Management Discussion and Analysis

Forbes Resources Brazil Holding S.A. (Consolidated) – 1Q 2025

Summary

1Q 2025 Management’s Discussion and Analysis

The following Management's Discussion and Analysis (“MD&A”) as provided by the management of Forbes Resources Brazil Holding S.A. should be read in conjunction with its unaudited interim financial statements for the quarter ended March 31, 2025. All currency amounts are referenced in thousands of Brazilian Reais unless otherwise stated.

Description of the Company

Paraná Xisto S.A. ("PX" or "Company") is a privately held corporation, controlled by Forbes Resources Brazil Holding S.A. ("Forbes Brazil"), headquartered in the city of São Mateus do Sul, state of Paraná, Brazil, that operates in: (i) exploration, refining, processing, commercialization, distribution, import, export, transportation, and storage of petroleum from shale or other rocks, its derivatives, related products, and biofuels; (ii) production, distribution, and commercialization of utilities such as electricity, steam, water, compressed air, and industrial gases; and (iii) the conduct of any other activities related to or similar to the Company's corporate purpose, including service provision.

With an installed capacity of 6,000 BOE[1] per day, the Company's main products include: Fuel Oil, Naphtha, Natural Gas and LPG[2]. PX also produces Sulfur and Shale Water, which are mainly destined to the fertilizers sector.

The Company was incorporated on January 5, 2021 ("Incorporation Date"). On October 1, 2022, the assets were split and transferred ("Asset Transfer Date"), remaining a wholly owned subsidiary of Petróleo Brasileiro S.A. ("Petrobras") until November 4, 2022 ("Closing Date of Sale"), when it was acquired by Forbes Brazil. Between the Incorporation Date and the Asset Transfer Date, there were no significant operational activities or transactions.

[1] See "Definitions" section

[2] See "Definitions" section

Highlights for the Consolidated Unaudited Interim Financial Statements for the Three Months Ended March 31, 2025

- **Production averaged 4,536 BOE per day** of Oil Products and 52 tonnes per day of Sulfur; Processing of shale ore averaged 230 tonnes per hour and a total of 23k tonnes of oil sludge was processed.

- **OCB1 benchmark averaged a 16% premium to Brent** resulting in a realized premium to Brent for Fuel Oil Sales of 6%.

- **Sales volume increased 16% QoQ**; Totaling 46,525 tonnes of oil products (consisting of: Fuel Oil – 36,769 tonnes; Naphtha – 5,784 tonnes; Natural Gas – 2,835,999 m^3; and LPG – 1,703 tonnes), 3,964 tonnes of Sulfur and 60 tonnes of Shale Water.

- **Net revenue increased 23% QoQ**; Totaling 142,639 (USD 24 million).

- **Adjusted EBITDA totaled 39,596 (USD 7 million)**.

Results of Operations – Production, Sales and Pricing[3]

	1Q 2025	1Q 2024 (Restated)	Percentage Change
Average Daily Production			
Fuel Oil (BOE per day)	3,266	2,802	17
Naphtha (BOE per day)	459	525	(13)
Natural Gas (BOE per day)	653	530	23
LPG (BOE per day)	159	228	(30)
Oil Products (BOE per day)	**4,536**	**4,084**	**11**
Sulfur (Tonnes per day)	52	52	(0)
Shale Water (Tonnes per day)	–	1	(100)
Total Products Sales			
Fuel Oil (Tonnes)	36,769	28,786	28
Naphtha (Tonnes)	5,784	5,895	(2)
Natural Gas (Tonnes)	2,269	1,832	24
LPG (Tonnes)	1,703	2,426	(30)
Sulfur (Tonnes)	3,964	4,442	(11)
Shale Water (Tonnes)	60	18	233
Average Realized Sales Prices			
Fuel Oil (BRL per tonne)	2,941	3,009	(2)
Naphtha (BRL per tonne)	3,065	2,478	24
Natural Gas (BRL per tonne)	3,548	3,307	7
LPG (BRL per tonne)	3,376	2,521	34
Sulfur (BRL per tonne)	679	465	46
Shale Water (BRL per tonne)	4,528	4,881	(7)
Average Benchmark Price			
Exchange Rate (BRL per USD)	5.85	4.95	18
Brent Price (USD per BBL)	75.72	83.00	(9)
OCB1 Benchmark (BRL per tonne)	3,224.82	3,449.16	(7)

