The following Management's Discussion and Analysis ("MD&A") is dated August 11, 2022 and should be read in conjunction with the restated audited consolidated financial statements and accompanying notes of Alvopetro Energy Ltd. ("Alvopetro" or the "Company") as at and for the years ended December 31, 2021 and 2020. Additional information for the Company, including the restated Annual Information Form ("AIF"), can be found on SEDAR at <u>www.sedar.com</u> or at <u>www.alvopetro.com</u>. This MD&A contains financial terms that are not considered measures under International Financial Reporting Standards ("IFRS") and forward-looking statements. As such, the MD&A should be used in conjunction with Alvopetro's disclosure under the headings "Non-GAAP and Other Financial Measures" and "Forward Looking Information" at the end of this MD&A.

# All amounts contained in this MD&A are in United States dollars ("USD"), unless otherwise stated and all tabular amounts are in thousands of United States dollars, except as otherwise noted.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

#### Amendment and Restatement of the Consolidated Financial Statements

This MD&A supersedes and replaces the original Management's Discussion and Analysis dated March 17, 2022, which was filed on SEDAR on March 17, 2022 (the "Original MD&A"). Subsequent to the issuance of the audited consolidated financial statements for the years ended December 31, 2021 and 2020, the Company identified an error with respect to the foreign currency translation of certain assets acquired by the Company in 2012. This MD&A and the associated audited consolidated financial statements as at and for the years ended December 31, 2021 and 2020 has been restated as further discussed in Note 21 of the restated audited consolidated financial statements and in this MD&A under the heading "Restatement of the Consolidated Financial Statements". In connection with the foregoing, this MD&A reflects the restated financial information including restated net income (loss), depletion and depreciation expense, impairment expense, and deferred tax expense for the periods noted. The restatement is not as a result of any change to the Company's operations or the Company's business. For any and all of the aforementioned periods there is no impact on the overall cash position, net cash flows from operating, investment or financing activities on the statement of cash flows or on any of the inputs used to determine the Company's recoverable reserves.

Other than the restated financial information, and related disclosures in respect of the restatement of such figures, this MD&A does not, and does not purport to, update or restate the information in the Original MD&A or reflect any events that occurred after the date of the Original MD&A.

#### **OVERVIEW**

#### **Description of Business**

Alvopetro is engaged in the exploration for and the acquisition, development and production of hydrocarbons in Brazil. Alvopetro is a pioneer in the development of Brazil's independent onshore natural gas industry anchored by the Company's core Caburé upstream and midstream project. Natural gas sales from the Caburé natural gas field commenced on July 5, 2020. Alvopetro's shares are traded on the TSX Venture Exchange (TSX: ALV.V) and are also traded on the OTCQX<sup>®</sup> Best Market in the United States (OTCQX: ALVOF).

#### Strategy

Alvopetro's strategy is to unlock the on-shore natural gas potential in the state of Bahia, building off the development of our Caburé and Murucututu natural gas assets and our strategic midstream infrastructure. Our objective is to create a balanced reinvestment and long-term stakeholder return model where approximately half of our cash flows are reinvested in organic growth opportunities and the other half is distributed to stakeholders as dividends, share repurchases, and interest and principal repayments to debt capital providers.



# **FINANCIAL & OPERATING SUMMARY**

	As at and Three Months Ended December 31,				Ended nber 31,
	2021	2020	Change (%)	2021	2020
Financial					
(\$000s, except where noted)					
Natural gas, oil and condensate sales	9,896	5,887	68	34,980	11,308
Net income – restated <sup>(1)</sup>	2,778	2,815	(1)	5,595	9,640
Per share – basic restated (\$) <sup>(1)</sup>	0.08	0.09	(11)	0.17	0.29
Per share – diluted restated $(\$)^{(1)}$	0.08	0.08	-	0.16	0.27
Cash flow from operating activities	7,088	3,124	127	24,291	3,061
Per share – basic $(\$)^{(2)}$	0.21	0.09	133	0.73	0.09
Per share – diluted $(\$)^{(2)}$	0.20	0.09	122	0.70	0.09
Funds flow from operations $^{(3)}$	6,480	4,252	52	24,637	6,216
Per share – basic $(\$)^{(2)}$	0.19	0.13	46	0.74	0.19
Per share – diluted $(\$)^{(2)}$	0.18	0.13	38	0.71	0.18
Capital expenditures <sup>(4)</sup>	1,470	452	225	4,513	3,814
Total assets – restated <sup>(1)</sup>	73,630	74,150	1	73,630	74,150
Cash and cash equivalents	11,469	5,159	122	11,469	5,159
Net working capital surplus <sup>(3)</sup>	9,097	5,539	64	9,097	5,539
Working capital, net of debt (net debt) <sup>(3)</sup>	2,552	(9,884)	126	2,552	(9,884)
Weighted average shares outstanding (000s)		( ) ,		,	
Basic	33,824	33,086	2	33,103	32,871
Diluted <sup>(2)</sup>	35,986	33,557	7	34,928	35,145
Operations					
Natural gas, crude oil and natural gas liquids sales:					
Natural gas (Mcfpd)	13,966	11,163	25	13,517	5,346
NGLs – condensate (bopd)	103	89	16	103	44
Oil (bopd)	2	-	-	2	5
Total (boepd)	2,432	1,950	25	2,358	940
Average realized prices <sup>(3)</sup> :					
Natural gas (\$/Mcf)	7.07	5.36	32	6.50	5.36
NGL – condensate (\$/bbl)	84.36	46.97	32 80	75.89	46.57
Oil (\$/bbl)	64.50 76.47	40.97	80	63.61	36.81
Company total (\$/boe)	44.22	32.82	35	40.64	32.88
Operating netback (\$/boe) <sup>(3)</sup>					
Realized sales price	44.22	32.82	35	40.64	32.88
Royalties	(4.22)	(1.51)	179	(3.61)	(2.15)
Production expenses	(3.62)	(3.39)	7	(3.64)	(3.88)
Operating netback	36.38	27.92	30	33.39	26.85

Notes:

(1) Please refer to the section entitled "Restatement of the Consolidated Financial Statements" within this MD&A and Note 21 of the notes to the restated consolidated financial statements for details of this restatement.

(2) The weighted average number of diluted common shares outstanding in the computation of funds flow from operations and cash flows from operating activities per share is the same as for net income per share.

(3) See "Non-GAAP and Other Financial Measures" section within this MD&A.

(4) Includes non-cash capital expenditures of \$0.4 million for the year ended December 31, 2020.



# HIGHLIGHTS AND SIGNIFICANT TRANSACTIONS FOR THE FOURTH QUARTER OF 2021

- Our daily sales averaged 2,432 boepd in Q4 2021, a 25% increase from the Q4 2020 average of 1,950 boepd and a 1% decrease from the Q3 2021 average of 2,459 boepd. In Q4 2021, 95.7% of our sales volumes were from natural gas with 4.2% from NGLs from condensate and the remainder from crude oil sales.
- Our operating netback of \$36.38 per boe in the fourth quarter improved 30% from Q4 2020 due to an increase in our realized natural gas price and improved commodity prices overall, offset by increased royalties. The current quarter's netback was consistent with Q3 2021.
- We reported net income of \$2.8 million, compared to \$2.8 million in Q4 2020 and a net loss of \$0.02 million in Q3 2021.
- We generated funds flow from operations in Q4 2021 of \$6.5 million (\$0.19 per basic share and \$0.18 per diluted share) and cash flows from operating activities of \$7.1 million (\$0.21 per basic share and \$0.20 per diluted share).
- Capital expenditures totaled \$1.5 million, focused on our Murucututu/Gomo pipeline extension.
- We declared our second dividend of \$0.06 per share to shareholders of record on December 30, 2021. Total dividends of \$2.0 million were paid on January 14, 2022.
- As at December 31, 2021, we had a net working capital surplus of \$9.1 million, including \$11.5 million in cash and cash equivalents. The Company's working capital net of our credit facility balance of \$6.5 million improved to \$2.6 million, compared to \$0.3 million as of September 30, 2021.

# ADDITIONAL HIGHLIGHTS AND SIGNIFICANT TRANSACTIONS FOR 2021

- Our annual sales averaged 2,358 boepd (95.5% natural gas, 4.4% NGLs from condensate and marginal crude oil production).
- We recognized net income of \$5.6 million, compared to \$9.6 million in 2020.
- We generated funds flow from operations of \$24.6 million (\$0.74 per basic share on \$0.71 per diluted share) compared to \$6.2 million in 2020 (\$0.19 per basic share and \$0.18 per diluted share).
- Capital expenditures totaled \$4.5 million, focused on our Murucututu pipeline extension and our initial costs for our planned 2022 exploration program.
- We completed a share restructuring in September 2021, involving a share repurchase and a consolidation resulting in a reduction in our common shares outstanding from 99.8 million to 32.9 million immediately following the restructuring.
- We commenced quarterly dividend payments of \$0.06/share, with dividends declared to shareholders of record on September 29, 2021 and December 30, 2021.

# **RECENT HIGHLIGHTS**

- On February 1, 2022, our contracted natural gas price under our long-term gas sales agreement increased 48% to Brazilian real ("BRL")1.94/m3 (\$11.28/Mcf based on our average heat content premium to date of 107% and the average February 2022 BRL/USD foreign exchange of 5.197). This price is effective for all natural gas sales from February 1 to July 31, 2022.
- On February 18, 2022, we repaid an additional \$1.5 million of our Credit Facility reducing the balance outstanding to \$5.0 million.
- > On March 2, 2022, we spud the 182-C1 well on Block 182, the first of two natural gas exploration wells planned for 2022.
- On March 8, 2022, we announced our reserves as at December 31, 2021 with total proved plus probable ("2P") reserves of 8.7 MMboe and a before tax net present value discounted at 10% of \$297.0 million. We also announced the Murucututu resources assessment (previously referred to as the Gomo natural gas resource) with risked best estimate contingent resource of 3.5 MMboe (before tax net present value discounted at 10% of \$60.7 million) and risked best estimate prospective resource of 12.1 MMboe (before tax net present value discounted at 10% of \$208.7 million). The reserves and resources data is based on an independent reserves and resources assessment and evaluation prepared by GL Ltd. ("GLI") dated March 7, 2022 with an effective date of December 31, 2021 (the "GLI Reserves and Resources Report").
- On March 17, 2022, we announced a 33% increase in our quarterly dividend, to \$0.08 per common share, payable on April 14, 2022 to shareholders of record on March 31, 2022.



# NATURAL GAS AND OIL PROPERTIES

As at December 31, 2021, Alvopetro held interests in the Caburé and Murucututu natural gas assets, two exploration blocks with natural gas prospects (Block 183 and Block 182) and two oil fields (Bom Lugar and Mãe-da-lua), in the Recôncavo basin onshore Brazil.

Property, plant a	nd equipment	("PP&E") Assets
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Field	Gross Acres	Current Phase Expiry	PP&E balance December 31, 2021 Restated <sup>(1)</sup> (\$000's)	Net Present Value of 2P Reserves <sup>(2)</sup> (\$000's)	Work Commitment (\$000's) <sup>(3)</sup>
Caburé	4,814	December 5, 2043 and May 12, 2044	18,338	216,859	-
Murucututu <sup>(4)</sup>	6,988	April 18, 2048 and November 8, 2048	21,358	72,307	-
Bom Lugar	2,240	July 10, 2023	12	6,899	63
Mãe-da-lua	431	February 22, 2044	-	934	63
TOTAL <sup>(5)</sup>			39,708	297,000	126

(1) Please refer to the section entitled "Restatement of the Consolidated Financial Statements" within this MD&A and Note 21 of the notes to the consolidated financial statements for details of this restatement.

(2) See "Oil and Natural Gas Reserves" at the end of this MD&A.

(3) The work commitment amounts included above for Bom Lugar and Mãe-da-lua relate to abandonment guarantees which the Company is required to post locally in Brazil with respect to producing fields. There is a total of \$0.1 million of restricted cash relating to these abandonment guarantees as at December 31, 2021. The Company has not yet been required to post an abandonment guarantee with respect the Caburé or Murucututu fields; however, all estimated abandonment obligations, including those with respect to Caburé and Murucututu, have been included in the determination of decommissioning liability and recognized on the consolidated statement of financial position.

(4) References to Murucutut throughout this MD&A refer to our Murucututu natural gas project which extends across Block 197 and a portion of Block 183. See further discussion below. The project was previously referred to as our Gomo project and was renamed to Murucututu with the declaration of commerciality filed in 2021.

(5) The total balance in the table above excludes \$0.1 million in other assets classified as PP&E as at December 31, 2021, largely relating to furniture and office equipment.

## Exploration and evaluation ("E&E") assets

Block	Gross Acres	Current Phase Expiry	E&E balance December 31, 2021 (\$000's)	Estimated Commitment <sup>(1)</sup> (\$000's)	Letter of Credit Support <sup>(2)</sup> (\$000's)
182 <sup>(3)</sup>	4,747	June 3, 2022	998	-	-
183 <sup>(4)</sup>	2,946	July 27, 2022	833	597	638
TOTAL <sup>(5)</sup>			1,831	597	638

(1) The estimated commitments expressed above are based on costs to complete work units ("UTs") which represent the minimum work to be carried out under the terms of the existing exploration phase of the concession contracts. UTs may be satisfied through, among other things, drilling exploration wells and shooting or reprocessing seismic. UTs are not applicable in the Development Assessment Plan ("PAD") phase; however, the Company must notify the ANP of its work plan to be completed during this phase.

(2) Letters of Credit ("LCs") posted in satisfaction of work units may differ from USD equivalent amounts for the associated commitments due to foreign exchange fluctuations and foreign exchange margin requirements.

(3) Block 182 is currently in the PAD phase. Work to be completed under the PAD includes drilling of the 182-C1 well which was spud on March 2, 2022.

