# **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 and six months ended June 30, 2021 and 2020, as well as information about our future prospects. This MD&A has been prepared as of August 11, 2021 and should be read in conjunction with the Company's unaudited condensed interim consolidated financial statements and the accompanying notes for the three and six months ended June 30, 2021 (the "interim financial statements") and the MD&A and audited consolidated financial statements as at and for the year ended December 31, 2020 as well as Pieridae's Annual Information Form ("AIF"). The 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") applicable to the preparation of interim financial statements, including International Accounting Standard 34, Interim Financial Reporting ("IAS 34"). 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.

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, or on SEDAR, 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, adjusted funds flow from operations ("AFFO") and adjusted operating expenses. 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 13 and 14 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 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), and at Pieridae's website (www.pieridaeenergy.com). Although the forward-looking statements contained herein are based upon what management believes to be reasonable assumptions, management cannot assure that actual results will be consistent with these forward-looking statements. Investors should not place undue reliance on forward-looking statements. These forward-looking statements are made as of the date hereof and Pieridae assumes no obligation to update or review them to reflect new events or circumstances except as required by applicable securities laws.

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

Bcf	Billion cubic feet	Mmcf	Million cubic feet
Bcm	Billion cubic metres	MMBtu	Million British thermal units
GJ	Gigajoules	USD	United States Dollars

# **DEFINITIONS AND ABBREVIATIONS**

# PIERIDAE'S OBJECTIVES AND STRATEGIC UPDATE

Since 2011, Pieridae has been focused on becoming the first Canadian owned liquefied natural gas ("LNG") producer that integrates (a) upstream activities consisting primarily of the acquisition and development of natural gas resource properties situated primarily in Alberta, the extraction of natural gas and other commodities from those properties and the initial processing of the natural gas in or near the field (the "Upstream Segment") and (b) midstream activities consisting primarily on the delivery of natural gas by pipeline to the site of the proposed Goldboro LNG Facility (as described below) where it is further processed and liquefied to produce LNG for sale to customers for export to international markets and to specific markets in North America (the "LNG Segment" and together with the Upstream Segment, the "Goldboro LNG Project").

The Company's fundamental strategy has been to acquire under-valued natural gas reserves (primarily in Alberta) which can be developed for the purpose of supplying natural gas to the proposed Goldboro LNG Facility (the "Goldboro LNG Facility" or the "Facility"), to construct the Facility and develop the natural gas reserves

This development would be supported by a long-term, take-or-pay contract with Germany's largest utility – Uniper – which would purchase all of the LNG from Goldboro's first train. Pieridae had previously received confirmation of eligibility in principle of an untied loan guarantee of up to US\$4.5 billion from the German Government. If approved, this money would be used to support the construction of the LNG Facility and development of conventional natural gas reserves in Alberta. These elements were seen as key drivers in securing low-cost project financing, potentially supported by a repayable government loan or grant.

Once constructed, Goldboro LNG would produce high-valued LNG for sale in international markets. This strategy encompasses a "reuse, revitalize, repurpose" mandate aligned to the Company's environmental, social and governance ("ESG") values and goals to make the best use of existing local and national infrastructure and industrial footprints, with the outcome of supporting the global transition to a lower carbon economy through cleaner LNG as a replacement, bridge fuel for higher emissions coal.

On July 2, 2021, the Company publicly announced that after many years of effort and progress toward realizing this strategy, it has not been able to meet all of the key conditions necessary to make a final investment decision ("FID") on the Goldboro LNG Project in the scope and configuration previously contemplated. A copy of this news release that provides further details is located under the Company's profile on <u>www.sedar.com</u>. As a result, the Board of Directors decided to move the project in a new direction, which will include assessing any and all options and strategic alternatives that could make an LNG project more compatible with the current environment, and with consideration of Pieridae's existing working capital challenges. Pieridae believes that the fundamentals for an LNG project at Goldboro remain strong, including robust LNG demand from Europe, high global LNG prices, Indigenous participation, a net-zero emissions pathway forward, and support from jurisdictions across Canada.

Additionally, on July 26, 2021, the Company formally announced the initiation of a formal strategic review process under the supervision of a special committee of the Board of Directors, and in collaboration with a leading financial advisory firm. This process will identify, examine and consider a range of strategic alternatives for Pieridae. Such strategic alternatives may include, but are 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 Company has taken a long-term approach to growth and investments in order to mirror the long-term nature of its infrastructure, and to focus on creating long-term shareholder value. Operational discipline, safe, effective and efficient operations, community outreach, and cost control are fundamental to the Company, in addition to seeking opportunities to further integrate ESG considerations into our corporate strategy. The intention of this strategic review process is to protect and enhance this shareholder value.

