amended as described below from January 1, 2022, forward.

The long-term debt is repayable in full on October 16, 2023; however the Company may repay the principal in whole or in part any time prior to October 16, 2023, upon 90 days written notice to the agent, without penalty. The Company incurred \$6.0 million of closing costs which were accounted for as transaction costs and netted against the value of the loan to be amortized over 48 months.

Under the terms of the credit agreement, on or before October 16, 2021, the Company had an option either to acquire certain petroleum and natural gas properties from the lender for a purchase price of \$45.0 million in cash on or before October 16, 2021, or pay a deferred fee ("Fee") in the amount of \$50.0 million to the agent. On September 30, 2021, amendments to the credit agreement were made to delay payment of the Fee to January 1, 2022, and interest on this Fee accrued from October 16, 2021. Further amendments were made on December 31, 2021, to incorporate the Fee as part of the loan principal due on October 16, 2023, on an interest free basis. Other changes made on December 31, 2021, include an amendment to the payment of interest, on the principal balance excluding the Fee, whereby 8% will be payable in cash and the remaining 7% will be PIK on a quarterly basis. In addition, 1.75% of the principal balance outstanding including the Fee is repayable quarterly beginning in 2022.

During 2021 and 2020 several amendments and waivers were negotiated to the Credit Agreement, associated with certain covenants and payment obligations; refer to note 12 of the consolidated financial statements. As at December 31, 2021, the Company was in compliance with, or had obtained the required waivers for, all covenants of the loan.

## Working Capital and Capital Strategy

The following table presents the composition of Pieridae's working capital position at December 31, 2021, and 2020:

(\$ 000s)	Year ended December 31	
	2021	2020
Cash and cash equivalents	26,216	11,069
Restricted cash	1,348	1,995
Accounts receivable	49,637	44,900
Prepays expenses and deposits	5,060	5,364
Inventories <sup>(1)</sup>	2,515	23,882
<b>Total current assets</b>	<b>84,776</b>	<b>87,210</b>
Accounts payable	74,707	64,474
Accrued liabilities	67,628	34,372
Current portion of decommissioning obligations	5,390	4,434
Current portion of lease liabilities	1,549	2,032
Other amounts payable	1,514	1,514
Current portion of long-term debt <sup>(2)</sup>	21,654	-
<b>Total current liabilities</b>	<b>172,442</b>	<b>106,825</b>
<b>Working capital (deficit)</b>	<b>(87,666)</b>	<b>(19,615)</b>

<sup>(1)</sup> \$21.0 million of inventory was reclassified to property, plant, and equipment during 2021 as it was concluded that it would be utilized in the Company's ongoing capital program. Refer to note 8 of the consolidated financial statements.

<sup>(2)</sup> As described in note 12 of the consolidated financial statements, the current portion of long-term debt does not meaningfully increase the Company's total cash flow obligation to its lender in 2022 due to the corresponding modification of the payment in kind mechanism.

Pieridae's working capital deficit at December 31, 2021, was \$87.7 million compared to a deficit of \$19.6 million at December 31, 2020. Working capital was negatively impacted during 2021 by net losses experienced during the first three quarters which arose from a combination of: weakness in condensate and liquids pricing and Pieridae's inability to fully participate in strengthening prices through the second half of 2021 due to fixed price natural gas sales contracts and WTI-linked condensate physical sales contracts which were under-market during the year, Goldboro development expenses, and a reduction in third-party processing fees. Additionally, the Company was obligated to conduct two major sustaining capital facility turnarounds at Jumping Pound and Caroline during the year which further strained our working capital resources.

The associated increases in accounts payable and accrued liabilities throughout 2021 were partially offset by higher accounts receivable at December 31, 2021, driven by stronger commodity prices in that month.

Management monitors working capital on a continuous basis. The downward trend of working capital reversed during the fourth quarter of 2021 and is anticipated to climb toward a more sustainable ratio during the first half of 2022; refer to the "Outlook" section of this MD&A. Management is focused on strengthening Pieridae's balance sheet through sustaining production, rigorous cost control across its operations

and administration. Recent and forecast elevated commodity prices continue to provide supportive cash flows. Pieridae's capital strategy is aligned with its business strategy and is focused on ensuring the Company has sufficient liquidity to fund operations and mitigate reserve decline. Externally, Pieridae's principal sources of liquidity are the EDC guarantee facility, additional debt, and equity offerings.

