

Zacks Small-Cap Research

Sponsored – Impartial - Comprehensive

Steven Ralston, CFA

312-265-9426

sralston@zacks.com

scr.zacks.com

10 S. Riverside Plaza, Chicago, IL 60606

Alvopetro Energy Ltd (ALVOF-OTCQX)

Monthly production from the Caburé Project continues to increase. The cash flow is being used to repay debt and fund further exploration. A dividend is expected to be declared starting in 2023.

Utilizing valuation analysis of comparative oil & gas companies, a **target price** for Alvopetro Energy is **\$1.25 per share**, which is based on an expected mid-second quartile price-to-sales multiple.

Current Price (04/02/21) \$0.76
Valuation \$1.25

OUTLOOK

Operating in **Brazil**, Alvopetro Energy (OTCQX: ALVOF; TSXV: ALV) is an upstream **producer of natural gas** with **midstream assets** (pipeline and gas treatment facility). After several years of development, the company **began producing** a significant amount of **natural gas in July 2020** under an attractive gas sales agreement. The cash flow is funding management's growth initiatives and is expected to fund future dividends for shareholders.

The company's growth activities include drilling two **exploration gas prospects** in the **Gomo Deep Basin** and the **construction of a 9-km tie-in pipeline** that will connect the 183-1 well to the 11-km Caburé transfer pipeline.

SUMMARY DATA

52-Week High \$0.88
52-Week Low \$0.37
One-Year Return (%) 5.26
Beta 0.76
Average Daily Volume (shrs.) 70,460

Shares Outstanding (million) 99,726
Market Capitalization (\$mil.) \$75.79
Short Interest Ratio (days) 0.06
Institutional Ownership (%) 2.6
Insider Ownership (%) 9.3

Annual Cash Dividend \$0.00
Dividend Yield (%) 0.00

5-Yr. Historical Growth Rates
Sales (%) N/A
Earnings Per Share (%) N/A
Dividend (%) N/A

P/E using TTM EPS N/M
P/E using 2021 Estimate 8.3
P/E using 2022 Estimate 6.3

Risk Level Above Average
Type of Stock Small - Growth
Industry Oil & Gas Extraction & Exploration

ZACKS ESTIMATES

Revenue

(in millions of \$)

| | Q1 | Q2 | Q3 | Q4 | Year |
|------|--------|--------|--------|--------|---------|
| | (Mar) | (Jun) | (Sep) | (Dec) | (Dec) |
| 2019 | 0.13 A | 0.09 A | 0.10 A | 0.30 A | 0.62 A |
| 2020 | 0.08 A | 0.06 A | 4.88 A | 5.63 A | 10.64 A |
| 2021 | 6.08 E | 6.57 E | 7.09 E | 7.66 E | 27.40 E |
| 2022 | | | | | 32.80 E |

Earnings per share

(EPS is operating earnings before non-recurring items)

| | Q1 | Q2 | Q3 | Q4 | Year |
|------|-----------|-----------|-----------|-----------|-----------|
| | (Mar) | (Jun) | (Sep) | (Dec) | (Dec) |
| 2019 | -\$0.01 A | -\$0.01 A | -\$0.02 A | -\$0.01 A | -\$0.05 A |
| 2020 | -\$0.02 A | -\$0.02 A | \$0.06 A | \$0.04 A | \$0.05 A |
| 2021 | \$0.02 E | \$0.02 E | \$0.02 E | \$0.03 E | \$0.09 E |
| 2022 | | | | | \$0.12 E |

Quarterly revenues may not equal annual revenues due to rounding.

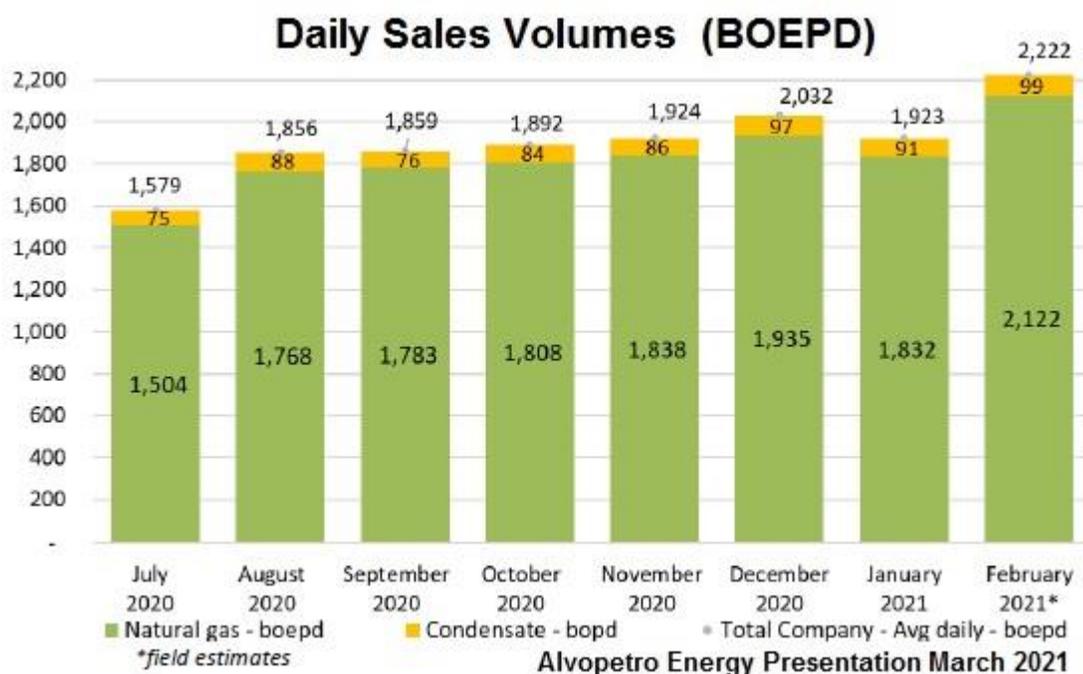
Quarterly EPS may not equal annual EPS due to rounding or dilution.

EXECUTIVE SUMMARY FOR 2020

Alvopetro achieved a highly significant, transformational milestone in 2020. After years of **developing the Caburé natural gas field** and completing the **construction of supporting midstream infrastructure** (a transfer pipeline and gas treatment facility), along with securing a **gas sales agreement** with Bahiagás, Alvopetro commenced natural gas deliveries on July 5, 2020. The company transformed into a **profitable natural gas and condensate production company**.

In 2020, Alvopetro generated **\$10.6 million in revenues**, almost all in the third and fourth quarters, and reported net income of \$5.71 million (**\$0.0543 per diluted share**), which included a \$1.84 million foreign exchange gain and a deferred tax recovery of \$3.75 million. Funds flow from operations was \$6.22 million, and the **operating netback** was **\$26.85 per BOE**.

Both the rate of production/sales and the average realized natural gas sales price are increasing. The average daily sales volumes have increased from 1,856 BOEPD in the first full month of production in August 2020 to 2,222 BOEPD in the last reported month of February 2021. In 2020, the average realized natural gas sales price was \$5.36 per MCF, when the gas price floor under the gas sales agreement was \$5.28 per MCF. As of February 1, 2021, gas price floor was raised from \$5.23 to \$5.88 per MCF for the ensuing six months. In the Resource Report completed by GLJ, the pricing assumption for 2021 is \$5.70 per MCF.



As of February 2021, the company is producing at a rate of 2,222 BOEPD and generating cash flow well beyond expenses such that the company's debt (credit facility) is being paid down at a rapid pace. At least 5.7 million has been repaid in the last five months through March 2021. Working capital has increased from a \$6.7 deficit in 2019 to a \$5.5 million surplus as of December 31, 2020.

In addition to **paying down debt**, management is focused on **advancing the company's Gomo natural gas project** to production, along with pursuing acquisitions and initiating a stockholder dividend.

ANNUAL EVALUATION OF RESERVES

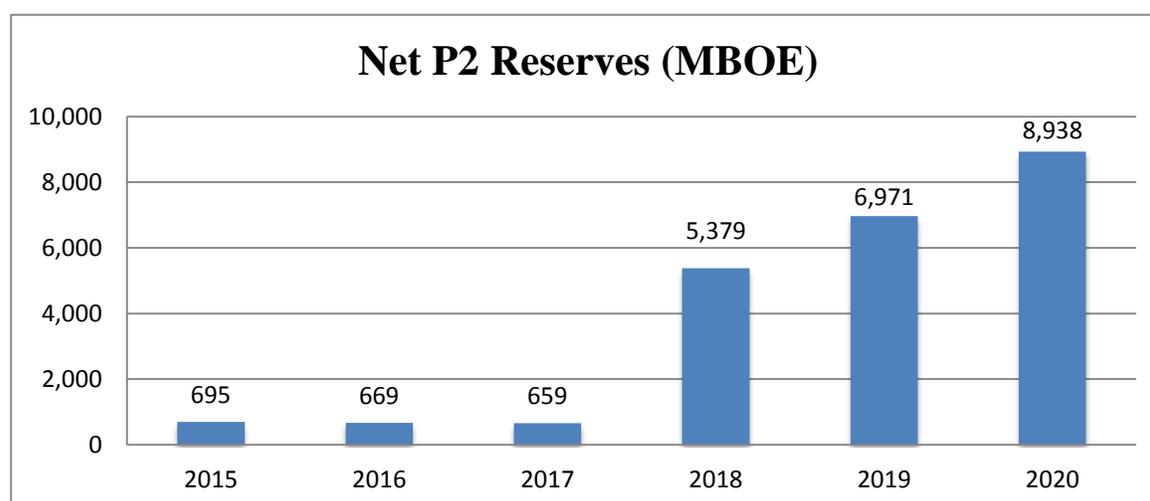
Annually, generally in early March, Alvo Petro provides an independent **Reserve Report** (prepared in accordance with NI 51-101). The report assesses and evaluates the reserves of Alvo Petro's Caburé conventional natural gas pool (located on Blocks 197 and 198), the Gomo Natural Gas Project (area around the 183-1 and 197-1 wells in Blocks 183 and 197, respectively) and two mature oil fields: the 2,238-acre Bom Lugar and 432-acre Mae-da-lua. The latest report, which was last prepared by GLJ Petroleum Consultants, is dated March 8, 2021 with an effective date of **December 31, 2020**.