(4) The portion of Block 183 which is not part of the Murucututu project is in the second exploration phase. Alvopetro plans to drill the 183-B1 well in 2022 in satisfaction of this work commitment.

(5) The total E&E balance reflected in the table above excludes \$1.9 million of other assets classified as E&E as at December 31, 2021, largely relating to equipment and materials inventory available for use on future capital projects.

#### NATURAL GAS ASSETS:

#### **Caburé Natural Gas Field**

Alvopetro's flagship asset, the Caburé natural gas field, commenced commercial natural gas deliveries on July 5, 2020, averaging 14.0 MMcfpd in Q4 2021 and 13.5 MMcfpd for the year ended December 31, 2021. The Caburé and Caburé Leste natural gas field, collectively referred to as the Caburé natural gas field throughout this MD&A, extends across four blocks in the Recôncavo basin in the state of Bahia in Brazil, two of which are held by Alvopetro (Blocks 197 and 198) and two of which are held by our



partner (Blocks 211 and 212), with Alvopetro's share of the unitized area (the "Unit") being 49.1% and our operating partner's share being 50.9%.

Under the terms of the Unit Operating Agreement ("UOA"), each party is entitled to nominate for their working interest share of field production and for any natural gas not nominated by the other party. Once a party produces their share of proved plus probable reserves, they will no longer be entitled to further production allocations. Under the terms of the UOA, natural gas liquids ("NGLs") production from the unit (relating to condensate production) is split based on working interest.

#### **Natural Gas Sales**

Alvopetro's share of natural gas from the Caburé natural gas field is shipped via our 11-kilometre Caburé transfer pipeline and processed through the natural gas processing facility (the "Facility") owned and operated by Enerflex Ltd. ("Enerflex") pursuant to our Gas Treatment Agreement. All natural gas is sold to Bahiagás, the local state distribution company, under the terms of our gas sales agreement ("GSA"), which provides for the sale of firm volumes and interruptible volumes. The GSA has take-or-pay provisions and ship-or-pay penalties to ensure performance by both parties which are based on the firm volumes. For 2020 and 2021, the Company agreed to firm volumes of 10.6 MMcfpd (300  $10^3 \text{m}^3/\text{d}$ ) and interruptible volumes of up to 7.1 MMcfpd (200  $10^3 \text{m}^3/\text{d}$ ). For the first half of 2022, Alvopetro agreed to firm volumes of 10.6 MMcfpd (300  $10^3 \text{m}^3/\text{d}$ ) and interruptible volumes of up to 7.1 MMcfpd (200  $10^3 \text{m}^3/\text{d}$ ). For the first half of the year, or alternatively reduce such volumes to firm volumes as low as 7.9 MMcfpd (225  $10^3 \text{m}^3/\text{d}$ ) and interruptible volumes as high as 9.7 MMcfpd (275  $10^3 \text{m}^3/\text{d}$ ).

#### Murucututu (Gomo) Natural Gas Project

Alvopetro's Murucututu natural gas project extends across Blocks 183 and 197, both held by Alvopetro, and includes the 183(1) and 197(1) wells, both of which were drilled in 2014. In late 2019, Alvopetro commenced a stimulation and initial production test of the 183(1) well and in early 2021 completed another production test, the results from which validated previous analysis with respect to our long-term productivity forecast of the well. Alvopetro declared commerciality on the portion of Block 183 attributable to this project in April 2021 and this portion of the block has been renamed Murucututu and is now in the development and production phase with an expiry date of April 2048. On October 1, 2021, Alvopetro declared commerciality on the development and production phase with an expiry date of April 2048.

In 2021, Alvopetro commenced installation of a 9-kilometre transfer pipeline extension to connect the 183(1) well to our Caburé transfer pipeline, incurring a total of \$0.9 million in capital expenditures in Q4 2021 and \$2.0 million in the year ended December 31, 2021. The installation was completed in early 2022 and the pipeline has now been tested. Alvopetro anticipates a further \$1.3 million in capital expenditures in 2022 relating to final installation, testing costs and construction of field production facilities. We expect the 183(1) well to be tied in and on production in the second quarter of 2022. Future capital plans for the project include stimulation and tie-in of our 197(1) well and drilling additional "fit-for-purpose" development wells, with the 197(1) stimulation and tie-in and the first "fit for purpose" development well (MURS-1) planned first in 2022, with total estimated capital expenditures on these projects of \$8.8 million. A second development well (MUR-1) is expected to follow in late 2022, at an estimated cost of \$5.8 million.

#### Natural Gas Exploration Prospects (Block 182 & Block 183):

Alvopetro's E&E assets include Block 182 and the portion of Block 183 that is not part of the Murucututu project. In 2022, Alvopetro plans to drill two wells on these blocks, the 182-C1 well and the 183-B1 well, with the first well, 182-C1, spud on March 2, 2022. In 2021, we completed civil construction, purchased long lead items and incurred other preliminary costs totalling \$1.0 million relating to these two projects. Total future drilling costs of \$6.7 million are anticipated for these two wells in 2022. Future capital expenditures on these projects will depend on drilling results.

#### OIL ASSETS:

The Company has two oil fields (Bom Lugar and Mãe-da-lua), with marginal oil production. Total oil sales averaged 2 bopd in 2021 (5 bopd in 2020, all from the Mãe-da-lua field). Alvopetro has two oil development prospects on the Bom Lugar field, the first of which comprises the 2P reserves value assigned by GLJ in the *"Property, plant and equipment ("PP&E")* 



Assets" table above. On the Mãe-da-lua field, the 2P reserves assigned in the table above relate to a stimulation of the existing well to improve overall production.

# FINANCIAL AND OPERATING REVIEW

#### **Sales Volumes**

	Thr	ee Months Ende	Year	Year Ended		
		December 31,		Decem	ber 31,	
	2021	2020	Change (%)	2021	2020	
Total sales volumes by product:						
Natural gas (Mcf)	1,284,914	1,026,982	25	4,933,625	1,956,637	
NGLs – condensate (bbls)	9,459	8,197	15	37,582	16,148	
Oil (bbls)	170	-	-	786	1,657	
Total sales (boe)	223,781	179,361	25	860,639	343,911	
Average daily sales volumes by product:						
Natural gas (Mcfpd)	13,966	11,163	25	13,517	5,346	
NGLs – condensate (bopd)	103	89	16	103	44	
Oil (bopd)	2	-	-	2	5	
Average daily sales (boepd)	2,432	1,950	25	2,358	940	

Natural gas sales in Q4 2021, continued at levels consistent with Q2 2021 and Q3 2021. Average daily sales in Q4 2021 increased 25% from Q4 2020 and 151% in the year-ended December 31, 2021 compared to 2020 as natural gas sales commenced on July 5, 2020, contributing to only one-half of the year in the prior period.





#### **Average Realized Sales Prices**

	Th	ree Months Ende	Year Ended		
		December 31,		December 31,	
	2021	2020	Change (%)	2021	2020
Average realized prices <sup>(1)</sup> :					
Natural gas (\$/Mcf)	7.07	5.36	32	6.50	5.36
NGL – condensate (\$/bbl)	84.36	46.97	80	75.89	46.57
Oil (\$/bbl)	76.47	-	-	63.61	36.81
Total (\$/boe)	44.22	32.82	35	40.64	32.88
Average benchmark prices:					
Brent oil (\$/bbl)	79.61	44.32	80	70.86	41.96
Henry Hub (\$/MMBtu)	4.75	2.52	88	3.89	2.03
National Balancing Point (\$/MMBtu)	30.44	5.35	469	15.80	3.23
Average contracted natural gas price under GSA <sup>(2)</sup>					
BRL/m <sup>3</sup>	1.31	0.96	36	1.16	0.97
Average foreign exchange rate (\$1 USD = BRL)	5.586	5.392	4	5.396	5.158

(1) See "Non-GAAP and Other Financial Measures" section within this MD&A.

(2) Under the terms of the GSA, the volumes delivered are adjusted for heat content in the determination of the final amounts paid, representing a gross-up of approximately 7% to the contracted natural gas price, which contributes to a higher realized price overall relative to the contractual price.

The natural gas price under our long-term GSA with Bahiagas is set semi-annually (as of February 1<sup>st</sup> and August 1<sup>st</sup>) based on a trailing weighted average of USD benchmark prices for Brent, Henry Hub and National Balancing Point, incorporating both a floor and ceiling price, which were \$5.28/MMBtu and \$8.98/MMBtu, respectively, as of February 1, 2021 and \$5.52/MMBtu and \$9.38/MMBtu, respectively as of August 1, 2021 (August 1, 2020 - \$5.23/MMBtu and \$8.89/MMBtu). The natural gas price is then converted to a Brazilian Real ("BRL") denominated natural gas price based on a historical average foreign exchange rate and billed monthly in BRL at the BRL-denominated natural gas price until the next price reset. As all invoices are issued in BRL, actual receipts and revenue recognized in equivalent USD will be subject to exchange rate variations. See "Foreign Exchange" discussion below.

As a result of the decline in the global commodity prices, Alvopetro's natural gas price was set to the floor price on both the August 1, 2020 and February 1, 2021 semi-annual price determinations, adjusting to BRL0.96/m<sup>3</sup> and BRL1.06/m<sup>3</sup>, respectively. With improving global commodity prices in 2021, our contracted price increased 24% to BRL1.31/m<sup>3</sup> effective August 1, 2021. With the increased contracted price, Alvopetro's realized natural gas price increased 32% to \$7.07/Mcf in Q4 2021 compared to Q4 2020. Alvopetro's realized natural gas price in Q4 2021 was consistent with Q3 2021 despite the higher contracted price applicable for the full quarter compared to only two months in Q3 2021 due to the depreciation of the BRL relative to the USD which averaged 5.59 in Q4 2021 compared to 5.23 in Q3 2021.

Condensate production from both the Caburé unit and gas processing facility is sold pursuant to contracts based on Brent plus a premium. With average Brent prices increasing since Q4 2020 and including the premium received on condensate sales, our realized sales price on condensate improved 80% this quarter.

Oil sales from the Bom Lugar field and the Mãe-da-lua fields are sold at a discount to Brent.

## Natural Gas, Oil and Condensate Sales Revenue

	Th	Three Months Ended December 31,			Year Ended December 31,	
	2021	2020	Change (%)	2021	2020	
Natural gas	9,085	5,502	65	32,078	10,495	
Condensate	798	385	107	2,852	752	
Oil	13	-	-	50	61	
Total revenues	9,896	5,887	68	34,980	11,308	



Alvopetro's revenues increased \$4.0 million compared to Q4 2020 due to the 25% increase in daily sales volumes and the 35% increase in the average realized sales price.

#### Royalties

	Th	Three Months Ended December 31,			Year Ended December 31,		
	2021	2020	Change (%)	2021	2020		
Royalties	945	271	249	3,107	740		
Royalties per boe (\$) <sup>(1)</sup>	4.22	1.51	179	3.61	2.15		
Royalties as a percentage of sales (%) <sup>(1)</sup>	9.5%	4.6%	107	8.9%	6.5%		

(1) See "Non-GAAP and Other Financial Measures" section within this MD&A.

The majority of Alvopetro's properties (including the Caburé and Murucututu natural gas fields) are subject to a base 10% government royalty plus a 1% landowner royalty. The Bom Lugar field is subject to a base 5% government royalty plus a 0.5% landowner royalty. There is an additional 2.5% gross-overriding royalty on the portion of the Caburé and Murucututu natural gas assets that were previously on Block 197, the Mãe-da-lua field and Block 182.

Royalties on natural gas are based on production volumes at an inherent reference price attributable to the raw natural gas produced at the wellhead (prior to midstream processing), resulting in lower effective royalty rates compared to base royalty rates. As Henry Hub spot prices are a significant component of the reference price used for royalties, Alvopetro's effective royalty rate fluctuates with changes in Henry Hub prices. With higher Henry Hub prices in the fourth quarter of 2021 compared to 2020, Alvopetro's effective royalty rate increased as a percentage of sales.

In 2021, the ANP introduced legislation to reduce the government royalty rate for medium and small producers from the rate of 10% to 7.5% and 5.0%, respectively. Alvopetro has applied for the rate reduction and expects to qualify as a medium producer which would reduce the government royalty rate to 7.5% on the majority of our properties, once approved by the ANP.



#### **Production Expenses**

	Th	Three Months Ended December 31,			Year Ended December 31,		
	2021	2020	Change (%)	2021	2020		
Production expenses by type:							
Personnel costs	88	63	40	286	193		
Facility and pipeline costs	443	311	42	1,672	573		
Other fixed costs	243	214	14	939	519		
Variable costs	35	20	75	199	51		
Workover costs	-	-	-	38	-		
Total production expenses	809	608	33	3,134	1,336		



	Th	Three Months Ended December 31,			Year Ended December 31,	
	2021	2020	Change (%)	2021	2020	
Production expenses per boe:						
Personnel costs	0.39	0.35	11	0.34	0.56	
Facility and pipeline costs	1.98	1.74	14	1.94	1.67	
Other fixed costs	1.09	1.19	(8)	1.09	1.50	
Variable costs	0.16	0.11	45	0.23	0.15	
Workover costs	-	-	-	0.04	-	
Total production expenses per boe (\$) <sup>(1)</sup>	3.62	3.39	7	3.64	3.88	

(1) See "Non-GAAP and Other Financial Measures" section within this MD&A.

The majority of the Company's production expenses relate to fees paid to Enerflex for operation of the Facility and the transfer pipeline and agreed unit operating costs with our partner on the Caburé upstream assets. Production expenses have increased from both Q4 2020 (33%) and from the year ended December 31, 2020 (135%). However, as the majority of Alvopetro's costs are fixed in nature, costs on a per boe basis have increased only 7% in Q4 2021 and have decreased by 6% in 2021 compared to 2020. Production costs per boe in Q4 2021 were relatively consistent with Q3 2021 (\$3.64 per boe). Since coming on production in the third quarter of 2020, Alvopetro's production costs have remained below \$4.00 per boe each quarter.