## Capital Resources

As at December 31, 2021, and 2020, Pieridae's capital structure was comprised of share capital, working capital and long-term debt, less cash and cash equivalents. The following table summarizes our capital structure on December 31, 2021, and December 31, 2020:

(\$ 000s)	December 31, 2021	December 31, 2020
Cash and cash equivalents	26,216	11,069
Less:		
current portion of long-term debt	(21,654)	-
long-term debt	(209,927)	(219,555)
Net debt	(205,365)	(208,486)
Shareholders' equity	(33,210)	4,384

## SHARE CAPITAL, WARRANTS AND STOCK OPTIONS OUTSTANDING

As at December 31, 2021, the Company had 157,645,871 (December 31, 2020 - 157,641,871) common shares outstanding. As at December 31, 2021, 7,040,465 (December 31, 2020 - 8,322,072) stock options were outstanding with a weighted average exercise price of \$1.27, representing 4.5% of common shares outstanding (December 31, 2020 - 5.3%).

As at March 23, 2022, the Company had 157,666,871 common shares outstanding and 6,917,465 options outstanding at a weighted average exercise price of \$1.28.

As at December 31, 2021, and March 23, 2022, there were 5 million warrants outstanding (December 31, 2020 - nil) at an exercise price of \$0.70 per common share.

## COMMITMENTS, PROVISIONS AND CONTINGENCIES

The Company has entered several financial obligations during the normal course of business. As at December 31, 2021, these obligations, and the expected timing of their settlement, are detailed below:

(\$ 000s)	2022	2023	2024	2025	Thereafter	Total
Interest on long-term debt	17,013	13,857	-	-	-	30,870
Firm transportation	4,373	2,321	570	505	121	7,890
<b>Total</b>	<b>21,386</b>	<b>16,178</b>	<b>570</b>	<b>505</b>	<b>121</b>	<b>38,760</b>

### Provisions and Contingencies

In November 2020, the Company settled a commercial dispute which resulted in the recognition of a total liability of \$14.4 million to be settled \$3.0 million up front and the remainder over 33 months. At December 31, 2021, the balance of \$7.2 million was classified as \$3.1 million in long term and \$4.1 million in current liabilities within accounts payable and accrued liabilities. Refer to note 21 of the consolidated financial statements for additional information.

The Company is also 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 of these pending or threatened proceedings 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

The Company does not have any financial arrangements that are excluded from the consolidated financial statements, nor are any such arrangements outstanding as of the date at this MD&A.

## ENVIRONMENTAL, SOCIAL AND GOVERNANCE COMMITMENT

Pieridae is in compliance with all environmental laws and regulations as of the date of this MD&A. Pieridae's Liability Management Rating is within both the British Columbia Oil and Gas Commission's ("BCOGC") and the Alberta Energy Regulator's ("AER") requirements after

accounting for a \$1.8 million deposit in place with the BCOGC. Pieridae’s liability rating in Alberta is calculated by the AER based on the licenses which are in Pieridae’s name; refer to note 13 of the consolidated financial statements for more information.

Pieridae embraces the notion of ethical responsibility and the value that belief brings to what we strive to accomplish each and every day. The latest lexicon companies use to bring this notion to life is ESG: Environmental, Social and Governance. ESG is weaved into the pillars of our business: communication, connection, leadership, shared value, and a focus on results. These are supported on a foundation we call “One Pieridae”. Together, this foundation and five pillars hold up our integrated business and environment, social, and governance strategy.

In June 2021, Pieridae released its inaugural ESG Report. Toward developing this inaugural report, the Company formalized an ESG policy and a framework for integrating ESG into business strategy and decision making, including the formation of a new Board committee to oversee ESG and governance, establishing a senior management committee to bring ESG strategy and reporting to the next level, and completing a current state assessment and strategic roadmap, all enveloped in an ESG vision statement that will help guide the Company’s ESG efforts. Refer to the Company’s website for this inaugural ESG report.