	1Q 2025	1Q 2024 (Restated)	Percentage Change
Fuel Oil Sales	108,148	86,604	25
Naphtha Sales	17,728	14,605	21
Natural Gas Sales	8,050	6,060	33
LPG Sales	5,749	6,115	(6)
Sulfur Sales	2,692	2,064	30
Shale Water Sales	272	88	209
Total Products Sales	**142,639**	**115,536**	**23**

[3] See "Definitions" section

Fuel Oil

Fuel oil obtained from shale ore has technical advantages, such as more uniform viscosities between batches and lower heating requirements. The industrial applications are heating, as well as in the paving industry.

The Company's realized price received for its fuel oil is determined by the average of the OCB1 benchmark pricing points of Araucaria & Paulina, less the margin paid in distribution.

In 1Q 2025 the average fuel oil price decreased 2% vs. 1Q 2024. Over the same period the sales increased by 28% as a result of increased sales to Vibra, which has expanded its operations to Goiás and Minas Gerais states.

Naphtha

Naphtha is hydrocarbon mixture derived from the refining of crude oil. It serves primarily as a raw material for the production of chemicals such as ethylene, propylene, and butadiene, which are used to produce various plastics, resins, and synthetic fibers. It is also used in the refining process as a blending component for gasoline, contributing to its overall quality. It also finds application as an industrial solvent and as a diluent to facilitate transportation given that it reduces overall viscosity. The Company produces naphtha both from the refining of the crude oil produced by it as well as from the refining of oil sludge purchased from Petrobras.

In 1Q 2025 the average naphtha price increased 24% vs. 1Q 2024. Over the same period the sales decreased by 2% as a result of lower production. These effects combined caused the net revenues of the segment to increase by 21%.

Other Products

Natural gas is a fossil fuel used as a burning energy source. Its main application is generating heat and electricity in power plants. In 1Q 2025, natural gas sales increased by 24% as a result of higher demand from Incepa, which operated its industrial furnace at close to full capacity during the quarter.

LPG stands for Liquefied Petroleum Gas which is a flammable hydrocarbon gas mixture, primarily composed of propane and butane, that is liquefied through pressurization for ease of storage and transport. Its main applications include residential and commercial heating and cooking and providing energy for various industrial processes. In 1Q 2025 LPG sales decreased by 30% compared to 1Q 2024. This reflects the strategy adopted by the company to optimize its production towards fuel oil to the detriment of LPG, resulting in approximately 60% use of GLP plant's capacity.

Sulfur is a byproduct of shale oil refining extracted when sulfur compounds are removed during the process of producing cleaner fuels. Its main applications include the production of fertilizers, manufacturing chemicals and various other industrial processes. In 1Q 2025 sulfur sales decreased by 11% when compared to 1Q 2024. This is a result of the higher charged prices, which were driven by the international benchmark, in which Russia is the main supplier.

Shale water emerges during the extraction of shale oil. This water contains a mix of naturally occurring substances from the shale formation, including salts, minerals, and organic matter, as well as other components. Its main application is as an input for the production of foliar fertilizers.

Production

PX Energy refining process consists of two factors, shale ore retorting and oil sludge processing. Sludge is a byproduct of various processes within the Oil & Gas industry (especially in the refining segment) that consists in a mixture of hydrocarbons, water and solid particles.

	1Q 2025	1Q 2024 (Restated)	Percentage Change
Shale Ore Processing			
Operating Days (#)	89	87	3
Retorted Shale (Tonnes)	489,469	436,696	12
Hour Rate (Tonnes per hour)	230	210	9
Sludge Receiving			
Received Gross (Tonnes)	22,619	24,581	(8)
Received Net (Tonnes)	17,875	19,359	(8)
Net Commitment (Tonnes)	10,015	9,324	7

One way to standardize production across different energy sources is by using a Barrel of Oil Equivalent (BOE), which represents the amount of energy equivalent to that contained in a barrel of crude oil. The table below shows the standardized information:

	1Q 2025	1Q 2024 (Restated)	Percentage Change
Production			
Fuel Oil (BOE)	289,830	242,357	20
Naphtha (BOE)	40,724	45,371	(10)
Natural Gas (BOE)	57,914	45,863	26
LPG (BOE)	14,068	19,686	(29)
Sulfur (BOE)	–	–	NM
Shale Water (BOE)	–	–	NM
Total Production (BOE)	**402,536**	**353,277**	**14**
Operating Days (#)	89	87	3
Daily Production (BOE per day)	**4,536**	**4,084**	**11**

Royalty Expenses[4]

	1Q 2025	1Q 2024 (Restated)	Percentage Change
Royalty Expenses	4,887	3,429	43
Royalty Rate (%)	3.43%	2.97%	15

Royalty Expenses are payable to the Brazilian National Petroleum Agency ("Agência Nacional de Petróleo" or "ANP"). Royalties are calculated as a percentage of the production from retorted shale only. Production from sludge oil is exempt from royalty payments. ANP imposes a 5% royalty on products derived from shale retorting. The effective royalty rates were 3.43% in 1Q 2025 and 2.97% in 1Q 2024, both below the 5% rate set by ANP. This difference is due to (i) varying methodologies between ANP's pricing of production and the Company's realized sales pricing, (ii) the exclusion of products derived from sludge oil refinement from royalty payments, and (iii) the exclusion of Sulfur and Shale Water from royalty payments.

[4] Non-IFRS. See "Non-IFRS and Other Financial Measures" section

Cash COGS (excl. Royalties)[5] and SG&A

	1Q 2025	1Q 2024 (Restated)	Percentage Change
Mining Costs	23,411	19,727	19
Refining Costs	13,187	11,070	19
Maintenance Costs	12,944	9,049	43
Sludge Costs	13,222	14,099	(6)
Energy Costs	4,045	5,732	(29)
Other Costs	16,317	11,202	46
Total Cash COGS	**83,126**	**70,879**	**17**
Cash SG&A	26,826	35,423	(24)
Total Cash COGS and SG&A	**109,953**	**106,303**	**3**

In 1Q 2025, PX's total cash COGS and SG&A increased slightly when compared to 1Q2024.

The 19% QoQ mining costs increase is mainly due to the increase in third-party services, caused by the change in the mining outsourced contractor from Weiller to Afonso Mineração.

The 19% QoQ refining costs increase is mainly due to the increase in personnel costs related to a new operating shift started in Q4 2024.

The 43% QoQ maintenance costs increase reflects the increase in contracts with Betun and Manserv (both responsible for maintenance services).

The 29% QoQ decrease in energy costs is due to the change in the electric power supplier from Petrobras to Comerc, reducing the electric power price from BRL 160 / MWh to BRL 85 / MWh.

The 46% QoQ other costs increase reflects, among other factors, the increase in insurance related to the industrial plant.

[5] Non-IFRS. See "Non-IFRS and Other Financial Measures" section

EBITDA[6] and Adjusted EBITDA[7] Reconciliation

	1Q 2025	1Q 2024 (Restated)	Percentage Change
Total Sales	142,639	115,536	23
Total COGS, SG&A and Other	(120,394)	(123,282)	(2)
(+) D&A	13,051	14,137	(8)
EBITDA	**35,295**	**6,390**	**452**
EBITDA ('000 USD)	**6,031**	**1,291**	**367**
(+) Oil Purchase	4,301	27	15,830
(+) Club	–	6	(100)
Adjusted EBITDA	**39,596**	**6,423**	**516**
Adjusted EBITDA ('000 USD)	**6,766**	**1,297**	**422**
Adjusted EBITDA Margin (%)	28%	6%	399

In 1Q 2025 the Company increased its EBITDA and Adjusted EBITDA when compared to 1Q 2024.

[6] Non-IFRS. See "Non-IFRS and Other Financial Measures" section
[7] Non-IFRS. See "Non-IFRS and Other Financial Measures" section

Cash Flow from Operating Activities

	1Q 2025	1Q 2024 (Restated)	Percentage Change
Net Income (Loss)	27,507	(85,760)	NM
Accrual for Obsolescence and NRV	(80)	–	NM
Depreciation and Amortization	13,051	14,137	(8)
Change in Net Working Capital	24,327	(25,739)	NM
Financial Result	817	–	NM
Cash Flow from Operating Activities	**65,622**	**(97,362)**	**NM**
Cash Flow from Operating Activities ('000 USD)	**11,213**	**(19,663)**	**NM**

During 1Q 2025 the company showed much stronger operating cash flow generation than 1Q 2024 as a result of stronger result.