#### **Operating Netback**

	Three	e Months Ende	Year Ended		
	D	ecember 31,		December 31,	
	2021	2020	Change (%)	2021	2020
Operating netback <sup>(1)</sup>					
Natural gas, oil and condensate revenues	9,896	5,887	68	34,980	11,308
Royalties	(945)	(271)	249	(3,107)	(740)
Production expense	(809)	(608)	33	(3,134)	(1,336)
Operating netback	8,142	5,008	63	28,739	9,232
Operating netback per boe <sup>(1)</sup> :					
Natural gas, oil and condensate revenues	44.22	32.82	35	40.64	32.88
Royalties	(4.22)	(1.51)	179	(3.61)	(2.15)
Production expense	(3.62)	(3.39)	7	(3.64)	(3.88)
Operating netback per boe	36.38	27.92	30	33.39	26.85

(1) See "Non-GAAP and Other Financial Measures" section within this MD&A.

Overall, Alvopetro's operating netback improved \$8.46 per boe in Q4 2021 compared to Q4 2020 due to the improved realized sales prices on both natural gas and condensate sales, partially offset by higher royalties.



# Change in Operating Netback per boe by Component - Q4 2020 vs. Q4 2021

Alvopetro's operating netback in Q4 2021 was consistent with Q3 2021 with slightly higher realized sales prices offset by higher royalties.



## Change in Operating Netback per boe by Component - Q3 2021 vs. Q4 2021



#### **Other Income**

	Th	Three Months Ended			nded
		December 31,		Decembe	er 31,
	2021	2020	Change (%)	2021	2020
Tax recoveries from ongoing operations	121	-	-	629	-
Retroactive tax credits	-	-	-	390	-
Interest	6	5	20	20	24
Water disposal and other	17	12	42	35	51
Total Other Income	144	17	747	1,074	75

In the year-ended December 31, 2021, the Company reported other income of \$1.1 million, largely with respect to tax credits and recoveries. Of the \$1.0 million recognized for tax recoveries and retroactive tax credits, \$0.4 million was recognized in respect of a change in tax legislation applicable to historical amounts claimed. Other income also includes interest income on cash balances and water disposal revenue.

## General and Administrative ("G&A") Expenses

	Th	ree Months End	Year Ended		
		December 31,		Decem	ber 31,
G&A Expenses, by type:	2021	2020	Change (%)	2021	2020
Personnel	1,454	422	245	3,469	2,595
Travel	16	3	433	31	17
Office and IT costs	49	27	82	159	115
Professional fees	169	157	8	748	419
General corporate costs	355	194	83	1,168	652
Gross G&A	2,043	803	154	5,575	3,798
Capitalized G&A	(399)	(59)	576	(905)	(728
G&A expenses	1,644	744	121	4,670	3,070
\$ per boe <sup>(1)</sup>	7.35	4.15	77	5.43	8.93

(1) See "Non-GAAP and Other Financial Measures" section within this MD&A.

G&A expenses increased in both the three months and year-ended December 31, 2021 compared to the same periods in 2020 due mainly to increased personnel costs, increased professional fees and general corporate costs (which includes public company costs, directors' fees, insurance and other costs). G&A costs in Q4 2021 include final short-term incentive bonuses for personnel, contributing to increased personnel costs compared to Q4 2020 and Q3 2021.





#### Cash Flow from Operating Activities and Funds Flow from Operations

	Th	Three Months Ended December 31,			Year Ended December 31,	
	2021	2020	Change (%)	2021	2020	
Cash flows from operating activities	7,088	3,124	127	24,291	3,061	
Per share – basic (\$)	0.21	0.09	133	0.73	0.09	
Per share – diluted (\$)	0.20	0.09	122	0.70	0.09	
Funds flow from operations <sup>(1)</sup>	6,480	4,252	52	24,637	6,216	
Per share – basic (\$)	0.19	0.13	46	0.74	0.19	
Per share – diluted (\$)	0.18	0.13	38	0.71	0.18	

(1) See "Non-GAAP and Other Financial Measures" section within this MD&A.

Funds flow from operations and cash flows from operations increased compared to the same periods in 2020 due mainly to higher revenues and other income, partially offset by increased royalties, production expense, G&A expense, current tax expense and, in the case of cash flows from operating activities, additional cash flows from changes in non-cash working capital. Compared to Q3 2021, funds flow from operations decreased \$1.5 million as other income decreased \$0.8 million due to non-recurring amounts reflected in Q3 2021 and G&A expense increased \$0.5 million in Q4 2021 due to final 2021 bonus adjustments.

#### **Foreign Exchange**

The Company's reporting currency is the USD, and its functional currencies are the USD and the BRL. Substantially all costs incurred in Brazil are in BRL and the Company incurs head office costs in both USD and Canadian dollars ("CAD"). In each reporting period, the change in the values of the BRL and the CAD relative to the Company's reporting currency are recognized. Foreign exchange rates for the reporting periods as specified are as follows:

		As at	% Appreciation (I of BRL/CAD	•	
	December 31,	September	December 31,		
	2021	30, 2021	2020	Q4 2021	YTD 2021
Rate at end of period:					
\$1 USD = BRL	5.581	5.439	5.197	(2.6)	(7.4)
\$1 USD = CAD	1.268	1.274	1.273	0.5	0.4

		% AppreciationThree Months EndedYear Ended(Depreciation) ofDecember 31,December 31,BRL/CAD to USD				on) of
	2021	2020	2021	2020	Q4	YTD
Average rate in the period:						
\$1 USD = BRL	5.586	5.392	5.396	5.158	(3.6)	(4.6)
\$1 USD = CAD	1.260	1.303	1.253	1.340	3.3	6.5

The assets and liabilities of Alvopetro's Brazilian subsidiaries are translated to USD at the exchange rate on the reporting period date. The income and expenses of BRL-denominated items are translated to USD at the exchange rates on the date of the relevant transactions. All resulting foreign currency differences are recorded in exchange gain or loss on translation of foreign operations in other comprehensive income or loss. The BRL depreciated 3% from September 30, 2021, and 7% from December 31, 2020, resulting in exchange losses recognized in other comprehensive income.

Foreign exchange fluctuations on USD-denominated amounts advanced to the Brazilian subsidiaries are recorded in exchange gains or losses on translation of foreign operations and included in other comprehensive income, to the extent settlement is neither forecasted nor likely to occur in the foreseeable future. Where future settlement is anticipated in the foreseeable future, foreign exchange gains or losses on the amount expected to be settled are recognized in earnings. The Company recorded \$0.6 million of foreign exchange losses in the three months ended December 31, 2021, and \$1.8 million in the year ended December



31, 2021, with respect to fluctuations in foreign exchange on intercompany amounts anticipated to be repaid in the foreseeable future (December 31, 2020 - \$1.8 million foreign exchange gain).

As discussed above, the Company is exposed to foreign exchange fluctuations on its natural gas revenues. With respect to Alvopetro's natural gas price reset on February 1, 2021 and August 1, 2021 the price determined in BRL was based on average historical exchange rates of 5.38 and 5.39, respectively. In the three months ended December 31, 2021, the actual average rate was 5.59, a 4% depreciation compared to rates in the natural gas price determinations effective February 1, 2021 and August 1, 2021. The following table denotes the overall estimated impact on natural gas revenues of a 5% and 10% depreciation and appreciation of the BRL relative to the USD:

	Three Mor Decem	nths Ended ber 31,	Year E Decem	Ended ber 31,
	2021	2020	2021	2020
Increase (Decrease) to Natural Gas Revenues from:				
5% Appreciation of BRL to USD	478	275	1,688	525
10% Appreciation of BRL to USD	1,009	550	3,564	1,050
5% Depreciation of BRL to USD	(433)	(262)	(1,528)	(500)
10% Depreciation of BRL to USD	(826)	(500)	(2,916)	(954)

To manage exposure to foreign exchange volatility with respect to the BRL, the Company has periodically entered into BRL/USD forward exchange rate contracts. During the years ended December 31, 2021 and 2020, the Company entered into a total of BRL15.6 million forward exchange contracts with settlements based on fixed rates between 4.99 and 5.59 per USD and settlement dates spanning from February to December 2021. The Company recognized the fair value of these contracts in the statement of financial position with changes in fair value recognized as an unrealized gain or loss included in net income. Realized gains or losses are recognized in the period the contracts are settled. Total gains with respect to these contracts for the year ended December 31, 2021 were 0.03 million (2020 - 0.01 million loss). No forward contracts were outstanding as of December 31, 2021. The Company recognizes the fair value of these contracts in the statement of financial position with changes in fair value of these contracts were outstanding as of December 31, 2021. The Company recognizes the fair value of these contracts in the statement of financial position with changes in fair value are ecognized as an unrealized gain or loss included in the period the contracts are settled. Total gains with respect to these contracts for the year ended December 31, 2021 were 0.03 million (2020 - 0.01 million loss). No forward contracts were outstanding as of December 31, 2021. The Company recognizes the fair value of these contracts in the statement of financial position with changes in fair value recognized as an unrealized gain or loss are recognized in the period the contracts are settled.

Head office transactions in CAD are recognized at the rates of exchange prevailing at the date of the transactions. At the end of each reporting period, monetary assets and liabilities are translated at the exchange rate in effect at the reporting period date. Non-monetary assets, liabilities, revenues and expenses are translated at transaction date exchange rates. Exchange gains or losses are included in the determination of earnings as foreign exchange gains or losses.

## **Depletion and Depreciation**

	Three Months Ended December 31,			Year Ended December 31,		
	<b>2021</b> 2020 Change			2021	2020	
	Restated <sup>(1)</sup>	Restated <sup>(1)</sup>	(%)	Restated <sup>(1)</sup>	Restated <sup>(1)</sup>	
Depletion and depreciation on PP&E	1,698	674	152	6,736	1,315	
Depreciation of right of use assets	235	260	(10)	971	574	
Depletion and depreciation expense	1,933	934	107	7,707	1,889	
\$ per boe <sup>(2)</sup>	8.64	5.21	66	8.95	5.49	

(1) Please refer to the section entitled "Restatement of the Consolidated Financial Statements" within this MD&A and Note 21 of the notes to the restated consolidated financial statements for details of this restatement.

(2) See "Non-GAAP and Other Financial Measures" section within this MD&A.

Depletion and depreciation expense increased in 2021 compared to all periods in 2020 as a result of increased production volumes and increased depletable base following the transfer of the carrying value of the Murucututu/Gomo natural gas asset to PP&E in the first quarter of 2021.



#### Impairment

		Three Months Ended December 31,		Ended nber 31,
				2020
	2021	2020	2021	Restated <sup>(1)</sup>
Bom Lugar	-	-	-	1,012
Assets held for sale	-	4	-	4
Other	-	70	-	70
Total impairment (recovery) expense	-	74	-	1,086

(1) Please refer to the section entitled "Restatement of the Consolidated Financial Statements" within this MD&A and Note 21 of the notes to the restated consolidated financial statements for details of this restatement.

The majority of the impairment in 2020 relates to the Company's Bom Lugar field. As a result of the impact of the COVID-19 pandemic and the significant decline in current and forecasted crude oil prices, the Company recognized an impairment of the Bom Lugar asset of \$1.0 million in the three months ended March 31, 2020. The remainder of impairment in Q4 2020 relates to write-downs in assets held for sale and other working capital amounts related to a disposition of assets. There were no indications of impairment or impairment reversal in 2021.

#### **Share-Based Compensation Expense**

	Three Months Ended December 31,			Year Ended December 31,	
	2021	2020	Change (%)	2021	2020
Share based compensation expense	139	101	38	440	242

Share-based compensation expense is a non-cash expense based on the fair value of stock options, restricted share units ("RSUs") and deferred share units ("DSUs") granted and amortized over the respective vesting periods. At December 31, 2021, 1.4 million stock options, 0.4 million RSUs and 0.2 million DSUs were outstanding compared to 2.3 million stock options, 0.3 million RSUs and no DSUs at December 31, 2020. Despite reduced stock options outstanding, as a result of increased RSUs and DSUs along with higher exercise prices for new stock options granted, overall share-based compensation expense increased in 2021.

#### **Finance Expenses**

	Three Months Ended December 31,			Year Ended December 31,		
	2021	2020	Change (%)	2021	2020	
Lease interest	305	350	(13)	1,355	706	
Accretion on decommissioning liabilities	23	24	(4)	82	80	
Amortization of deferred financing costs	156	176	(11)	635	650	
Interest on Credit Facility	154	446	(65)	1,079	1,638	
Gross finance expenses	638	996	(36)	3,151	3,074	
Capitalized to E&E and PP&E	-	-	-	-	(737)	
Finance expenses	638	996	(36)	3,151	2,337	

Finance expenses decreased in Q4 2021 compared to Q4 2020 due mainly to decreased interest on our Credit Facility as a result of the repayment of \$9.0 million in advances and elimination of the 3% payment in kind (PIK) interest effective April 15, 2021. The increase to interest on capital leases is due to the commencement of the capital lease with Enerflex at the end of the second quarter of 2020, offset by decreased interest on our Credit Facility.

The portion of interest on the Credit Facility and the amortization of deferred financing costs directly attributable to eligible PP&E and E&E activities was capitalized to those assets in 2020.



#### **Income Tax Expense**

	Thr	ee Months Endeo	Year Ended		
	December 31,			December 31,	
	2021	2020		2021	2020
	Restated <sup>(1)</sup>	Restated <sup>(1)</sup>	Change (%)	Restated <sup>(1)</sup>	Restated <sup>(1)</sup>
Current income tax expense	133	-	-	507	-
Deferred income tax expense (recovery)	218	1,180	(82)	5,919	(7,129)
Total	351	1,180	(70)	6,426	(7,129)

(1) Please refer to the section entitled "Restatement of the Consolidated Financial Statements" within this MD&A and Note 21 of the notes to the restated consolidated financial statements for details of this restatement.

