

The following Management's Discussion and Analysis ("MD&A") is dated March 21, 2023 and should be read in conjunction with the audited consolidated financial statements and accompanying notes of Alvopetro Energy Ltd. ("Alvopetro" or the "Company") as at and for the years ended December 31, 2022 and 2021. Additional information for the Company, including the Annual Information Form ("AIF"), can be found on SEDAR at www.sedar.com or at www.alvopetro.com. 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

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 natural gas asset and midstream projects. Alvopetro's shares are traded on the TSX Venture Exchange (TSX: ALV.V) and are also traded on the OTCQX® 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.

FINANCIAL & OPERATING SUMMARY

	As at and Three Months Ended			As at and Year Ended		
	December 31,			December 31,		
	2022	2021	Change (%)	2022	2021	Change (%)
Financial						
<i>(\$000s, except where noted)</i>						
Natural gas, oil and condensate sales	17,077	9,896	73	63,508	34,980	82
Net income	5,191	2,778	87	31,732	5,595	467
Per share – basic (\$) ⁽¹⁾	0.14	0.08	75	0.92	0.17	441
Per share – diluted (\$) ⁽¹⁾	0.14	0.08	75	0.86	0.16	438
Cash flow from operating activities	12,366	7,088	74	47,534	24,291	96
Per share – basic (\$) ⁽¹⁾	0.34	0.21	62	1.37	0.73	88
Per share – diluted (\$) ⁽¹⁾	0.33	0.20	65	1.29	0.70	84
Funds flow from operations ⁽²⁾	13,193	6,480	104	49,879	24,637	102
Per share – basic (\$) ⁽¹⁾	0.36	0.19	89	1.44	0.74	95
Per share – diluted (\$) ⁽¹⁾	0.35	0.18	94	1.35	0.71	90
Dividends declared	4,357	2,034	114	12,697	4,057	213
Per share ⁽¹⁾	0.12	0.06	100	0.36	0.12	200
Capital expenditures	5,944	1,470	304	24,795	4,513	449
Cash and cash equivalents	19,784	11,469	72	19,784	11,469	72
Net working capital surplus ⁽²⁾	14,698	9,097	62	14,698	9,097	62
Working capital, net of debt ⁽²⁾	14,698	2,552	476	14,698	2,552	476
Weighted average shares outstanding						
Basic (000s) ⁽¹⁾	36,231	33,824	7	34,642	33,103	5
Diluted (000s) ⁽¹⁾	37,298	35,986	4	36,919	34,928	6
Operations						
Natural gas, NGLs and crude oil sales:						
Natural gas (Mcfpd)	15,546	13,966	11	14,647	13,517	8
NGLs – condensate (bopd)	128	103	24	110	103	7
Oil (bopd)	5	2	150	6	2	200
Total (boepd)	2,724	2,432	12	2,557	2,358	8
Average realized prices ⁽²⁾ :						
Natural gas (\$/Mcf)	11.18	7.07	58	11.07	6.50	70
NGLs – condensate (\$/bbl)	89.29	84.36	6	103.50	75.89	36
Oil (\$/bbl)	79.50	76.47	4	82.67	63.61	30
Company total (\$/boe)	68.13	44.22	54	68.04	40.64	67
Operating netback (\$/boe) ⁽²⁾						
Realized sales price	68.13	44.22	54	68.04	40.64	67
Royalties	(4.15)	(4.22)	(2)	(4.81)	(3.61)	33
Production expenses	(3.90)	(3.62)	8	(3.80)	(3.64)	4
Operating netback	60.08	36.38	65	59.43	33.39	78
Operating netback margin ⁽²⁾	88%	82%	7	87%	82%	6

Notes:

- (1) Per share amounts are based on weighted average shares outstanding other than dividends per share, which is based on the number of common shares outstanding at each dividend record date. 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.
- (2) See “Non-GAAP and Other Financial Measures” section within this MD&A.

HIGHLIGHTS AND SIGNIFICANT TRANSACTIONS FOR THE FOURTH QUARTER OF 2022

- Our average daily sales increased to a new quarterly record of 2,724 boepd (+3% from Q3 2022 and +12% from Q4 2021).
- With natural gas sales in Q4 2022 continuing at the ceiling price in our contract, our average realized natural gas price was \$11.18/Mcf (+58% from Q4 2021) and our average realized price per boe was \$68.13 (+54% from Q4 2021). Higher realized prices and record daily sales volumes resulted in a 73% increase in our natural gas, condensate and oil revenue compared to Q4 2021.
- Our operating netback was \$60.08 per boe in Q4 2022, an improvement of \$23.70 per boe from Q4 2021 (+65%) and \$0.25 per boe from Q3 2022.
- We generated funds flows from operations of \$13.2 million (\$0.36 per basic share and \$0.35 per diluted share), an increase of \$6.7 million compared to Q4 2021 and a decrease of \$0.2 million compared to Q3 2022.
- We reported net income of \$5.2 million in Q4 2022, an increase of \$2.4 million (+87%) compared to Q4 2021. Net income was impacted by impairment expense of \$6.3 million recognized on exploration assets.
- Capital expenditures totaled \$5.9 million, including drilling and testing costs for our 182-C2 well, testing of the Unit-C well and facilities expenditures at the Caburé unit, testing costs for our 183-B1 well, development costs on our Murucututu project and long-lead purchases.
- Our Q4 2022 dividend increased 50% to \$0.12 per share. The Q4 2022 dividend was paid on January 13, 2023 to shareholders of record on December 30, 2022.
- Our cash and working capital increased to \$14.7 million, an improvement of \$2.5 million compared to September 30, 2022 and an increase of \$12.1 million compared to December 31, 2021 working capital net of debt of \$2.6 million.

ADDITIONAL HIGHLIGHTS AND SIGNIFICANT TRANSACTIONS FOR 2022

- Our annual sales averaged 2,557 boepd (95% natural gas, 4% NGLs from condensate and marginal crude oil production), an increase of 8% compared to 2021.
- We reported net income of \$31.7 million, compared to \$5.6 million in 2021 (+467%).
- We generated funds flow from operations of \$49.9 million (\$1.44 per basic share on \$1.35 per diluted share) compared to \$24.6 million in 2021 (\$0.74 per basic share and \$0.71 per diluted share).
- Capital expenditures totaled \$24.8 million in 2022.
- In the third quarter of 2022, all outstanding warrants were exercised. Alvopetro received cash proceeds of \$2.4 million and issued a total of 2,081,616 common shares on the exercise.
- The credit facility was fully repaid in September 2022 and has been cancelled.
- Dividends totaled \$0.36 per share in 2022 compared to \$0.12 per share in 2021 (+200%).

RECENT HIGHLIGHTS

- On March 21, 2023, we announced that our Board of Directors approved a 17% increase in our quarterly dividend to \$0.14 per common share, payable in cash on April 14, 2023 to shareholders of record on March 31, 2023.
- We have now commenced stimulation operations at our 197(1) well on our Murucututu natural gas field. The 197(1) well location has already been tied in to the Murucututu field facilities at our 183(1) well and we expect to commence production from the well in the second quarter.
- In January 2023, the Company announced TSX Venture Exchange approval for a normal course issuer bid (the “NCIB”). The terms of the NCIB permit Alvopetro to repurchase up to 2,876,414 common shares from January 6, 2023 to the earlier of January 5, 2024 or when the NCIB is completed or terminated by Alvopetro. No repurchases have been made under the NCIB as of the date of this MD&A.
- Effective February 1, 2023, our natural gas price under our long-term gas sales agreement with Bahiagás has increased 4% to BRL2.00/m³. This price is effective for all natural gas sales from February 1 to July 31, 2023. Including recently approved and enhanced sales tax credits, our realized gas price, net of sales taxes, for the month of February was approximately \$12.23/Mcf (based on our average heat content to date and the average February 2023 BRL/USD foreign exchange rate of 5.17).
- On February 28, 2023, we announced our reserves at December 31, 2022 with total proved plus probable (“2P”) reserves of 9.0 MMboe and a before tax net present value discounted at 10% of \$348.2 million, an increase of 17% compared to the December 31, 2021 before tax net present value. We also announced the Murucututu resources assessment with risked best estimate resource of 2.9 MMboe (before tax net present value discounted at 10% of \$62.2 million) and risked best estimate prospective resource of 12.5 MMboe (before tax net present value discounted at 10% of \$259.1 million). The reserves and

resources data is based on an independent reserves and resources assessment and evaluation prepared by GLJ Ltd. ("GLJ") dated February 27, 2023 with an effective date of December 31, 2022 (the "GLJ Reserves and Resources Report").

NATURAL GAS AND OIL PROPERTIES

As at December 31, 2022, Alvo Petro held interests in the Caburé and Murucututu natural gas assets, two exploration blocks (Block 183 and Block 182) and two oil fields (Bom Lugar and Mãe-da-lua), in the Recôncavo basin onshore Brazil.

Property, plant and equipment ("PP&E") Assets

Field	Gross Acres	Current Phase Expiry	PP&E balance December 31, 2022 (\$000's)	Net Present Value of 2P Reserves ⁽¹⁾ (\$000's)
Caburé	4,814	December 5, 2043 and May 12, 2044	19,485	211,924
Murucututu ⁽²⁾	6,988	April 18, 2048	22,793	126,946
Bom Lugar	2,240	Extension requested ⁽³⁾	12	8,396
Mãe-da-lua	431	February 22, 2044	-	910
TOTAL⁽⁴⁾			42,290	348,176

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

(2) References to Murucututu throughout this MD&A refer to our Murucututu natural gas project which extends across portions of Block 197 and Block 183. See further discussion below.

(3) The Bom Lugar Development and Production Phase currently extends to July 2023. Alvo Petro has submitted a new development plan to the ANP requesting an extension of the phase for an additional 15 years.

(4) The total balance in the table above excludes \$0.2 million in other assets classified as PP&E as at December 31, 2022, largely relating to furniture and office equipment.