Summary of Oil and Gas Reserves - By Field

| Effective Dec. 31, 2020 | Caburé Natural Gas Field | | Gomo Gas Field | | Bom Lugar Oil Field | | Mãe-da-lua Oil Field | | Total | |
|---|-----------------------------|----------------|-------------------|----------------|------------------------|----------------|-------------------------|----------------|------------------|----------------|
| | Company Gross | Company Net | Company Gross | Company Net | Company Gross | Company Net | Company Gross | Company Net | Company Gross | Company Net |
| | (Mboe) | (Mboe) | (Mboe) | (Mboe) | (Mboe) | (Mboe) | (Mboe) | (Mboe) | (Mboe) | (Mboe) |
| Proved | | | | | | | | | | |
| Producing | 4,098 | 3,842 | - | - | - | - | - | - | 4,098 | 3,842 |
| Developed Non-Producing | - | - | 403 | 371 | - | - | 22 | 19 | 425 | 390 |
| Undeveloped | - | - | 441 | 406 | 145 | 136 | - | - | 586 | 542 |
| Total Proved | 4,098 | 3,842 | 843 | 777 | 145 | 136 | 22 | 19 | 5,108 | 4,774 |
| Probable | 1,920 | 1,804 | 2,433 | 2,237 | 121 | 113 | 12 | 10 | 4,485 | 4,164 |
| Total Proved plus Probable | 6,018 | 5,646 | 3,276 | 3,014 | 266 | 249 | 34 | 29 | 9,593 | 8,938 |
| Possible | 1,650 | 1,552 | 2,675 | 2,452 | 272 | 256 | 17 | 14 | 4,615 | 4,273 |
| Total Proved plus Probable plus Possible | 7,668 | 7,198 | 5,951 | 5,466 | 538 | 505 | 51 | 43 | 14,209 | 13,211 |

Alvo Petro Energy 2020 Annual Report

Total net 2P (proved and probable) reserves increased **28.3% YOY** (year over year) to **8.94 MMBOE** from 6.97 MMBOE in 2019. In the prior year (2019) net P2 reserves increased 29.6%. Accordingly, the net present value before tax (discounted at 10%) is \$195.2 million.



Analyzing the increase in reserves on the **field level**, the company's **net P2 reserves** in the unitized **Caburé** natural gas field increased **2.9%** to 4.06 MMBOE, while the net P2 reserves in the **Gomo** natural gas field increased **151%** to 3.01 MMBOE.

The 2020 Reserve Report does not include the risked contingent and prospective resources of the Gomo Project (see Gomo Project section below).

GOMO PROJECT UPDATE

The Gomo project's potential is highlighted by the recently completed annual reserve and resource evaluation. The **Gomo Project's net 2P reserves** increased 150% from 1.202 to 3.014 MMBOE.

Summary of Oil and Gas Reserves - Gomo Field

| Effective Dec. 31, 2019 | Gomo Gas Field | | Effective Dec. 31, 2020 | Gomo Gas Field | |
|---|-------------------|----------------|---|-------------------|----------------|
| | Company Gross | Company Net | | Company Gross | Company Net |
| | (Mboe) | (Mboe) | | (Mboe) | (Mboe) |
| Proved | | | Proved | | |
| Producing | - | - | Producing | - | - |
| Developed Non-Producing | - | - | Developed Non-Producing | 403 | 371 |
| Undeveloped | 412 | 367 | Undeveloped | 441 | 406 |
| Total Proved | 412 | 367 | Total Proved | 843 | 777 |
| Probable | 946 | 835 | Probable | 2,433 | 2,237 |
| Total Proved plus Probable | 1,358 | 1,202 | Total Proved plus Probable | 3,276 | 3,014 |
| Possible | 1,566 | 1,378 | Possible | 2,675 | 2,452 |
| Total Proved plus Probable plus Possible | 2,924 | 2,580 | Total Proved plus Probable plus Possible | 5,951 | 5,466 |

Alvopetro Energy 2019 Annual Report

Alvopetro Energy 2020 Annual Report

The Gomo Project's reserves are classified as undeveloped since expenditures are required to construct a 9-km pipeline extension and to develop a field facility prior to the commencement of production.

For developmental plans, see Expectations for 2021 Section immediately below.

EXPECTATIONS FOR 2021

Management expects that the **production from the Caburé natural gas field** to remain or be above the levels reported during the second half of 2020 so that the average daily natural gas/ condensate sales to be over 1,900 BOEPD for the 2021 year.

In February 2021, **management raised its EBITDA forecast** from \$17 million to **US\$18 million** for 2021.

At the **Gomo Natural Gas Project**, with the successful completion of the production test of the 183-1 well in March 2021, management is proceeding with plans to commence **construction of a 9-km tie-in pipeline** that will connect well 183-1 to the 11-km Caburé transfer pipeline. The environmental approval has been already received for this pipeline. The estimated cost is \$2.4 million.

Also at the Gomo Project, **stimulation of additional net pay** in 183-1 well and **stimulation of 197-1** well are expected during 2021.

Furthermore, management plans on drilling **two natural gas exploration prospects** (182-C1 and 183-B1). The civil construction on both these well sites has been completed and the drilling campaign is expected to commence in the second quarter of 2021 at an estimated total cost of \$7.7 million. Moreover, in late-2021 or 2022, management plans to **drill additional developmental wells** at Gomo.

RECENT NEWS

2020 Results

On March 25, 2021, Alvo Petro Energy reported results for the year ending December 31, 2020. **Natural gas, condensate and oil sales were \$11.5 million**, a record for the company since deliveries of high pressure natural gas sales volume commenced mid-year on July 5, 2020. Year-over year (YOY) comparisons are meaningless since 2019 sales volumes (from the Mãe-da-lua field) were *de minimis* averaging only 8 BOPD per quarter. In 2020, the average natural gas price realization was \$5.36 per MCF, and the average realized condensate price was \$46.57 per bbl.

Sequentially, on a quarter-to-quarter basis, fourth quarter gas, condensate and oil **revenues increased 10.7%** from \$5.32 million to \$5.89 million. In the fourth quarter, natural gas sales averaged 11.163 MMCFPD and condensate sales averaged 89 BOPD compared to 10.105 MMCFPD and 79 BOPD, respectively, in the third quarter. **Sequentially, operating netback increased** from \$25.99 to \$27.92 per BOE.

Total expenses increased 60.5% year-over year as total revenues increased 2,561% as production came online from the Caburé natural gas field. G&A expenses increased a modest 9.9% YOY and production expenses increased at 384%, a rate much lower than the growth rate of revenues.

Annual earnings were \$5.706 million (or \$0.0543 per diluted share) versus a loss of \$5.011 million (or \$0.0518 per diluted share) in 2019. **EBITDA also turned positive** from -2.723 million in 2019 to **+6.221 million in 2020**. Working capital improved to \$5.5 million as of December 31, 2020 versus a \$6.7 deficit at the end of 2019.

OVERVIEW

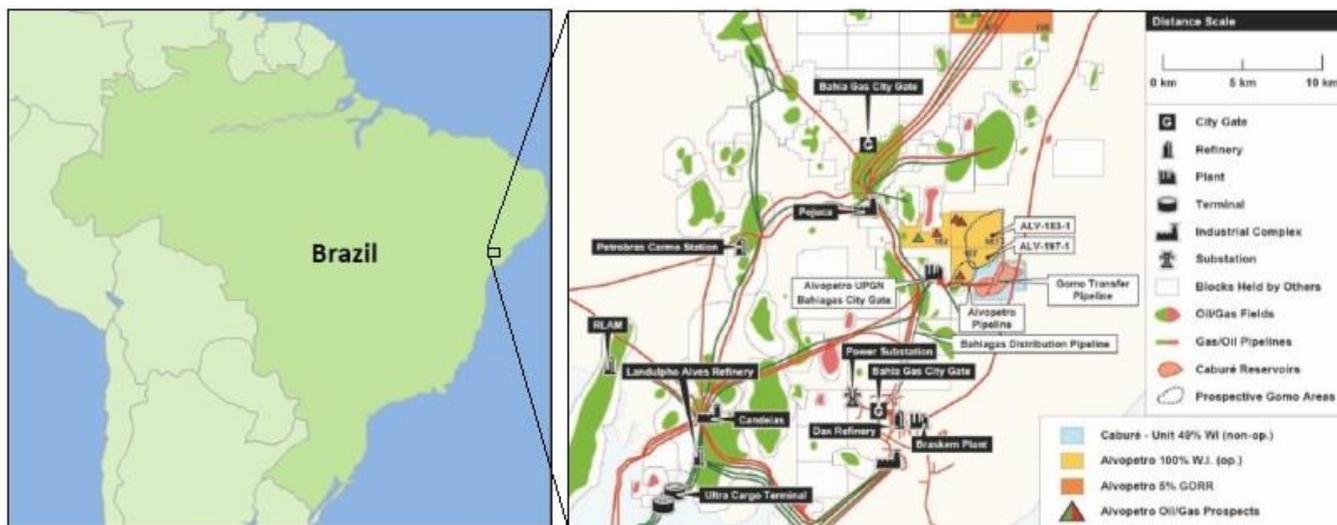
Alvo Petro Energy Ltd (OTCQX: ALVOF; TSXV: ALV) is an upstream natural gas **producer** (natural gas production with P-2 reserves), **midstream operator** (pipeline and gas processing facility) and **exploration company** (prospects). The company's natural gas operations are **in Brazil**.

In July 2020, Alvo Petro began producing a significant amount of natural gas when production commenced from the company's **Caburé natural gas field** located in northeast Brazil. This onshore natural gas field is situated in the state of Bahia, north of the city of Salvador. The company also has a developing natural gas project in the **Gomo Deep Basin**, in the concession Blocks immediately north of the Caburé field. Management has been adept in creating business partnerships to advance its Caburé assets to commercial production.

Currently, the **Brazilian Government is promoting investments into the natural gas market** in hopes of lowering gas prices by increasing competition and opening the market to other operators. Part of process includes:

- 1) breaking the monopoly held by Petrobras (aka Petróleo Brasileiro S.A, Brazil's state-controlled oil company; NYSE: PBR), primarily through divestments and
- 2) setting guidelines and incentives for a Novo Mercado de Gás (new natural gas market) program so that natural gas can be more attractively priced and thereby stimulate local industrial activity

Through these actions, the Ministry of Economy expects gas production in Brazil to double over the next 10 years.



Alvopetro Energy Presentation November 2020

Alvopetro Energy Presentation March 2020

Management is focused on creating a platform to develop the natural gas potential of the Recôncavo Basin located in the Brazilian state of Bahia. Through multiple agreements, strategic infrastructure assets have been constructed, which have enabled Alvopetro to **commence commercial natural gas sales from the Caburé Project** and to further develop the company's **Gomo natural gas project**.

Company Milestones in the Commercialization of Caburé Natural Gas Field

| | |
|------------|--|
| Dec. 2014 | Discovered Caburé natural gas field |
| April 2018 | Unitized Caburé natural gas field |
| May 2018 | Secured gas sales agreement with Bahiagás |
| Sept. 2018 | Contracted Enerflex to construct and operate the natural gas treatment facility |
| Nov. 2018 | Contracted Tecmaster Engenharia e Construções to construct 11-km transfer pipeline |
| Jan. 2020 | Completed construction of 500,000 m ³ (17.657 MMCF) per day 11-km transfer pipeline |
| May 2020 | Amended gas sales agreement with Bahiagás doubling firm contracted deliveries |
| June 2020 | Commissioned 500,000 m ³ (17.657 MMCF) per day gas treatment facility |
| July 2020 | Commenced commercial gas sales from Caburé natural gas field |
| Sept. 2020 | Achieved profitability |

In order to ensure the sale of future gas production at attractive prices, Alvopetro Energy entered into a **gas sales agreement** with Bahiagás, a major gas distributor in Brazil with a local distribution network servicing the environs of the city of Salvador and 12 surrounding municipalities. Signed in May 2018, the gas sales agreement **set an attractive floor price** in the contract, along with a **firm and flexible delivery volume levels**. Through this well-negotiated agreement, Alvopetro's Caburé natural gas field is now directly connected to Bahiagás' gas distribution network of Bahiagás a City Gate via a gas treatment facility, both of which Bahiagás constructed for the project.