The statutory corporate tax rate in Brazil is 34%. This is comprised of a basic 15% corporate income tax, plus 10% surtax and a 9% social contribution tax. In the third quarter of 2021, the Company received approval from tax authorities in Brazil for Supertintendência de Desenvolvimento do Nordeste ("SUDENE"), a regional tax incentive offered in Bahia State. Under the incentive, special deductions reduce the inherent current tax payable on qualifying projects to an effective rate of 15.25% where SUDENE profits align with taxable income under the actual profit regime. The SUDENE incentive applies to natural gas profits Alvopetro earns for a period of ten taxation years, commencing January 1, 2021 and ending December 31, 2030. The benefit of the SUDENE incentive was recognized for the 2021 taxation year reducing current tax expense to \$0.5 million for the year and \$0.1 million in Q4 2021.

With respect to deferred tax, as Alvopetro expects the majority of temporary differences to reverse during the SUDENE period, Alvopetro has estimated the future tax rate applicable to temporary differences based on the SUDENE rate of 15.25%. As the Company had a deferred tax asset balance on January 1, 2021 of \$7.8 million, the impact of the rate reduction from the statutory tax of 34% to the SUDENE rate of 15.25% increased deferred tax expense in 2021 by \$4.1 million as all available tax pools and other deductible temporary differences are now valued at a lower future tax rate, contributing to the majority of the deferred tax expense in the year and resulting in an overall effective tax rate of 53% (computed as total income tax expense divided by income before taxes). In Q4 2021, the Company's effective tax rate is 11% due to the impact of the SUDENE incentive and SUDENE benefits in excess of taxable income computed under the actual profit regime.

The Company also recognized a previously unrecognized deferred tax asset of \$0.7 million and \$3.9 million in the three months and year ended December 31, 2021, respectively. The deferred tax asset recognized relates to foreign exchange losses on intercompany loans expected to be repaid in the foreseeable future. As such amounts were previously recognized in other comprehensive income (loss) for accounting purposes, the deferred tax asset was also recognized in other comprehensive income with no benefit recognized through deferred tax expense.

#### Net Income

		Three Months Ended December 31,			nded oer 31,
	2021	2020	Change	2021	2020
	Restated <sup>(1)</sup>	Restated <sup>(1)</sup>	(%)	Restated <sup>(1)</sup>	Restated <sup>(1)</sup>
Net income	2,778	2,815	(1)	5,595	9,640
Per share – basic (\$)	0.08	0.09	(11)	0.17	0.29
Per share – diluted (\$)	0.08	0.08	-	0.16	0.27

(1) Please refer to the section entitled "Restatement of the Consolidated Financial Statements" within this MD&A and Note 21 of the notes to the restated consolidated financial statements for details of this restatement.

The Company reported net income of \$2.8 million in Q4 2021 which was consistent with net income in Q4 2020. In the year ended December 31, 2021, net income decreased \$4.0 million, despite the \$18.4 million increase in funds flow from operations, due to the \$5.8 million increase in DD&A expense, foreign exchange losses of \$2.0 million (compared to a gain of \$1.8 million in 2020), and deferred tax expense of \$5.9 million in 2021 (compared to a recovery of \$7.1 million in 2020).



#### **Capital Expenditures**

	Three Mor	nths Ended	Year	Ended	
	Decem	ber 31,	December 31,		
Capital Expenditures by Type	2021	2020	2021	2020	
E&E					
Drilling and completions	150	325	621	538	
Facility & equipment	-	-	17	26	
Land, lease, and similar payments	-	-	8	34	
Inventory purchases	-	-	526	46	
Capitalized G&A	142	59	356	237	
Capitalized finance expense	-	-	-	114	
Total E&E	292	384	1,528	995	
PP&E					
Facility & equipment	885	65	1,950	1,694	
Drilling & completion	13	-	195	-	
Land, lease and similar payments	21	-	42	5	
Furniture & fixtures	2	3	29	6	
Capitalized G&A	257	-	549	491	
Capitalized finance expense	-	-	-	623	
Other	-	-	220	-	
Total PP&E	1,178	68	2,985	2,819	
Total Capital Expenditures by Type <sup>(1)</sup>	1,470	452	4,513	3,814	

	Three Mon Decemb		Year Ended December 31,		
Capital Expenditures by Property	<b>2021</b> 2020		2021	2020	
E&E					
Blocks 182, 183, & 197	292	384	1,002	949	
Inventory	-	-	526	46	
Total E&E	292	384	1,528	995	
PP&E					
Caburé and associated midstream assets	26	65	56	2,813	
Murucututu/Gomo (Blocks 183, 197)	1,144	-	2,690	-	
Bom Lugar	6	-	14	-	
Corporate & other	2	3	225	6	
Total PP&E	1,178	68	2,985	2,819	
Total Capital Expenditures by Property <sup>(1)</sup>	1,470	452	4,513	3,814	

(1) Includes non-cash capital expenditures of \$0.4 million for the year ended December 31, 2020.

Capital expenditures in Q4 2021 and for the year ended December 31, 2021 were focused on the 9-km transfer pipeline to connect the 183(1) well on our Murucututu field to the Caburé pipeline, with \$0.9 million incurred in Q4 2021 and \$2.0 million in 2021, and preliminary costs and long-lead purchases for our two upcoming exploration wells (the 182-C1 well and the 183-B1 well), with \$0.1 million incurred in Q4 2021 and \$1.0 million in 2021. Additional capital expenditures in 2021 included \$0.9 million in capitalized G&A.



#### **Summary of Annual Results**

	2021	2020	2019
Financial			
Natural gas, oil and condensate sales	34,980	11,308	240
Net income (loss) – restated <sup>(1)</sup>	5,595	9,640	(5,011)
Per share – basic restated (\$) <sup>(1)</sup>	0.17	0.29	(0.16)
Per share –diluted restated (\$) <sup>(1)</sup>	0.16	0.27	(0.16)
Cash flows from operations	24,291	3,061	(2,509)
Per share – basic (\$) <sup>(2)</sup>	0.73	0.09	(0.08)
Per share –diluted (\$) <sup>(2)</sup>	0.70	0.09	(0.08)
Funds flow from operations <sup>(3)</sup>	24,637	6,216	(2,828)
Per share – basic (\$) <sup>(2)</sup>	0.74	0.19	(0.09)
Per share –diluted (\$) <sup>(2)</sup>	0.71	0.18	(0.09)
Working capital surplus (deficit) <sup>(3)</sup>	9,097	5,539	(6,701)
Total assets – restated <sup>(1)</sup>	73,630	74,150	63,585
Non-current liabilities	14,515	24,330	6,389
Average daily sales:			
Natural gas (Mcfpd)	13,517	5,346	-
NGL – condensate (bopd)	103	44	3
Oil (bopd)	2	5	8
Total average daily sales (boepd)	2,358	940	11

(1) Please refer to the section entitled "Restatement of the Consolidated Financial Statements" within this MD&A and Note 21 of the notes to the restated consolidated financial statements for details of this restatement.

(2) The weighted average number of diluted common shares outstanding in the computation of funds flow from operations and cash flows from operating activities per share is the same as for net income per share.

(3) See "Non-GAAP and Other Financial Measures" section within this MD&A.

Following commencement of natural gas sales from the Caburé field, the Company's average daily sales, natural gas, oil and condensate sales as well as net income, cash flows from operations and funds flow from operations all increased significantly from the second half of 2020 to the end of 2021. Net income in 2020 was also positively impacted by a foreign exchange gain and a deferred tax recovery whereas in 2021, the Company recognized a foreign exchange loss and overall tax expense. The Company generated net losses and cash outflows from operations in 2019.

With improved funds flow from operations, the Company's working capital surplus increased from a deficit as of December 31, 2019 to a surplus at the end of each of 2020 and 2021.

Total assets have increased 16% from 2019 primarily due to capital spending on the Company's Caburé natural gas project (including construction of the transfer pipeline, costs related to the gas processing facility, and Alvopetro's share of joint unit development costs) and our Murucututu natural gas project (including costs for the installation of the transfer pipeline connecting the 183(1) well to the Caburé pipeline).

The Company entered into the Credit Facility in 2019 and had drawn \$5.0 million as of December 31, 2019, with the remaining available funds drawn in 2020, bringing the total balance outstanding to \$15.4 million as of December 31, 2020. In 2021, the Company repaid total advances of \$9.0 million, reducing the balance outstanding to \$6.5 million as of December 31, 2021, contributing to the reduction in noncurrent liabilities from December 31, 2020. The Company's non-current liabilities were higher in 2020 and 2021 due to the commencement of the capital lease with Enerflex in the second quarter of 2020. As of December 31, 2021, the Company's total noncurrent capital lease obligation is \$7.5 million compared to \$7.8 million as of December 31, 2020 and \$0.1 million as of December 31, 2019.



#### **Summary of Quarterly Results**

	Q4 2021	Q3 2021	Q2 2021	Q1 2021	Q4 2020	Q3 2020	Q2 2020	Q1 2020
Financial							~~~~~	~~~~~
Natural gas, oil and condensate sales	9,896	9,963	8,182	6,939	5,887	5,320	40	61
Net income (loss) – restated <sup>(1)</sup>	2,778	(20)	3,784	(947)	2,815	9,987	(1,168)	(1,994)
Per share – basic restated $(\$)^{(1)}$	0.08	(0.00)	0.11	(0.03)	0.09	0.30	(0.04)	(0.06)
Per share – diluted restated $($)^{(1)}$	0.08	(0.00)	0.11	(0.03)	0.08	0.30	(0.04)	(0.06)
Cash flows from operating activities	7,088	7,234	5,665	4,304	3,124	1,971	(1,094)	(940)
Per share – basic $(\$)^{(2)}$	0.21	0.22	0.17	0.13	0.09	0.06	(0.03)	(0.03)
Per share diluted $(\$)^{(2)}$	0.20	0.20	0.16	0.13	0.09	0.06	(0.03)	(0.03)
Funds flow from operations <sup>(3)</sup>	6,480	7,930	5,471	4,756	4,252	3,610	(973)	(673)
Per share – basic (\$) <sup>(2)</sup>	0.19	0.24	0.16	0.14	0.13	0.11	(0.03)	(0.02)
Per share diluted (\$) <sup>(2)</sup>	0.18	0.22	0.16	0.14	0.13	0.11	(0.03)	(0.02)
Capital expenditures <sup>(4)</sup>	1,470	1,261	918	864	452	107	1,645	1,610
Operations								
Average realized prices <sup>(3)</sup> :								
Natural gas (\$/Mcf)	7.07	7.07	6.06	5.68	5.36	5.37	_	_
NGL – condensate (\$/bbl)	84.36	79.36	74.47	64.41	46.97	44.75	37.27	70.54
Oil (\$/bbl)	76.47	61.11	59.63	-	-0.57		30.25	50.66
	,	01.11	55.05				50.25	50.00
Average Foreign Exchange (\$1 USD = BRL)	5.586	5.229	5.291	5.483	5.392	5.377	5.385	4.466
Operating netback (\$/boe) <sup>(3)</sup>								
Realized sales price (\$/boe) <sup>(3)</sup>	44.22	44.04	38.08	35.45	32.82	32.79	31.13	60.10
Royalties <sup>(3)</sup>	(4.22)	(4.02)	(2.82)	(3.30)	(1.51)	(2.81)	(3.89)	(7.88)
Production expenses <sup>(3)</sup>	(3.62)	(3.64)	(3.68)	(3.63)	(3.39)	(3.99)	(28.02)	(43.35)
Operating netback (\$/boe) <sup>(3)</sup>	36.38	36.38	31.58	28.52	27.92	25.99	(0.78)	8.87
Average daily sales:								
Natural gas (Mcfpd)	13,966	14,102	13,512	12,464	11,163	10,105	-	-
NGL – condensate (bopd)	103	107	105	98	89	79	2	5
Oil (bopd)	2	2	5	-	-	-	12	6
Total average daily sales (boepd)	2,432	2,459	2,361	2,175	1,950	1,764	14	11

Notes:

(1) Please refer to the section entitled "Restatement of the Consolidated Financial Statements" within this MD&A and Note 21 of the notes to the restated consolidated financial statements for details of this restatement.

(2) The weighted average number of diluted common shares outstanding in the computation of funds flow from operations and cash flows from operating activities per share is the same as for net income per share.

(3) See "Non-GAAP and Other Financial Measures" section within this MD&A.

(4) Includes non-cash capital expenditures of \$0.35 million in Q2 2020 and \$0.05 million in Q1 2020.

Average daily sales volumes decreased 1% from Q3 2021 but overall natural gas, oil and condensate sales decreased only \$0.07 million due to a marginal increase in the average realized sales price per boe in Q4 2021. Overall, the Company's operating netback of \$36.38 per boe was consistent with Q3 2021. Net income improved \$2.8 million from Q3 2021 despite reduced funds flow from operations due to lower DD&A and a lower foreign exchange loss in Q4 2021 compared to Q3 2021. In all quarters prior to the third quarter of 2020 efforts by the Company were focused on the development of the Caburé asset and related midstream infrastructure, with minimal revenue from oil and condensate sales, resulting in net losses and negative funds flow from operations in these prior periods.