Exploration and evaluation ("E&E") assets

Block	Gross Acres	Current Phase Expiry	E&E balance December 31, 2022 (\$000's)
182 ⁽¹⁾	4,747	April 3, 2024	5,879
183 ⁽²⁾	2,946	March 16, 2024	6,621
TOTAL⁽³⁾			12,500

(1) Block 182 is currently in the Development Assessment Plan ("PAD") phase. There are no work units (UTs) applicable in the PAD phase; however, the Company must notify the ANP of its work plan to be completed during the phase and to the extent such work is not completed, some or all of the acreage may be lost. To maintain the full land area of Block 182, the PAD work includes drilling and testing an additional well prior to the expiry date. Alternatively, Alvo Petro may declare commerciality on the 'ring-fenced' area around the 182-C2 well, submit a development plan to move to the development and production phase, subject to the approval of the ANP, and relinquish the remaining acreage in the block.

(2) The portion of Block 183 which is not part of the Murucututu project is currently in the PAD phase. To maintain the full land area of Block 183, the PAD work includes drilling and testing an additional well prior to the expiry date. Alternatively, Alvo Petro may declare commerciality on the 'ring-fenced' area the 183-B1 well, submit a development plan to move to the development and production phase, subject to the approval of the ANP, and relinquish the remaining acreage in the block.

(3) The total E&E balance reflected in the table above excludes \$3.6 million of other assets classified as E&E as at December 31, 2022, largely relating to equipment and materials inventory available for use on future capital projects.

NATURAL GAS ASSETS:

Caburé Natural Gas Field

Alvo Petro's flagship asset, the Caburé natural gas field, commenced commercial natural gas deliveries on July 5, 2020. The Caburé field extends across four blocks in the Recôncavo Basin in the state of Bahia in Brazil, two of which are held by Alvo Petro and two of which are held by our partner, with Alvo Petro's share of the unitized area (the "Unit") being 49.1%. 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. In 2022, the 7-CARN-2D-BA Well (“Unit-C Well”) (49.1% Alvopetro) was drilled and tested at the Unit and the results have been incorporated in the GLJ Reserves and Resources Report.

Murucututu Natural Gas Project

Alvopetro’s Murucututu natural gas project extends across Blocks 183 and 197, both held 100% 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. In 2022, Alvopetro completed installation of a 9-kilometre transfer pipeline extension to connect the 183(1) well to our Caburé transfer pipeline and constructed and commissioned field production facilities. We have also completed pipeline construction to tie-in our 197(1) well. In mid-October 2022, we commenced production from the 183(1) well. Capital plans for the project in 2023 include stimulation of our 197(1) well and drilling two additional “fit-for-purpose” development wells with total expenditures of \$16 million budgeted at our Murucututu project in 2023. Stimulation operations at our 197(1) well have now commenced and we expect production from the well to commence in the second quarter.

Natural Gas Sales

Alvopetro’s share of natural gas from the Caburé natural gas field and the Murucututu 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”). Total natural gas sales averaged 14.6 MMcfpd in 2022 (2021 – 13.5 MMdfpd), the majority of which was from the Caburé field. Including natural gas liquids sales from condensate which averaged 110 bopd in 2022 (2021 – 103 bopd), total natural gas and NGL sales averaged 2,551 boepd (2021 – 2,356 boepd).

The GSA provides for the sale of firm volumes and interruptible volumes and has take-or-pay provisions and ship-or-pay penalties to ensure performance by both parties which are based on the firm volumes. For 2021 and 2022, the Company agreed to firm volumes of 10.6 MMcfpd (300 10³m³/d) and interruptible volumes of up to 7.1 MMcfpd (200 10³m³/d). For 2023, the Company has agreed to the same firm and interruptible volumes and has the ability to adjust the firm volumes up to 7.9 MMcfpd (225 10³m³/d) and the interruptible volumes up to 9.7 MMcfpd (275 10³m³/d) with at least 60 days notice.

OIL ASSETS:

The Company has two oil fields (Bom Lugar and Mãe-da-lua), with marginal oil production historically. Total oil sales averaged 6 bopd in 2022 (2 bopd in 2021). In 2023, Alvopetro plans to drill up to two oil development prospects on the Bom Lugar field, the first of which comprises the 2P reserves value assigned by GLJ in the GLJ Reserves and Resources Report, with total capital expenditures budgeted of \$11 million, including the two development wells and necessary facility upgrades. On the Mãe-da-lua field, Alvopetro has planned a stimulation of the existing well in 2023 at a total estimated cost of \$0.5 million to improve oil recovery rates (included in 2P reserves assigned by GLJ in the GLJ Reserves and Resources Report).

EXPLORATION ASSETS (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 drilled and tested the 182-C1 well on Block 182, drilled and tested the 183-B1 well on Block 183 and drilled and commenced testing of the 182-C2 well on Block 182 (which was completed in January 2023).

With respect to Block 182, Alvopetro abandoned the 182-C1 well subsequent to December 31, 2022. Based on open hole logs, the 182-C1 well had encountered net pay in the Agua Grande Formation but very close to the main bounding fault, and no hydrocarbons were recovered during testing. The well crossed over the main bounding fault and did not encounter the secondary target in the Sergi Formation. As a result, Alvopetro drilled the second well (182-C2) further away from the fault to better assess the reservoir quality of the Agua Grande Formation and to reach the secondary target of the Sergi Formation. Following the decision to abandon the 182-C1 well, all costs associated with the well were written off in 2022 and an impairment expense of \$6.3 million was recognized on Block 182 in Q4 2022.

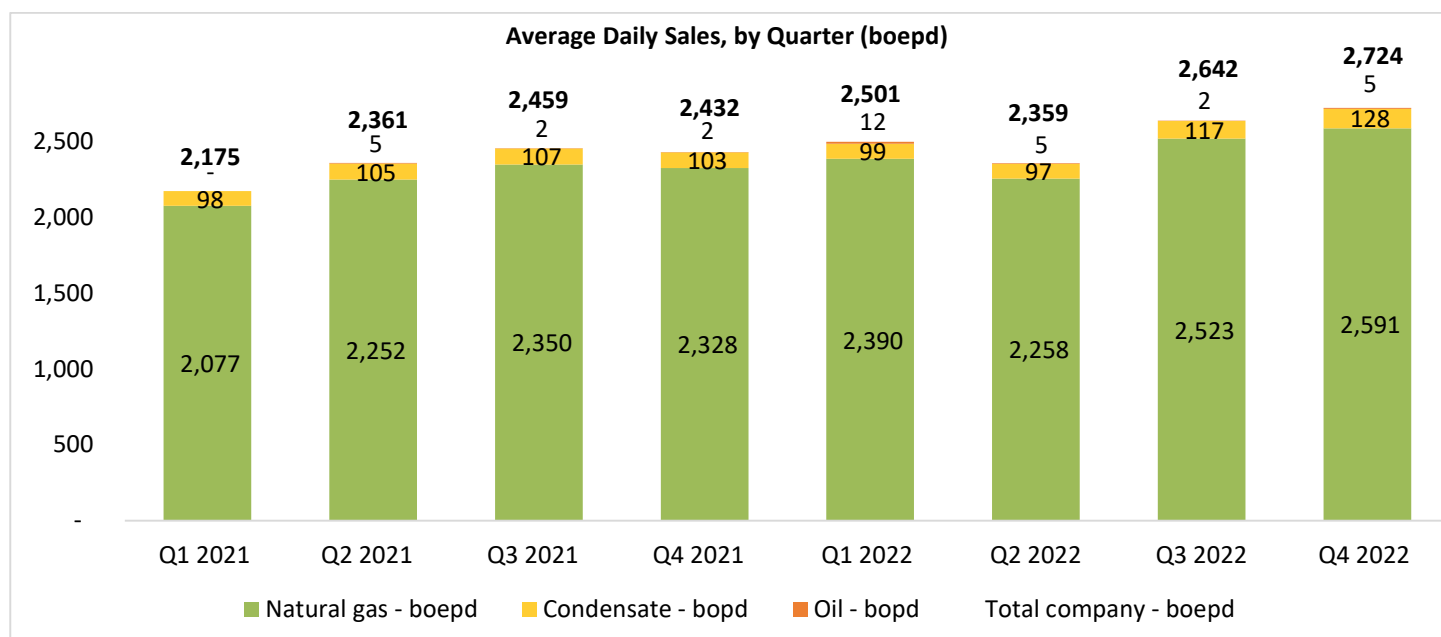
With respect to the 182-C2 well and the 183-B1 well, initial testing results indicated lower than anticipated permeability. Alvopetro is evaluating alternatives to remediate possible permeability impacts from near wellbore damage. Future capital expenditures on these projects will depend these initial results.

FINANCIAL AND OPERATING REVIEW

Sales Volumes

	Three Months Ended December 31,			Year Ended December 31,		
	2022	2021	Change (%)	2022	2021	Change (%)
Total sales volumes by product:						
Natural gas (Mcf)	1,430,275	1,284,914	11	5,346,243	4,933,625	8
NGLs – condensate (bbls)	11,782	9,459	25	40,262	37,582	7
Oil (bbls)	478	170	181	2,129	786	171
Total sales (boe)	250,639	223,781	12	933,436	860,639	8
Average daily sales by product:						
Natural gas (Mcfpd)	15,546	13,966	11	14,647	13,517	8
NGLs – condensate (bopd)	128	103	24	110	103	7
Oil (bopd)	5	2	150	6	2	200
Average daily sales (boepd)	2,724	2,432	12	2,557	2,358	8

Alvopetro achieved another record quarter of average daily sales volumes in Q4 2022 with natural gas sales of 15.5 MMcfpd and overall sales volumes of 2,724 boepd, an increase of 12% from Q4 2021 and 3% from Q3 2022.