During the first half of 2020, Alvopetro **completed the construction** of an **11-kilometer transfer pipeline** and a **17.6 MMCFPD gas processing plant**. The high-pressure pipeline was completed in January 2020 by Tecmaster, and the gas treatment facility was commissioned in May 2020 under the gas treatment agreement with Enerflex. Alvopetro controls 100% of its midstream business (gas hubs, pipeline and processing facility) and will own the gas treatment facility outright in 10 years for a small payment when the contract expires.

Upstream Production

Well Production Facility



Midstream Infrastructure

Gas Hub



Gas Processing Plant



Alvopetro Energy Presentations March & December 2020

Consequently, by having this **midstream infrastructure** constructed, the company **commenced commercial, high-pressure gas production on July 5, 2020** from the unitized Caburé natural gas field, in which the company has a **49.1% working interest**. The gas is delivered (via a City Gate and distribution pipeline owned by Bahiagás) to the industrial area of Camaçari, a major area of natural gas consumption in the environs of the city of Salvador in northeast Brazil.

In July 2020, Alvopetro Energy **commenced commercial, high-pressure gas production from the unitized Caburé gas field** (which includes portions of Alvopetro's Blocks 197 and 198) in the Recôncavo Basin and is pursuing natural gas exploration projects 1) on Blocks 182 and 183, just north of the company's gas processing facility and 2) at a deep tight basin natural gas resource in the Gomo Formation (Blocks 197 and 183), just north of the company's existing Caburé wells.

Alvopetro has **seven existing wells** in the Caburé natural gas field, six of which are currently tied-in (2.95 wells net) with one additional development well in the planning stages.

A stable production profile is expected through 2028 with increasing EBITDA based on the **gas sales agreement** with Bahiagás (at an attractive price point at or above \$5.88 per MMBtu). Despite the contracted gas price being over twice that currently realized in North America, Alvopetro's gas is being sold to the end customer at a lower price than what is available from other producers (primarily Petrobras) in Bahia.

Management projects that the company will **generate EBITDA of US\$18 million in 2021**. The cash flow from the Caburé Field will help fund management's initiatives for future growth and a dividend stream for shareholders.

Gomo Gas Project (Blocks 183 and 197)

Alvopetro is in the process of developing a tight-gas play in the Gomo Deep Basin, which underlies the company's Blocks 183 and 197. **Two wells (183-1 and 197-1)** were drilled in 2014. A successful production test of 183-1 well was completed in March 2021. Management is proceeding with plans to **construct a 9-km flow-pipeline** that will connect well 183-1 to the 11-km Caburé transfer pipeline. The environmental approval has been already received for this pipeline. The estimated cost is \$2.4 million.

Additional Exploration Potential

Management has identified oil & gas prospects across the company's Brazilian concessions, which comprise 23,527 acres of land. **Management plans to drill two of these exploration prospects (183-B1 and 182-C1) during 2021** at an estimated total cost of \$7.7 million. Both of these wells are natural gas prospects in close proximity to Alvopetro's natural gas processing unit (Unidade de Processamento de Gás Natural or UPGN).

Blue Sky Potential – Additional Natural Gas Exploration Prospects

Management is dedicating a portion of the company's operational cash flows for the investment in additional upstream opportunities in Brazil. With the intermediate-term goal of increasing daily gas volumes at its UPGN, management is focusing its initial efforts on natural gas prospects in close proximity to that facility.

Management

In the small cap, junior exploration and production company segment of the oil & gas sector, investors look for assurance that management can effectively execute its strategy. In order to be successful, the **management team** of a junior oil & gas company **needs the technical, development, regulatory, operational and financing experience** to navigate the necessary steps of exploring a prospective field (seismic interpretation, regulatory approvals, environmental permitting etc.), conducting production tests (to determine gas reservoir performance), effecting production planning, arranging supporting infrastructure and implementing operational procedures.

Alvopetro Energy has a **leadership team with a proven track record** that has delivered in the past. Several members of Alvopetro's management team (COB, CEO, CFO, VP of Asset Management and Exploration Manager) was also part of management of **Petrominerales** (TSE: PMG), which was developed into a 40,000 BOPD producer in Colombiaⁱ and which was **acquired for CDN\$1.6 billion** (US\$1.55 billion)ⁱⁱ by Colombia's largest private oil producer, Pacific Rubiales Energy Corp. (TSE: PRE) in 2013. While operating Petrominerales, management acquired a 5% stake in a pipeline, signaling management's insight into the importance of equity ownership in midstream assets. In addition, John Wright, COB of Alvopetro, was the CEO of **Pacalta Resources**, which was developed to a 40,000 BOPD producer in Ecuador and subsequently **sold** to Alberta Energy **for CDN\$973 million** in 1999.ⁱⁱⁱ To be sure, Alvopetro has the natural gas assets and management experience to walk the same path again.

Equity Milestones

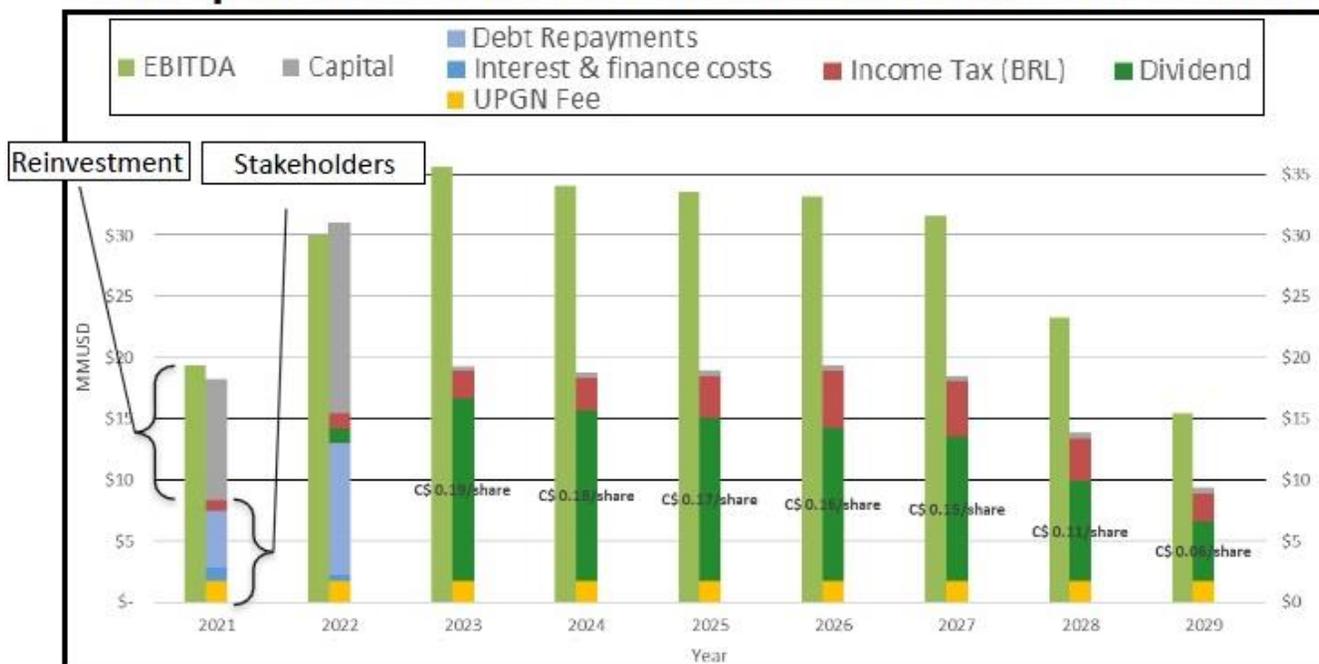
On January 15, 2019, the company's shares were **uplisted to the OTCQX Best Market**. Now, ALVOF is Depository Trust Company (DTC) eligible. The OTCQX listing should expand awareness of the company among US investors, both retail and institutional. The company's primary listing continues to be the TSX Venture Exchange (TSXV) under the symbol ALV.

In February, the TSX Venture Exchange announces the Venture 50, a list of 50 companies that ranked the highest in five sectors: Clean Technology and Life Sciences, Diversified Industries, Energy, Mining and Technology. The ranking is based on three equally-weighted, quantitative criteria: year-over-year (YOY) performance in market capitalization growth, share price appreciation and trading volume during the prior calendar year. The objective is to highlight early-stage companies that have performed well. For 2019, **Alvopetro Energy was one of the 10 highest ranked energy companies**.

MANAGEMENT'S STRATEGY

Management's vision is to make Alvopetro Energy a leading independent upstream and midstream gas company in Brazil. **Phase 1** consisted of becoming **commercial producer** of on-shore natural gas producer in the state of Bahia in Brazil, which was **achieved in July 2020**. The cash flow from the production is expected to help fund additional developmental initiatives and return a healthy **dividend** to shareholders.

Disciplined Reinvestment & Investor Return Model



Alvopetro Energy Presentation March 2021

Based on the development of the company's Caburé's P2 reserves, management has forecasted an EBITDA profile at the floor price in the sales agreement with Bahiagás (light green bars in the above chart). In 2020, it is estimated that the company has generated EBITDA of US\$7.5 million, most of which has been either utilized to reduced debt or added to working capital. **For 2021, projected EBITDA is US\$18 million**, including the impact of forecasted G&A expenses. In 2021, almost all of the projected EBITDA is anticipated to be consumed by capital expenditures (grey bar), debt principal repayment (light blue bar), interest costs on debt (dark blue bar), a UPGN fee to Enerflex for the gas facility (yellow bar) and taxes (red bar). By the end of 2022, it is assumed that the entire amount of debt will have been repaid, and thereafter, **between 2023 and 2029, a cumulative amount of CDN\$0.74 per share would be available for shareholders.**

Also, over the same time period, CDN\$1.09 per share (or US\$82 million) would be available for investment in upstream projects (in the Gomo Deep Basin Project and/o in additional exploration prospects) and, at the discretion of the Board, other uses of cash flow, e.g. acquisition of some of the expected divestitures by Petrobras in the Recôncavo Basin, additional dividends to shareholders, share buybacks etc. Management is also considering the renegotiation the company's existing credit facility (in order to lower interest costs), along with extending the maturity of the company's debt, which would permit more funds generated from operations to be allocated to acquisitions, exploration and dividends.

Management's **medium-term objective** (or **Phase 2**) is to **maximize the capacity** of both the **transfer pipeline** and **gas treatment facility** up to full capacity (500,000 m³ or 17.657 MMCF per day), which **would increase** the company's **EBITDA to US\$31 million** from US\$18 million at the floor price.