Working Capital

	1Q 2025	1Q 2024 (Restated)	Change in NWC
Accounts Receivable	33,377	11,777	21,600
Inventory	58,411	54,516	3,894
Recoverable Taxes	89,202	112,092	(22,889)
Leased Assets	2,851	2,759	92
Deposits	19,854	18,427	1,427
Other Assets	17,960	10,603	7,357
Non-Cash Movements	–	–	–
Operational Assets	**221,656**	**210,174**	**11,482**
Accounts Payable	56,663	48,622	8,041
Payroll	6,865	6,778	86
Taxes	97,109	82,189	14,920
Other Liabilities	118,515	127,956	(9,441)
Non-Cash Movements	–	–	–
Operational Liabilities	**279,152**	**265,546**	**13,605**
Net Working Capital	**(57,496)**	**(55,372)**	**(2,124)**

During 1Q 2025 the Net Working Capital stayed in line with 1Q 2024.

Capital Expenditures[8]

	1Q 2025	1Q 2024 (Restated)	Percentage Change
Maintenance Capital Expenditures	12,328	4,852	154
Growth Capital Expenditures	233	4,052	(94)
Process Improvements and Other Capital Expenditures	–	3,938	(100)
Total Capital Expenditures	**12,561**	**12,842**	**(2)**

During the 1Q 2025 the Company invested 12,561, in line with 1Q 2024. However, the 1Q 2025 investments were focused on the maintenance segment, given that the scheduled maintenance is happening during 2Q 2025.

[8] Non-IFRS. See "Non-IFRS and Other Financial Measures" section

Liquidity and Capital Resources

	1Q 2025	1Q 2024 (Restated)	Percentage Change
Cash and cash equivalents	42,342	12,394	242
Available Cash and Equivalents	**42,342**	**12,394**	**242**
Available Cash and Equivalents ('000 USD)	**7,235**	**2,503**	**189**
ANP withheld application	19,854	18,427	8
Total Cash and Equivalents	**62,195**	**30,821**	**102**
Total Cash and Equivalents ('000 USD)	**10,628**	**6,225**	**71**

The Company's objectives when managing capital are to i) deploy capital to provide an appropriate return on investment to its shareholders and ii) maintain financial flexibility in order to preserve the Company's ability to meet financial obligations. To aid in managing the capital structure, the Company monitors adjusted working capital and cashflow generation.

As of December 31, 2024, the Company had available cash of 42,342 (USD 7,235) and total cash of 62,195 (USD 10,628).

Interest Coverage Ratio

	1Q 2025	2024	1Q 2024 (Restated)	Last 12 Months
(+) Gross Cash Interest Costs ('000 USD)	3,200	12,800	–	12,800
(-) Gross Cash Interest Income ('000 USD)	(232)	(2,647)	(162)	(2,717)
Net Interest Cost ('000 USD)	**2,968**	**10,153**	**(162)**	**10,083**
Interest Coverage Ratio				**2.44x**

The Interest Coverage Ratio is defined as the ratio between the EBITDA and the Net Interest Cost. The Interest Coverage Ratio is 2.44x, above the minimum threshold of 1.30x. Below is the calculation of the considered EBITDA.

	1Q 2025	2024	1Q 2024 (Restated)	Last 12 months
Total Sales	142,639	540,096	115,536	567,199
Total COGS, SG&A and Other	(120,394)	(492,396)	(123,282)	(489,508)
(+) D&A	13,051	59,161	14,137	58,075
EBITDA	**35,295**	**106,861**	**6,390**	**135,766**
EBITDA ('000 USD)	**6,031**	**19,818**	**1,291**	**24,559**
(+) Oil Purchase	4,301	21,450	27	25,724
(+) Club	–	5	5	–
Adjusted EBITDA	**39,596**	**128,316**	**6,423**	**161,490**
Adjusted EBITDA ('000 USD)	**6,766**	**23,797**	**1,297**	**29,266**
Adjusted EBITDA Margin (%)	28%	24%	6%	28%

Dividends

During 1Q 2025 the Company did not declare any dividend distribution in line with its dividend policy, which is the following: the net profit for the year, adjusted in accordance with current legislation, will be allocated as follows, subject to approval by the General Assembly:

(i) 5% (five percent) of the net profit will be allocated to the legal reserve, which shall not exceed 20% (twenty percent) of the Company's paid-in capital;
(ii) Any remaining net profit may be allocated to contingency reserves, aiming to offset future decreases in profit due to probable loss determined by judgment made by the entity;
(iii) Net profit derived from government grants or subsidies for investments may be allocated to the reserve for tax incentives;
(iv) Portion of the contingency reserve constituted in previous periods and corresponding to losses actually incurred or unrealized, if any, should be reversed;
(v) From the remaining balance, after the deductions and reversals indicated and as provided by applicable law, 25% (twenty-five percent) shall be distributed to shareholders as mandatory dividends;
(vi) Part or all of the remaining balance, after deductions, reversals, and distribution of mandatory dividends, may be retained for capital budget execution, subject to approval by the management bodies; and
(vii) Any remaining balance, if applicable, shall be distributed to shareholders as additional dividends.

Subsequential Events

Subsequent to the quarter ended on 31 March, 2025, the Company received a cash injection totaling USD 3.3 million. Combining this received funding with the cash balance as reported on March 31, 2025, the minimum cash covenant is cured.

Business Risks and Uncertainties

The operations of the Company are speculative due to the high-risk nature of its business, which involve operations, financing, development and exploration of mining and processing facilities. These risk factors could materially affect the Company's future operating results and could cause actual events to differ materially from those described in forward–looking information relating to the Company. The following list is not intended to be an exhaustive list of risks related to the Company and its business.

Risks associated with the Company's business and the industry in which the Company operates:

The Company's business depends significantly upon and may be adversely affected by product prices, which are highly volatile

The Company's revenues, cash flow, reserve estimates, profitability and rate of growth depend substantially on prevailing international and local prices of shale fuel oil, shale naphtha, shale gas, liquefied petroleum gas, sulfur, and fertilizer inputs (individually "**product**", together the "**products**"). Consequently, it is impossible to accurately predict future price movements. The prices for these products are generally volatile, and the prices have witnessed particularly high volatility in recent years. Prices are unstable and are subject to significant fluctuations for many reasons beyond the Company's control, including, but not limited to:

- changes in global and regional supply and demand, and expectations regarding future supply and demand, even in response to relatively minor economic developments;
- geopolitical uncertainty;
- availability of tankers and other transportation and processing facilities;
- proximity to, and the capacity, availability and cost of, transportation;
- mining capacity;
- price, availability and government subsidies of alternative products;
- price and availability of new technologies;
- the ability and willingness of the members of the Organization of the Petroleum Exporting Countries ("**OPEC**") and other oil-producing nations to set and maintain specified levels of production and prices;
- political, economic and military developments in producing regions, and domestic and foreign governmental regulations and actions, including import and export restrictions, taxes, repatriations and nationalizations;
- global and regional economic conditions, particularly in large economies such as the United States of America and the People's Republic of China, which drive global consumption of the products; and

- trading activities by market participants and others either seeking to secure access to the products or to hedge against commercial risks, or as part of investment portfolio activity.

Sustained lower prices for the products or price declines may lead to a material decrease in the Company's net production revenues.

Further, sustained lower prices for the products may also cause the Company to make substantial downward adjustments to the value of its product reserves. If this occurs, or the Company's estimates of production or economic factors change, the Company may be required to write-down the carrying value of its proved product properties. If product prices were to remain depressed over time, it could have a negative effect on the Company's ability to fulfil its obligations under the terms and conditions of the Bonds, as well as the market price and value of the Bonds.

The Company's products will face strong competition

The Company will encounter competition in many areas of its business. Competition in the Company's products will be based on a number of factors, including product quality and performance, brand reputation, price and quality of customer service and support. Aggressive pricing or operating strategies by the Company's competitors could also adversely affect its sales and results of operations.

Reliance on management

The success of the Company depends to a large extent upon its ability to retain the services of its senior management and key personnel. The loss of the services of any of these persons could have a materially adverse effect on the Company's business and prospects. There is no assurance the Company can maintain the services of its directors, officers or other qualified personnel required to operate its business, however, it does have a short-term incentive plan and long-term incentive plan in place to assist in the retention of its senior management.