Average Realized Sales Prices

	Three Months Ended December 31,			Year Ended December 31,		
	2022	2021	Change (%)	2022	2021	Change (%)
Average realized prices⁽¹⁾:						
Natural gas (\$/Mcf)	11.18	7.07	58	11.07	6.50	70
NGL – condensate (\$/bbl)	89.29	84.36	6	103.50	75.89	36
Oil (\$/bbl)	79.50	76.47	4	82.67	63.61	30
Total (\$/boe)	68.13	44.22	54	68.04	40.64	67
Average benchmark prices:						
Brent oil (\$/bbl)	88.72	79.61	11	100.93	70.86	42
Henry Hub (\$/MMBtu)	5.55	4.75	17	6.45	3.89	66
National Balancing Point (\$/MMBtu)	19.84	30.44	(35)	25.27	15.80	60
Average contracted natural gas price⁽²⁾						
BRL/m ³	1.94	1.31	48	1.88	1.16	62
Average foreign exchange rate:						
\$1 USD = BRL	5.255	5.586	5.9	5.165	5.396	4.3

(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 volumetric 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 1st and August 1st) 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 \$5.65/MMBtu and \$9.61/MMBtu, respectively, as of February 1, 2022 and \$6.01/MMBtu and \$10.22/MMBtu, respectively, as of August 1, 2022. The floor and ceiling prices are adjusted for US inflation under the terms of the GSA. The natural gas price is then converted to a BRL-denominated natural gas price based on historical average foreign exchange rates and billed monthly in BRL 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 of February 1, 2022 and August 1, 2022, Alvopetro’s natural gas price was set to the respective ceiling prices within the GSA. With all Q4 2022 natural gas sales at the ceiling price, Alvopetro’s realized natural gas price increased 58% to \$11.18/Mcf in Q4 2022 compared to \$7.07/Mcf in Q4 2021.

Condensate production from the Caburé Unit, Murucututu and the Facility is sold pursuant to contracts based on Brent. With average Brent prices increasing, our realized sales price on condensate improved 6% compared to Q4 2021.

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

All sales and realized prices are reported net of applicable sales taxes.

Natural Gas, Oil and Condensate Sales Revenue

	Three Months Ended December 31,			Year Ended December 31,		
	2022	2021	Change (%)	2022	2021	Change (%)
Natural gas	15,987	9,085	76	59,165	32,078	84
Condensate	1,052	798	32	4,167	2,852	46
Oil	38	13	192	176	50	252
Total revenues	17,077	9,896	73	63,508	34,980	82

Alvopetro’s total natural gas, oil and condensate revenues increased \$7.2 million compared to Q4 2021 with the 54% increase in the average realized price per boe and the 12% increase in average daily sales volumes.

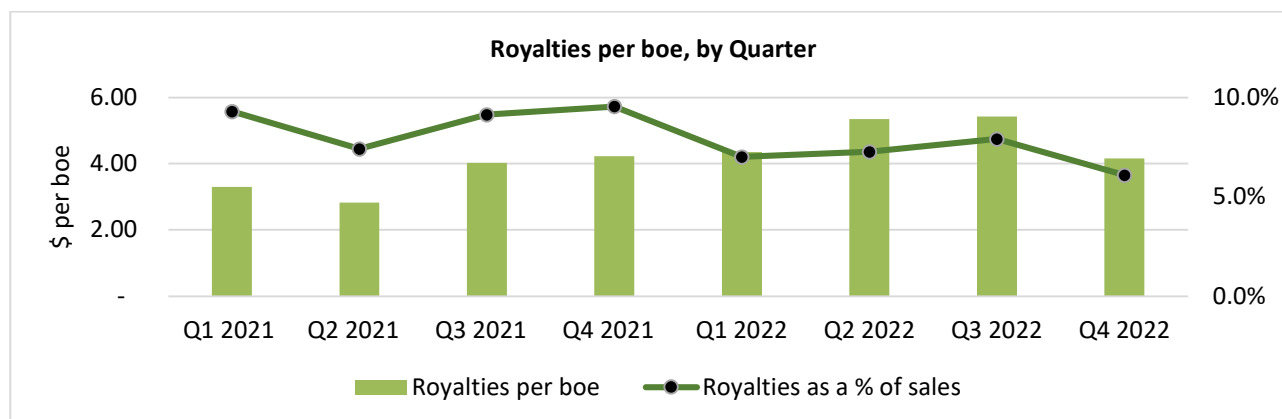
Royalties

	Three Months Ended December 31,			Year Ended December 31,		
	2022	2021	Change (%)	2022	2021	Change (%)
Royalties	1,041	945	10	4,486	3,107	44
Royalties per boe (\$) ⁽¹⁾	4.15	4.22	(2)	4.81	3.61	33
Royalties as a % of sales ⁽¹⁾	6.1%	9.5%	(36)	7.1%	8.9%	(20)

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

As of May 1, 2022, Alvopetro's Caburé natural gas field and the Mãe-da-lua field are subject to a base 7.5% government royalty plus a 1% landowner royalty. Prior to this time, these fields were subject to a 10% government royalty rate and the 1% landowner royalty, contributing to lower royalties as a percentage of sales in 2022. Following production commencement from the Murucututu natural gas field in Q4 2022, Alvopetro applied for the reduced royalty rate on this field as well. 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 on 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 natural gas royalties, Alvopetro's effective royalty rate fluctuates with changes in Henry Hub prices relative to Alvopetro's contracted natural gas price.



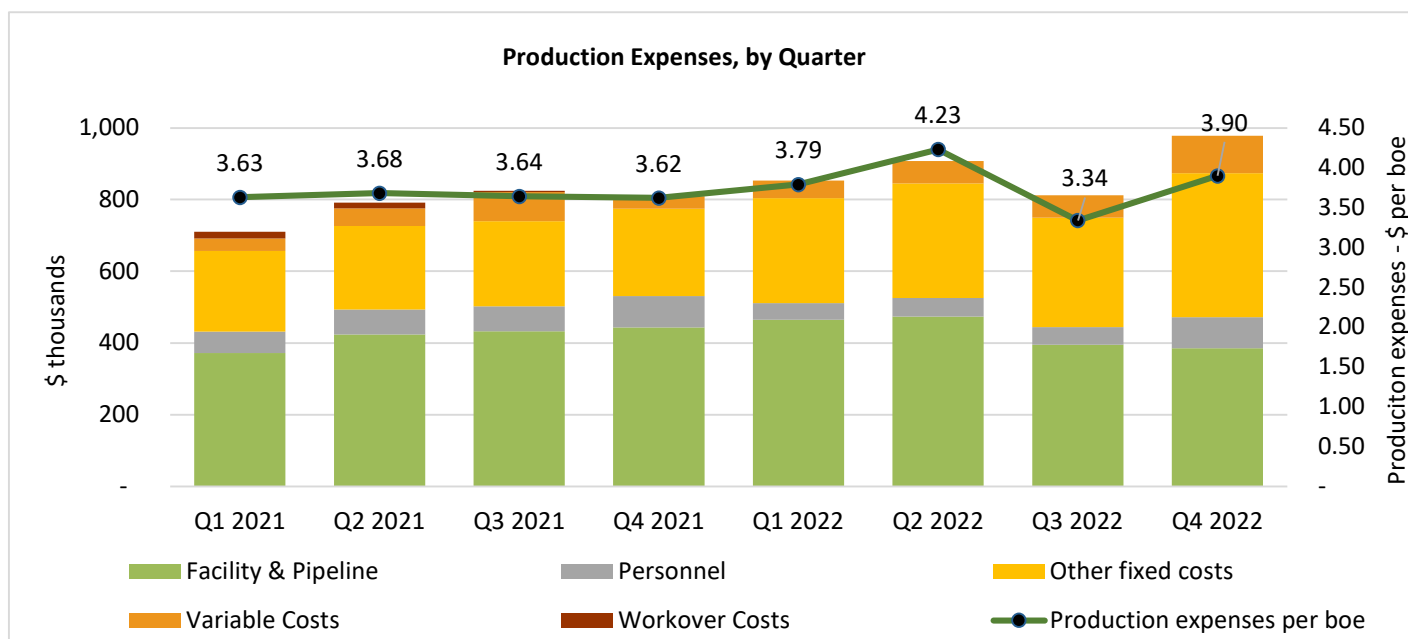
Production Expenses

	Three Months Ended December 31,			Year Ended December 31,		
	2022	2021	Change (%)	2022	2021	Change (%)
Production expenses by type:						
Personnel costs	87	88	(1)	233	286	(19)
Facility and pipeline costs	385	443	(13)	1,719	1,672	3
Other fixed costs	401	243	65	1,319	939	40
Variable costs	105	35	200	279	199	40
Workover costs	-	-	-	-	38	(100)
Total production expenses	978	809	21	3,550	3,134	13

	Three Months Ended December 31,			Year Ended December 31,		
	2022	2021	Change (%)	2022	2021	Change (%)
Production expenses per boe ⁽¹⁾ :						
Personnel costs	0.35	0.39	(10)	0.25	0.34	(26)
Facility and pipeline costs	1.54	1.98	(22)	1.84	1.94	(5)
Other fixed costs	1.59	1.09	46	1.41	1.09	29
Variable costs	0.42	0.16	163	0.30	0.23	30
Workover costs	-	-	-	-	0.04	(100)
Total	3.90	3.62	8	3.80	3.64	4

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

The majority of the Company's production expenses relate to operational fees paid for the Facility and the transfer pipeline and agreed unit operating costs with our partner on the Caburé upstream assets. With commencement of production from the 183(1) well on the Murucututu natural gas field, other fixed costs increased in Q4 2022 compared to both Q3 2022 and Q4 2021. Other fixed costs for the year ended December 31, 2022 are also higher compared to 2021 due to an increase in Alvo Petro's share of unit operating costs with higher proportionate production allocations from the Caburé Unit in 2022 compared to 2021. Variable costs were higher in Q4 2022 compared to Q4 2021 and Q3 2022 due to additional maintenance expenditures incurred and additional costs associated with commencement of production from the Murucututu field.