#### **Commitments and Contingencies**

The following is a summary of Alvopetro's contractual commitments as at December 31, 2021:

			-1 6	
Commitments	< 1 Year	1-3 Years	Thereafter	Total
Minimum work commitments <sup>(1)</sup>				
Block 183	597	-	-	597
Bom Lugar	-	63	-	63
Mãe-da-lua	-	-	63	63
Minimum work commitments	597	63	63	723
Gas Treatment Agreement	1,454	3,259	8,961	13,674
Total commitments	2,051	3,322	9,024	14,397

Notes:

(1) Under the terms of the ANP concession contracts for each of our exploration blocks, the Company has commitments which must be completed prior to the applicable phase expiry date. The Company is required to post a performance guarantee with the ANP for all commitments in the table above.

Amounts presented above for the Gas Treatment Agreement represent the monthly service fees for operation and maintenance of the Facility and Alvopetro's 11-kilometre transfer pipeline and expected monthly costs associated with the facility expansion expected to be completed in June 2022. Once the facility expansion is completed, it is expected such amounts will be treated as capital lease obligation and reflected on the consolidated statements of financial position.

As is customary in the oil and gas industry, we may at times have work plans in place to reserve or earn certain acreage positions or wells. If we do not complete such work plans in a timely manner, the acreage positions or wells may be lost, or penalties may be applied.

The Company currently has no contingent liabilities recorded; however, in the normal course of operations, we may have disputes with industry participants for which we currently cannot determine the ultimate results. The Company has a policy to record contingent liabilities as they become determinable and the probability of loss is more likely than not. The outcome of adverse decisions in any pending or threatened proceedings related to these and other matters could have a material impact on the Company's financial position, results of operations or cash flows.

## LIQUIDITY AND CAPITAL RESOURCES

## **Credit Facility**

In 2019, the Company entered into the \$15 million Credit Facility which is secured by all of Alvopetro's assets and was originally set to mature on October 8, 2022. During the three months ended June 30, 2021, the Credit Facility was amended to extend the maturity date to October 8, 2023. The Credit Facility is subject to cash interest of 9.5% per annum, payable monthly. Originally, additional PIK interest at a rate of 3.0% per annum applied but was eliminated effective April 15, 2021. Amounts drawn under the Credit Facility are repayable at maturity, however amounts may be repaid in part or full at Alvopetro's option without penalty. Alvopetro has repaid a total of \$9.0 million to date in 2021, bringing the balance outstanding to \$6.5 million as of December 31, 2021. In February 2022, Alvopetro repaid a further \$1.5 million, bringing the outstanding balance to \$5.0 million as of March 17, 2022.

The Credit Facility contains certain customary financial and non-financial covenants, standard representations and warranties and events of default. Events of default include, but are not limited to, failure to pay amounts owing (advances or interest) when due and payable, incorrect representations and warranties, failure to comply with financial and non-financial covenants, cross-default provisions on other debt outstanding, invalidity of security registrations, and change of control. To the extent an event of default occurs, the lenders can terminate their obligations for further advances under the Credit Facility and declare all advances outstanding immediately due and payable.



# Financial Covenants

Under the terms of the Credit Facility, Alvopetro must comply with financial covenants as of December 31, 2020, being a minimum debt service ratio of 1.30 and a maximum leverage ratio of 2.25. For the period ended December 31, 2021, the covenants are computed for the period January 1, 2021 to December 31, 2021 and determined as follows:

Covenant	Covenant threshold	December 31, 2021	December 31, 2020
Debt Service Ratio	Minimum of 1.30:1	6.04:1	3.57:1
Leverage Ratio	Maximum of 2.25:1	(0.19):1	1.33:1

Debt Service Ratio is computed based on the "Adjusted Consolidated EBITDA" to "Consolidated Debt Service". Both Adjusted Consolidated EBITDA and Consolidated Debt Service are defined terms in the Credit Facility agreement. Adjusted Consolidated EBITDA is "Consolidated EBITDA" decreased by income taxes, capital expenditures, dividends and share repurchases in the period and increased or decreased by the net change in non-cash working capital in the period. Consolidated EBITDA is defined in the Credit Facility and is reconciled to net income by adding back depletion, depreciation, impairment, finance expenses, taxes, share based compensation, unrealized gains and losses and other non-cash items. In addition, for all periods commencing on July 1, 2020 (being those covenant calculations ending on December 31, 2020, March 31, 2021 and June 30, 2021), Adjusted Consolidated EBITDA was increased by the Company's cash and cash equivalents as of June 30, 2020. Consolidated Debt Service is defined to include all interest and principal payments on the Company's outstanding debt and capital lease obligations for the period.

The Leverage Ratio is computed as the ratio of "Adjusted Consolidated Indebtedness" to "Consolidated EBITDA". Adjusted Consolidated Indebtedness includes all debt of the Company reduced by the portion of debt attributable to the capital lease obligation outstanding to Enerflex and the unrestricted cash balance.

The Company is in compliance with all financial and non-financial covenants as of December 31, 2021.

#### Lease Liabilities

In 2018, Alvopetro entered into the 10-year Gas Treatment Agreement with Enerflex. Pursuant to the agreement, Enerflex constructed and operates the Facility to process natural gas from the Company's Caburé natural gas field. Enerflex also operates the Company's Caburé transfer pipeline. Alvopetro pays both a monthly equipment rental fee for the Facility as well as monthly service fees for operations and maintenance. The portion of the agreement that relates to the equipment rental is a right-of-use asset with a corresponding lease liability. The Facility was commissioned and became available for use during the second quarter of 2020 and the associated \$8.3 million right-of-use asset and lease liability were recognized at that time. The ongoing obligations to Enerflex will be satisfied in the normal course. The lease liability to Enerflex represents the majority of the Company's lease liabilities as at December 31, 2021. Additional lease liabilities outstanding relate to office space in Canada and Brazil and surface land access for our midstream assets. In the third quarter of 2021 Alvopetro notified Enerflex to increase the operational capacity of the Facility to 500,000 m3/d (17.7 MMcfpd) under the terms of the existing Gas Treatment Agreement. The additional firm capacity is expected to be available in 2022 and, once available, it is expected to be reflected as an increased lease liability.

The Company's lease liabilities are as follows:

	As at	
	December 31,	December 31,
	2021	2020
Lease liabilities, beginning of year	8,310	163
Additions	190	8,494
Finance expense	1,355	706
Lease payments	(1,856)	(1,014)
Foreign currency translation	(20)	(39)
Lease liabilities, end of year	7,979	8,310
Current	516	483
Non-current	7,463	7,827
Total, end of year	7,979	8,310



## **Cash and Working Capital**

At December 31, 2021, Alvopetro's cash and cash equivalents of \$11.5 million and its restricted cash of \$0.2 million were held as follows:

		U.S.	CAD	Brazil
	Total	Dollar	Dollar <sup>(1)</sup>	Real <sup>(1)</sup>
Cash held in Canada	7,869	7,464	405	-
Cash held in Brazil	3,600	-	-	3,600
Restricted cash - current	175	-	-	175
Total	11,644	7,464	405	3,775

(1) Amounts in the table above denote the U.S. dollar equivalent as at December 31, 2021.

The Company had cash of \$11.5 million and a total net working capital surplus of \$9.1 million at December 31, 2021. Positive cash flows from natural gas deliveries and associated condensate sales sufficient to fund the Company's operational activities, planned capital projects are expected going forward. In addition, the Company expects to have sufficient cash flows to fund future dividends, following the Board of Director's decision to commence quarterly dividends in the third quarter of 2021. However, the Company is exposed to a variety of risks which may adversely impact future cash flows. The Company manages this risk by forecasting cash flows for a minimum period of twelve months, which involves preparation of capital expenditure, operating and general and administrative budgets, all of which are monitored closely, and adjusted as necessary. The Company has flexibility on future capital plans, other than with respect to work commitments and the Board of Directors has discretion with respect to any future dividend amounts.

Exploration work commitments to be met in Brazil have been supported by a credit facility with a Canadian bank which allows for the issuance of LCs and letters of guarantee in support of the financial guarantees required by the ANP for Alvopetro's work commitments under the terms of its concession contracts associated with its exploration blocks. LCs and letters of guarantee issued may be supported by either cash collateral posted by Alvopetro or through an Account Performance Security Guarantee from Export Development Canada ("EDC"). As at December 31 2021, the total amount of LCs issued under the credit support facility was \$0.6 million (December 31, 2020 - \$0.6 million), the full balance of which was satisfied by EDC. The Company has a restricted cash balance of \$0.2 million as at December 31, 2021 (December 31, 2020 - \$0.1 million) primarily in respect of abandonment guarantees on the Company's oil fields.

The liability for decommissioning obligations of Alvopetro was \$0.6 million as at December 31, 2021, with \$0.1 million expected to be incurred within one year. The liability is adjusted each reporting period to reflect the passage of time, with the accretion charged to earnings, and for revisions to the estimated future cash flows, if applicable.

At December 31, 2021, the Company had \$1.6 million of equipment inventory to be utilized for future operations which is included in exploration and evaluation assets in the consolidated statement of financial position.

## **Dividend Initiation**

During the third quarter of 2021, Alvopetro initiated a quarterly dividend program, with the first dividend of \$0.06 per common share declared by the board of directors (the "Board") on September 21, 2021 to shareholders of record on September 29, 2021 and paid on October 15, 2021. The second quarterly dividend of \$0.06 per common shares was declared on December 15, 2021 to shareholders of record on December 30, 2021, and paid on January 14, 2022. All dividends are designated as "eligible dividends" for the purpose of the Income Tax Act (Canada).

The Company expects future dividends to be paid quarterly as part of Alvopetro's long-standing objective to balance spending from cash flows on reinvestment in growth opportunities with stakeholder returns. The decision to declare any future quarterly dividend and the amount of such dividend, if any, remains subject to the discretion of the Board and may vary depending on a variety of factors. There can be no assurance that dividends will be paid at the intended rate or at any rate in the future.



#### **Share Restructuring**

On September 7, 2021, Alvopetro completed a share restructuring, which involved a 2,100 to 1 share consolidation followed immediately by a 1 to 700 share split, for an effective consolidation of 3:1. Shareholders who held less than 2,100 common shares at the close of business on September 3, 2021 were entitled to receive a cash payment in exchange for their common shares equal to C\$1.12 per common share, based on the volume weighted average trading price of the common shares on the TSX Venture Exchange during the five consecutive trading days ending on and including September 3, 2021. Pursuant to the restructuring, a total of 1,265,306 common shares were repurchased for a total cost of \$1.1 million and the remaining shares were consolidated on an effective 3:1 basis. Alvopetro's common shares decreased from a total of 99.8 million shares outstanding to 32.9 million shares outstanding.

# **RESTATEMENT OF THE CONSOLIDATED FINANCIAL STATEMENTS**

The Company has determined that there was an error in prior periods in respect of the application of IAS 21 – The Effects of Changes in Foreign Exchange Rates on accounting for the purchase price adjustment associated with the original acquisition of the Company's Brazilian assets in the year-ended December 31, 2012 and the functional currency associated with such amounts. IAS 21 requires that fair value adjustments relating to acquisitions be carried in the functional currency of the subsidiary acquired, being BRL in the case of the 2012 acquisition. The Company had incorrectly carried such amounts in USD since the time of the acquisition. Given the devaluation of the BRL to USD since 2012, the adjustments as set out below were required to bring the accounting records in compliance with IAS 21. There is an overall decrease in the carrying value of the Company's E&E and PP&E assets, an associated increase in deferred tax asset as well as a decrease in depletion expense in the years ended December 31, 2020 and a decrease in impairment expense in the year ended December 31, 2020 and in years prior to December 31, 2020. The impact of the adjustments to the audited restated consolidated financial statements is summarized below. Also summarized below is the impact of the adjustments to all related disclosure within this MD&A. Please also refer to Note 21 of the audited restated consolidated financial statements for further details.

The restatement is not as a result of any change to the Company's operations or the Company's business and there is no impact on the overall cash position, the net cash flows from operating, investment or financing activities on the statement of cash flows for any of the aforementioned periods.

	December 31, 2019		January 1, 2020
	(Previously Reported)	Adjustment	(Restated)
E&E	35,971	(5,255)	30,716
PP&E	30,984	(2,576)	28,408
Retained Earnings (Deficit) <sup>(1)</sup>	(76,878)	3,562	(73,316)
Accumulated Other Comprehensive Loss <sup>(1)</sup>	(26,393)	(11,393)	(37,786)

#### Impact of the Restatement on the Consolidated Financial Statements

As at and for the year-ended December 31	1,
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		2021			2020	
	Previously			Previously		
	Reported	Adjustment	Restated	Reported	Adjustment	Restated
Impact on Consolidated Statements of Financial Posit	tion					
E&E	3,713	-	3,713	32,262	(6,498)	25,764
PP&E	48,748	(8,968)	39,780	25,843	(2,953)	22,890
Deferred tax asset	3,938	1,367	5,305	4,576	3,213	7,789
Retained Earnings (Deficit) <sup>(1)</sup>	9	6,477	6,486	(71,172)	7,496	(63,676)
Accumulated Other Comprehensive Loss <sup>(1)</sup>	(32,445)	(14,078)	(46,523)	(35,294)	(13,734)	(49,028)



	As at and for the year-ended December 31,					
	2021 20				2020	
	Previously			Previously		
	Reported	Adjustment	Restated	Reported	Adjustment	Restated
Impact on Consolidated Statements of Operations and	d Compreher	nsive Income (	Loss) <sup>(2)</sup>			
Depletion and depreciation expense	(8,606)		(7,707)	(2,070)	181	(1,889)
Impairment expense	-	-	-	(1,455)	369	(1,086)
Deferred tax (expense) recovery	(4,001)	(1,918)	(5,919)	3,745	3,384	7,129
Net Income	6,614	(1,019)	5,595	5,706	3,934	9,640
Exchange gain (loss) on translation of foreign operations	2,849	(344)	2,505	(8,901)	(2,341)	(11,242)
Comprehensive Income (loss)	9,463	(1,363)	8,100	(3,195)	1,593	(1,602)
Net income per share amounts:						
Basic	0.20	(0.03)	0.17	0.17	0.12	0.29
Diluted	0.19	(0.03)	0.16	0.16	0.11	0.27
(a)						
Impact on Consolidated Statements of Cash Flows <sup>(3)</sup>						
Operating Activities:	C C 1 4	(1.010)	5 505	F 700	2 0 2 4	0.640
Net income	6,614	(1,019)	5,595	5,706	3,934	9,640
Adjustments for non-cash items:		(222)			(101)	
Depletion and depreciation	8,606	(899)	7,707	2,070	(181)	1,889
Impairment	-	-	-	1,455	(369)	1,086
Deferred tax	4,001	1,918	5,919	(3,745)	(3,384)	(7,129)
Funds flow from operations	24,637	-	24,637	6,216	-	6,216
Cash flow from operating activities	24,291	-	24,291	3,061	-	3,061

(1) Adjustments to retained earnings (deficit) and accumulated other comprehensive loss include both the impact in the years ended December 31, 2020 and December 31, 2021 as well as the impact of adjustments on opening balances as at January 1, 2020 to reflect lower historical impairment expense and depletion expense as a result of reductions in the carrying values of E&E and PP&E. As these adjustments on past balances resulted in lower carrying values of both E&E and PP&E, corresponding historical impairment charges and depletion expense are reduced following the adjustments to the carrying value resulting in an increase to retained earnings, offset by an increase in accumulated other comprehensive loss.