The Company may not be successful in acquiring new assets or equipment or in hiring qualified personnel due to a highly competitive environment

As a result of rising product prices and the highly competitive environment within the oil and gas and the mining industries, the Company may be unable to acquire suitable assets, and/or secure equipment and services, as these may be in short supply. Due to the competitive environment, the Company may also experience difficulties in hiring and retaining qualified personnel necessary for the Company's operations and/or projects. Should the Company be unable to acquire suitable assets or equipment to hire and retain qualified personnel, this could adversely affect the Company's business prospects and results of operations, and could have a negative effect on the Company's ability to meet its obligations under the Bond Terms.

Mining is a complex and hazardous process that frequently experiences production disruptions, which could result in significant costs adversely affect the Company's results of operations

The Company's oil, gas and mining operations involve complex processes, which are affected by the mineralogy of the mineral deposits and structural geologic conditions and are subject to related risks. Production delays may occur due to equipment failures, unusual or unexpected geological conditions, environmental hazards, acts of nature, and other unexpected events or problems. If accidents or other unforeseen events occur, or if the Company's safety procedures are not effective, the Company could be subject to liabilities arising out of personal injuries or deaths of its employees or others, its operations could be interrupted, it could be required to expend significant amounts to remediate safety issues or repair damaged facilities, or it could be required to shut down or abandon affected facilities. This could have a material adverse effect on the Company's ability to meet its obligations under the Bond Terms.

The Company's results may differ significantly from the estimates and assumptions used by management in the evaluation of the Company's fields and reserves

Oil and gas reserves engineering is a subjective process of estimating accumulations of oil and gas that cannot be measured in an exact way. Different estimates of the oil and gas reserves conducted by other engineers may therefore deviate materially from the estimates set out herein. Assumptions and uncertainties are inherent in estimating quantities of proved product reserves, including projecting future rates of production, timing and amounts of development expenditures and product prices, many of which are beyond the Company's control. Results of mining, drilling, testing and production after the date of the estimate may require revisions to be made. For example, if the Company is unable to sell its products to customers, this may impact the estimate of the Company's product reserves. Accordingly, reserves estimates are often materially different from the quantities of product that are ultimately recovered, and if such recovered quantities are substantially lower that the initial reserves estimates, this could have a material adverse impact on the Company's business, financial condition and results of operations, and could have a negative effect on the Company's ability to meet its obligations under the Bond Terms.

The Company has a limited operating history

The Company, being incorporated in 2022, does not have a long operating history upon which it can base estimates of its future operating costs. The capital and operating costs are estimated based on the interpretation of geological data, feasibility studies, technical reports and historical data provided by Petrobras, and there can be no assurance that they will prove to be accurate.

Future operations will be dependent on the Company's facilities and critical equipment

Any disruption of operations at the Company's facilities could significantly affect production, distribution, or the ability to fulfil future contractual obligations, which could damage the Company's customer relationships. An interruption at the Company's facilities could result in production disruptions with respect to production of products, and materials or critical equipment parts may not be available at reasonable prices, on a timely basis. A production interruption or disruption at the future facility could result in a loss of customers, a loss in revenue, or fines or penalties.

Future operations will also depend upon critical equipment, such as compressors, boilers and furnaces. This equipment could be damaged or destroyed, suffer breakdowns or failures or deteriorate due to wear and tear sooner than the Company estimates, and the Company may be unable to replace or repair the equipment in a timely manner or at a reasonable cost. If such events occur, the Company may incur additional maintenance and capital expenditures, future operations could be materially disrupted and the Company may not be able to produce and ship its products.

The Company may not be able to comply with the terms of its concession contracts, which may subject the Company to fines and to the loss of the relevant concession, its benefits or future revenues

The Company's oil and gas and mining services must be conducted in accordance with public concessions, and non-compliance with applicable law, regulation or contractual provisions of the relevant concession may subject the Company to fines. Furthermore, the Company's concessions may in certain circumstances be terminated prior to their expiration, due to, *inter alia*, non-compliance with the terms of the concession contracts, expropriation for reasons of public interest and/or bankruptcy. In the event of expropriation for the benefit of the public, there is also a possibility that the Company may not be eligible for any compensation. Thus, should the Company be subject to fines, early termination of its concessions and/or expropriation, this could materially adversely affect the Company's business prospects and results of operations, and could have a negative effect on the Company's ability to meet its obligations under the terms of the Bond.