Operating Netback

	Three Months Ended December 31,			Year Ended December 31,		
	2022	2021	Change (%)	2022	2021	Change (%)
Operating netback ⁽¹⁾						
Natural gas, oil and condensate sales	17,077	9,896	73	63,508	34,980	82
Royalties	(1,041)	(945)	10	(4,486)	(3,107)	44
Production expenses	(978)	(809)	21	(3,550)	(3,134)	13
Operating netback	15,058	8,142	85	55,472	28,739	93
Operating netback per boe ⁽¹⁾ :						
Average realized sales price - \$ per boe ⁽¹⁾	68.13	44.22	54	68.04	40.64	67
Royalties - \$ per boe ⁽¹⁾	(4.15)	(4.22)	(2)	(4.81)	(3.61)	33
Production expenses - \$ per boe ⁽¹⁾	(3.90)	(3.62)	8	(3.80)	(3.64)	4
Operating netback per boe	60.08	36.38	65	59.43	33.39	78
Operating netback margin ⁽¹⁾	88%	82%	7	87%	82%	6

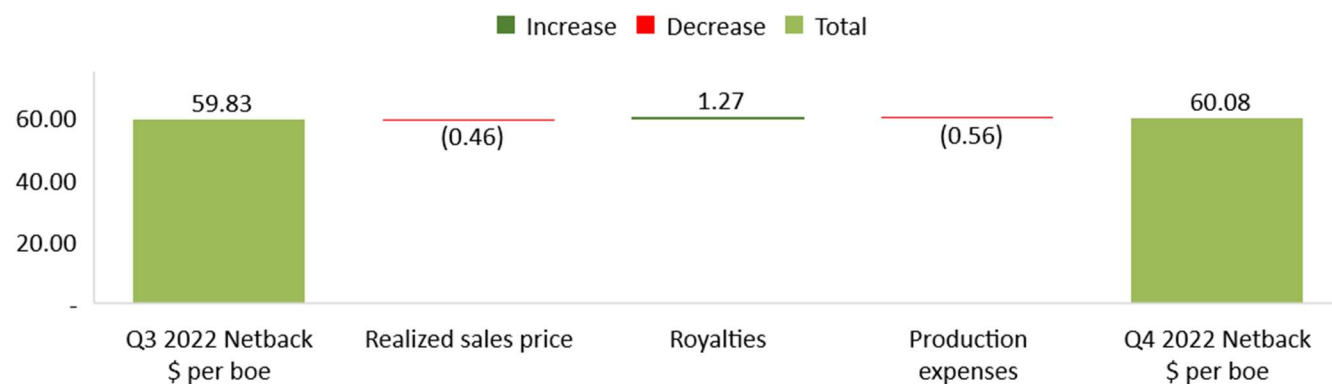
(1) See "Non-GAAP and Other Financial Measures" section within this MD&A.

Alvopetro's operating netback increased by \$23.70 per boe (+65%) in Q4 2022 compared to Q4 2021 due mainly to the improved realized sales prices. Compared to Q3 2022, Alvopetro's operating netback increased \$0.25 per boe with lower royalties largely offset by lower realized prices on condensate sales and increased production expenses per boe.

Change in Operating Netback per boe by Component (Q4 2022 compared to Q4 2021)

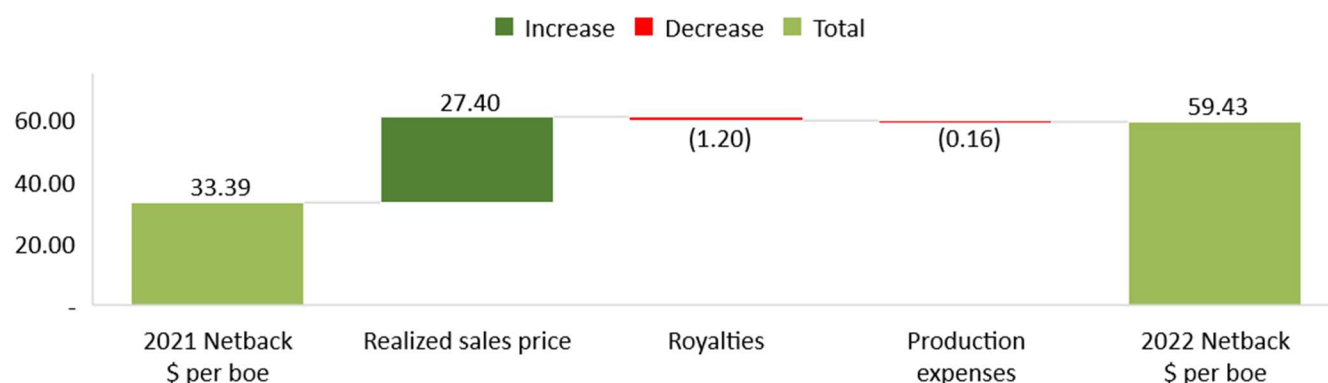


Change in Operating Netback per boe by Component (Q4 2022 compared to Q3 2022)



For the year ended December 31, 2022, Alvopetro's operating netback increased \$26.04 per boe (+78%) due to higher realized prices.

**Change in Operating Netback per boe by Component
(YTD 2022 compared to YTD 2021)**



Other Income

	Three Months Ended December 31,			Year Ended December 31,		
	2022	2021	Change (%)	2022	2021	Change (%)
Tax recoveries from operations	134	121	11	449	629	(29)
Retroactive tax recoveries	-	-	-	-	390	(100)
Interest income	198	6	3,200	367	20	1,735
Water disposal income and other	25	17	47	107	35	206
Total	357	144	148	923	1,074	(14)

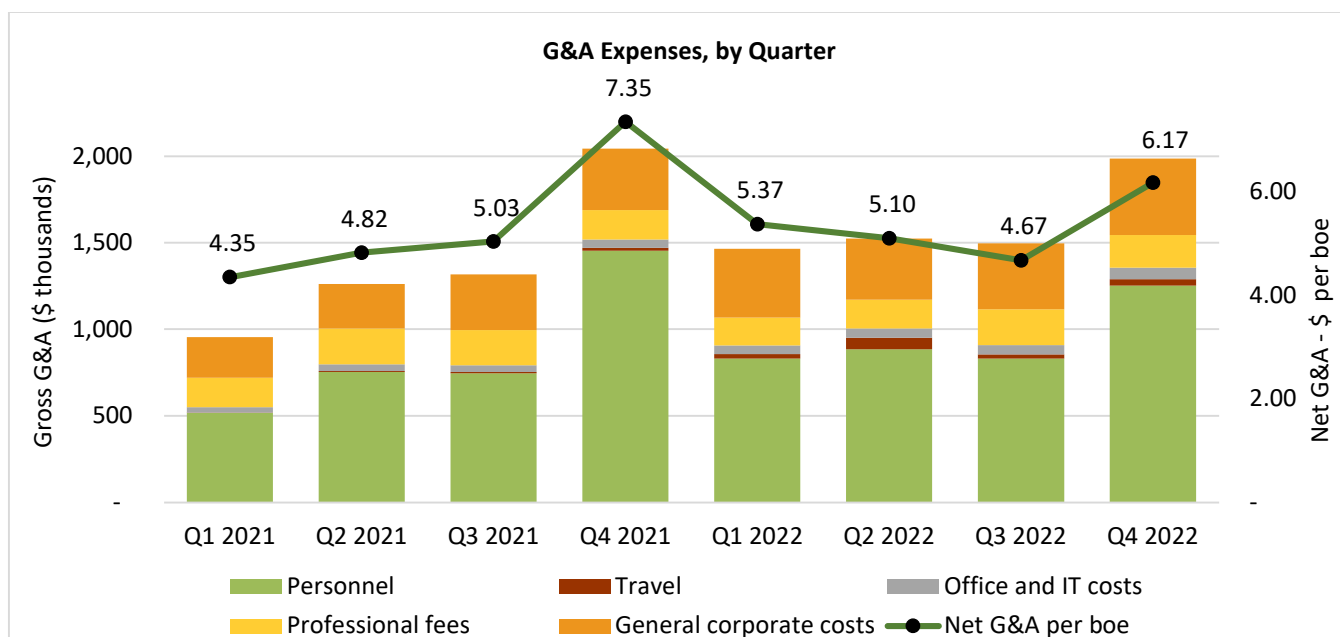
The majority of other income relates to interest income on cash and cash equivalent deposits and tax credits arising from ongoing operations. With rising cash balances and higher interest rates in 2022 compared to 2021, Alvopetro's interest income has increased. For the year ended December 31, 2022, other income has decreased compared to 2021 as Alvopetro benefited from retroactive tax recoveries of \$0.4 million in 2021 following a change in Brazilian tax legislation.

General and Administrative ("G&A") Expenses

G&A Expenses, by type:	Three Months Ended December 31,			Year Ended December 31,		
	2022	2021	Change (%)	2022	2021	Change (%)
Personnel	1,253	1,454	(14)	3,799	3,469	10
Travel	36	16	125	152	31	390
Office and IT costs	67	49	37	224	159	41
Professional fees	189	169	12	722	748	(3)
General corporate costs	441	355	24	1,573	1,168	35
Gross G&A	1,986	2,043	(3)	6,470	5,575	16
Capitalized G&A	(439)	(399)	10	(1,486)	(905)	64
G&A expenses	1,547	1,644	(6)	4,984	4,670	7
\$ per boe ⁽¹⁾	6.17	7.35	(16)	5.34	5.43	(2)

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

Annual salary adjustments and growing staffing levels resulted in higher personnel costs compared to 2021. Both Q4 2021 and Q4 2022 include final adjustments for annual short-term incentive bonuses for personnel, contributing to increased personnel costs compared to other quarters and higher G&A costs per boe. With increased activity levels, travel and general corporate costs have also risen compared to 2021 comparative periods. Increased capital projects in 2022 resulted in higher capitalized G&A compared to 2021.