# **QUARTERLY HIGHLIGHTS**

Pieridae reports business results in two segments: Upstream and LNG. The tables below provide a summary of the consolidated financial results for the past eight quarters:

	2021		2020			2019		
(\$ 000s unless otherwise noted)	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3
Production								
Natural gas (mcf/day)	194,232	215,179	212,220	184,080	208,689	199,234	204,262	86,884
Condensate (bbl/day)	2,950	3,158	3,259	2,807	3,166	2,850	2,840	121
NGLs (bbl/day)	3,083	4,975	6,171	4,722	5,843	5,156	5,253	55
Sulphur (ton/day)	1,710	1,713	1,829	2,232	1,970	1,906	938	269
Total production (boe/d)	38,404	43,997	44,800	38,209	43,791	41,211	42,137	14,657
Financial								
Net loss	(10,058)	(19,547)	(45,968)	(29,845)	(13,396)	(11,484)	(25,873)	(13,178)
Net loss per share, basic and diluted	(0.06)	(0.12)	(0.29)	(0.19)	(0.09)	(0.07)	(0.18)	(0.15)
Net operating income (loss) <sup>(1)</sup>	14,444	20,876	12,829	(646)	19,301	19,239	24,470	(2,699)
Cashflow provided by (used in)								
operating activities	12,093	11,000	1,037	(4,541)	(2,013)	6,426	(17,748)	(238)
Adjusted funds flow from operations <sup>(1)</sup>	8,516	14,877	8,535	(6,779)	12,466	12,644	14,448	(7,665)
Total assets	575,690	557,696	612,651	583,942	588,415	609,437	602,474	364,095
Working capital (deficit) surplus	(47,862)	(28,314)	(19,615)	(9,164)	15,109	15,596	19,105	(88 <i>,</i> 430)
Capital expenditures	15,171	7,797	8,926	6,033	264	2,020	165,764	1,914
Development expenses	(4,862)	8,604	8,682	2,472	4,129	3,459	805	504

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

# SECOND QUARTER 2021 OPERATIONAL AND FINANCIAL HIGHLIGHTS

#### Continued Safe Operation of Pieridae's Assets, Completion of Major Facility Turnaround

Pieridae's assets produced an average of 38,404 boe/day during the second quarter, a 13% decrease from the prior quarter, and a 12% decrease from the comparative quarter in 2020; resilient results when considering that during the quarter an \$18.5 million, five week scheduled turnaround was successfully completed at the Company's Jumping Pound Gas Complex, impacting 3,309 boe/day of production during the quarter. Additionally, as a result of market fundamentals, ethane was blended back into the natural gas sales stream at two of Pieridae's gas processing facilities during the quarter, resulting in a 2% increase in natural gas heat content but negatively impacting production on a comparative basis by 1,730 boe/day during the quarter.

Pieridae's realized natural gas price was \$2.59/mcf in the second quarter vs an AECO benchmark of \$3.11/mcf. While below benchmark as a result of our hedge portfolio, realized prices for natural gas were consistent as compared to the first quarter of 2021 and 39% higher than the comparative quarter in 2020. The Company continues to have a robust hedging program in place to insulate itself from volatile commodity prices. Pieridae's senior secured lender Third Eye Capital Corporation ("TEC") has temporarily amended their requirement to have 60% of production hedged on an 18-month rolling average boe basis in order to allow the Company to take advantage of strengthening crude and natural gas markets. At June 30, 2021, 77,538 GJ/d of fixed price physical sales contracts of natural gas were in place at a weighted-average price of \$2.54/GJ, and 1,500 bbl/day of 2021 condensate production was hedged at a weighted average price of \$54.95/bbl, representing a hedge percentage of 49% on a modified 18-month forward-looking basis.

In the second quarter of 2021, Pieridae generated cashflow from operating activities of \$12.1 million and AFFO of \$8.5 million, a decrease of \$4.0 million or 32% compared to the same period in 2020. Higher operating costs per boe and royalties offset the comparative strength in revenues, primarily as a result of higher power prices and increased third-party processing fees, both of which are partially tied to natural gas price indexes. Additionally, net income was impacted by Pieridae's continued investment in the Goldboro LNG Project, expenditures from which must be expensed prior to a successful FID.

#### **Caroline Carbon Capture Power Complex Announcement**

On May 27, 2021, Pieridae announced progress toward the creation of a Caroline Carbon Capture Power Complex. The Complex, to be located at Pieridae's Caroline Facility in Alberta, is envisioned to be a combination of large-scale carbon capture and sequestration ("CCS") and blue power production. This development supports independent, third-party research Pieridae commissioned last year which highlights pathways to achieving net-zero emissions by 2050. CCS was noted as a reputable pathway toward this goal.