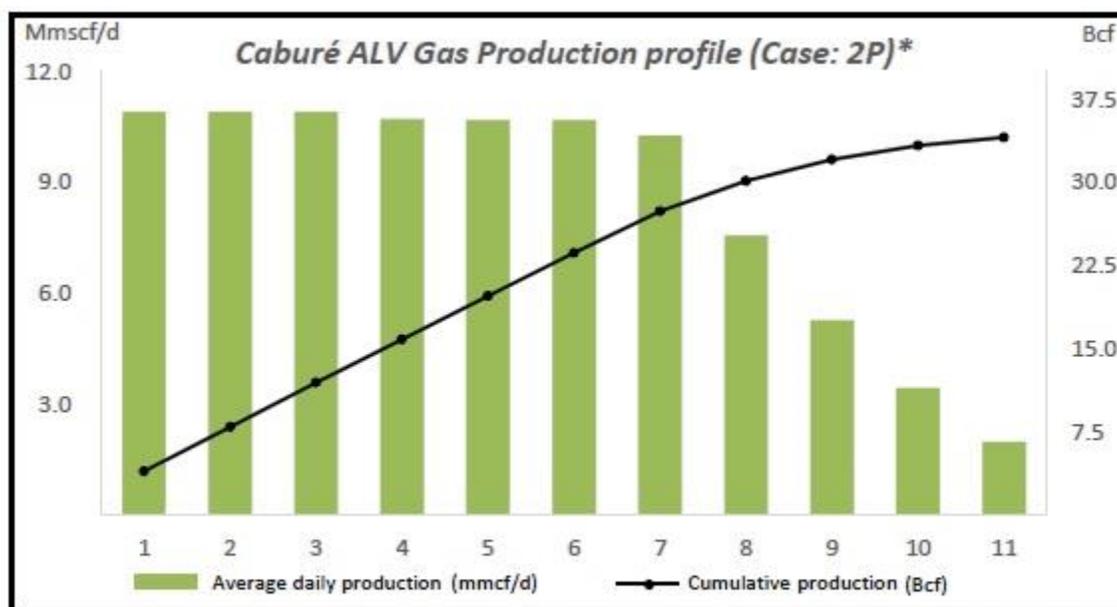
The capacity of Bahiagás' City Gate is 2.00 million m³ (70.6 MMCF) per day, and management would like to capture as much as a 50% share over the long term. Toward that end, **Phase 3** consists of increasing reserves to support that higher level of production through 1) exploration drilling in 2021 and 2) the additional development of the **Gomo natural gas project.**

- Immediately north of Caburé, the Gomo Natural Gas Project has gross P2 reserves of 3.276 MMBOE (or 17.23 BCF) as of the last evaluation (December 31, 2020). These existing reserves have only been assigned to the drainage areas around the two existing wells (183-1 and 197-1).
- Management has decided to proceed with the construction of the project's 9-km tie-in pipeline and associated field production facilities, which will connect the 183-1 well to the Caburé transfer pipeline.
- In 2021, management plans to drill natural gas prospects (183-B1 and 182-C1 on Blocks 183 and 182, respectively) in order to prove up the reserves in the Gomo Deep Basin. If successful, the drilling program could potentially double the company's reserves.

PRODUCTION

Commercial production from the Caburé natural gas field began on July 5, 2020. Alvo Petro's interest in daily sales volume, including condensate, quickly rose to a level of over 1,856 BOE and has increased slightly almost every month thereafter reaching 2,222 BOEPD in February 2021. Sales volumes have exceeded management's initial production forecast of 1,767 BOE/D.

Due to the nature of the Caburé natural gas field, **a flat production profile is expected** with little maintenance capital being required on this conventional gas reservoir. Current production is being derived from three wells of the existing seven wells with all remaining wells expected to be in production in 2021. Typically, the production profile of a natural gas well declines steadily after the initial month of production, particularly in unconventional tight gas plays that have short transient flow periods. Management's projected production profile (below) portends a relatively flat trajectory over the first eight years of operation.



Alvo Petro Energy Presentation March 2021

GAS SALES AGREEMENT

On May 7, 2018, Alvo Petro Energy entered into a **long-term gas sales agreement** with Bahiagás (Companhia de Gás da Bahia), the largest natural gas distribution company in northeastern Brazil. Founded in 1991, **Bahiagás** (Companhia de Gás da Bahia) is owned by the state of Bahia, Mitsui Gás e Energia do Brasil Ltda. (a wholly-owned subsidiary of **Mitsui & Co.**, Ltd. Japan; TYO: 80310; OTCMKTS: MITSF) and **Petrobras**.

The gas sales agreement has several components:

- a **gas delivery contract** with terms for both volume and pricing
 - a firm delivery contract and an interruptible (non-firm) part
- the construction of **midstream infrastructure**
 - a new **gas receiving station** (aka City Gate)
 - constructed and owned by Bahiagás
 - a **15-kilometer pipeline** connecting the City Gate to Bahiagás' 569-km gas distribution network servicing Salvador and 12 surrounding towns
 - constructed and owned by Bahiagás
 - an **11-kilometer transfer pipeline** to connect Alvo Petro's unitized Caburé natural gas field to the gas treatment facility
 - constructed and owned by Alvo Petro
 - construction subcontracted to Tecmaster Engenharia e Construções Ltda
 - **natural gas treatment facility**
 - financed, engineered, constructed and initially owned & operated by Enerflex
 - under a 10-year Gas Treatment Agreement (aka BOOM contract) with Alvo Petro

Gas Delivery and Sales Contract

Though the initial gas sales agreement was signed in May 2018, subsequently, it was **amended effective May 1, 2020**, just prior to the completion of the three midstream infrastructure projects. Under the amended contract, the volume of the **firm delivery portion** of the contract doubled from 150,000 m³ (or 5.297 MMcf) per day to **300,000 m³** (or 10.59 MMcf) **per day** until the end of 2020. Take or pay guarantees are applicable to the firm delivery provision of the sales agreement. The **interruptible volume portion** was reduced from as much as 350,000 m³ (or 12.360 MMcf) per day to as much as **200,000m³** (or 7.063 MMcf) **per day**. **In total**, the gas sales agreement provides for deliveries of up to **500,000m³** (or 17.657 MMcf) **per day**.

The **gas pricing mechanism** is based on a long-term blended average of three pricing benchmarks: Brent crude oil (natural gas equivalent), Henry Hub natural gas and UK NBP natural gas. The price is also bound by **floor and ceiling prices**. The **floor price is currently \$5.88 per MCF** based on the February 1, 2021 re-set. The floor and ceiling prices are also indexed to the U.S. CPI (Consumer Price Index). The natural gas price received is re-set semi-annually on the first of February and August.

NATURAL GAS PROCESSING PLANT

Gas Treatment Agreement

On September 20, 2018, **Alvo Petro** and **Enerflex Ltd** entered into a **Gas Treatment Agreement** under which the terms of the construction and operation of a **natural gas treatment facility** are specified. Under the Agreement, **Enerflex constructed** a natural gas processing plant with a

nameplate capacity of 500,000 m³ of gas per day (17.657 MMCF per day). Enerflex is also the owner and operator of the processing facility, which includes all responsibilities for contracted gas deliveries and plant maintenance. In exchange, Alvo Petro is financially obligated to lease/**rent the equipment** (right-of-use assets) required to operate the facility and pay a monthly integrated **service fee** (equivalent to \$2.9 million annually) for the operation and maintenance of the natural gas treatment facility (which includes operational services and maintenance for Alvo Petro's 11-kilometer transfer pipeline). The **term of the service fee is 10 years** beginning when the facility became operational (namely, July 5, 2020). The associated lease liability of the right-of-use assets is \$8.3 million over the 10-year term. Even though the facility is currently owned and operated by Enerflex, Alvo Petro maintains full control of the gas processed within the processing plant. When the Gas Treatment Agreement terminates after 10 years, ownership of the facility transfers to Alvo Petro for a small payment related to the compression equipment.



Alvo Petro Energy Presentation December 2020

Construction of the Gas Treatment Facility

Under the Gas Treatment Agreement (aka Build-Own-Operate-Maintain or BOOM contract), Enerflex financed, engineered, designed and constructed the processing plant project. The plant is located about 2.2km (or 1.4 miles) NNE of the municipality of Mata de São João or about 58 kilometers (or 36 miles) north of Salvador.

The treatment facility consists of a control room building, pig receiver, mechanical refrigeration plant, three large compressors, suction filters, fuel gas scrubber, S&T (shell & tube) exchanger, line tubes and tanks for condensate storage. Much of the equipment was fabricated in Houston and shipped to Brazil between May and August 2019.

A **natural gas treatment facility removes impurities** from raw, natural gas in order to produce pipeline quality, dry natural gas. The process involves removing contaminants, such as solids, water, higher molecular mass hydrocarbons (oil) and condensates, among others (e.g. carbon dioxide, hydrogen sulfide, mercury, etc.). A critical component is the Mechanical Refrigeration Unit (MRU), which cools the natural gas (reducing the hydrocarbon dew point) in order to condense natural gas liquids (NGLs) and maximize their recovery and hence, maximize the value of the gas stream.

The Alvo Petro-Enerflex processing plant delivers **pipeline-quality natural gas** (sales specification standards set by ANP) to Bahiagás' City Gate (a natural gas receiving station to Bahiagás' Salvador distribution network). The Metropolitan Region of Salvador (*Região Metropolitana de Salvador*) is composed of three districts, one of which is **the industrial area of Camaçari, a major area of**

natural gas consumption. Camaçari is situated between the city of Salvador and Alvo Petro's gas production facility. The population of Salvador is over 3,000,000.

Mechanical Refrigeration Unit



Alvo Petro Energy Presentation November 2018

The natural gas processing unit (Unidade de Processamento de Gás Natural or UPGN) was **fully commissioned in May 2020**, and **commercial gas deliveries** to the City Gate **commenced on July 5, 2020** for use by the local market. **Production quickly ramped up** to slightly above 300,000 m³ (or 10.59 MMcf) per day, the firm delivery rate of the gas delivery contract with Bahiagás. Current production is being derived from three of the six producing wells on the Caburé Unit. At the rate of volume, the UPGN is operating at only 60% of its nameplate capacity.



Map data: Google, CNES / Airbus, Maxar Technologies, January 2021

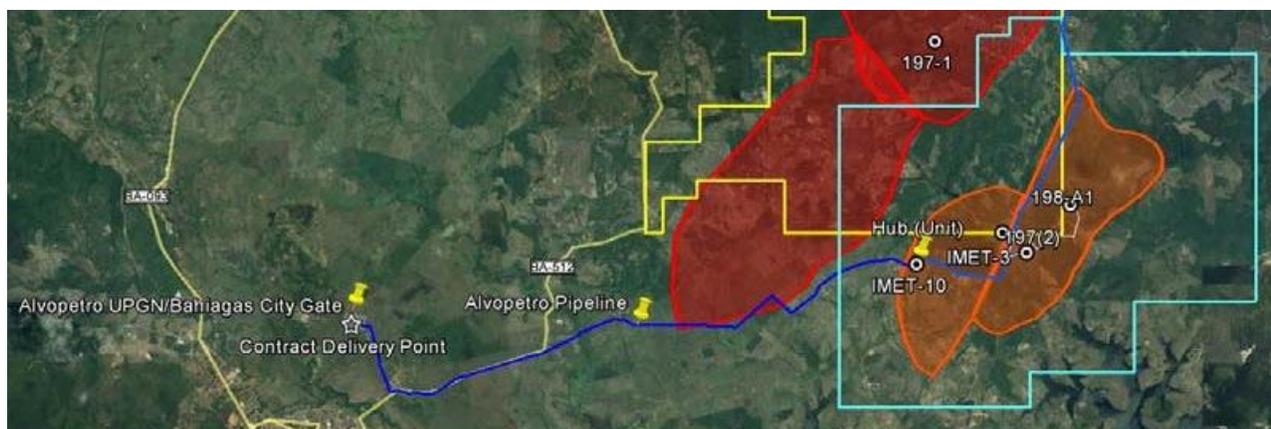
Alvo Petro is currently the only company in Brazil, other than Petrobras, that is able to **deliver sales-specified gas** to a gas distribution company.