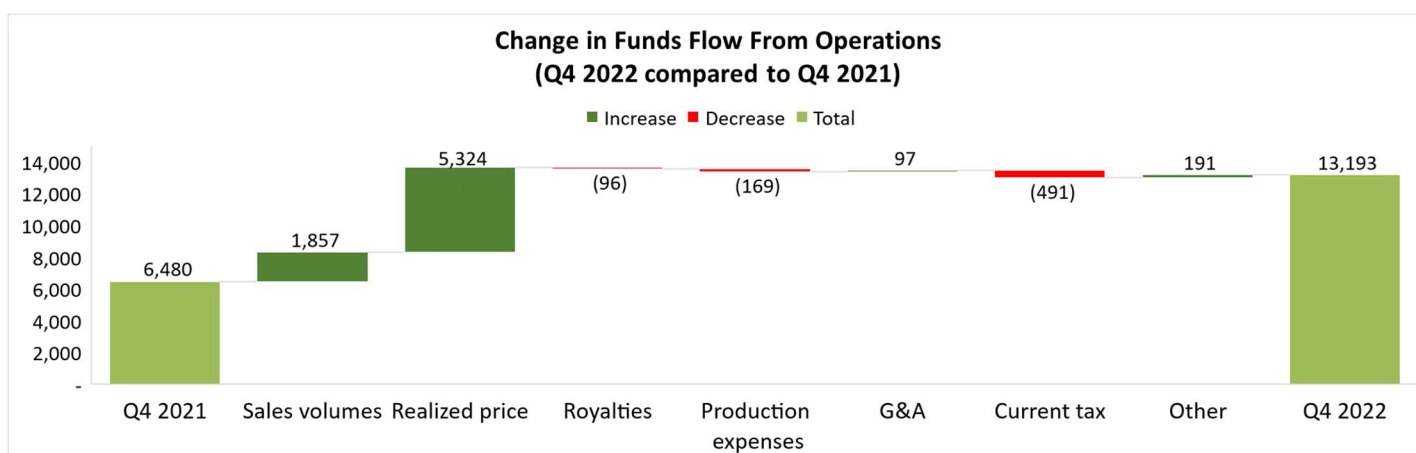


Cash Flow from Operating Activities and Funds Flow from Operations

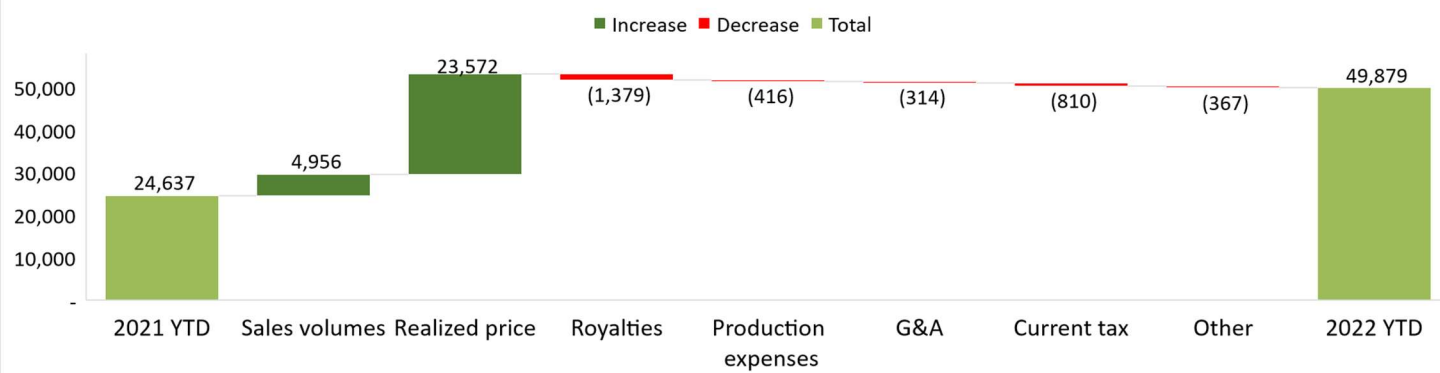
	Three Months Ended December 31,			Year Ended December 31,		
	2022	2021	Change (%)	2022	2021	Change (%)
Cash flows from operating activities	12,366	7,088	74	47,534	24,291	96
Per share – basic (\$)	0.34	0.21	62	1.37	0.73	88
Per share – diluted (\$)	0.33	0.20	65	1.29	0.70	84
Funds flow from operations ⁽¹⁾	13,193	6,480	104	49,879	24,637	102
Per share – basic (\$)	0.36	0.19	89	1.44	0.74	95
Per share – diluted (\$)	0.35	0.18	94	1.35	0.71	90

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

Funds flow from operations and cash flow from operating activities increased in both the three months and year ended December 31, 2022 compared to the same periods in 2021 due to higher revenues associated with increased commodity prices and sales volumes, partially offset by higher royalties, production expenses and current tax expense.



Change in Funds Flow From Operations (YTD 2022 compared to YTD 2021)



Foreign Exchange

	December 31, 2022	As at September 30, 2022	December 31, 2021	% Appreciation (Depreciation) of BRL/CAD to USD	
				Q4 2022	YTD 2022
Rate at end of period:					
\$1 USD = BRL	5.218	5.407	5.581	3.5	6.5
\$1 USD = CAD	1.354	1.371	1.268	1.2	(6.8)

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:

	Three Months Ended December 31,		Year Ended December 31,		% Appreciation (Depreciation) of BRL/CAD to USD	
	2022	2021	2022	2021	Change from Q4 2021	Change from YTD 2022
Average rate in the period:						
\$1 USD = BRL	5.255	5.586	5.165	5.396	5.9	4.3
\$1 USD = CAD	1.358	1.260	1.300	1.253	(7.8)	(3.8)

The assets and liabilities of Alvo Petro'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 appreciated 4% from September 30, 2022 and 7% from December 31, 2021 resulting in exchange gains in other comprehensive income of \$2.4 million in Q4 2022 and \$3.1 million for the year ended December 31, 2022.

Foreign exchange fluctuations on USD-denominated intercompany 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 \$1.0 million of foreign exchange gains on intercompany advances in Q4 2022 (Q4 2021 - \$0.6 million foreign exchange loss) and \$2.1 million in the year ended December 31, 2022 (2021 - \$1.8 million foreign exchange loss) due to the appreciation of the BRL to the USD.

As discussed above, the Company is exposed to foreign exchange fluctuations on its natural gas revenues. With respect to Alvo Petro's natural gas price resets on February 1, 2022 and August 1, 2022, respectively, the price determined in BRL was based on average historical exchange rates of 5.40 and 5.08. In Q4 2022, the actual average rate was 5.26, a depreciation of 4% compared to the rate used in the August 1st reset. 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 Months Ended December 31,		Year Ended December 31,	
	2022	2021	2022	2021
Increase (Decrease) to Natural Gas Revenues from:				
5% Appreciation of BRL to USD	842	478	3,114	1,688
10% Appreciation of BRL to USD	1,777	1,009	6,574	3,564
5% Depreciation of BRL to USD	(761)	(433)	(2,817)	(1,528)
10% Depreciation of BRL to USD	(1,453)	(826)	(5,378)	(2,916)

To mitigate exposure to foreign exchange volatility with respect to the BRL, the Company has periodically entered into BRL/USD forward exchange rate contracts. In 2022, the Company entered into a total of BRL10.6 million forward exchange contracts with settlements based on fixed rates between 4.74 and 5.58 per USD and settlement dates spanning from February to July 2022. 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 (loss). Realized gains or losses are recognized in the period the contracts are settled. Total losses with respect to these contracts for the year ended December 31, 2022 were \$0.1 million (2021 - \$0.03 million gain). As of December 31, 2022 and December 31, 2021, no forward contracts were outstanding.

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,		
	2022	2021	Change (%)	2022	2021	Change (%)
Depletion and depreciation on PP&E	1,839	1,698	8	5,961	6,736	(12)
Depreciation of right-of-use assets	295	235	26	1,042	971	7
Depletion and depreciation expense	2,134	1,933	10	7,003	7,707	(9)
\$ per boe ⁽¹⁾	8.51	8.64	(2)	7.50	8.95	(16)

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

Depletion is calculated on a unit-of-production basis for all upstream PP&E assets. Depletion was higher in Q4 2022 compared to Q4 2021 due to higher production volumes and a higher depletable base with additional future development costs for reserves additions on the Murucututu field, partially offset by the impact of a property fully depleted as of December 31, 2021. All midstream PP&E assets are depreciated over the estimated useful life of the assets on a straight-line basis and the Company's right-of-use assets are depreciated over the lease term on a straight-line basis. With the expansion of the Facility completed in the third quarter of 2022, the increase in future equipment rental costs associated with the expansion was recognized as an increased right-of-use asset, contributing to higher depreciation in Q4 2022 and for the year ended December 31, 2022.

Impairment

	Three Months Ended December 31,			Year Ended December 31,		
	2022	2021	Change (%)	2022	2021	Change (%)
Block 182	6,338	-	-	6,338	-	-
Total impairment expense	6,338	-	-	6,338	-	-

The impairment recognized in 2022 relates to Block 182 and costs associated with drilling and testing the 182-C1 well as the Company decided to proceed with an abandonment of the well. The Company continues to evaluate the 182-C2 prospect on Block 182. There were no other indications of impairment or impairment reversal in 2022.

Share-Based Compensation Expense

	Three Months Ended December 31,			Year Ended December 31,		
	2022	2021	Change (%)	2022	2021	Change (%)
Share-based compensation expense	269	139	94	861	440	96

Share-based compensation expense is 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 as well as costs associated with dividend equivalents attributable to RSUs and DSUs granted to date. As of December 31, 2022, 1.6 million stock options, 0.5 million RSUs and 0.2 million DSUs were outstanding compared to 1.4 million stock options, 0.4 million RSUs and 0.2 million DSUs at December 31, 2021. With more awards outstanding and higher exercise prices for new stock options granted (due to higher share prices compared to 2021), overall share-based compensation expense increased in 2022.

Finance Expenses

	Three Months Ended December 31,			Year Ended December 31,		
	2022	2021	Change (%)	2022	2021	Change (%)
Lease interest	501	305	64	1,531	1,355	130
Accretion on decommissioning liabilities	10	23	(57)	51	82	(38)
Amortization of deferred financing costs	-	156	(100)	496	635	(22)
Interest on Credit Facility	(6)	154	(104)	300	1,079	(72)
Finance expenses	505	638	(21)	2,378	3,151	(25)

Finance expenses decreased in Q4 2022 and for the year ended December 31, 2022 compared to the 2021 comparative periods due mainly to decreased interest on our Credit Facility as a result of the declining principal balance following repayments. In September 2022, Alvo Petro repaid the final amount owing under the Credit Facility, compared to a balance of \$6.5 million outstanding as of December 30, 2021. Interest on capital leases increased in Q4 2022 following completion of the Facility expansion and the associated incremental lease liabilities.