#### **Pieridae Releases Its Inaugural ESG Report**

On June 22, 2021, Pieridae released its inaugural ESG Report, the culmination of more than 14 months of effort to develop an ESG framework and strategy which support the inaugural report. The report defines Pieridae's material ESG risks and opportunities to be prioritized over the coming months and has a number of commitments which the Company will focus on delivering.

#### **Pieridae Announces Resignation of CFO**

On July 5, 2021, Pieridae announced that Rob Dargewitcz resigned as Chief Financial Officer ("CFO") of the Company, effective July 30, 2021, to pursue other opportunities. On July 26, 2021, Pieridae announced the appointment of Adam Gray as Interim Chief Financial Officer.

#### **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. Upstream is currently the only segment generating operating revenues.

#### Production

	Three mon	Three months ended		ths ended
		June 30		June 30
	2021	2020	2021	2020
Natural gas (mcf/day)	194,232	208,689	204,647	203,962
Condensate (bbl/day)	2,950	3,166	3,053	3,008
NGLs (bbl/day)	3,083	5,843	4,024	5,500
Sulphur (ton/day)	1,710	1,970	1,712	1,938
Total production (boe/day)	38,404	43,791	41,185	42,501

Production in the second quarter of 2021 was 38,404 boe/d, a decrease of 5,387 boe/day or 12% compared to the same quarter in 2020. This decrease was primarily due to shut-in production at the Jumping Pound Gas Complex as a result of the scheduled turnaround which impacted production by 3,309 boe/day. By the end of May, production was back on stream after work was successfully completed. Production was also slightly impacted by other minor scheduled workover projects in the Limestone and Caroline fields.

Additionally, as a result of market fundamentals, ethane was blended back into the natural gas sales stream at two of Pieridae's gas processing facilities during the quarter, resulting in a 2% increase in natural gas heat content but negatively impacting consolidated production on a comparative basis by 1,730 boe/day during the quarter.

On a year-to-date basis, production was 41,185 boe/d, a decrease of 1,316 boe/day or 3% compared to the same period in 2020.

#### **Benchmark Prices**

	Three mon	ths ended	Six months ended	
		June 30		June 30
(three and six-month averages)	2021	2020	2021	2020
AECO benchmark price (CAD/mcf)	3.11	1.98	3.10	2.02
Condensate benchmark price (USD/bbl)	64.82	35.83	62.11	41.33
NYMEX benchmark price (USD/MMBtu)	2.98	1.72	2.85	1.81
WCS heavy differential from WTI (USD/bbl)	(13.51)	7.37	(12.85)	16.32
Dated Brent benchmark price (USD/bbl)	69.08	33.23	65.23	42.14
NBP UK natural gas benchmark price (USD/MMBtu)	8.74	1.68	7.74	2.45
US/Canadian dollar average exchange rate (USD)	0.8142	0.7219	0.8019	0.7326
US/Canadian dollar period-end exchange rate (USD)	0.8068	0.7338	0.8068	0.7338

#### **Realized Prices**

	Three months ended	Six mon	ths ended
	June 30		June 30
(three and six-month averages)	2021 2020	2021	2020
Natural gas (\$/mcf)	2.59 1.87	2.61	2.05
Condensate (\$/bbl)	60.08 39.94	59.22	53.11
NGLs (\$/bbl)	22.61 10.09	24.22	11.16
Sulphur (\$/ton)	19.85 10.42	19.62	7.10

# **Petroleum and Natural Gas Revenue**

	Three mon	ths ended	Six months ended	
		June 30		June 30
(\$ 000s except per boe)	2021	2020	2021	2020
Natural gas	45,838	35,521	96,677	76,271
Condensate	16,127	11,505	32,727	29,071
NGLs	6,343	5,368	17,636	11,166
Sulphur	3,089	1,867	6,078	2,504
Petroleum and natural gas revenue	71,397	54,261	153,118	119,012
Average sales volume (boe/day)	38,404	43,791	41,185	42,502
Petroleum and natural gas revenue (\$/boe)	20.43	13.62	20.54	15.39
Other income	1,287	634	2,322	1,283
Third party processing	3,833	6,926	8,646	13,728

Petroleum and natural gas revenue in the second quarter of 2021 was \$71.4 million, an increase of \$17.1 million or 32% compared to the same quarter in 2020. On a year-to date basis, petroleum and natural gas revenue was \$153.1, an increase of \$34.1 million or 29% compared to the same period in 2020. The increase was primarily due to higher realized price for natural gas (27% increase), condensate (13% increase) and NGLs (combined 117% increase), offset by slightly reduced volumes as previously described.