NATURAL GAS PIPELINE

11-km Transfer Pipeline

Alvo Petro owns an 11 km tie-in pipeline that is capable of transporting 500,000 m³ (17.657 MMCF) per day of raw, natural gas from the field production facilities (HUB) to the recently commissioned gas treatment facility, which thereby connects the existing wells in the unitized Caburé natural gas field to the gas processing plant. In November 2018, Alvo Petro contracted Tecmaster Engenharia e Construções

Ltda to construct this transfer pipeline, which was completed in January 2020. The pipeline's operator is Enerflex Ltd under a 10-year service contract that began on July 5, 2020.



Alvo Petro Energy Presentation May 2018

Construction of the 11-km Transfer Pipeline (dark blue line in image above)

On November 16, 2018, Alvo Petro **awarded the contract** for the construction of its 10.93-km transfer pipeline to **Tecmaster Engenharia e Construções Ltda.** Founded in December 2000 and headquartered in city of Maceió (about 420 kilometers from the Caburé natural gas field), Tecmaster is an engineering and construction (E&C) company specializing in the construction and maintenance of on-shore oil & gas pipelines with clients throughout Brazil, including Petrobras and Bahiagás.

Transfer Pipeline Project

Pipeline Delivered to Staging Area



Alvo Petro Energy Presentation June 2019

Right-of-Way Preparation



Alvo Petro Energy Presentation August 2019

Alvo Petro directly ordered 11 kilometers of **8-inch ANSI Class 300 pipe** for the project from **Vallourec** (OTCMARKETS: VLOUF; FR: VK), a global provider of tubular solutions. The pipes were delivered to a field staging area during the first quarter of 2019. After the **environmental license was received on May 10th** and the National Agency of Petroleum, Natural Gas and Biofuels (ANP) authorized the construction of the pipeline on June 12th, construction of the pipeline commenced immediately thereafter. By August 2019, the majority of the right-of-way had been cleared, after which the pipeline began to be installed, welded and buried. **The transfer pipeline was completed in January 2020**, and subsequently it was inertized in February 2020. The total **cost** of the pipeline project was **US\$3.7 million**.

Transfer Pipeline Project

Line Pipe Placed Along Right-of-Way



Alvopetro Energy Presentation August 2019

High Pressure Unit Facility Tie-in



Alvopetro Energy Presentation Feb. 2020

CABURÉ GAS FIELD (49.1% working interest)

Situated in the sedimentary Recôncavo Basin, the Caburé natural gas field was **unitized on April 20, 2018** after several wells defined this natural gas reservoir that straddled multiple license areas. Through an arbitration process conducted by the National Agency of Petroleum, Natural Gas and Biofuels of Brazil (or *Agência Nacional do Petróleo, Gás Natural e Biocombustíveis* aka ANP), the reservoir's reserves were allocated into working interest shares of 50.9% to Imetame Energia and **49.1% to Alvopetro Energy**. With the majority ownership, Imetame is the operator of the unitized field; however, periodically, production allocations against each company's share of 2P reserves are revisited, which may allow for operator responsibilities to be redetermined. The first redetermination is effective on December 31, 2021.

The **Caburé natural gas field** underlies portions of Alvopetro's **Block 197** (2,323 of 5,807 gross acres) and **Block 198** (2,503^{iv} of the original 7,739 gross acres),^v along with parts of Imetame's Blocks 211 and 212. Together, Alvopetro's portions of Blocks 197 and 198 that comprised part of the Caburé natural gas field encompass **4,826 acres**. Currently, the Caburé natural gas field has **six producing wells tied-in to the 11-km transfer pipeline** and another existing well.

Block 197 (2,323 acres)

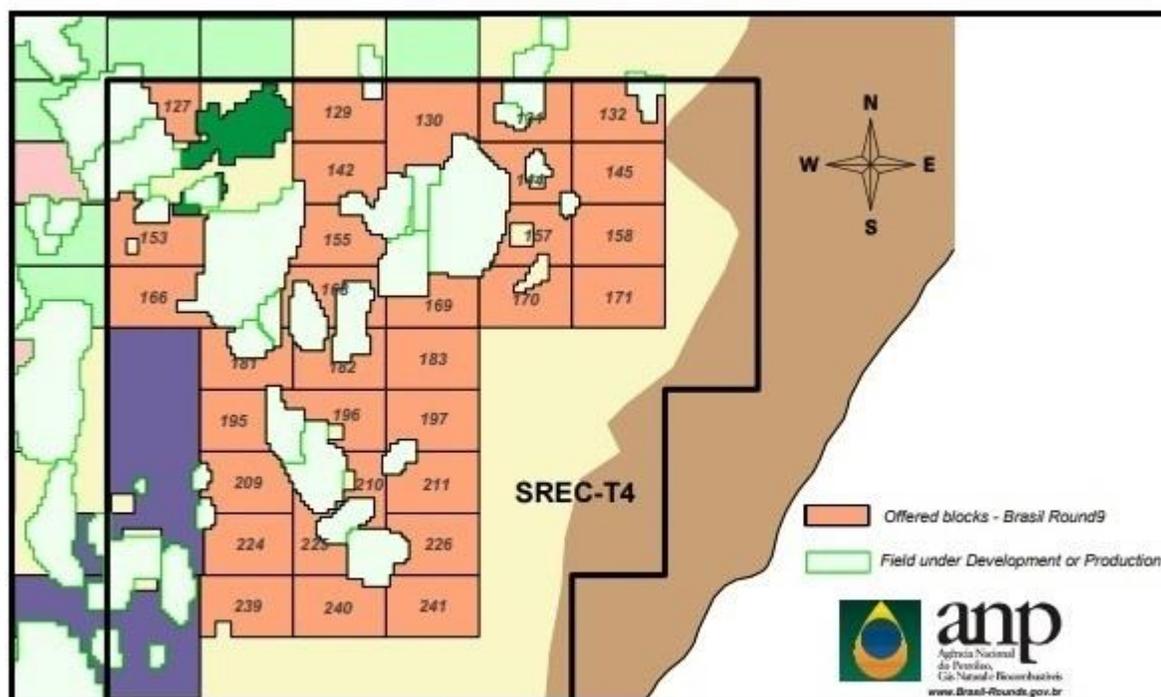
Alvopetro was awarded **Block 197** during Brazil's 9th Oil & Gas Exploration License Bidding Round in November 2007. The company drilled its first well (197-1) in that block in April 2014. **In December 2014, the Caburé natural gas field was discovered** with the drilling of a second well (**197-2**) in Block 197. After successfully encountering three separate intervals of Caruaçu Member of the Maracangalha Formation in 2015, a declaration of commerciality was approved by the ANP in January 2017, which separated the gas discovery from the remainder of the block and resulted in the discovery officially being named the Caburé gas field.

Block 198 (2,503 acres)

Block 198 (7,739 acres) was awarded to Alvopetro during the 12th Oil & Gas Exploration License Bidding Round in November 2013. Block 198 is immediately east of Block 197. In January 2017, the company drilled the 1,480-meter **198-A1 well**, tested it in February and March 2017, and in May, declared the well's commerciality with that portion of the field being named Caburé Leste. The net

pay interval is in the Caruaçu Formation with potential in the up-hole Pojuca sands. In May 2017, Alvo Petro relinquished 5,236 acres of Block 198 to the ANP, retaining **2,503^{vi} acres**.

Recôncavo Basin



Nacional do Petróleo, Gás Natural e Biocombustíveis of Brazil (ANP)

National Agency of Petroleum, Natural Gas and Biofuels Agencia

rodadas.anp.gov.br/arquivos/Round9/mapas/Reconcavo.pdf ; accessed January 18, 2021

Unitization

In Brazil, as in many other jurisdictions, when a hydrocarbon reservoir extends across concessions (in the case of Brazil, Blocks), it is **mandatory that the discovery be unitized** or pooled (in order to facilitate a fair and orderly exploration and development process) and that the appropriate government agency approve the unitization agreement.

In 2017, through the drilling and testing of four wells (197-2, 198-A1, IMET-3 and IMET-10), it was determined that **the Caburé natural gas field extends across four blocks in the Recôncavo Basin**: Blocks 197 and 198 held by Alvo Petro Energy and Blocks 211 and 212 held by Imetame Energia. Imetame was awarded Blocks 210 and 211 during Brazil's 9th Oil & Gas Exploration License Bidding Round in November 2007. From the start of the unitization process, the ANP (National Agency of Petroleum, Natural Gas and Biofuels of Brazil) was involved to help arbitrate the terms of the arrangement.

On April 20, 2018, Alvo Petro and Imetame Energia finalized the terms of a unitization agreement, along with a development plan and other related agreements. Initially, Imetame would be the operator with a 50.9% working interest and Alvo Petro would hold 49.1%. **Each company had a different objective**: Imetame's management wanted to build a thermoelectric plant and Alvo Petro planned on building a UPGN (gas process plant) to sell gas into the local distribution network. **Both companies achieved their goals**.

Initial low-pressure production supplied Imetame Energia's well-to-wire 28MW thermoelectric plant (Prosperidade 1), which began operating in 2018. Located in Camaçari, the plant produces electricity and is connected to through transmission lines and substations to the Brazilian National Interconnected System (SIN). According to Imetame's August 2016 presentation, Prosperidade 1 is

strategically located close to Imetame's **IMET-3** and **IMET-10** wells. Imetame's share of gas is transported directly from the field to the thermal power project. Starting in September 2018, this early field production totaled 1,447 MMCF of natural gas through March 18, 2020 (or 70,890 cubic meters per day), which was allocated against Imetame's share of 2P reserves.

In the meantime, Alvo Petro Energy negotiated a gas sales agreement with Bahiagás, constructed a high-pressure gas treatment facility (through an agreement with Enerflex Ltd.) and an 11-km transfer pipeline to transport the raw gas from the field to the gas processing plant. The treatment facility began commercially selling sales-specified gas into the local gas distribution network on July 5, 2020.

Today, the Alvo Petro's **Caburé & Caburé Leste** fields are collectively known as the **Caburé natural gas field**. The unitized field (which includes Imetame's **Cardeal do Nordeste** and **Cardeal do Nordeste Leste** fields) has **seven existing wells**, six of which are producing wells tied-in to the 11-km transfer pipeline.

| Alvo Petro Energy Ltd | | | | | | |
|----------------------------------|--------------|----------------------------|---------------------|--------------|---------------------------|--|
| Unitized Caburé Oil Field | | | | | | |
| Existing Wells | Block | Field | When Spudded | Depth | Comment | |
| 197-2 | 197 | Caburé (CBE) | Dec. 2014 | 1,669 | discovery well | |
| IMET-3 | 211 | Cardeal do Nordeste (CARN) | 2015 | 2,344 | commercialized April 2015 | |
| IMET-10D | 211 | Cardeal do Nordeste (CARN) | 2015 | 2,576 | PIG launcher site | |
| 198-A1 aka ALV-11 | 198 | Caburé do Leste (CBEL) | Jan. 2017 | 1,480 | commercialized May 2017 | |
| IMET-26A | 212 | Cardeal do Nordeste Leste | Sept.2019 | 1,549 | commercialized March 2020 | |
| CARN-1D | 211 | Cardeal do Nordeste (CARN) | 2019 | 1,739 | development well | |
| CBE-1D | 197 | Caburé (CBE) | 2019 | 1,759 | development well | |

GOMO NATURAL GAS PROJECT (100% Working Interest)

With management's first priority of commencing production of natural gas having been achieved, the company's initiative to further develop the company's resources in the Gomo Deep Basin can be accomplished, being funded with internally generated cash flow.