Income Tax Expense

	Three Months Ended December 31,			Year Ended December 31,		
	2022	2021	Change (%)	2022	2021	Change (%)
Current income tax expense	624	133	369	1,317	507	160
Deferred income tax expense	159	218	(27)	4,396	5,919	(26)
Total	783	351	123	5,713	6,426	(11)

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 Supertendência 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 Alvo Petro earns for a period of ten taxation years, commencing January 1, 2021, and ending December 31, 2030. As Alvo Petro expects the majority of temporary differences to reverse during the SUDENE period, for deferred tax purposes Alvo Petro has estimated the future tax rate applicable to temporary differences based on the SUDENE rate of 15.25%.

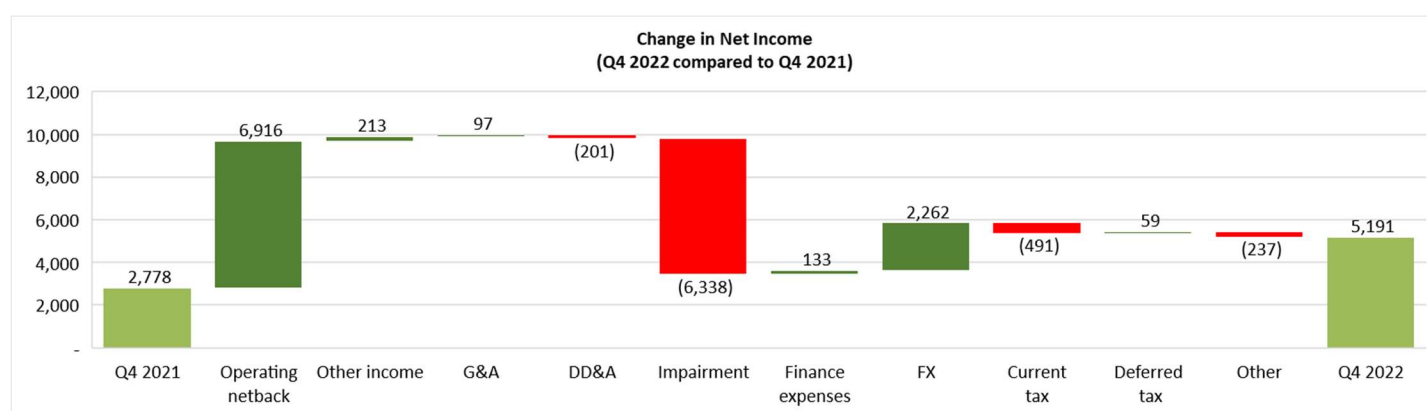
With increased net income, the Company’s current tax expense increased in 2022 compared to the same periods in 2021. Overall, the Company’s effective tax rate (computed as total income tax expense divided by income before taxes) is 15% in the year ended December 31, 2022, consistent with the SUDENE rate of 15.25%. The benefit of the SUDENE incentive was recognized in the 2021 taxation year in the three months ended September 30, 2021, when Alvo Petro received approval for the incentive from tax authorities. As Alvo Petro had a deferred tax asset on January 1, 2021, the impact of the rate reduction from the statutory rate of 34% to the

SUDENE rate of 15.25% resulted in increased deferred tax expense in 2021 of \$4.1 million as all available tax pools and other deductible temporary differences were valued at a lower future tax rate, which increased the effective tax rate in the year ended December 31, 2021 to 53%.

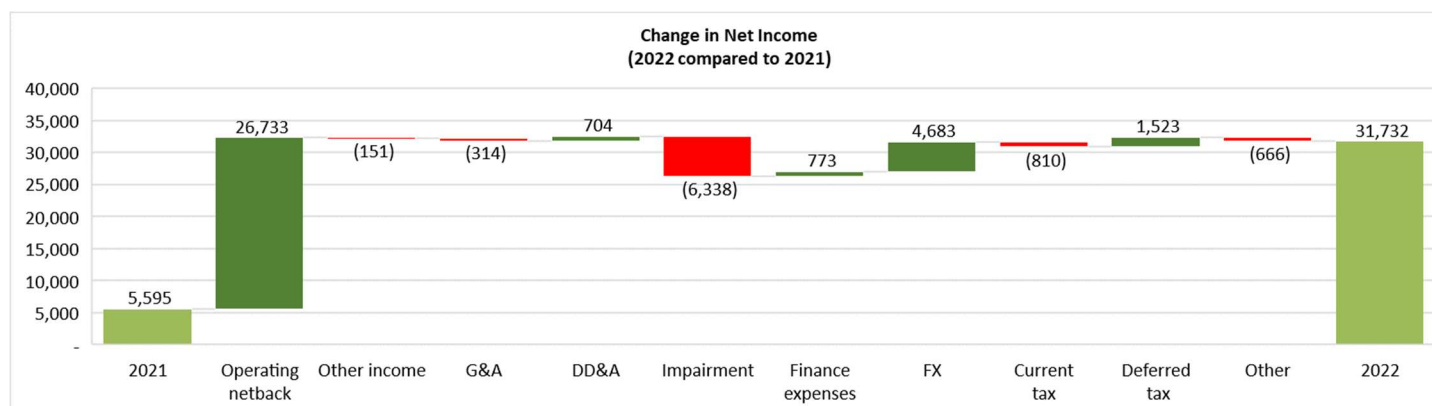
Net Income

	Three Months Ended December 31,			Year Ended December 31,		
	2022	2021	Change (%)	2022	2021	Change (%)
Net income	5,191	2,778	87	31,732	5,595	467
Per share – basic(\$)	0.14	0.08	75	0.92	0.17	441
Per share – diluted(\$)	0.14	0.08	75	0.86	0.16	438

The Company reported \$5.2 million in net income in Q4 2022, an increase of \$2.4 million from Q4 2021, despite a \$6.3 million impairment expense due to improved operating netback¹ and a foreign exchange gain of \$1.4 million in Q4 2022 compared to a loss of \$0.9 million in Q4 2021, partially offset by higher DD&A and current tax expense in 2022.



For the year ended December 31, 2022, net income increased \$26.1 million due to increased operating netback¹ and foreign exchange gains and lower DD&A, finance expense and deferred tax expense, partially offset by impairment expense, higher G&A, higher current tax and reductions in other income.



¹ Non-GAAP Financial Measure. See “Non-GAAP and Other Financial Measures”.

Capital Expenditures

	Three Months Ended December 31,		Year Ended December 31,	
Capital Expenditures by Type	2022	2021	2022	2021
E&E				
Drilling and completions	2,946	150	14,314	621
Facility & equipment	4	-	100	17
Land, lease, and similar payments	-	-	(7)	8
Inventory purchases	1,600	-	3,262	526
Capitalized G&A	292	142	876	356
Total E&E	4,842	292	18,545	1,528
PP&E				
Facility & equipment	464	885	3,449	1,950
Drilling & completion	420	13	1,774	195
Land, lease and similar payments	53	21	144	42
Furniture & fixtures	9	2	47	29
Capitalized G&A	147	257	610	549
Other	9	-	226	220
Total PP&E	1,102	1,178	6,250	2,985
Total Capital Expenditures by Type	5,944	1,470	24,795	4,513

	Three Months Ended December 31,		Year Ended December 31,	
Capital Expenditures by Property	2022	2021	2022	2021
E&E				
Blocks 182, 183	3,242	292	15,308	1,002
Inventory	1,600	-	3,262	526
Other	-	-	(25)	-
Total E&E	4,842	292	18,545	1,528
PP&E				
Caburé and associated midstream assets	606	26	2,022	56
Murucututu	466	1,144	4,074	2,690
Other	30	8	154	239
Total PP&E	1,102	1,178	6,250	2,985
Total Capital Expenditures by Property	5,944	1,470	24,795	4,513

Capital expenditures in the quarter included \$1.7 million for testing the 183-B1 well, final drilling costs of \$0.5 million on the 182-C2 well, initial testing cost on the 182-C2 well of \$0.8 million, \$0.5 million in expenditures at the Caburé unit including facilities expansion and drilling and testing costs for the Unit-C well, development costs on our Murucututu field of \$0.5 million, \$1.6 million for long-lead inventory purchases and \$0.4 million in capitalized G&A.

Summary of Annual Results

	2022	2021	2020
Financial			
Natural gas, oil and condensate sales	63,508	34,980	11,308
Net income	31,732	5,595	9,640
Per share – basic (\$) ⁽¹⁾	0.92	0.17	0.29
Per share –diluted (\$) ⁽¹⁾	0.86	0.16	0.27
Cash flows from operations	47,534	24,291	3,061
Per share – basic (\$) ⁽¹⁾	1.37	0.73	0.09
Per share –diluted (\$) ⁽¹⁾	1.29	0.70	0.09
Funds flow from operations ⁽²⁾	49,879	24,637	6,216
Per share – basic (\$) ⁽¹⁾	1.44	0.74	0.19
Per share –diluted (\$) ⁽¹⁾	1.35	0.71	0.18
Net working capital surplus ⁽²⁾	14,698	9,097	5,539
Total assets	98,427	73,630	74,150
Non-current liabilities	9,090	14,515	24,330
Average daily sales:			
Natural gas (Mcfpd)	14,647	13,517	5,346
NGL – condensate (bopd)	110	103	44
Oil (bopd)	6	2	5
Total average daily sales (boepd)	2,557	2,358	940

(1) 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.

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

Natural gas sales from the Caburé field commenced in July 2020 and average daily production has continually increased from the second half of 2020 to the end of 2022. Higher average daily sales volumes in each of 2021 and 2022 and higher averaged realized prices per boe, especially in 2022, has resulted in increased natural gas, oil and condensate revenues as well as higher net income, cash flows from operations and funds flow from operations. Net income in 2020 and 2022 was also positively impacted by foreign exchange gains compared to foreign exchange losses in 2021, partially offset by impairment expense recognized in 2020 and 2022.

With improved funds flow from operations, the Company’s working capital surplus increased from \$5.5 million as of December 31, 2020 to \$14.7 million as of December 31, 2022.

Total assets have increased 33% from December 31, 2020 primarily due to capital spending on exploration projects and our Murucututu natural gas project, along with an increase to right-of-use assets following expansion of the gas treatment facility, partially offset by DD&A and impairment expense.

The Company entered into the Credit Facility in 2019 and had fully drawn all available funds 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 and in 2022, the Credit Facility was fully repaid by September 2022, bringing the balance outstanding to \$nil as of December 31, 2022 contributing to the reduction in non-current liabilities.