Third party processing revenue is derived from fees charged to third parties for processing their production and sulphur volumes through Pieridae's three sour gas 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 income in the second quarter of 2021 was \$3.8 million, a decrease of \$3.1 million or 45% compared to the same quarter in 2020. On a year-to date basis third party processing revenue was \$8.6 million, a decrease of \$5.1 million or 37% compared to the same period in 2020. The decreases are due to lower throughput volumes from third parties as a result of shut-ins of certain third-party owned production assets during the year, the Jumping Pound turnaround which restricted third-party throughput capacity for 38 days during the quarter, as well as Pieridae's fall 2020 acquisition of working interest ownership in Waterton which lowered third party processing revenue while increasing Pieridae's own production volumes.

For the three and six months ended June 30, 2021, the Company did not recognize any realized gains on risk management contracts, compared to a realized gain of \$8.2 million and \$12.7 million respectively in the comparative period of 2020 arising from the monetization of certain commodity forward contracts.

#### **Royalties**

	Three months ended	Six moi	nths ended	
	June 30		June 30	
(\$ 000s except per boe)	2021 2020	2021	2020	
Royalties	3,872 1,382	7,694	4,012	
Royalties (\$/boe)	1.11 0.35	1.03	0.52	

Royalties in the second quarter of 2021 were \$3.9 million (\$1.11/boe), an increase of \$2.5 million or 180% compared to the same quarter in 2020. On a year-to date basis, royalties were \$7.7 million (\$1.03/boe), an increase of \$3.7 million or 92% compared to the same period in 2020. The increase in royalties for the three and six months ended June 30, 2021 was primarily due to higher prices for natural gas, condensate and NGLs which correspondingly attract higher royalty rates.

#### **Operating Expense**

	Three mont	Three months ended		nths ended	
		June 30		June 30	
(\$ 000s except per boe)	2021	2020	2021	2020	
Operating expense	53,870	45,422	112,090	96,404	
Operating expense (\$/boe)	15.41	11.40	15.04	12.46	
Adjusted operating expense (1)	46,948	36,629	97,366	80,172	
Adjusted operating expense (\$/boe) <sup>(1)</sup>	13.43	9.19	13.06	10.36	

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

Operating expense in the second quarter of 2021 was \$53.9 million (\$15.41/boe), an increase of \$8.4 million or 19% compared to the same quarter in 2020. In the second quarter of 2020, a \$9.2 million adjustment was made to operating expenses to reflect management's best estimate of a processing fee-dispute settlement ongoing at that time. Second quarter operating expenses, normalized for this processing fee dispute adjustment, would have decreased by \$0.8 million as compared to 2020. Operating expenses during the quarter were impacted by higher power prices and processing fees, offset by a favorable prior period carbon tax estimate adjustment, and reduced costs for maintenance and contractor services. On a year-to-date basis, operating expenses, normalized for the processing fee dispute adjustment, would have increased by \$0.0. Year-to-date operating expenses, normalized for the processing fee dispute adjustment, would have increased by \$8.0 million, also due primarily to higher power prices and processing fees, as well as the timing of certain planned field maintenance activities.

Adjusted operating expense for the second quarter of 2021 was \$46.9 million (\$13.43/boe), an increase of \$10.3 million or 28% compared to the same quarter in 2020. Adjusted operating expenses on a year-to-date basis were \$97.4 million (\$13.06/boe), an increase of \$17.2 million or 21% compared to the same quarter in 2020. This adjusted basis is a non-GAAP measure, refer to "Non-GAAP Measures" in this MD&A, and is intended to reflect normalized operating expense by deducting third-party revenue and sulphur production revenue from operating costs, as both offset additional incurred costs toward generating those additional revenue which is not reflected in per-boe comparatives. As compared to 2020, the increase in sulphur revenues did not fully offset the reduction in third party processing fees earned on a three-month and year to date basis.

#### **Transportation Expense**

	Three months ended	Six months ended	
	June 30		June 30
(\$ 000s except per boe)	2021 2020	2021	2020
Transportation expense	4,331 3,939	8,982	7,775
Transportation expense (\$/boe)	1.24 0.99	1.20	1.01

Transportation expense in the second quarter of 2021 was \$4.3 million (\$1.24/boe), an increase of \$0.4 million or 10% compared to the same quarter in 2020. On a year-to-date basis, transportation expense was \$9.0 million (\$1.20/boe), an increase of \$1.2 million or 16% compared to the same period in 2020. These respective increases were mainly driven by the increase in Pieridae's firm service capacity on the Nova Gas Transmission Ltd. ("NGTL") System, and a higher cost for fuel gas on that system.