The Gomo natural gas project calls for the development of a tight gas play in the Gomo Deep Basin, which underlies the company's Block 183 and portion of Block 197. Block 183 encompasses 7,740 acres. The first **two wells** (**183-1** and **197-1**) were drilled in 2014.

Ownership

Alvo Petro was awarded **Block 197** during Brazil's 9th Oil & Gas Exploration License Bidding Round in November 2007.

Block 183 was also awarded in Brazil's 9th Oil & Gas Exploration License Bidding Round but to another party. Subsequently, in May 2013, Alvo Petro acquired Block 183 through a farm-in agreement.

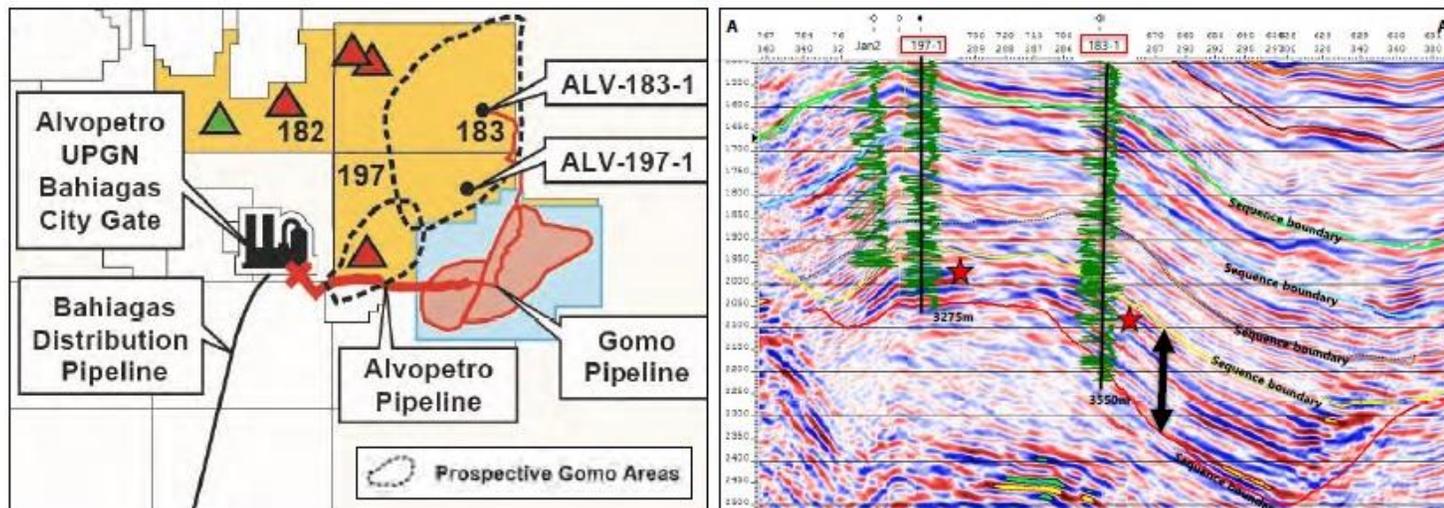
Well – 183-1 (Gomo Deep Basin)

In October 2014, Alvo Petro drilled the **ALV-183-1** exploratory well in the Gomo Deep Basin. ALV-183-1 was drilled to a depth of 3,550 meters. The test well **encountered 168 meters with**

hydrocarbon shows over several separate intervals, including 46 meters of net pay in the Upper Gomo and 93 meters in the Lower Gomo.

Subsequently, in February 2018, the company successfully tested the intervals in the **Gomo Member** of the Lower Cretaceous Candeias (Shale) Formation and the **Caruaçu Member** of the Maracangalha Formation. According to ANP, the Gomo Member is a prospective source for unconventional shale oil or gas plays while the Caruaçu Member has potential for the development of deep tight gas sands resources.^{vii} Using the Barnett shale analogy, ANP estimated that the recoverable shale gas resources in the Recôncavo Basin are 20 TCF.^{viii}

ALV-183-1 & ALV-197-1 in Gomo Deep Basin



Alvopetro Energy Presentation December 2020

In the fourth quarter of 2019, a **fracture stimulation test** of well 183-1 targeted an 18-meter zone in the Gomo Member. During the flowback period, the well produced 5.82 MMCF of natural gas and 249 BBL of 56 degree API condensate, which correlates to an average rate of production of 0.734 MMCF/d of natural gas and 31 BBL/d of condensate. A subsequent 6-hour production period during the same test produced at an average rate of 0.919 MMCF/d of natural gas and 27 BBL/d of condensate. However, some difficulties were encountered that hampered the validation of the pressure transient analysis. A plunger lift system was installed to recover fluids from the 183-1 well and in March 2021, a **follow-on production test was completed** in order to determine an indication of potential well productivity through studies of formation permeability and long-term deliverability (gas flow rate).

Well – 197-1 (Gomo Deep Basin)

In April 2014, Alvopetro completed drilling the ALV-197-1 exploratory well in Block 197. The well targeted the Gomo Formation and tested gas at 3,200 meters and 3,600 meters.

9-kilometer Tie-in Pipeline

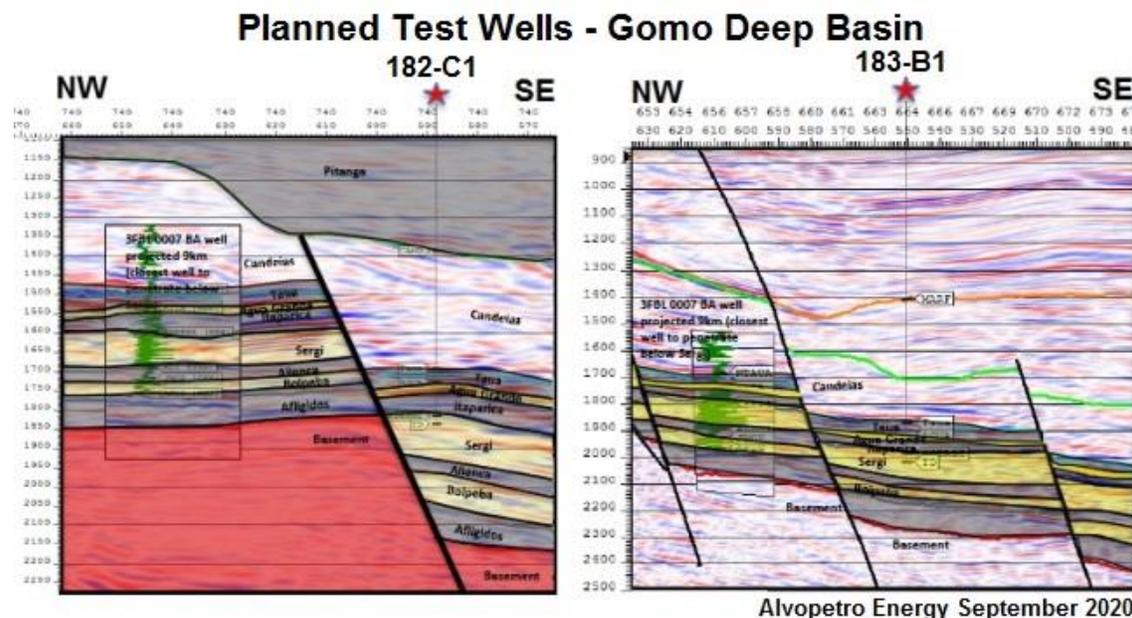
The construction of a **9-km flow line**, which will connect the 183-1 well to Alvopetro's existing 11-km Caburé gas field transfer pipeline. This 9-kilometer pipeline extension is expected to be constructed in 2021. The required environmental permits for the flow line have already been received.

Reserves

In the annual independent reserve assessment and evaluation effective December 31, 2020, the drainage areas around **183-1** and **197-1** have been assigned **Gross 2P reserves (3.276 MMBOE)**. See Reserves section of this report for tables.

Planned Exploration Wells – 183-B1 & 182-C1 (Gomo Deep Basin)

During 2021, management plans to drill two multi-zone prospects: **ALV-183-B1** (3,100 meters) and **ALV-182-C1** (2,900 meters). Both of these exploration wells are licensed. The company the civil construction (preparations of the pad site) for these two exploration wells. A capital expenditure budget of \$7.7 million is currently allocated to this exploration project.



GLJ Petroleum Consultants has completed independent evaluations of the UPIIP (Undiscovered Petroleum Initially in Place) for the prospective resources of both wells. For those unfamiliar with prospective resource terminology, prospective resources are “those quantities of oil and gas estimated on a given date to be potentially recoverable from undiscovered accumulations” by application of future development projects. “Prospective resources have both an associated chance of discovery and a chance of development.” The key elements of prospective resources are that they are undiscovered, yet deemed potentially recoverable since they are considered to be “technically viable and economic to recover” under existing economic conditions, operating methods and government regulations.

Nevertheless, for the **1,300-acre ALV-183-B1 prospect**, GLJ’s “best estimate” evaluation of **UPIIP Prospective Resource** is 43.7 BCF (**5.9 MMBOE**) with a 44% chance of discovery. For the **780-acre ALV-182-C1 prospect**, and 4.6 MMBOE GLJ’s “best estimate” is 33.5 BCF (**4.6 MMBOE**) with a 47% chance of success.

VALUATION

The valuation process for small and mid-cap oil & gas companies can be based upon various valuation methodologies, including comparative analysis, a discounted cash flow (DCF) model and/or a calculation of Net Asset Value (NAV). Usually, the applicable methodology is determined by the company's position within its corporate life cycle: **comparative analysis for producing companies**, a DCF model for unprofitable producing companies and a calculation of NAV for exploration companies that are still in the developmental stage with only prospective resources. Since Alvo Petro Energy has achieved commercial production and is profitable on an operational basis, we believe that comparative analysis is the appropriate valuation method.

We use a comparative valuation methodology based on **Price-to-Sales (P/S)** for oil and gas companies due to the cyclical nature of the industry, predominately influenced by the changes in the price of oil over time due to fundamental changes in the supply of and demand for the commodity.

After analyzing a segment of oil & gas companies generating revenues of up to \$30 million annually, we identified several **comparable companies**, namely Epsilon Energy (EPSN), Mexco Energy (MXC), PEDEVCO (PED), PHX Minerals (PHX), Royale Energy (ROYL), Tengasco (TGC) and U.S. Energy (USEG). Companies not considered comparable to Alvo Petro were those structured as Unit Trust Funds, those with significant oil service operations and those whose stocks are trading below \$0.10.