## RISK FACTORS

The Company monitors and complies with current government regulations that affect its activities, although operations may be adversely affected by changes in government policy, regulations, or taxation. In addition, Pieridae maintains a level of liability, property and business interruption insurance which is believed to be adequate for the Company’s size and activities but is unable to obtain insurance to cover all risks within the business or in amounts to cover all possible claims. Risk to Pieridae’s business and operations include, but are not limited to:

Risks Related to the Oil and Gas Industry
Challenges in the Oil and Gas Industry
Price, Markets, Volatility and Marketing of Oil, Gas and NGLs
Reserve Decline, Exploration, Development and Production Risk
Reserve Estimates
Liability Management
Royalty Regimes
Alternatives to and Changing Demand for Petroleum Products
Reserve Decline, Exploration, Development and Production Risk
Other Risks Inherent to Pieridae’s Business
Additional Financing Required, and Access to Capital
Liquidity
Environmental Incidents
Climate Change
Climate Change - Transition Risks
Climate Change - Physical Climate Change Risks
Climate Change Regulations and Carbon Taxes
Permits, Licenses and Approvals
Regulatory
COVID-19 and Its Effect on the Economy
Insurable Risk
Co-ownership of Assets and Operational Dependence
Growth Management
Third Party Credit Risk
Reliance on Key Personnel
Political, Geo-Political and Public Perception Risk
Hedging
Competition
Availability and Cost Inflation of Material and Equipment
Title to Production Assets and Reserves
Estimation of Abandonment and Reclamation Costs
Possible Failure to Realize Anticipated Benefits of Acquisitions
Project Risk
Conflicts of Interest
Litigation
Variations in Foreign Exchange and Interest Rates
Tax Horizon
Changes in Risk Profile

Cost of New Technologies
Internal Controls
Breach of Confidentiality
Information Technology Systems and Cyber-Security
Reputation Risk
Estimates and Assumptions
Forward-Looking Statements and Information May Prove Inaccurate
<b>Risks Related to Pieridae's Common Shares</b>
Volatility
Return on Investment
Dividends
Dilution

Refer to the Company's Annual Information Form for the year ended December 31, 2021, for fulsome discussion of these risks. See also "Forward Looking Statements" in this MDA.

## SIGNIFICANT ACCOUNTING JUDGEMENT AND ESTIMATES

The timely preparation of the consolidated financial statements requires management to make judgments, estimates and assumptions that affect the application of accounting policies and reported amounts of assets, liabilities, 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.

The following are the critical accounting judgments and estimates 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 the consolidated financial statements:

### i. Identification of cash generating units

Some of the Company's assets are aggregated into cash-generating units ("CGU") for the purpose of calculating depletion and impairment. A CGU is comprised of assets that are grouped together into the smallest group of assets that generate cash inflows from continuing use that are largely independent of the cash inflows of other assets or groups of assets. 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.

### ii. Impairment of petroleum and natural gas assets

For the purposes of determining whether impairment of petroleum and natural gas assets has occurred, and the extent of any impairment or its reversal, the key assumptions the Company uses in estimating future cash flows are forecasted petroleum and natural gas prices, expected 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 amounts of assets. Impairment charges and reversals are recognized in profit or loss.

### iii. Exploration and evaluation assets

The application of the Company's accounting policy for exploration and evaluation ("E&E") assets 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.

### iv. Lease arrangements

The Company applies judgement when reviewing each of its contractual arrangements to determine whether an arrangement contains a lease. The carrying amounts of the right-of-use assets, lease obligations, and the resulting interest and depreciation expense are based on the implicit interest rate within the lease arrangement or, if this information is unavailable, the incremental borrowing rate. Incremental borrowing rates are based on judgments including economic environment, term, and the underlying risk inherent to the asset.