#### **General and Administrative Expense**

	Three month	is ended	Six months ended	
		June 30		June 30
(\$ 000s except per boe)	2021	2020	2021	2020
G&A expense – Upstream	3,715	2,366	8,210	5,556
G&A expense – Corporate and LNG	1,961	4,020	3,402	5,841
G&A expense (\$/boe) – Upstream	1.06	0.59	1.10	0.72
G&A expense (\$/boe) – Corporate and LNG	0.56	1.01	0.46	0.76

Upstream G&A expense in the second quarter of 2021 was \$3.7 million (\$1.06/boe), an increase of \$1.3 million or 57% compared to the same quarter in 2020. On a year-to-date basis, Upstream G&A expense was \$8.2 million (\$1.10/boe), an increase of \$2.7 million or 48% compared to the same period in 2020. The comparative period had the benefit of operating overhead recoveries however, this was subsequently recorded in operating expense; this policy change commenced in the fourth quarter of 2020. After adjusting for this,

Upstream G&A for the three and six months ended June 30, 2021 would be \$2.2 million and \$5.2 million respectively which is materially consistent with comparative periods of 2020.

Corporate and LNG G&A expense in the second quarter of 2021 was \$2.0 million (\$0.56/boe), a decrease of \$2.1 million or 51% compared to the same quarter in 2020. On a year-to date basis corporate and LNG G&A expense was \$3.4 million (\$0.46/boe), a decrease of \$2.4 million or 42%. These respective decreases were due to lower salaries and benefits. LNG associated G&A expenses are classified as development expense.

#### **Finance Expense**

	Three mon	ths ended	Six months ended	
		June 30		June 30
(\$ 000s)	2021	2020	2021	2020
Interest expense	7,933	7,706	15,875	15,545
Accretion of financing costs	5,944	3,867	11,470	7,355
Interest income	(7)	(40)	(12)	(72)
Accretion of decommissioning obligations	-	212	-	423
Interest on lease liabilities	47	30	92	70
Total finance expense	13,917	11,775	27,425	23,321

Finance expense in the second quarter of 2021 was \$13.9 million, an increase of \$2.1 million or 18% compared to the same quarter in 2020. On a year-to-date basis, finance expense was \$27.4 million, an increase of \$4.1 million or 18% compared to the same period in 2020. The respective increases were due to accretion of financing costs as the Company elected to pay a portion of the interest in kind. Refer to Note 7 of the interim financial statements for additional information.

#### **Depletion and Depreciation**

	Three mont	Three months ended		ths ended
		June 30	) June 30	
(\$ 000s)	2021	2020	2021	2020
Depletion and depreciation	9,519	10,170	21,832	19,504

Depletion and depreciation expense in the second quarter of 2021 was \$9.5 million, a decrease of \$0.7 million or 6% compared to the same quarter in 2020 primarily due to lower production. On a year-to-date basis, depletion and depreciation expense was \$21.8 million an increase of \$2.3 million or 12% compared to the same period in 2021. The increase was due capital additions added to the depletion base and higher year-to-date production.

#### **Share-based Compensation**

	Three months ende	d Six mo	Six months ended	
	June 3	ס	June 30	
(\$ 000s)	2021 202	2021	2020	
Share-based compensation – Upstream	73 5	1 160	123	
Share-based compensation – LNG	57 9	2 124	195	

Upstream share-based compensation in the second quarter of 2021 was \$0.1 million which was relatively consistent to \$0.1 million for the same quarter in 2020. On a year-to-date basis, LNG share-based compensation was \$0.1 million compared to \$0.2 million for the same period in 2020 due to a slightly lower options outstanding as a result of expiries.

#### **LNG SEGMENT**

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.

The Goldboro LNG site is near the community of Goldboro, Nova Scotia. The site was selected to make use of existing infrastructure and is aligned with the Company's goal to minimize capital exposure by reusing existing, underutilized midstream infrastructure. The site is

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conveniently located next to the Maritimes and Northeast Pipeline ("M&NP"), which will be modified to deliver gas to the Goldboro LNG Facility.

Prior to the July 2, 2021 announcement that the Goldboro LNG Project was unable to achieve FID, the Company had progressed the Project through the open book estimate ("OBE") stage and respected global engineering firm Bechtel was engaged to, among other things, perform a detailed review of the scope and design of the Two Train, 10.4 MMTPA Goldboro LNG Facility, develop a comprehensive engineering, procurement, construction and commissioning ("EPCC") execution plan and a final lump sum, turnkey EPCC contract price proposal.

Following the July 2, 2021 announcement, activities with Bechtel and all associated strategic vendors and consultants have been suspended, and ongoing activity is focused on exploring strategic alternatives for LNG development on the Goldboro site.