- (2) The adjustments to reduce the carrying value of PP&E resulted in lower depletion and depreciation expense in both 2020 and 2021 and lower impairment expense in 2020. With respect to deferred tax, the Company recognized a previously unrecognized deferred tax asset as of September 30, 2020 and the reduction in the carrying value of the Company's E&E and PP&E balances contributes to a higher deferred tax asset recognition and a higher deferred tax recovery in 2020. In 2021, the Company revalued its deferred tax asset to a rate of 15.25% (from a rate of 34%). As the Company's deferred tax asset is restated to a higher amount as of December 31, 2020, this results in a higher deferred tax expense in 2021 when the deferred tax asset is revalued at the lower tax rate, contributing to the increase in the deferred tax expense in 2021. The adjustments to the exchange gain (loss) on translation of foreign operations, included in other comprehensive income (loss) in the Consolidated Statement of Operations and Comprehensive Income (Loss) are due to exchange losses reflected on the translation of foreign operations as the E&E and PP&E carrying values are now reflected in local currency (BRL) and adjusted at each period end date for presentation purposes.
- (3) There are adjustments to the individual line items within Operating Activities in the Consolidated Statements of Cash Flows. However, as reflected in the table above, there is no overall impact in funds flow from operations or cash flow from operating activities following the adjustments. Furthermore, there is no impact to any line items in Financing Activities or Investing Activities from any adjustments.



# Impact of the Restatement on Disclosure Within this MD&A:

# Adjustments to PP&E Balances by Property as of December 31, 2021:

	PP&E balance December 31, 2021		
Field	(Original)	Adjustment	Restated
Caburé	21,141	(2,803)	18,338
Murucututu	27,523	(6,165)	21,358
Bom Lugar	12	-	12
Mãe-da-lua	-	-	-
TOTAL	48,676	(8,968)	39,708

# Adjustment to Depletion and Depreciation

		Three Months Ended December 31,		led r 31,
	2021	2020	2021	2020
Depletion and depreciation – original	2,173	1,027	8,606	2,070
Adjustment	(240)	(93)	(899)	(181)
Depletion and depreciation expense - restated	1,933	934	7,707	1,889
Depletion and depreciation per boe -original	9.71	5.73	10.00	6.02
Adjustment	(1.07)	(0.52)	(1.05)	(0.53)
Depletion and depreciation per boe – restated	8.64	5.21	8.95	5.49

# Adjustment to Impairment

	Three Months Ended December 31,			Ended nber 31,
	2021	2020	2021	2020
Total impairment – original	-	74	-	1,455
Adjustment	-	-	-	(369)
Total impairment - restated	-	74	-	1,086

# Adjustment to Deferred Income Tax Expense (Recovery)

		Three Months Ended December 31,				
	2021	2020	2021	2020		
Deferred income tax expense (recovery) – original	181	1,148	4,001	(3,745)		
Adjustment	37	32	1,918	(3,384)		
Deferred income tax expense (recovery) - restated	218	1,180	5,919	(7,129)		

# Adjustment to Net Income

		Three Months Ended December 31,		Ended 1ber 31,
	2021	2020	2021	2020
Net income – original	2,575	2,754	6,614	5,706
Adjustment	203	61	(1,019)	3,934
Net income - restated	2,778	2,815	5,595	9,640



#### Adjustment to Net Income per Share

		Three Months Ended December 31,		Ended nber 31,
	2021	2020	2021	2020
Net income per share – basic (\$) – original	0.08	0.08	0.20	0.17
Adjustment	-	0.01	(0.03)	0.12
Net income per share – basic (\$) - restated	0.08	0.09	0.17	0.29
Net income per share – diluted (\$) – original	0.07	0.08	0.19	0.16
Adjustment	0.01	-	(0.03)	0.11
Net income per share – diluted (\$) - restated	0.08	0.08	0.16	0.27

#### Adjustments to Annual Results:

	2021	2020	2019
Net income (loss) – original	6,614	5,706	(5,011)
Adjustment	(1,019)	3,934	-
Net income (loss) – restated	5,595	9,640	(5,011)
Net income per share - original – basic (\$)	0.20	0.17	(0.16)
Adjustment	(0.03)	0.12	-
Net income per share – basic (\$) - restated	0.17	0.29	(0.16)
Net income per share – diluted (\$)	0.19	0.16	(0.16)
Adjustment	(0.03)	0.11	-
Net income per share – diluted (\$) - restated	0.16	0.27	(0.16)
Total assets – original	81,231	80,388	71,416
Adjustment	(7,601)	(6,238)	(7,831)
Total assets – restated	73,630	74,150	63,585

#### Adjustments to Quarterly Results:

	Q4 2021	Q3 2021	Q2 2021	Q1 2021	Q4 2020	Q3 2020	Q2 2020	Q1 2020
Net income (loss) – original	2,575	1,490	3,637	(1,088)	2,754	6,483	(1,168)	(2,363)
Adjustment	203	(1,510)	147	141	61	3,504	-	369
Net income (loss) – restated	2,778	(20)	3,784	(947)	2,815	9,987	(1,168)	(1,994)
Net income per share – original - basic (\$)	0.08	0.05	0.11	(0.03)	0.08	0.20	(0.04)	(0.07)
Adjustment	-	(0.05)	-	-	0.01	0.10	-	0.01
Net income per share – basic - restated	0.08	(0.00)	0.11	(0.03)	0.09	0.30	(0.04)	(0.06)
Net income per share – original - diluted (\$)	0.07	0.04	0.11	(0.03)	0.08	0.19	(0.04)	(0.07)
Adjustment	0.01	(0.04)	-	-	-	0.11	-	0.01
Net income per share – diluted -restated	0.08	(0.00)	0.11	(0.03)	0.08	0.30	(0.04)	(0.06)

# OUTSTANDING SHARE DATA

The Company is authorized to issue an unlimited number of common shares and preferred shares in one or more series. As of March 17, 2022, there were 33,903,629 common shares, 1,445,108 stock options, 366,500 RSUs, 196,665 DSUs and 2,685,956 warrants outstanding. There are no preferred shares outstanding.



# NON-GAAP AND OTHER FINANCIAL MEASURES

This MD&A or documents referred to in this MD&A make reference to various non-GAAP financial measures, non-GAAP ratios, capital management measures and supplementary financial measures as such terms are defined in National Instrument 52-112 *Non-GAAP and Other Financial Measures Disclosure*. Such measures are not recognized measures under GAAP and do not have a standardized meaning prescribed by IFRS and therefore might not be comparable to similar financial measures disclosed by other issuers. While these measures may be common in the oil and gas industry, the Company's use of these terms may not be comparable to similarly defined measures presented by other companies. The non-GAAP and other financial measures referred to in this report should not be considered an alternative to, or more meaningful than measures prescribed by IFRS and they are not meant to enhance the Company's reported financial performance or position. These are complementary measures that are used by management in assessing the Company's financial performance, efficiency and liquidity and they may be used by investors or other users of this document for the same purpose.

Below is a description of the non-GAAP financial measures, non-GAAP ratios, capital management measures and supplementary financial measures used in this MD&A.

#### **Non-GAAP Financial Measures**

#### **Operating netback**

Operating netback is calculated as natural gas, oil and condensate sales revenues less royalties and production expenses. This calculation is provided in the "Operating Netback" section of this MD&A using our IFRS measures. Operating netback is a common metric used in the oil and gas industry to demonstrate profitability from operations.

#### **Non-GAAP Financial Ratios**

#### **Operating Netback per boe**

Operating netback is calculated on a per unit basis, which is per barrel of oil equivalent ("boe"). It is a common non-GAAP measure used in the oil and gas industry and management believes this measurement assists in evaluating the operating performance of the Company. It is a measure of the economic quality of the Company's producing assets and is useful for evaluating variable costs as it provides a reliable measure regardless of fluctuations in production. Alvopetro calculated operating netback per boe as operating netback divided by total sales volumes (barrels of oil equivalent). This calculation is provided in the "Operating Netback" section of this MD&A using our IFRS measures.

## Funds Flow from Operations Per Share

Funds flow from operations per share is a non-GAAP ratio that includes all cash generated from operating activities and is calculated before changes in non-cash working capital, divided by the weighted average shares outstanding for the respective period. For the periods reported in this document the cash flows from operating activities per share and funds flow from operations per share is as follows:

	Three Months Ended December 31,			Ended ber 31,
\$ per share	2021	2020	2021	2020
Per basic share:				
Cash flows from operating activities	0.21	0.09	0.73	0.09
Funds flow from operations	0.19	0.13	0.74	0.19
Per diluted share:				
Cash flows from operating activities	0.20	0.09	0.70	0.09
Funds flow from operations	0.18	0.13	0.71	0.18



# **Capital Management Measures**

# Funds Flow from Operations

Funds flow from operations is a non-GAAP capital management measure that includes all cash generated from operating activities and is calculated before changes in non-cash working capital. The most comparable GAAP measure to funds flow from operations is cash flows from operating activities. Management considers funds flow from operations important as it helps evaluate financial performance and demonstrates the Company's ability to generate sufficient cash to fund future growth opportunities. Funds flow from operations should not be considered an alternative to, or more meaningful than, cash flows from operating activities however management finds that the impact of working capital items on the cash flows reduces the comparability of the metric from period to period. A reconciliation of funds flow from operations to cash flows from operating activities is as follows:

	Three Months Ended December 31,			Ended Iber 31,
	2021	2020	2021	2020
Cash flows from operating activities	7,088	3,124	24,291	3,061
Add back changes in non-cash working capital	(608)	1,128	346	3,155
Funds flow from operations	6,480	4,252	24,637	6,216

#### Net Working Capital

Net working capital is computed as current assets less current liabilities. Net working capital is a measure of liquidity, is used to evaluate financial resources, and is calculated as follows:

	As at Dec	ember 31,
	2021	2020
Total current assets	17,188	8,487
Total current liabilities	(8,091)	(2,948)
Net working capital surplus	9,097	5,539

## Working Capital Net of Debt (Net Debt)

Working capital net of debt is computed as net working capital surplus decreased by the carrying amount of the Credit Facility. Working capital net of debt is used by management to assess the Company's overall financial position. As of December 31, 2021, Alvopetro's net working capital surplus exceeds the balance outstanding on the Credit Facility.

	As at Deceml	oer 31,
	2021	2020
Net working capital surplus	9,097	5,539
Credit Facility, balance outstanding	(6,545)	(15,423)
Working capital, net of debt (net debt)	2,552	(9,884)

#### **Supplementary Financial Measures**

"Average realized natural gas price - \$/Mcf" is comprised of natural gas sales as determined in accordance with IFRS, divided by the Company's natural gas sales volumes.

"Average realized NGL – condensate price - \$/bbl" is comprised of condensate sales as determined in accordance with IFRS, divided by the Company's NGL sales volumes from condensate.

"Average realized oil price - \$/bbl" is comprised of oil sales as determined in accordance with IFRS, divided by the Company's oil sales volumes.

"Average realized price - \$/boe" is comprised of natural gas, condensate and oil sales as determined in accordance with IFRS, divided by the Company's total natural gas, condensate and oil sales volumes (barrels of oil equivalent).



"Royalties per boe" is comprised of royalties, as determined in accordance with IFRS, divided by the total natural gas, condensate and oil sales volumes (barrels of oil equivalent).

"Royalties as a percentage of sales" is comprised of royalties, as determined in accordance with IFRS, divided by the total natural gas, condensate and oil sales, as determined in accordance with IFRS.

"Production expenses per boe" is comprised of production expenses, as determined in accordance with IFRS, divided by the total natural gas, condensate and oil sales volumes (barrels of oil equivalent).

**"G&A expenses per boe"** is comprised of net G&A expense, as determined in accordance with IFRS, divided by the total natural gas, condensate and oil sales volumes (barrels of oil equivalent).

"DD&A expense per boe" is comprised of DD&A expense, as determined in accordance with IFRS, divided by the total natural gas, condensate and oil sales volumes (barrels of oil equivalent).

## **OFF BALANCE SHEET ARRANGEMENTS**

Alvopetro has off-balance sheet arrangements consisting of various contracts entered into in the normal course of operations. Contracts that contain a lease are accounted for under IFRS 16 and recorded on the balance sheet as of December 31, 2021 to the extent the lease has commenced. All other contracts which are entered into in the normal course of operations are captured in the *Commitments and Contingencies* section above. In 2021, Alvopetro notified Enerflex to increase the operational capacity of the Facility to 500,000 m3/d (17.7 MMcfpd) under the terms of the existing Gas Treatment Agreement. The additional firm capacity is expected to be available by June 1, 2022 and will increase the monthly equipment rental costs. The anticipated additional monthly costs associated with the expansion have been reflected in the *Commitments and Contingencies* table above and are expected to be reflected as increased lease liability and recorded on the balance sheet once the expansion is completed.