Summary of Quarterly Results

	Q4 2022	Q3 2022	Q2 2022	Q1 2022	Q4 2021	Q3 2021	Q2 2021	Q1 2021
Financial								
Natural gas, oil and condensate sales	17,077	16,672	15,787	13,972	9,896	9,963	8,182	6,939
Net income (loss)	5,191	8,795	6,631	11,115	2,778	(20)	3,784	(947)
Per share – basic (\$) ⁽¹⁾	0.14	0.26	0.20	0.33	0.08	(0.00)	0.11	(0.03)
Per share – diluted (\$) ⁽¹⁾	0.14	0.24	0.18	0.30	0.08	(0.00)	0.11	(0.03)
Cash flows from operating activities	12,366	13,838	12,997	8,333	7,088	7,234	5,665	4,304
Per share – basic (\$) ⁽¹⁾	0.34	0.40	0.38	0.25	0.21	0.22	0.17	0.13
Per share - diluted (\$) ⁽¹⁾	0.33	0.37	0.35	0.23	0.20	0.20	0.16	0.13
Funds flow from operations ⁽²⁾	13,193	13,348	12,434	10,904	6,480	7,930	5,471	4,756
Per share – basic (\$) ⁽¹⁾	0.36	0.39	0.37	0.32	0.19	0.24	0.16	0.14
Per share - diluted (\$) ⁽¹⁾	0.35	0.36	0.34	0.30	0.18	0.22	0.16	0.14
Dividends declared	4,357	2,896	2,728	2,716	2,034	2,023	-	-
Per share (\$) ⁽¹⁾	0.12	0.08	0.08	0.08	0.06	0.06	-	-
Capital expenditures	5,944	8,713	6,338	3,800	1,470	1,261	918	864
Net working capital surplus ⁽²⁾	14,698	12,225	11,641	12,302	9,097	6,839	4,499	5,775
Working capital, net of debt (net debt) ⁽²⁾	14,698	12,225	9,096	7,257	2,552	294	(3,046)	(7,254)
Operations								
Average realized prices ⁽²⁾ :								
Natural gas (\$/Mcf)	11.18	11.18	11.90	10.03	7.07	7.07	6.06	5.68
NGL – condensate (\$/bbl)	89.29	101.57	121.93	106.42	84.36	79.36	74.47	64.41
Oil (\$/bbl)	79.50	80.92	94.47	79.50	76.47	61.11	59.63	-
Average foreign exchange (\$1 USD = BRL)	5.255	5.246	4.927	5.233	5.586	5.229	5.291	5.483
Operating netback (\$/boe) ⁽²⁾								
Realized sales price (\$/boe) ⁽²⁾	68.13	68.59	73.54	62.08	44.22	44.04	38.08	35.45
Royalties ⁽²⁾	(4.15)	(5.42)	(5.35)	(4.35)	(4.22)	(4.02)	(2.82)	(3.30)
Production expenses ⁽²⁾	(3.90)	(3.34)	(4.23)	(3.79)	(3.62)	(3.64)	(3.68)	(3.63)
Operating netback (\$/boe) ⁽²⁾	60.08	59.83	63.96	53.94	36.38	36.38	31.58	28.52
Operating netback margin ⁽²⁾	88%	87%	87%	87%	82%	83%	83%	80%
Average daily sales:								
Natural gas (Mcfpd)	15,546	15,139	13,546	14,339	13,966	14,102	13,512	12,464
NGL – condensate (bopd)	128	117	97	99	103	107	105	98
Oil (bopd)	5	2	5	12	2	2	5	-
Total average daily sales (boepd)	2,724	2,642	2,359	2,501	2,432	2,459	2,361	2,175

Notes:

- (1) Per share amounts are based on weighted average shares outstanding other than dividends per share, which is based on the number of common shares outstanding at each dividend record date. 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.
- (2) See “Non-GAAP and Other Financial Measures” section within this MD&A.

Average daily sales volumes increased 3% to 2,724 boepd in Q4 2022. Despite natural gas sales continuing at the ceiling price in the GSA, with the decrease in Brent prices, our realized sales price per boe decreased \$0.46 (-1%). However, with higher daily sales volumes, our natural gas, oil and condensate sales increased \$0.4 million from Q3 2022 (+2%). Our operating netback increased \$0.25 per boe despite lower realized sales prices and higher production expenses due to reduced royalties. Funds flow from operations decreased \$0.2 million despite higher revenues due to higher G&A and current tax expense. Net income decreased \$3.6 million due mainly to impairment expense of \$6.3 million recognized in Q4, partially offset by foreign exchange gains compared to losses in the prior quarter.

Commitments and Contingencies

The following is a summary of Alvo Petro's contractual commitments as at December 31, 2022:

Commitments	< 1 Year	1-3 Years	Thereafter	Total
Minimum work commitments ^{(1), (2)}				
Bom Lugar	67	-	-	67
Mãe-da-lua	-	-	67	67
Minimum work commitments	67	-	67	134
Gas Treatment Agreement⁽²⁾	1,361	2,721	6,123	10,205
Total commitments	1,428	2,721	6,190	10,339

(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 minimum work commitments in the table above. Alvo Petro previously reported a minimum work commitment for Block 183. This commitment was satisfied with the completion of drilling of the 183-B1 well in July 2022, subject to the approval of the ANP.

(2) Minimum work commitments and all amounts for the Gas Treatment Agreement are BRL denominated commitments and reflected in the table above based on the U.S. dollar equivalent as at December 31, 2022. As a result, such commitments are subject to fluctuations in the USD/BRL foreign exchange rate.

Amounts presented above for the Gas Treatment Agreement represent the monthly service fees for operation and maintenance of the Facility and Alvo Petro's 11-kilometre transfer pipeline. All costs associated with equipment rental, including equipment rental costs for the Facility expansion, are treated as a 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

Cash and Working Capital

At December 31, 2022, Alvo Petro's cash and cash equivalents of \$19.8 million and restricted cash of \$0.3 million were held as follows:

	Total	U.S. Dollar	CAD Dollar ⁽¹⁾	BRL ⁽¹⁾
Cash and cash equivalents held in Canada	14,498	14,213	285	-
Cash and cash equivalents held in Brazil	5,286	-	-	5,286
Restricted cash - current	296	-	-	296
Total	20,080	14,213	285	5,582

(1) Amounts in the table above denote the U.S. dollar equivalent as at December 31, 2022.

The Company had cash and cash equivalents of \$19.8 million and a total net working capital surplus of \$14.7 million at December 31, 2022. The Company has a restricted cash balance of \$0.3 million as at December 31, 2022. Positive cash flows from natural gas deliveries and associated condensate sales are projected to be sufficient to fund the Company's operational activities and planned capital projects 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 and to increase the quarterly dividend in the first quarter of 2022 and again in the fourth quarter of 2022. The Company is exposed to a variety of risks which may adversely impact future cash flows. The Company manages these risks 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.

The liability for decommissioning obligations of Alvopetro was \$0.6 million as at December 31, 2022, 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, 2022, the Company had \$3.3 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.

Credit Facility

In 2019, the Company entered into a credit facility (the “Credit Facility”) which was secured by all of Alvopetro’s assets. The Credit Facility was subject to cash interest of 9.5% per annum, payable monthly. In September 2022, Alvopetro repaid all final amounts outstanding under the Credit Facility and the Facility has been cancelled.

Lease Liabilities

The lease liability to Enerflex in respect of the monthly equipment rental under our Gas Treatment Agreement represents the majority of the Company’s lease liabilities as at December 31, 2022 and December 31, 2021. In the third quarter of 2022, Enerflex completed the expansion of the Facility to increase the operational capacity to 500,000 m³/d (17.7 MMcfd) under the terms of the existing Gas Treatment Agreement, resulting in lease liability additions in the period. Additional lease liabilities outstanding relate to office space in Canada and Brazil and surface land access for our midstream assets. The Company’s lease liabilities are as follows:

	As at	
	December 31, 2022	December 31, 2021
Lease liabilities, beginning of period	7,979	8,310
Additions	1,930	190
Finance expense	1,531	1,355
Lease payments	(2,027)	(1,856)
Foreign currency translation	15	(20)
Lease liabilities, end of period	9,428	7,979
Current	855	516
Non-current	8,573	7,463
Total, end of period	9,428	7,979

Dividends

In 2021, Alvopetro initiated a quarterly dividend program, with dividends of \$0.06 per common share declared by the board of directors (the “Board”) in the third and fourth quarters of 2021. In March 2022, the quarterly dividend was increased to \$0.08 per common share and in November 2022, Alvopetro increased the dividend to \$0.12 per common share, payable on January 13, 2023 to shareholders of record on December 30, 2022. All dividends are designated as “eligible dividends” for the purpose of the Income Tax Act (Canada). A total of \$4.4 million in dividends were declared in Q4 2022 (Q4 2021 - \$2.0 million) and \$12.7 million in the year ended December 31, 2022 (2021 - \$4.1 million). In March 2023, the quarterly dividend was increased to \$0.14 per common share, payable on April 14, 2023 to shareholders of record on March 31, 2023.

The Company expects future dividends to be paid quarterly as part of Alvopetro’s long-standing capital allocation 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 numerous factors. There can be no assurance that dividends will be paid at the intended rate or at any rate in the future.

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

21, 2023, there were 36,311,579 common shares, 1,564,996 stock options, 492,623 RSUs and 236,665 DSUs outstanding. There are no preferred shares outstanding.

RELATED PARTY TRANSACTIONS

There were no related party transactions with entities outside the consolidated group in the years ended December 31, 2022 or December 31, 2021. Key management personnel include Alvopetro's directors and officers. In the year ended December 31, 2022, the Company recorded \$1.9 million (2021 - \$1.9 million) in salary and benefits to key management personnel and \$0.6 million in share-based compensation (2021 - \$0.4 million).

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.