As previously disclosed, a condition of the Uniper contract is that the Company achieve a successful FID by June 30, 2021, after which time Uniper has the right to terminate the contract. As of the date of this MD&A, Uniper has not provided this notice of termination.

#### **Development Expense**

	Three months ended	Six mor	Six months ended	
	June 30	June 30		
(\$ 000s)	2021 2020	2021	2020	
Development expense	(4,862) 4,129	3,742	8,878	

Development expense in the second quarter of 2021 was a recovery of \$4.9 million, an decrease of \$9.0 million or 218% compared to the same quarter in 2020. On a year-to date basis, development expense was \$3.7 million, a decrease of \$5.1 million or 58% compared to the same period in 2020. The respective decreases are due to the reversal of an \$7.5 million amount payable to a third-party engineering and construction company due to the remote nature of the obligation, following the Company's announced evaluation of strategic alternatives for the Goldboro LNG Project. This expense reversal was partially offset by additional development expenses incurred on the Goldboro project during the quarter.

# LIQUIDITY AND CAPITAL RESOURCES

#### **Cash and Cash Equivalents**

Pieridae held \$9.7 million in cash and cash equivalents and restricted cash of \$2.2 million as at June 30, 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 in order to facilitate the Company's ongoing operations.

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

In July 2020, the Company received a \$6.0 million guarantee facility from Export Development Canada which was increased to \$8.0 million in June 2021. This guarantee facility provides for 100% guarantee to the issuing banks of the Company's existing and future letter of credit of which \$6.0 million was drawn at June 30, 2021 (December 31, 2020 – \$4.9 million).

#### Loans and Term Debt

On October 16, 2019, the Company entered into a fully drawn senior secured non-revolving term loan facility (the "Credit Agreement") for \$206.0 million. This Credit Agreement bears interest at a fixed rate of 12.0% per annum from the date of issue, accrued daily and payable quarterly in cash, plus an additional 3.0% per annum, which is payable quarterly either in cash or, at the option of the Company and subject to the lender's approval, in kind by way of accruing to the principal outstanding. The Credit Facility is repayable in full on October 16, 2023 and a deferred fee of \$50.0 million is due on October 16, 2021; however, the Company has discretion to repay the principal in whole or in part any time prior to this date upon 90 days written notice to the lender, without penalty. Refer to Note 7 of the interim financial statements for additional information on the Credit Facility. During and subsequent to the quarter ended June 30, 2021, the Company was in compliance with, or had obtained the required waivers for, all covenants of the Credit Agreement.

# **Working Capital Deficit and Capital Structure**

Pieridae's working capital deficit increased from \$19.6 million at December 31, 2020 to \$47.9 million at June 30, 2021 primarily as a result of increases in accounts payable and accrued liabilities. Working capital was pressured by net operating losses experienced during the period which arose from a combination of higher operating expenses, costs associated with Goldboro development, and a reduction in third-party processing revenues, partially offset by higher commodity revenues earned.

While Pieridae's working capital deficiency is anticipated to improve over the next 12 months, the Company is actively pursuing strategic alternatives to enhance shareholder value, to strengthen its balance sheet, and to fund the \$50 million deferred fee which is payable in October 2021. As previously discussed, these strategic alternatives could include, but are not limited to, a corporate sale, merger, a sale of a material portion of Pieridae's assets or other transactions or a combination thereof. Although there is no guarantee that these efforts will be successful, or, if successful, that the alternatives identified will be on terms acceptable to the Company, management believes the Company, both through its Western Canadian upstream and midstream asset base, and the Goldboro LNG project opportunities, presents a compelling opportunity to potential lenders and investors. The inability of the Company to identify a strategic alternative that will allow the Company to access sufficient capital for its operations could have a material adverse effect on the Company's financial condition, results of operations or prospects.

These factors impact the Company's ability to secure further financing and indicate the existence of material uncertainties that may cast significant doubt about the Company's ability to continue as a going concern. Refer to Note 2 of the interim financial statements for additional information.

Pieridae's capital strategy is aligned with its business strategy and is focused on ensuring the Company has sufficient liquidity to fund operations and project development. Externally, Pieridae's principal sources of liquidity are the Credit Agreement, EDC LC backstop facility, and additional debt and/or equity offerings.