The current P/S valuation range for this group of comparable companies is between 12.8 and 2.50 times TTM revenues with a mean P/S valuation of 5.46 times.

| Industry Comparables | Pr Chg YTD | P/E CFY | Price/ Book | Price/ Sales | Market Cap. |
|-----------------------------|-----------------------|--------------------|------------------------|-------------------------|------------------------|
| ALVOPETRO ENERGY LTD | 30.4 | 8.3 | 1.43 | 4.43 | 75.8 |
| Industry Mean | 20.1 | 2.5 | 1.67 | 5.46 | 51.8 |
| Industry Median | 24.0 | 2.5 | 1.50 | 3.40 | 42.0 |
| S&P 500 | 7.0 | 40.9 | 4.37 | 2.95 | N/A |
| EPSILON ENERGY LTD | -0.5 | N/A | 1.32 | 3.80 | 88.5 |
| MEXCO ENERGY CORP | 45.9 | N/A | 2.23 | 7.69 | 18.3 |
| PEDEVCO CORP | 0.0 | N/A | 1.50 | 12.81 | 113.6 |
| PHX MINERALS INC | 27.0 | N/A | 1.03 | 2.50 | 64.4 |
| ROYALE ENERGY INC | 25.0 | 2.5 | N/A | 3.00 | 6.5 |
| U.S. ENERGY CORP | 23.1 | N/A | 2.29 | 2.93 | 19.6 |

Alvo Petro Energy is entering the emerging growth phase of its corporate history with an increasing revenue stream, which was enabled by the recently constructed gas processing facility and transfer pipeline. Due the character of the company's enterprise, namely a small-capitalization company with a growing revenue profile, we expect Alvo Petro to attain at least a second quartile P/S ratio of the comparable companies listed above. Moreover, a common attribute of first and second quartile companies is a stable-to-growing revenue growth profile, which is consistent to Alvo Petro's. Also, due the company's recent initiation of commercial sales, we utilized the current run rate of revenues of the last six months of production to project annual revenues.

With the expectation that Alvo Petro's stock will trade at a mid-second quartile P/S ratio, our **comparable analysis valuation target** is **\$1.25**.

RISKS

- Alvo Petro operates in Brazil, a country marked by a history of hyperinflation (1980's through 1995) and currency devaluations (1994 – 2002, 2012 – 2015 and starting again in 2018). The country has also experienced volatile political and economic climates. Then again, oil & gas are commodities, and as such, are influenced by global factors rather than local economic conditions.
- The Brazilian Government, at some time, could restrict the repatriation of capital and/or earnings from Brazil or could alter the regulatory regime, which in extreme and rare circumstances would include the risk of the expropriation of properties without fair compensation.
- Under the gas sales agreement with Bahiagás, there are penalties if Alvo Petro fails to supply the firm volumes specified in the contract. Management anticipates that the company's production can fulfill the firm sales commitments; however, if not, the company could purchase third-party gas supplies to meet its commitments or pay the failure penalties.
- Lower gas price and/or reduced demand due to a recession could cause Bahiagás to default on the take-or-pay provision in the gas sales agreement.
- Operationally, all natural resource companies, including oil & gas companies, are at risk from labor disputes.

BALANCE SHEETS

ALVOPETRO ENERGY LIMITED

(in '000 \$US except share data)

| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---------------|---------------|---------------|---------------|---------------|
| Period ending | 12/31/2016 | 12/31/2017 | 12/31/2018 | 12/31/2019 | 12/31/2020 |
| ASSETS | | | | | |
| Cash and cash equivalents | 17,788 | 9,189 | 7,070 | 1,215 | 5,159 |
| Restricted cash | 108 | 106 | 135 | 270 | 125 |
| Trade and other receivables | 431 | 153 | 284 | 265 | 2,802 |
| Prepaid expenditures | 196 | 208 | 330 | 370 | 273 |
| Assets held for sale | 410 | 236 | 202 | 332 | 128 |
| Total Current Assets | 18,933 | 9,892 | 8,021 | 2,452 | 8,487 |
| Exploration and evaluation assets | 53,259 | 54,585 | 35,340 | 35,971 | 32,262 |
| Property, plant and equipment | 4,860 | 4,238 | 22,011 | 30,984 | 25,843 |
| Right-of-use assets | - | - | - | 219 | 8,092 |
| | - | - | - | - | 4,576 |
| Other assets | - | - | - | 1,790 | 1,128 |
| TOTAL ASSETS | 77,052 | 68,715 | 65,372 | 71,416 | 80,388 |
| Accounts payable & accrued liabilities | 1,878 | 1,111 | 1,221 | 3,244 | 2,390 |
| Lease liabilities | - | - | - | 101 | 483 |
| Decommissioning liabilities | 78 | 19 | 71 | 80 | 63 |
| Other liabilities | - | - | - | 5,728 | 12 |
| Total Current Liabilities | 1,956 | 1,130 | 1,292 | 9,153 | 2,948 |
| Lease liabilities | - | - | - | 62 | 7,827 |
| Credit facility | - | - | - | 5,027 | 15,423 |
| Other liabilities | - | - | 2,348 | - | - |
| Decommissioning liabilities | 1,321 | 1,445 | 1,160 | 1,300 | 1,080 |
| Non-Current Liabilities | 1,321 | 1,445 | 3,508 | 6,389 | 24,330 |
| TOTAL LIABILITIES | 3,277 | 2,575 | 4,800 | 15,542 | 27,278 |
| SHAREHOLDERS' EQUITY | | | | | |
| Share capital | 151,937 | 151,937 | 155,731 | 156,355 | 156,755 |
| Contributed surplus | 1,558 | 1,662 | 1,813 | 2,790 | 2,821 |
| Deficit | (60,390) | (67,507) | (71,847) | (76,878) | (71,172) |
| Accumulated other comprehensive loss | (19,330) | (19,952) | (25,125) | (26,393) | (35,294) |
| Total Stockholders' Equity | 73,775 | 66,140 | 60,572 | 55,874 | 53,110 |
| TOTAL LIAB. & STOCKHOLDERS' EQUITY | 77,052 | 68,715 | 65,372 | 71,416 | 80,388 |
| Shares outstanding | 85,166,871 | 85,166,871 | 96,670,871 | 97,849,788 | 99,461,400 |

PROJECTED ANNUAL INCOME STATEMENTS

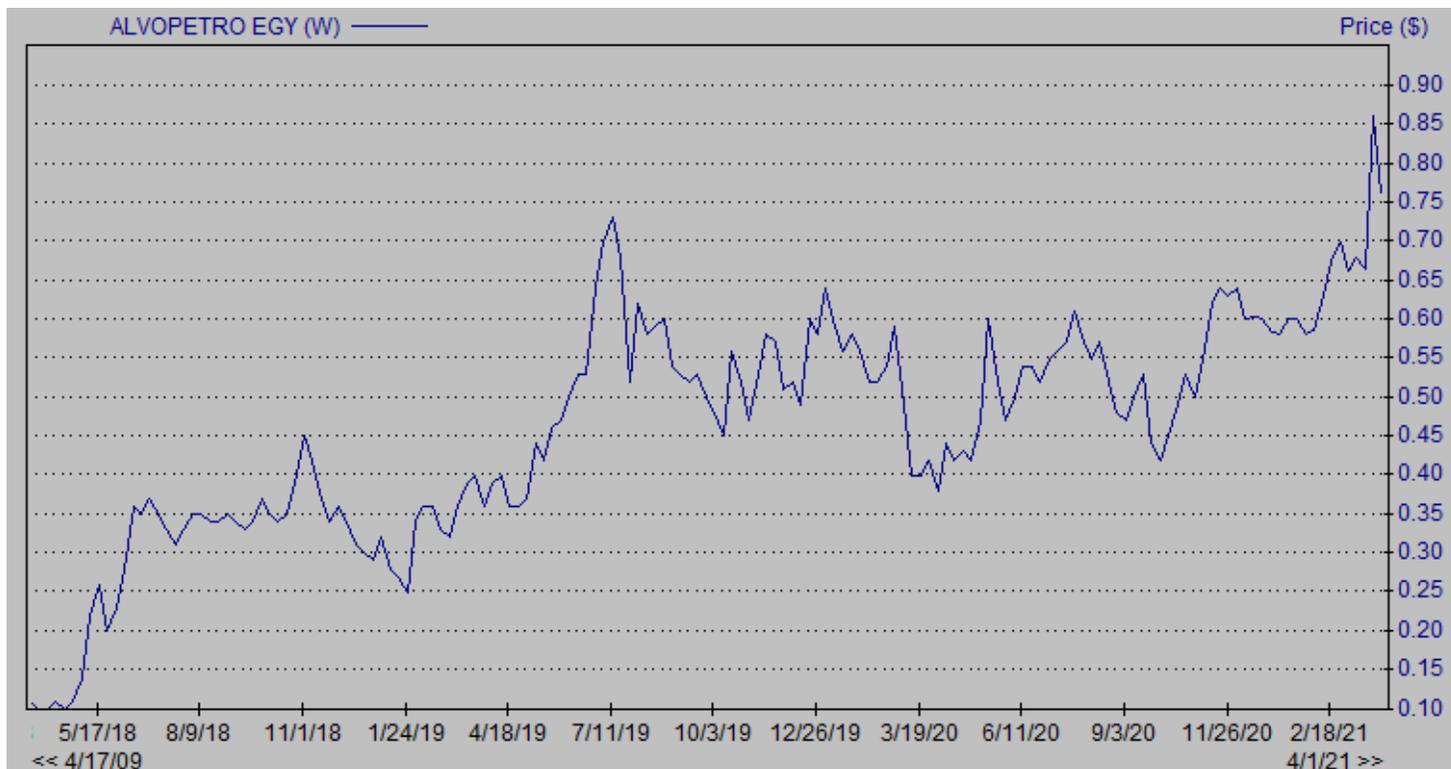
| ALVOPETRO ENERGY LIMITED | | | | | | |
|---|-----------------|-----------------|-----------------|-----------------|----------------|---------------|
| Income Statement | 2016 | 2017 | 2018 | 2019 | 2020 E | 2021 E |
| (in '000 \$US, except share out. data) | 12/31/2016 | 12/31/2017 | 12/31/2018 | 12/31/2019 | 12/31/2020 | 12/31/2021 |
| Natural gas, oil & condensate sales | 561 | 462 | 519 | 240 | 11,308 | 28,650 |
| Royalties and production taxes | (59) | (51) | (55) | (34) | (740) | (1,319) |
| Net natural gas, oil & condensate rev. | 502 | 411 | 464 | 206 | 10,568 | 27,331 |
| Other income | 109 | 144 | 152 | 194 | 75 | 70 |
| Total revenues & other income | 611 | 555 | 616 | 400 | 10,643 | 27,401 |
| Production | 1,153 | 824 | 840 | 276 | 1,336 | 2,959 |
| Transportation | 33 | 23 | 13 | - | 0 | 0 |
| General and administrative | 3,523 | 2,607 | 2,762 | 2,793 | 3,070 | 3,091 |
| Depletion and depreciation | 416 | 205 | 144 | 234 | 2,070 | 4,998 |
| Impairment | 7,823 | 3,661 | 765 | 1,645 | 1,455 | 0 |
| Accretion of decommissioning liabilities | 28 | 37 | 0 | 0 | 0 | 0 |
| Exploration and evaluation expenses | 434 | 212 | 209 | 95 | 0 | 0 |
| Finance expenses | - | - | 41 | 259 | 2,337 | 3,984 |
| Share-based compensation | 80 | 85 | 95 | 141 | 242 | 200 |
| Risk management losses | - | - | - | - | 12 | 0 |
| Foreign exchange (gain) loss | (12) | 2 | 32 | 6 | (1,840) | 0 |
| Loss (gain) on disposition of assets | 41 | 16 | 55 | (38) | 0 | 0 |
| Total expenses | 13,519 | 7,672 | 4,956 | 5,411 | 8,682 | 15,232 |
| Income (loss) before taxes | (12,908) | (7,117) | (4,340) | (5,011) | 1,961 | 12,169 |
| Deferred tax recovery (income tax) | 330 | 0 | 0 | 0 | 3,745 | (1,825) |
| Net income (loss) | (12,578) | (7,117) | (4,340) | (5,011) | 5,706 | 10,343 |
| Other comprehensive income | | | | | | |
| Fgn. curr. translation gain (loss) | 5,507 | (622) | (5,173) | (1,269) | (8,901) | (8,000) |
| Comprehensive income (loss) | (7,071) | (7,739) | (9,513) | (6,280) | (3,195) | 2,343 |
| Diluted income (loss) per diluted share | (0.1477) | (0.0836) | (0.0496) | (0.0518) | 0.0543 | 0.0916 |
| Wgtd. average shares out. - diluted | 85,166,871 | 85,166,871 | 87,562,224 | 96,708,918 | 105,128,825 | 112,879,104 |