#### **RISKS AND UNCERTAINTIES**

Alvopetro is exposed to a variety of risks including, but not limited to: market risk, reservoir performance risk, exploration risk, operational risks, foreign operations risk, liquidity and financing risk, legal and regulatory risks including the impact of new and stricter environmental regulations, competitive risks within the oil and gas industry and physical risk associated with climate change. In addition, the impact of the COVID-19 pandemic increases our exposure to certain of these risks as further discussed below.

This section presents information about the Company's exposure to each of the above risks, the Company's objectives, policies and processes for measuring and managing risk, and the Company's management of capital. Further quantitative disclosures are included throughout the consolidated financial statements. Investors should carefully consider the following risk factors and the risk factors set forth under the heading "Risk Factors" in our restated Annual Information Form that can be found on SEDAR at www.sedar.com.

#### A. Market Risk

The Company is exposed to normal financial risks inherent within the oil and gas industry, including commodity price risk, exchange rate risk, interest rate risk and credit risk. Natural gas and crude oil prices fluctuate widely and are influenced by global supply and demand, government regulations, actions of other hydrocarbon-producing countries, international conflicts, weather conditions, worldwide political conditions, and other worldwide pandemics or other unforeseeable events. Fluctuations in crude oil and natural gas prices not only affect the Company's cash flows but may also affect the Company's access to capital, viability of prospective projects and valuation of existing assets. The Company's long-term GSA includes both a floor and a ceiling price which reduces the Company's exposure to natural gas price fluctuations. The Company monitors market conditions and may selectively use derivative instruments to reduce exposure to commodity price movements.

Alvopetro is exposed to market risks from fluctuations in foreign exchange rates, particularly with respect to its natural, oil and condensate revenues. Although the revenues are linked to USD benchmark prices, actual invoices for such sales are denominated in BRL, exposing the Company to foreign currency risk. This is particularly significant with respect to natural gas sales under the



Company's long-term GSA as the natural gas price is determined semi-annually based on historical USD benchmark prices and converted to a fixed BRL denominated price based on historical exchange rates. The Company then receives the fixed BRL denominated price until the next price determination date. As a result, fluctuations in the actual USD to BRL exchange rate from the average historical rate used to determine the BRL denominated natural gas price will result in USD realized prices which differ from the USD natural gas price at the price determination. Should the BRL depreciate from the average historical rate used in determining the BRL denominated natural gas price, the Company will realize lower equivalent USD until the next price reset which may result in a material decrease in funds flow. Throughout 2021 the Company entered into forward contracts to manage its exposure to foreign currency risk as further discussed above, in the Foreign Exchange section of this MD&A.

The Company's GSA is with one counterparty and, as a result, Alvopetro is subject to increased credit risk. In the year-ended December 31, 2021, 96% of the Company's revenues were sold to this one counterparty. If this gas sales contract were terminated for any reason, Alvopetro may be unable to enter into a relationship with another purchaser for such gas on a timely basis or on similar terms. Additional infrastructure development may be required to obtain a new gas sales contract with another party which may result in additional capital expenditures and delays in future cash flows. Alvopetro's results of operations and future cash flows are dependent on its ability to market its gas production and any change to price or volumes under its gas sales contract may impact future earnings.

Cash and cash equivalents consist of balances on deposit at banks and short-term deposits maturing in less than 90 days. Restricted cash consists of cash and cash equivalents and short-term deposits maturing in one year or less. Alvopetro manages credit risk related to short term deposits by investing only in term deposits of investment grade credit rating, and therefore the Company considers these assets to have negligible credit risk. As the interest rate on the Company's Credit Facility is fixed, it is not exposed to interest rate risk on amounts drawn.

## B. Reservoir Performance Risk

Lower than projected reservoir performance on the Company's assets could have a material adverse impact on the Company's future results of operations, cash flows, and overall financial condition. Estimates of future cash flows from Alvopetro's properties are based on judgment and assumptions with respect to timing and evaluation of development plans. Additional factors affecting the ultimate recoveries from Alvopetro's properties include initial production rates, production decline rates, future commodity prices, marketability of production, and operating costs, and royalties and other government levies that may be imposed over the producing life of the reserves. All judgments and assumptions were based on the best information available at the date the forecasts were prepared and all are subject to change, some being beyond the control of Alvopetro. Actual production and funds flow derived therefrom will vary from these forecasts, and such variations be material.

## C. Exploration Risk

The Company is exposed to a high level of exploration risk. The business of exploring for, developing or acquiring reserves is capital intensive and is subject to numerous estimates and interpretations of geological and geophysical data. The Company's current reserves will decline as reserves are produced unless the Company is able to discover new reserves which involves exploration risk. There can be no assurance that Alvopetro's future exploration activities will result in material additions to reserves or that such activities will lead to future cash flows. To manage this risk, Alvopetro employs highly experienced geoscientists, uses technology and 3D seismic as primary exploration tools and focuses exploration efforts in known hydrocarbon producing basins.

#### D. Operational Risk

Alvopetro's Caburé natural gas field is operated by Alvopetro's partner on this field. As Alvopetro is not the operator of this property, it is dependent on its partner for the timing and execution of key activities to ensure Alvopetro is able to meet production requirements under its GSA and generate future cash flows. Alvopetro is also dependent on its partner, to varying extents, to exercise best practices in terms of safety, environmental regulations, and employment law. To manage these risks, Alvopetro entered into a comprehensive unitization agreement which governs the responsibilities of the operator and non-operators in a fair and balanced approach. In addition, in 2022 Alvopetro expects production to commence from its Murucututu natural gas project and plans to further develop this asset to expand production from Alvopetro's 100% owned and operated assets.

All of Alvopetro's natural gas is processed through the Facility owned by Enerflex under the terms of the Gas Treatment Agreement. As the Facility is owned and operated by Enerflex, although Alvopetro has full control over the gas processed within the Facility, Alvopetro does not have full control over all operational matters. From time to time, the Facility may discontinue or decrease



operations either as a result of normal servicing requirements or as a result of unexpected events. While the GSA allows for scheduled downtime and routine maintenance, should such downtime be unplanned or extend for longer than anticipated, this could have a material adverse impact on the Company's operations and could give rise to ship or pay penalties under the GSA if the Company is unable to meet its firm production requirements. The terms of the Gas Treatment Agreement include strict availability requirements and downtime credits to minimize Alvopetro's costs associated with reduced processing; however, such credits may not fully offset costs incurred by Alvopetro due to ship or pay obligations under the GSA.

Alvopetro is exposed to a number of operational risks inherent in the industry including accidents, well blowouts, uncontrolled flows, labour strikes and environmental risks. Operational risks are managed using prudent field operating procedures. The Company has an emergency response plan to deal with potential incidents and maintains a comprehensive insurance program to reduce the risk of significant economic loss; however, not all risks can be eliminated. Losses resulting from the occurrence of these risks could have a material adverse impact on the Company's operations. Should operational problems reduce or limit Alvopetro's future gas production, future cash flows may be less than expected and Alvopetro may be subject to ship or pay penalties under its long-term GSA.

#### E. Pandemic Risk

The impact of pandemics, epidemics or local or global outbreaks of infectious diseases could have an adverse impact on the Company's operations, financial condition and future financial performance. The COVID-19 pandemic and the responses by governments and health authorities around the world to reduce the spread of the virus gave rise to a significant reduction in global economic activity and reduced demand for crude oil and natural gas, resulting in a sharp decline in commodity prices in 2020. Alvopetro's natural gas price under the GSA with Bahiagás was based on the floor price as of August 1, 2020 and February 1, 2021 as a result of the reduced commodity prices. Commodity prices have now recovered but future demand is uncertain and newly emerging variants or other pandemics may impact such demand and commodity prices well into the future, impacting the financial health of the Company. The extent to which the COVID-19 pandemic or any other future pandemic, epidemic or other such infectious disease may impact our operations, financial condition and future financial performance is currently unknown and pandemic risk may increase other risks including: 1) market risk due to volatility in commodity prices as a result of reduced oil and natural gas demand and due to volatility in foreign exchange markets; 2) operational risks due to workforce disruption or shut down orders which may restrict current operations and cash flows or future capital projects; 3) financing risk to the extent additional capital is required as financing alternatives may be limited or only available with terms unacceptable to Alvopetro a result of reduced commodity prices and continued volatility in the financial markets; and 4) foreign operations risk given the Company's operations are undertaken in Brazil which has been particularly hard hit by the impact of the COVID-19 pandemic. To date the Company has not experienced any downtime-related delays as a result of this risk.

## F. Foreign Operations Risk

As a result of existing operations in Brazil and additional projects which may be evaluated internationally, Alvopetro will be subject to certain risks, including currency fluctuations and possible political risks from changes in policies and regulations, renegotiations or modifications of existing contracts, changes in tax and royalty regulations, foreign exchange controls and potential economic instability and uncertainty. Currently the state and federal governments in Brazil support the exploration and development of its oil and gas properties by foreign companies. Nevertheless, there is no assurance that future political conditions will not result in the state or federal governments adopting different policies respecting foreign development and ownership of oil and gas, environmental protection and labour relations. Exploration and production activities may be affected in varying degrees by political stability and government regulations relating to the industry.

To help mitigate the risks associated with operating in foreign jurisdictions, the Company seeks to operate in regions where the petroleum industry is a key component of the economy. Alvopetro believes that management's experience operating in other international jurisdictions helps reduce these risks. Brazil has a long history of democracy and an established legal framework that, in Alvopetro's opinion, minimizes political risks. However, in 2022, there will be a national election in Brazil and changes in government may alter the level of support for oil and gas activities, potentially resulting in changes to existing oil and gas regulations in Brazil or to tax or other laws that could adversely affect the Company. There can be no certainty as to the outcome of the election and any resulting change in regulations or laws within Brazil.

Income tax laws affecting the Company may change in the future or be interpreted in a manner that adversely affects the Company. In addition, changes in foreign exchange regulations or restrictions on repatriation of funds from Brazil may adversely affect the



Company's ability to obtain cash from its Brazil subsidiaries to meet obligations within Canada, including the payment of dividends and repayment of the Credit Facility.

The majority of Alvopetro's operations are conducted in Portuguese and the Company may enter into significant contracts in Portuguese which may give rise to uncertainties. The Company manages this risk through the employment and involvement of qualified personnel within Brazil in all local operations.

#### G. Liquidity and Financing Risk

The Company owed a total of \$6.5 million under its Credit Facility as of December 31, 2021. The Company's ability to make payments of interest and principal on future amounts borrowed will depend on its future operating performance and cash flows from operations, which are subject to commodity prices, exchange rates, demand for oil and natural gas, the timing of capital activities, regulatory approvals, reservoir performance, and prevailing economic conditions, among other factors, many of which are beyond its control. The Company's cash flow from operations will be in part dedicated to the payment of principal and interest on future amounts drawn and there can be no assurance that the Company will be able to repay the Credit Facility when due. During the first quarter of 2022, the Company repaid an additional \$1.5 million of the Credit Facility, reducing the amount owing to \$5.0 million as of March 17, 2022.

The Credit Facility also imposes certain restrictions on the Company, including incurring additional indebtedness, acquisition and disposition of assets, entering into amalgamations, mergers, among other restrictions. In addition, the Credit Facility includes certain financial covenants with which the Company must comply. A breach of any of the terms of the Credit Facility could cause an event of default, resulting in some or all of the amounts borrowed becoming immediately due and payable, which could adversely affect the Company's financial condition. Pursuant to the terms of the Credit Facility, the lender has been provided with security over all of the assets of the Company. Failure to comply with the obligations in the Credit Facility and related agreements could result in an event of default which, if not cured or waived, could permit acceleration of future amounts owing under the Credit Facility.

The Company is committed to maintaining a strong balance sheet and is actively monitoring all spending to ensure a strong financial position. In 2021, the Company repaid a total of \$9.0 million of its Credit Facility with a balance outstanding of \$6.5 million as at December 31, 2021 and the Company ended 2021 with \$11.5 million of cash and cash equivalents and a working capital surplus net of debt of \$2.6 million.

The Company may seek to raise additional funds in the future to fund future capital expenditures on Alvopetro's properties or other potential business development activities. There can be no assurance that debt or equity financing will be available or sufficient to meet these requirements or, if debt or equity financing is available, that it will be on terms acceptable to Alvopetro. The inability of Alvopetro to access sufficient capital for its planned operations could have a material adverse effect on Alvopetro's business, financial condition, results of operations and prospects, and could result in the delay or indefinite postponement of further exploration, evaluation and development of Alvopetro's properties.

#### H. Trends in Environmental Regulation

Environmental legislation provides for, among other things, restrictions and prohibitions on spills and releases or emissions of various substances produced in association with oil and gas operations. The legislation also requires that wells and facility sites be operated, maintained, abandoned and reclaimed to the satisfaction of applicable regulatory authorities. Compliance with such legislation can require significant expenditures and a breach may result in the imposition of fines and penalties, some of which may be material. Environmental legislation is evolving in a manner expected to result in stricter standards and enforcement, larger fines and liability and potentially increased capital expenditures and operating costs. While the Company operates in accordance with all relevant environmental legislation and strives to minimize the environmental impact of its operations by providing for safety and environmental issues in all of its business plans, there can be no assurance that future changes to environmental laws will not result in a curtailment of production or a material increase in future costs which may adversely affect Alvopetro's financial condition. Alvopetro anticipates increased capital and operating expenditures as a result of increasingly stringent laws relating to the protection of the environment.