### v. Debt instruments

Debt instruments are initially recognized at fair value based on consideration received and adjusted in respect of any transaction costs that are incremental and directly attributable to the issue of the instrument. Subsequent measurement is at amortized cost and the effective interest rate method. Certain financing arrangements contain options which may revise future estimated cash outflow and result in an adjustment to the carrying value of the financial liability. At each reporting period, the Company will estimate whether such options will be

exercised and if an adjustment to the financial liability is required. All adjustments arising from such changes in estimates are recognized immediately in profit or loss.

#### **vi. Assessment of going concern**

The Company has concluded that there are no material uncertainties related to events or conditions that may cast significant doubt upon its ability to continue as a going concern. In reaching this conclusion, the Company uses significant judgement and estimates, and considered all relevant information, including feasibility of and effectiveness of management's mitigation plans. Accordingly, actual circumstances will differ from those estimates and the variation may be material.

#### **vii. 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, engineering, 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, the provision for decommissioning obligations and the recognition of deferred tax assets due to changes in expected future cash flows. The recoverable quantities of proved and probable reserves and associated estimated cash flows 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.

#### **viii. 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. Various valuation techniques are applied for measuring fair value including market comparables and discounted cash flows which rely on assumptions such as forward commodity prices, reserves and resources estimates, production costs and discount rates. Changes in any of these variables could significantly impact the carrying value of the net assets.

#### **ix. Decommissioning obligations**

The Company estimates future decommissioning and remediation costs of production facilities, processing facilities, wells, and pipelines at the end of their economic lives. In most instances, abandonment and reclamation of these 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, inflation, and liability-specific discount rates to determine present value of these cash flows.

#### **x. Share-based payments**

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 must 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.

#### **xi. 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. 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.

## CONTROL ENVIRONMENT

### Disclosure Controls and Procedures

As of December 31, 2021, an internal evaluation was carried out of the effectiveness of the Company's disclosure controls and procedures as defined in Canada by National Instrument 52-109 Certification of Disclosure in Issuers' Annual and Interim Filings ("NI 52-109"). Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the disclosure controls and procedures are effective to ensure that the information required to be disclosed in the reports that the Company files or submits under Canadian Securities Legislation is recorded, processed, summarized, and reported, within the time periods specified in the rules and forms therein. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that the information required to be disclosed by the Company in the reports that it files or submits under Canadian Securities Legislation is accumulated and communicated to Pieridae's Management as appropriate to allow timely decisions regarding the required disclosure.

### Internal Controls over Financial Reporting

Internal controls over financial reporting ("ICFR") is a process designed to provide reasonable assurance that all assets are safeguarded, transactions are appropriately authorized and to facilitate the preparation of relevant, reliable, and timely information. Because of its inherent limitations, ICFR may not prevent or detect misstatements. Management has assessed the effectiveness of the Company's ICFR as defined in Canada by NI 52-109. The assessment was based on the framework in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Management concluded that the Company's ICFR was effective as of December 31, 2021. No changes were made to the Company's internal control over financial reporting during the year ended December 31, 2021, that have materially affected, or are reasonably likely to materially affect, the internal controls over financial reporting.

Internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statements preparation and presentation. 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 policies or procedures may deteriorate.

## NEW ACCOUNTING POLICIES

The Company plans to adopt the following amendments to accounting standards, issued by the IASB, on their respective effective dates; however, the amendments are not expected to have a material impact on the consolidated financial statements.

### Amendments to IAS 16 Property, Plant and Equipment

In May 2020 the IASB issued Property, Plant and Equipment – Proceeds before Intended Use, which made amendments to IAS 16 Property, Plant and Equipment. Effective January 1, 2022, the amendments prohibit a company from deducting the cost of property, plant and equipment amounts received from selling items produced while the company is preparing the asset for its intended use. Instead, a company will recognize such sales proceeds and related cost in profit or loss.

### Amendments to IAS 1 Presentation of Financial Statements

In January 2021 the IASB issued amendments to IAS 1 Presentation of Financial Statements, to clarify its requirements for the presentation of liabilities as current or non-current in the consolidated statements of financial positions. The amendment is effective for periods beginning on or after January 1, 2023.