QUARTERLY INCOME STATEMENTS

| ALVOPETRO ENERGY LIMITED | | | | | | |
|---|-----------------|-----------------|-----------------|---------------|---------------|----------------|
| Income Statement | 2019 | 1Q | 2Q | 3Q | 4Q | 2020 |
| (in '000 \$US, except share out. data) | 12/31/2019 | 2020 | 2020 | 2020 | 2020 | 2020 |
| | | 3/31/2020 | 6/30/2020 | 9/30/20120 | 12/31/2020 | 12/31/2020 |
| Natural gas, oil & condensate sales | 240 | 61 | 40 | 5,320 | 5,887 | 11,308 |
| Royalties and production taxes | (34) | (8) | (5) | (456) | (271) | (740) |
| Net natural gas, oil & condensate rev. | 206 | 53 | 35 | 4,864 | 5,616 | 10,568 |
| Other income | 194 | 24 | 20 | 14 | 17 | 75 |
| Total revenues & other income | 400 | 77 | 55 | 4,878 | 5,633 | 10,643 |
| Production | 276 | 44 | 36 | 648 | 608 | 1,336 |
| Transportation | - | 0 | 0 | 0 | 0 | 0 |
| General and administrative | 2,793 | 640 | 1,032 | 654 | 744 | 3,070 |
| Depletion and depreciation | 234 | 62 | 50 | 931 | 1,027 | 2,070 |
| Impairment | 1,645 | 1,381 | 0 | 0 | 74 | 1,455 |
| Accretion of decommissioning liab. | 0 | - | - | - | - | 0 |
| Exploration and evaluation expenses | 95 | - | - | - | - | 0 |
| Finance expenses | 259 | 276 | 69 | 996 | 996 | 2,337 |
| Share-based compensation | 141 | 28 | 39 | 74 | 101 | 242 |
| Risk management losses | - | - | - | - | 12 | 12 |
| Foreign exchange (gain) loss | 6 | 9 | (3) | (15) | (1,831) | (1,840) |
| Loss (gain) on disposition of assets | (38) | 0 | 0 | 0 | 0 | 0 |
| Total expenses | 5,411 | 2,440 | 1,223 | 3,288 | 1,731 | 8,682 |
| Income (loss) before taxes | (5,011) | (2,363) | (1,168) | 1,590 | 3,902 | 1,961 |
| Deferred tax recovery (income tax) | 0 | 0 | 0 | 4,893 | (1,148) | 3,745 |
| Net income (loss) | (5,011) | (2,363) | (1,168) | 6,483 | 2,754 | 5,706 |
| Other comprehensive income | | | | | | |
| Fgn. curr. translation gain (loss) | (1,269) | (8,352) | (1,412) | (1,056) | 900 | (8,901) |
| Comprehensive income (loss) | (6,280) | (10,715) | (2,580) | 5,427 | 3,654 | (3,195) |
| Diluted income (loss) per diluted share | (0.0518) | (0.0240) | (0.0119) | 0.0616 | 0.0262 | 0.0543 |
| Wgted. average shares out. - diluted | 96,708,918 | 98,307,766 | 98,436,508 | 105,315,347 | 105,315,347 | 105,128,825 |

| ALVOPETRO ENERGY LIMITED | | | | | | |
|---|----------------|---------------|---------------|---------------|---------------|---------------|
| Income Statement | 2020 | 1Q E | 2Q E | 3Q E | 4Q E | Estimate |
| (in '000 \$US, except share out. data) | 2021 | 2021 | 2021 | 2021 | 2021 | 2021 |
| | 12/31/2020 | 3/31/2021 | 6/30/2021 | 9/30/2021 | 12/31/2021 | 12/31/2021 |
| Natural gas, oil & condensate sales | 11,308 | 6,358 | 6,867 | 7,416 | 8,009 | 28,650 |
| Royalties and production taxes | (740) | (293) | (316) | (341) | (369) | (1,319) |
| Net natural gas, oil & condensate rev. | 10,568 | 6,065 | 6,551 | 7,075 | 7,641 | 27,331 |
| Other income | 75 | 18 | 18 | 18 | 18 | 70 |
| Total revenues & other income | 10,643 | 6,083 | 6,568 | 7,092 | 7,658 | 27,401 |
| Production | 1,336 | 657 | 709 | 766 | 827 | 2,959 |
| Transportation | 0 | 0 | 0 | 0 | 0 | 0 |
| General and administrative | 3,070 | 750 | 765 | 780 | 796 | 3,091 |
| Depletion and depreciation | 2,070 | 1,109 | 1,198 | 1,294 | 1,397 | 4,998 |
| Impairment | 1,455 | 0 | 0 | 0 | 0 | 0 |
| Accretion of decommissioning liab. | 0 | - | - | - | - | 0 |
| Exploration and evaluation expenses | 0 | - | - | - | - | 0 |
| Finance expenses | 2,337 | 996 | 996 | 996 | 996 | 3,984 |
| Share-based compensation | 242 | 50 | 50 | 50 | 50 | 200 |
| Risk management losses | 12 | 0 | 0 | 0 | 0 | 0 |
| Foreign exchange (gain) loss | (1,840) | 0 | 0 | 0 | 0 | 0 |
| Loss (gain) on disposition of assets | 0 | 0 | 0 | 0 | 0 | 0 |
| Total expenses | 8,682 | 3,562 | 3,718 | 3,886 | 4,066 | 15,232 |
| Income (loss) before taxes | 1,961 | 2,521 | 2,850 | 3,206 | 3,592 | 12,169 |
| Deferred tax recovery (income tax) | 3,745 | (378) | (427) | (481) | (539) | (1,825) |
| Net income (loss) | 5,706 | 2,143 | 2,422 | 2,725 | 3,053 | 10,343 |
| Other comprehensive income | | | | | | |
| Fgn. curr. translation gain (loss) | (8,901) | (2,000) | (2,000) | (2,000) | (2,000) | (8,000) |
| Comprehensive income (loss) | (3,195) | 143 | 422 | 725 | 1,053 | 2,343 |
| Diluted income (loss) per diluted share | 0.0543 | 0.0199 | 0.0221 | 0.0244 | 0.0268 | 0.0916 |
| Wgtd. average shares out. - diluted | 105,128,825 | 107,421,654 | 109,570,087 | 111,761,489 | 113,996,719 | 112,879,104 |

HISTORICAL STOCK PRICE



DISCLOSURES

The following disclosures relate to relationships between Zacks Small-Cap Research ("Zacks SCR"), a division of Zacks Investment Research ("ZIR"), and the issuers covered by the Zacks SCR Analysts in the Small-Cap Universe.

ANALYST DISCLOSURES

I, Steven Ralston, hereby certify that the view expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the recommendations or views expressed in this research report. I believe the information used for the creation of this report has been obtained from sources I considered to be reliable, but I can neither guarantee nor represent the completeness or accuracy of the information herewith. Such information and the opinions expressed are subject to change without notice.

INVESTMENT BANKING AND FEES FOR SERVICES

Zacks SCR does not provide investment banking services nor has it received compensation for investment banking services from the issuers of the securities covered in this report or article. Zacks SCR has received compensation from the issuer directly, from an investment manager, or from an investor relations consulting firm engaged by the issuer for providing non-investment banking services to this issuer and expects to receive additional compensation for such non-investment banking services provided to this issuer. The non-investment banking services provided to the issuer includes the preparation of this report, investor relations services, investment software, financial database analysis, organization of non-deal road shows, and attendance fees for conferences sponsored or co-sponsored by Zacks SCR. The fees for these services vary on a per-client basis and are subject to the number and types of services contracted. Fees typically range between ten thousand and fifty thousand dollars per annum. Details of fees paid by this issuer are available upon request.

POLICY DISCLOSURES

This report provides an objective valuation of the issuer today and expected valuations of the issuer at various future dates based on applying standard investment valuation methodologies to the revenue and EPS forecasts made by the SCR Analyst of the issuer's business. SCR Analysts are restricted from holding or trading securities in the issuers that they cover. ZIR and Zacks SCR do not make a market in any security followed by SCR nor do they act as dealers in these securities. Each Zacks SCR Analyst has full discretion over the valuation of the issuer included in this report based on his or her own due diligence. SCR Analysts are paid based on the number of companies they cover.

SCR Analyst compensation is not, was not, nor will be, directly or indirectly, related to the specific valuations or views expressed in any report or article.

ADDITIONAL INFORMATION

Additional information is available upon request. Zacks SCR reports and articles are based on data obtained from sources that it believes to be reliable, but are not guaranteed to be accurate nor do they purport to be complete. Because of individual financial or investment objectives and/or financial circumstances, this report or article should not be construed as advice designed to meet the particular investment needs of any investor. Investing involves risk. Any opinions expressed by Zacks SCR Analysts are subject to change without notice. Reports or articles or tweets are not to be construed as an offer or solicitation of an offer to buy or sell the securities herein mentioned.

CANADIAN COVERAGE

This research report is a product of Zacks SCR and prepared by a research analyst who is employed by or is a consultant to Zacks SCR. The research analyst preparing the research report is resident outside of Canada, and is not an associated person of any Canadian registered adviser and/or dealer. Therefore, the analyst is not subject to supervision by a Canadian registered adviser and/or dealer, and is not required to satisfy the regulatory licensing requirements of any Canadian provincial securities regulators, the Investment Industry Regulatory Organization of Canada and is not required to otherwise comply with Canadian rules or regulations.

-
- ⁱ UPDATE 3-Petrominerales buys Colombia pipeline stake, eases transportation worries, Reuters, June 21, 2011
 - ⁱⁱ Colombia's Pacific Rubiales buys rival oil firm Petrominerales for C\$1.6 billion, Reuters, September 30, 2013
 - ⁱⁱⁱ AEC eager to get started on Ecuador pipeline, Oil & Gas Journal, September 27, 2000
 - ^{iv} Alvo Petro 1Q 2017 MDA page 4, footnote 10.
 - ^v Alvo Petro 3Q 2020 MDA page 4
 - ^{vi} Alvo Petro 1Q 2017 MDA page 4, footnote 10 and table.
 - ^{vii} Loureiro, Elaine, ANP Brasil 12th Round Oil & Gas Bidding Rounds, Recôncavo Basin, September 2013, Slide 42
 - ^{viii} Tassinari, Prof. Dr. Colombo C. G. Tassinari, Unconventional Hydrocarbon Resource Potential in Brazil and 12th Bid Round Overview, December 2013, slide 9