In addition to regulatory requirements, there have been increasing concerns raised by investors and potential investors within the oil and gas industry as to the impact of oil and gas operations on the environment and communities in which oil and gas companies operate. As a result of these concerns, certain investors may divest of any interest in oil and gas companies or the industry as a



whole. This may further limit Alvopetro's ability to access sources of financing in the future should it be required. Furthermore, even where capital is available, such investors may require the implementation of more stringent policies and practices concerning environmental matters, including with respect to greenhouse gas ("GHG") emissions or otherwise, some of which may require the installation of emissions monitoring and measuring devices, the verification and reporting of emissions data and additional financial expenditures to comply with GHG emissions reduction requirements. More stringent policies and monitoring requirements may come at a significant cost and time commitment of management, which may increase the overall cost of capital and have a negative impact on future cash flows from operations and earnings.

There may be additional costs to comply with sustainability disclosure standards. Emissions, carbon and other regulations impacting climate and climate related matters are constantly evolving. The newly established International Sustainability Standards Board (ISSB) is developing sustainability disclosure standards that are globally consistent, comparable and reliable. The cost to comply with this standard or any other similar disclosure standard has not yet been quantified and may be material.

The expanded use of hydraulic fracturing as a recovery technique employed in oil and natural gas drilling has given rise to increased public scrutiny over potential environmental impacts. Alvopetro expects to complete a hydraulic fracture stimulation on the 197(1) well and additional development wells planned for the Murucutut field and is awaiting the necessary regulatory approvals. Delays in obtaining these approvals may result in delays in our operational plans which may impact our business and future cash flows. Alvopetro believes that the hydraulic fracturing that we have conducted to date and may conduct in the future, given the depth and location of the wells and our consistent utilization of good oilfield practices, will be environmentally sound. Alvopetro anticipates that there will be a trend towards changing and increased regulatory requirements concerning hydraulic fracturing in the future, in Brazil and internationally. Changes to these regulatory requirements may impact our business.

## I. Legal and Regulatory Risks

The Company is subject to extensive governmental and approvals and regulations in Brazil. Delays in obtaining regulatory approvals could result in project delays and our inability to meet contractual obligations and commitments. Changes to these regulations could increase the costs of conducting business.

Alvopetro must fulfill certain minimum work commitments on projects in Brazil. There are no assurances that all of these commitments will be fulfilled within the time frames permitted. As such, Alvopetro may lose certain exploration rights on the blocks affected and may be subject to certain financial penalties that would be levied by the applicable governmental authority. From time to time Alvopetro may request extensions or suspensions to the timeframe allotted for work commitments. There is no assurance that such future requests will be granted. To the extent requests are not approved, acreage positions may be lost, and fines or penalties may be applied.

## J. Competitive Risks within the Oil and Gas Industry

The oil and gas industry is highly competitive, with respect to the acquisition of prospective oil and gas properties and reserves, attracting financing sources for the acquisition of new reserves or the development of existing reserves and in marketing production from existing reserves. Alvopetro's competitive position depends on its geoscience and engineering expertise, its financial resources, its ability to develop its properties and its ability to select, acquire and develop proved reserves and its ability to execute sales contracts for future production. Alvopetro will compete with a substantial number of other companies having larger technical staff and greater financial and operational resources and access to capital. Many such companies not only engage in the acquisition, exploration, development and production of petroleum reserves, but also carry on refining operations and market refined products. In Brazil particularly, Petróleo Brasileiro SA ("Petrobras") dominates the majority of the industry, including all aspects of oil and gas exploration, development, transportation and sales. Alvopetro competes with Petrobras and other major and independent oil and gas companies and other industries supplying energy and fuel in the marketing and sale of oil and gas to transporters, distributors and end users, including industrial, commercial and individual consumers. Access to pipelines and other transportation infrastructure may be limited and/or the terms on which such access is provided may not be favourable to the Company.

Alvopetro also competes with other oil and gas companies in attempting to secure equipment necessary for drilling and completion of wells. Such equipment may be in short supply from time to time or may not meet the technical specifications required by Alvopetro in its operations. In addition, equipment and other materials necessary to construct production and transmission facilities may be in short supply. Local content requirements in Brazil may reduce the control the Company has with respect to choice of service providers for its exploration and development activities.



# K. Climate Change – Physical Risks

Extreme climate conditions including floods, forest fires, earthquakes, hurricanes, drought and other weather-related events may impact Alvopetro's operations or that of its major customers or suppliers. Climate change may increase the frequency and severity of such events and future events may have a material adverse effect on Alvopetro. The Company's financial results for 2021 were not directly impacted from a climate event and the Company did not have any weather related damages to its properties from any climate related events. The Company maintains insurance coverage that provides a level of insurance for certain events that may arise due to climate change factors, however, the Company's insurance program is subject to limits and various restrictions. No claims were made under the Company's insurance policies in 2021 with respect to climate related matters.

# CHANGES IN ACCOUNTING POLICIES INCLUDING INITIAL ADOPTION

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

The Company has reviewed the following new and revised accounting pronouncements that have been issued but are not yet effective and may have a potential impact on the consolidated financial statements of the Company:

Standard and Description	Date of Adoption	Expected Impact on Consolidated Financial Statements
IAS 16 Property, Plant and Equipment –amended to specify that proceeds from selling items before the related item of PPE is available for use should be recognized in profit or loss, together with the costs of producing those items.	January 1, 2022	The Company is evaluating the expected impact on the financial statements.
IAS 37 <i>Provisions, Contingent Liabilities and Contingent Assets</i> - amended to specify which costs are included as a cost of fulfilling a contract when determining whether that contract is onerous.	January 1, 2022	The Company is evaluating the expected impact on the financial statements.
IAS 1 <i>Presentation of Financial Statements</i> – amended to clarify certain requirements for the presentation of liabilities as current or non-current in the statements of financial position.	January 1, 2023	The Company is evaluating the expected impact on the financial statements.

**Management's Report on Internal Control over Financial Reporting.** In connection with National Instrument 52-109 - Certification of Disclosure in Issuer's Annual and Interim Filings ("NI 52-109"), the Chief Executive Officer and Chief Financial Officer of the Company are required to file a Venture Issuer Basic Certificate with respect to the financial information contained in the unaudited interim financial statements and the audited annual financial statements and respective accompanying Management's Discussion and Analysis. The Venture Issuer Basic Certificate does not include representations relating to the establishment and maintenance of disclosure controls and procedures and internal control over financial reporting, as defined in NI 52-109.

**Forward-Looking Statements**. Certain information provided in this MD&A constitutes forward-looking statements. The use of any of the words "will", "expect", "intend" and other similar words or expressions are intended to identify forward-looking information. Forward-looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors could cause actual results to vary significantly from the expectations discussed in the forward-looking statements. These forward-looking statements reflect current assumptions and expectations regarding future events. More particularly and without limitation, this MD&A contains forward-looking statements concerning the plans relating to the Company's operational activities, future results from operations, the expected natural gas price, gas sales and gas deliveries under the Company's long-term gas sales agreement, projected financial results, the Company's plans for dividends in the future, future capital and operating costs, the expected timing and outcomes of certain of Alvopetro's testing activities, future production and sales volumes, proposed exploration and development activities and the timing for such activities, sources and availability of capital, capital spending levels and anticipated royalty reductions. Forward-looking statements are necessarily based upon assumptions and judgments with respect to the future including, but not limited to, equipment availability, the success of future drilling, completion, recompletion and development activities, foreign exchange rates, the outlook for commodity markets and ability to access capital markets, the impact of the



COVID-19 pandemic, the performance of producing wells and reservoirs, well development and operating performance, the timing of regulatory licenses and approvals, general economic and business conditions, forecasted demand for oil and natural gas, weather and access to drilling locations, the availability and cost of labour and services, environmental regulation, including regulation relating to hydraulic fracturing and stimulation, the ability to monetize hydrocarbons discovered, the regulatory and legal environment and other risks associated with oil and gas operations. Actual results achieved during the forecast period will vary from the information provided herein as a result of numerous known and unknown risks and uncertainties and other factors. In addition, the declaration, timing, amount and payment of future dividends remain at the discretion of the Board of Directors. Although we believe that the expectations and assumptions on which the forward-looking statements are based are reasonable, undue reliance should not be placed on the forward-looking statements because we can give no assurance that they will prove to be correct. Since forward looking statements address future events and conditions, by their very nature they involve inherent risks and uncertainties. Actual results could differ materially from those currently anticipated due to a number of factors and risks. These include, but are not limited to, risks associated with the oil and gas industry in general (e.g., operational risks in development, exploration and production; delays or changes in plans with respect to exploration or development projects or capital expenditures; the uncertainty of reserve estimates; the uncertainty of estimates and projections relating to production, costs and expenses, reliance on industry partners, availability of equipment and personnel, uncertainty surrounding timing for drilling and completion activities resulting from weather and other factors, changes in applicable regulatory regimes and health, safety and environmental risks), commodity price and foreign exchange rate fluctuations and general economic conditions. Certain of these risks are set out in more detail in this MD&A and in our restated 2021 Annual Information Form which has been filed on SEDAR and can be accessed at www.sedar.com. Except as may be required by applicable securities laws, Alvopetro assumes no obligation to publicly update or revise any forward-looking statements made herein or otherwise, whether as a result of new information, future events or otherwise.

Oil and Natural Gas Reserves. All net present values in this MD&A are based on estimates of future operating and capital costs and GLI's forecast prices as of December 31, 2021. The reserves definitions used in this evaluation are the standards defined in the Canadian Oil and Gas Evaluation Handbook reserve definitions and consistent with NI 51-101 and used by GLJ. References to the net present value of 2P reserves throughout this MD&A represents the reserves of Alvopetro for the associated fields and the before-tax net present value of future net revenue attributable to such reserves, discounted at 10%, as evaluated by GLJ in the GLJ Reserves and Resources Report as of December 31, 2021, based on forecast price and cost assumptions. The net present value of future net revenue attributable to Alvopetro's reserves as disclosed in this MD&A is stated without provision for interest costs and general and administrative costs, but after providing for estimated royalties, production costs, development costs, other income, future capital expenditures, well abandonment and reclamation costs for only those wells assigned reserves and material dedicated gathering systems and facilities. The net present values of future net revenue attributable to the Alvopetro's reserves estimated by GLI do not represent the fair market value of those reserves. The recovery and reserve estimates of the Company's reserves provided herein are estimates only and there is no guarantee that the estimated reserves will be recovered. Actual reserves may be greater than or less than the estimates provided herein and due to rounding, certain columns may not add exactly. The disclosure in the MD&A summarizes certain information contained in the GLJ Reserves and Resources Report but represents only a portion of the disclosure required under NI 51-101. Full disclosure with respect to the Company's reserves as at December 31, 2021 is contained in the Company's restated 2021 Annual Information Form which has been filed on SEDAR and can be accessed at www.sedar.com.

**Contingent Resources.** This MD&A discloses estimates of Alvopetro's contingent resources and the net present value associated with net revenues associated with the production of such contingent resources contained in the GLI Reserves and Resources Report. There is no certainty that it will be commercially viable to produce any portion of such contingent resources and the estimated future net revenues do not necessarily represent the fair market value of such contingent resources. Estimates of contingent resources involve additional risks over estimates of reserves. See the Company's restated Annual Information Form which has been filed on SEDAR and can be accessed at <u>www.sedar.com</u> for additional disclosures on the Company's contingent resources.

**Prospective Resources** – This MD&A discloses estimates of Alvopetro's prospective resources contained in the GLI Reserves and Resources Report. There is no certainty that any portion of the prospective resources will be discovered and even if discovered, there is no certainty that it will be commercially viable to produce any portion. Estimates of prospective resources involve additional risks over estimates of reserves. The accuracy of any resources estimate is a function of the quality and quantity of available data and of engineering interpretation and judgment. While resources presented herein are considered reasonable, the estimates should be accepted with the understanding that reservoir performance subsequent to the date of the estimate may



justify revision, either upward or downward. See the Company's restated Annual Information Form which has been filed on SEDAR and can be accessed at <u>www.sedar.com</u> for additional disclosures on the Company's prospective resources.

#### Abbreviations:

10 <sup>3</sup> m <sup>3</sup>	=	thousands of cubic metres
10 <sup>3</sup> m <sup>3</sup> /d	=	thousands of cubic metres per day
2P reserves	=	proved plus probable reserves
ANP	=	The National Agency of Petroleum, Natural Gas and Biofuels of Brazil
bbls	=	barrels of oil and/or natural gas liquids (condensate)
boepd	=	barrels of oil equivalent ("boe") per day
bopd	=	barrels of oil and/or natural gas liquids (condensate) per day
BRL	=	Brazilian real
CAD	=	CAD dollar
m³	=	cubic metre
m³/d	=	cubic metre per day
Mcf	=	thousand cubic feet
Mcfe	=	thousand cubic feet of gas equivalent
Mcfpd	=	thousand cubic feet per day
MMcfpd	=	million cubic feet per day
MMboe	=	millions of barrels of oil equivalent
MMBtu	=	million British Thermal Units
MMcf	=	million cubic feet
MMcfpd	=	million cubic feet per day
NGLs	=	natural gas liquids
Q2 2021	=	three months ended June 30, 2021
Q3 2021	=	three months ended September 30, 2021
Q4 2020	=	three months ended December 31, 2020
Q4 2021	=	three months ended December 31, 2021

**BOE Disclosure.** The term barrels of oil equivalent ("boe") may be misleading, particularly if used in isolation. A boe conversion ratio of six thousand cubic feet per barrel (6 Mcf/bbl) of natural gas to barrels of oil equivalence is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. All boe conversions in this MD&A are derived from converting gas to oil in the ratio mix of six thousand cubic feet of gas to one barrel of oil.