### Amendments to IAS 37 Provision Contingent Liabilities and Contingent Assets

In May 2020, the IASB issued Onerous Contracts – Cost of Fulfilling a Contract, which made amendments to IAS 37 Provisions Contingent Liabilities and Contingent Assets. Effective January 1, 2022, the amendments specify which costs an entity includes in determining the cost of fulfilling a contract for the purpose of assessing whether the contract is onerous.

## NON-GAAP MEASURES

Management has identified certain industry benchmarks such as net operating income, operating netback, adjusted operating expense and adjusted funds flow from operations to analyze financial and operating performance. These benchmarks are commonly used in the oil and gas industry; however, they do not have any standardized meanings prescribed by IFRS. Therefore, they may not be comparable with the calculation of similar measures for other entities.

## Net Operating Income

Management considers net operating income an important measure to evaluate the Company's operational performance as it demonstrates Pieridae's field level profitability. Net operating income equals total revenue including realized gains and losses on commodity risk management contracts, less royalties, operating expenses, and transportation expenses.

(\$ 000s)	Three months ended December 31		Year ended December 31	
	2021	2020	2021	2020
Total revenue <sup>(1)</sup>	107,803	77,009	353,210	279,482
Royalties	(17,687)	(4,402)	(31,405)	(9,609)
Operating expense	(53,862)	(55,485)	(218,631)	(203,432)
Transportation expense	(5,409)	(4,293)	(19,089)	(15,718)
<b>Net operating income <sup>(2)</sup></b>	<b>30,845</b>	<b>12,829</b>	<b>84,085</b>	<b>50,723</b>

<sup>(1)</sup> Excludes unrealized gains or losses from risk management contracts.

<sup>(2)</sup> Minimum 2020 NOI of \$55 million per the TEC covenant waiver allowed for a \$14.3 million adjustment related to the arbitration settlement amount. Refer to note 12 of the consolidated financial statements. Pieridae's covenant is a minimum annual NOI of \$70 million.

## Operating Netback

Management considers operating netback an important measure to evaluate the Company's operational performance as it demonstrates Pieridae's field level profitability relative to current commodity prices. Operating netback equals revenue including realized gains and losses on commodity risk management contracts less royalties, operating expenses and transportation expenses calculated on a per BOE basis.

(\$ per boe)	Three months ended December 31		Year ended December 31	
	2021	2020	2021	2020
Total revenue	28.37	18.69	23.86	18.19
Royalties	(4.65)	(1.07)	(2.12)	(0.63)
Operating expense	(14.17)	(13.46)	(14.77)	(13.23)
Transportation expense	(1.42)	(1.04)	(1.29)	(1.02)
<b>Operating netback (\$/boe)</b>	<b>8.13</b>	<b>3.12</b>	<b>5.68</b>	<b>3.31</b>

## Adjusted Funds Flow from Operations

Management considers Adjusted Funds Flow from Operations an important measure to evaluate the Company's cash flow as it demonstrates Pieridae's field level operational cash flow. Adjusted funds flow from operations equals net loss plus financial income and expense where financial income and expense excludes accretion of decommissioning obligations, depletion, depreciation, and impairment (reversals), and loss on associates. Development expenses are also added back to better focus the metric on the Company's upstream operational performance.

(\$ 000s)	Three months ended December 31		Year ended December 31	
	2021	2020	2021	2020
Net income (loss)	4,661	(45,968)	(39,790)	(100,693)
Development expense	225	8,682	4,750	18,742
Finance expense	(1,243)	13,493	40,592	47,928
Depletion and depreciation	15,976	15,452	48,442	44,013
Impairment of property, plant, and equipment	-	16,876	-	16,876
Loss on associates <sup>(1)</sup>	3,698	-	3,698	-
<b>Adjusted funds flow from operations</b>	<b>23,317</b>	<b>8,535</b>	<b>57,692</b>	<b>26,866</b>

<sup>(1)</sup> Loss on associates represents a one-time write-down of Pieridae's remaining non-operated working interest in a New Brunswick-based joint venture; refer to note 24 of the consolidated financial statements.