Operating Netback Margin

Operating netback margin is calculated as operating netback per boe divided by the realized sales price per boe. Operating netback margin is a measure of the profitability per boe relative to natural gas, oil and condensate sales revenues per boe and is calculated as follows:

	Three Months Ended December 31,		Year Ended December 31,	
	2022	2021	2022	2021
Operating netback - \$ per boe	60.08	36.38	59.43	33.39
Average realized price - \$ per boe	68.13	44.22	68.04	40.64
Operating netback margin	88%	82%	87%	82%

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 (as calculated below) 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,		Year Ended December 31,	
\$ per share	2022	2021	2022	2021
Per basic share:				
Cash flows from operating activities	0.34	0.21	1.37	0.73
Funds flow from operations	0.36	0.19	1.44	0.74
Per diluted share:				
Cash flows from operating activities	0.33	0.20	1.29	0.70
Funds flow from operations	0.35	0.18	1.35	0.71

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,		Year Ended December 31,	
	2022	2021	2022	2021
Cash flows from operating activities	12,366	7,088	47,534	24,291
Add back changes in non-cash working capital	827	(608)	2,345	346
Funds flow from operations	13,193	6,480	49,879	24,637

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 December 31,	
	2022	2021
Total current assets	27,627	17,188
Total current liabilities	(12,929)	(8,091)
Net working capital surplus	14,698	9,097

Working Capital Net of 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 at December 31,	
	2022	2021
Net working capital surplus	14,698	9,097
Credit Facility, balance outstanding	-	(6,545)
Working capital, net of debt	14,698	2,552

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, 2022 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.

RISKS AND UNCERTAINTIES

Alvopetro is exposed to a variety of risks including, but not limited to: exploration and exploitation risk, reservoir performance risk, market risk, operational and uninsurable risks, foreign operations risk, legal and regulatory risks including the impact of new and stricter environmental regulations, inflation risk and supply chain management, liquidity and financing risk, competitive risks within the oil and gas industry and pandemic risk.

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 additional risk factors set forth under the heading "Risk Factors" in our Annual Information Form that can be found on SEDAR at www.sedar.com.

A. Exploration and Exploitation 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 and exploitation 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.

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 working interest, 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 may be material. Virtually all of Alvopetro's production is currently from one asset, the Caburé natural gas field, which increases the risks associated with reservoir performance and other risks discussed herein as there is currently limited production from other assets to offset any production declines from Caburé. Alvopetro has plans to further develop the Murucututu natural gas project to mitigate this risk in the future.

C. 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 gas, oil and condensate revenues and on any cash and cash equivalent balances held in currencies other than USD. With respect to revenues, although natural gas, oil and condensate 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 and 2022 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. With respect to cash and cash equivalent balances, Alvopetro closely monitors foreign exchange rates and will determine the currency and location of cash held based on funding needs and opportunities to optimize on foreign currency and local interest rates. While Alvopetro holds cash balances in USD in Canada wherever possible, significantly reducing exposure to foreign exchange on cash balances, funds held in Brazil in BRL are subject to foreign exchange fluctuations relative to the USD.

The Company's GSA is with one counterparty and, as a result, Alvopetro is subject to significant credit risk. In the year ended December 31, 2022, 93% 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 investments and 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 is exposed to credit risk related to such balances. Market uncertainty associated with financial institution instability, bank collapses, international conflicts, geopolitical factors and pandemics increases Alvopetro's exposure to credit risk. Alvopetro manages this risk by investing only in term deposits or investments of investment grade credit rating, and therefore the Company considers these assets to have negligible credit risk. The Company is exposed to interest rate cash flow risk on cash and cash equivalents due to fluctuations in market interest rates applied to cash balances.

D. Operational and Uninsurable Risks

The majority of Alvopetro's current production is from the Caburé natural gas field which extends across four blocks, two of which are held by Alvopetro and two of which are held by a third-party partner. Alvopetro's current working interest is 49.1%; however, under the terms of the UOA, the working interest split is subject to redeterminations which may impact Alvopetro's working interest in the future. The first redetermination is currently underway and is expected to be finalized in 2023. The second redetermination will occur once 40% of the proved and probable reserves of the unit have been produced. Estimates of future cash flows from the Caburé natural gas field assume the current working interest of 49.1%. Should the working interest change following a redetermination, the impact on reserves and future cash flows may be material.

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 2022, production commenced from Alvopetro's Murucututu natural gas project and Alvopetro plans to further develop this 100% owned and operated asset to further mitigate this risk in the future.

All of Alvopetro's natural gas is processed through the Facility owned by Enerflex under the terms of the Gas Treatment Agreement. The Facility is owned and operated by Enerflex. Although Alvopetro has full control over all gas delivered to the Facility, Alvopetro does not have full control over all operational aspects of the Facility. 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. Should actual liabilities exceed policy limits under the Company's insurance program, Alvopetro could incur significant costs that could have a material adverse effect on its financial position. As

Alvopetro has interests in a limited number of properties, such risk is more significant than if spread over a greater number of properties. 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 that may negatively impact the Company's financial position.

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 2022 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 2022 with respect to any matters including any climate related matters.

E. Foreign Operations Risk

Given the Company's 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' policies and fiscal regimes in Brazil are highly supportive of 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, a new president was elected in Brazil in 2022, which took effect on January 1, 2023. 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 any changes in regulations or laws within Brazil and the impact on the Company. Such changes may be material.

Income tax laws affecting the Company may change in the future or be interpreted in a manner that adversely affects the Company. To date Alvopetro has been able to repatriate funds from Brazil in a tax efficient manner and there are currently no significant restrictions on the repatriation of capital and distribution of earnings from Brazil to foreign entities. However, changes in foreign exchange regulations, restrictions on repatriation of funds from Brazil or the imposition of additional income taxes or withholding taxes on repatriations may adversely affect the Company's ability to obtain cash from its Brazil subsidiaries to meet obligations within Canada, including the payment of dividends. The impact on future cash flows may be material.

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.

F. 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 Alvo Petro'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. Alvo Petro's development plans for the Murucututu field include plans for hydraulic fracture stimulations and are dependent on 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. Alvo Petro 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. Alvo Petro 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 negatively impact our business plans.

G. Inflation Risk and Supply Chain Management

Future capital costs and ongoing operating and other costs could escalate as a result of inflation cost pressures, supply limitations and other factors. A failure to secure the services and equipment necessary for the Company's operations for the expected price, on the expected timeline, or at all, may have an adverse effect on the Company's financial performance and cash flows. The Company's operating costs could escalate and become uncompetitive due to supply chain delays or disruptions, inflationary cost pressures, equipment availability limitations, escalating supply costs, commodity prices, or new taxes or other regulations. The Company's inability to manage costs may impact project returns and future development decisions, which could have a material adverse effect on its financial performance and cash flows. The cost or availability of equipment and services may adversely affect the Company's ability to undertake exploration and development projects. These materials and services may not be available when required at reasonable prices. A failure to secure the services and equipment necessary to the Company's operations for the expected price or on the expected timeline may have an adverse effect on the Company's financial performance and future cash flows. Our inability to control rising costs may impact future funds flow from operations and may result in delays in project execution and planned developments, further impacting our financial performance.

H. 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.

From time-to-time Alvo Petro must fulfill certain minimum work commitments or work plans on projects in Brazil. There are no assurances that all of these commitments and work plans will be fulfilled within the time frames permitted. As such, Alvo Petro 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. Alvo Petro may request extensions or suspensions to the timeframe allotted for work commitments and work plans. 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.

I. Liquidity and Financing Risk

In 2022, Alvopetro repaid all amounts borrowed under the Credit Facility. However, in the future the Company may seek to raise additional funds 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.

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 larger 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. 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 was 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.

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 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, 2024	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 plans relating to the Company's operational activities, proposed exploration development activities and the timing for such activities, exploration and development prospects of Alvopetro, capital spending levels, future capital and operating costs, plans for dividends in the future, plans for share repurchases under the NCIB and the duration of the NCIB, future production and sales volumes, the expected natural gas price, gas sales and gas deliveries under Alvopetro's long-term gas sales agreement, the expected timing of production commencement from the 197(1) well, projected financial results, the expected timing and outcomes of certain of Alvopetro's testing activities, anticipated royalty changes, the timing of completion of required redeterminations, and sources and availability of capital. Forward-looking statements are necessarily based upon assumptions and judgments with respect to the future including, but not limited to, expectations and assumptions concerning the timing of regulatory licenses and approvals, equipment availability, the success of future drilling, completion, testing, recompletion and development activities and the timing of such activities, the performance of producing wells and reservoirs, well development and operating performance, expectations regarding Alvopetro's working interest and the outcome of any redeterminations, environmental regulation, including regulation relating to hydraulic fracturing and stimulation, the ability to monetize hydrocarbons discovered, the outlook for commodity markets and ability to access capital markets, foreign exchange rates, general economic and business conditions, forecasted demand for oil and natural gas, the impact of the COVID-19 pandemic, weather and access to drilling locations, the availability and cost of labour and services, the regulatory and legal environment and other risks associated with oil and gas operations. The reader is cautioned that assumptions used in the preparation of such information, although considered reasonable at the time of preparation, may prove to be incorrect. 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 2022 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 GLJ's forecast prices as of December 31, 2022. The reserves definitions used in this evaluation are the standards defined in the Canadian Oil and Gas Evaluation Handbook reserve definitions and consistent with National Instrument 51-101 ("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, 2022, 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 GLJ 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, 2022 is contained in the Company's 2022 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 GLJ 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 Annual Information Form which has been filed on SEDAR and can be accessed at www.sedar.com for additional disclosures on the Company's contingent resources.

Prospective Resources – This MD&A discloses estimates of Alvopetro's prospective resources contained in the GLJ 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 Annual Information Form which has been filed on SEDAR and can be accessed at www.sedar.com for additional disclosures on the Company's prospective resources.

Abbreviations:

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	=	Canadian dollar
10 ³ m ³ /d	=	thousand cubic metre per day
m ³	=	cubic metre
m ³ /d	=	cubic metre per day
Mcf	=	thousand cubic feet
Mcfpd	=	thousand cubic feet per day
MMBtu	=	million British Thermal Units
MMcf	=	million cubic feet
MMcfpd	=	million cubic feet per day
NGLs	=	natural gas liquids

Q3 2022	=	three months ended September 30, 2022
Q4 2021	=	three months ended December 31, 2021
Q4 2022	=	three months ended December 31, 2022

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.