# **Capital Resources**

Pieridae's capital structure was comprised of share capital, working capital and term debt, less cash and cash equivalents. The following table summarizes our capital structure on June 30, 2021 and December 31, 2020:

(\$ 000s)	June 30, 2021	December 31, 2020
Cash and cash equivalents	9,740	11,069
Less: term debt	(232,383)	(219,555)
Net debt	(222,643)	(208,486)
Shareholders' equity	(23,080)	4,384

#### **Sources and Uses of Cash Flows**

	Three months ended		d Six months ended	
	June 30		June 30	
(\$ 000s)	2021	2020	2021	2020
Cash flows related to operating activities	12,093	(2,013)	23,093	4,413
Cash flows related to investing activities	(15,171)	(264)	(23,022)	(2,293)
Cash flows related to financing activities	(649)	(1,932)	(1,908)	(2,029)

Operating cash flows in the second quarter of 2021 were \$12.1 million, an increase of \$14.1 million or 701% compared to the same quarter in 2020. On a year-to-date basis, operating cash flows were 23.1 million, an increase of \$18.7 million or 423% compared to the same period in 2021. The respective increases were due to operational results and changes in non-cash working capital partially offset by expenditures on decommissioning obligations and other amounts payable. Pieridae remains focused on directing its available funds toward the safe and reliable operations of our Upstream assets, including completion of regulatory-driven maintenance capital activities at two of its gas processing facilities.

Investing cash outflows in the second quarter of 2021 were \$15.2 million, an increase of \$14.9 million compared to the same quarter in 2020. On a year-to-date basis, investing cash outflows increased by \$20.7 million or 904% when compared to the same period in 2020. The respective increases were a result of costs incurred related to the Jumping Pound facility turnaround and other capital additions.

Financing cash outflows in the second quarter of 2021 was \$0.6 million, a decrease of \$1.3 million or 66% compared to the same quarter in 2020. On a year-to-date basis, financing cash flows decreased by \$0.1 million or 6% compared to the same period in 2020. During the current period there were payments of lease obligations, fees associated with the term debt and restricted cash movements.

# SHARE CAPITAL, STOCK OPTIONS OUTSTANDING AND WARRANTS

As at June 30, 2021 and August 11, 2021, the Company had 157,641,871 common shares outstanding and 7,076,807 (December 31, 2020 – 8,322,072) stock options were outstanding with a weighted average exercise price of \$1.77/share.

On March 31, 2021, the Company issued 5,000,000 common share purchase warrants at an exercise price equal to \$0.70 per common share warrant. The Black-Scholes pricing model was used to calculate the fair value of \$1.3 million for the warrants.

# COMMITMENTS, PROVISIONS AND CONTINGENCIES

The Company has entered into several financial obligations during the normal course of business. As at June 30, 2021 these obligations, and the expected timing of their settlement, are detailed below:

(\$ 000s)	2021	2022	2023	2024	Thereafter	Total
Interest on term debt	65,930	31,600	25,020	-	-	122,550
Firm transportation	4,803	9,088	3,017	1,010	1,169	19,087
Total	70,733	40,688	28,037	1,010	1,169	141,637

#### **Provisions and Contingencies**

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 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**

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

#### **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
Weakness in the Oil and Gas Industry
Prices, Markets and Marketing of Crude Oil and Natural Gas
Reserve Decline, Exploration, Development and Production Risk
Reserve Estimates
Liability Management
Royalty Regimes
Alternatives to and Changing Demand for Petroleum Products
Hydraulic Fracturing
Other Risks Inherent to Pieridae's Business
Additional Financing
Liquidity
Access to Capital
Epidemics or Pandemics
Environmental Incidents
Climate Change
Chronic Climate Change Risks
Acute Climate Change Risks
Climate Change Regulations
Permits, Licenses and Approvals
Insurable Risk
Co-ownership of Assets and Operational Dependence

Growth Management
Third Party Credit Risk
Political, Geo-Political and Public Perception Risk
Impact of Future Financings on Market Price
Competition
Availability and Cost of Material and Equipment
Title to Production Assets and Reserves
Estimation of Abandonment and Reclamation Costs
Possible Failure to Realize Anticipated Benefits of Acquisitions
Project Risk
Conflicts of Interest
Litigation
Regulatory
Variations in Foreign Exchange and Interest Rates
Hedging
Tax Horizon
Changes in Risk Profile
Reliance on Key Personnel
Cost of New Technologies
Internal Controls
Breach of Confidentiality
Information Technology Systems and Cyber-Security
Reputation Risk
Estimates and Assumptions
Forward-Looking Statements and Information May Prove Inaccurate
Risks Related to Pieridae's Common Shares
Volatility
Dilution
Return on Investment
Dividends

Refer to the Company's Annual Information Form for the year ended December 31, 2020 for fulsome discussion of these risks.

# ENVIRONMENTAL, SOCIAL AND GOVERNANCE COMMITMENT

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 a solid ESG foundation, including the formation of a new Board committee to oversee ESG and governance, establishing a senior management framework 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.

# SIGNIFICANT ACCOUNTING JUDGEMENT AND ESTIMATES

The timely preparation of the interim 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. The use of significant judgments and estimates made by management in the preparation of the interim financial statements are discussed in note 2 of the consolidated financial statements for the year ended December 31, 2020.

# **CONTROL ENVIRONMENT**

#### Disclosure Controls and Procedures and Internal Controls over Financial Reporting

Pieridae is required to comply with National Instrument 52-109 "Certification of Disclosure in Issuers' Annual and Interim Filings". The certification of interim filings for the period ended June 30, 2021 requires that the Company disclose in the interim MD&A any changes in disclosure controls and procedures (DC&P) and internal controls over financial reporting (ICFR) that occurred during the period that have materially affected, or are reasonably likely to materially affect, internal controls over financial reporting. No such changes were made to the Company's DC&P and ICFR during the period ended June 30, 2021.

## **CHANGES IN ACCOUNTING POLICIES**

The Company has not early adopted any standard, interpretation or amendment that has been issued but is not yet effective.

# **OUTLOOK AND GUIDANCE**

# 2021 Guidance

Below is a summary of the Company's 2021 annual guidance updated to reflect management's latest forecast:

	2021
(\$ 000s unless otherwise noted)	Guidance
Total production (boe/d)	40,000 - 42,500
Net operating income <sup>(1)</sup>	85,000 - 100,000
Capital expenditures	35,000 – 45,000
Operating expense (\$/boe)	14.50 - 15.00
Adjusted operating expense (\$/boe) <sup>(1)</sup>	12.50 - 13.00

<sup>(1)</sup> Refer to Non-GAAP Measures

#### **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**

Net operating income equals total revenue including realized gains and losses on commodity risk management contracts less royalties, operating expenses and transportation expenses.

	Three months ended	l Six mor	Six months ended	
	June 3	)	June 30	
(\$ 000s except per boe)	2021 2020	2021	2020	
Revenue <sup>(1)</sup>	76,517 70,044	164,086	146,731	
Royalties	(3,872) (1,382	) (7,694)	(4,012)	
Operating expense	(53,870) (45,422	) (112,090)	(96,404)	
Transportation expense	(4,331) (3,939	(8,982)	(7,775)	
Net operating income	14,444 19,30	35,320	38,540	

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

# **Operating Netback**

The 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. Management considers net operating income and operating netback important measures to evaluate the Company's operational performance as it demonstrates Pieridae's field level profitability relative to current commodity prices.

	Three mon	Three months ended		Six months ended	
		June 30		June 30	
(\$ per boe)	2021	2020	2021	2020	
Revenue	21.89	17.58	22.01	18.97	
Royalties	(1.11)	(0.35)	(1.03)	(0.52)	
Operating expense	(15.41)	(11.40)	(15.04)	(12.46)	
Transportation expense	(1.24)	(0.99)	(1.20)	(1.01)	
Operating netback (\$/boe)	4.13	4.84	4.74	4.98	

# **Adjusted Operating Expense**

Adjusted operating expense is intended to provide an industry-comparable view of operating expenses for our sour gas processing facilities. Management considers comparability to mean consideration for all volumes running through these facilities, not only Pieridae-owned volumes, and some factor to normalize the increased expense of running sulphur recovery units at these facilities. Adjusted operating expense is calculated as operating expenses, less third-party processing revenue and sulphur revenue.

	Three mont	Three months ended		Six months ended	
		June 30		June 30	
(\$ 000s except per boe)	2021	2020	2021	2020	
Operating expense	53,870	45,422	112,090	96,404	
Third party processing revenue	(3,833)	(6,926)	(8,646)	(13,728)	
Sulphur revenue	(3,089)	(1,867)	(6,078)	(2,504)	
Adjusted operating expense	46,948	36,629	97,366	80,172	
Adjusted operating expense (\$/boe)	13.43	9.19	13.06	10.36	

# **Adjusted Funds Flow from Operations**

Pieridae defines adjusted funds flow from operations as its net loss, less financial income and expense, where financial income and expense excludes accretion, less depletion and depreciation. Development expenses are also added back to better focus the metric on the Company's upstream operational performance.

	Three mor	nths ended	Six months ended	
		June 30		June 30
(\$ 000s)	2021	2020	2021	2020
Net loss	(10,058)	(13,396)	(29,605)	(24,880)
Depletion and depreciation	9,519	10,170	21,832	19,504
Finance expense	13,917	11,563	27,425	22,898
Development expense	(4,862)	4,129	3,742	8,878
Adjusted funds flow from operations	8,516	12,466	23,394	26,400