Failure to comply with, obtain or renew the licenses and permits required for each of the sectors in which the Company operates may have a material adverse effect on the Company's business

The Company is required to obtain and maintain licenses and permits with respect to the Company's operations from the applicable governmental authorities, including but not limited to environmental licenses, authorizations, permits and registries. The laws and regulations governing these licenses may occasionally require the Company, among other things, to purchase and install costly pollution control equipment or make operational changes to limit the Company's impact on the environment and/or the health of the Company's employees and local residents and communities. Any failure to comply with the terms of such laws, regulations and licenses, authorizations, permits and registries could result in administrative penalties, including fines as high as BRL 50 million, warnings, embargo on activities, partial or total suspension of activities, as well as the revocation of existing operating licenses and permits.

Moreover, the Public Prosecutor Office in Brazil may commence civil proceedings to investigate irregularities and seek to recover damages and/or indemnification for environmental damages. It might also file a public civil action seeking the same results. At the criminal level, the legal entity of the Company involved in the irregular act may be subject to fines, restriction of rights and rendering of services to the community, and individuals who eventually contributed to the investigated acts, including managers, directors and employees, may be subject to imprisonment.

Governmental authorities may also withdraw licenses, modify the terms for granting or renewing licenses or require the Company to obtain additional licenses, authorizations, permits and registries, any of which could materially increase the Company's costs.

Any failure to comply with, obtain, maintain or renew the required licenses, authorizations, permits and registries, could result in fines, loss or early termination of the licenses, authorizations, permits and registries, as well as embargoes on the Company's operations and breach of financing and commercial agreements, which could adversely affect the Company's business prospects and results of operations, and could have a negative effect on the Company's ability to meet its obligations under the Bond Terms.

The Company is subject to risks related to its dependency on third parties for the export of produced products

The Company must rely on third parties in order to export the Company's products, hereunder custom clearance. Thus, failure of or delays outside of the Company’s control could impact the Company's revenue generation and result in an increase in the Company's operating and administrative expenses, negatively affecting the Company's results and business plans, and could have a negative effect on the Company's ability to meet its obligations under the Bond Terms.

The Company is subject to risks related to its dependency on certain material contracts

The Company relies on certain third-party contracts such as its offtake contracts and oil sludge contracts and failure by the counterparties to these contracts to perform the terms under the agreement could negatively impact the Company’s business plans and could have a negative effect on the Company’s ability to meet its obligations under the Bond Terms.

The Company is subject to third-party risk in terms of equipment and services

Oil and gas production and development activities are dependent on the availability of specialized equipment, including, but not limited to, drilling and related equipment in the particular areas where such activities will be conducted. The Company relies on suppliers of such equipment and services, in the operation and implementation of the Company's plans, and may be adversely affected by failures or delays by any suppliers in fulfilling their contractual obligations. If suppliers delay or fail to deliver the supplies required for the Company's projects, the Company may not meet its operational goals within the expected time. The Company may ultimately need to postpone one or more of the Company's projects, which may have an adverse effect on the Company's results. The Company relies on third party service providers and the availability and quality of such third parties may not be sufficient to adequately operate the Company facilities.

The construction, operation and expansion of facilities and equipment for oil and gas production involve significant risks

The increase in the Company's revenue depends significantly on the Company's ability to allocate capital efficiently and to develop and manage the Company's facilities.

The Company may be unable to adequately pursue such construction, operation and expansion activities due to a number of factors, including: (i) the Company's inability or difficulty to obtain or renew the necessary governmental authorizations; (ii) environmental restrictions or changes in environmental laws, providing for new obligations or requiring measures that increase the costs of the Company's projects; (iii) issues with equipment; (iv) environmental accidents or damage, which may subject the Company to substantial liability, as well as reputational harm; (v) delays in construction or incurring costs higher than expected during construction; (vi) unavailability of financing at commercially attractive terms; (vii) the Company's inability or difficulty in acquiring or establishing and maintaining the appropriate real estate easements; (viii) delays or interruptions in the production of wells caused by restrictions on the Company's transportation, storage, production capacity or interruptions of the transportation of the products; and (ix) adverse market conditions or lack of appropriate product transportation, which may compromise the Company's access to markets for the products.

If any of these or other problems occur, the Company may be required to incur in additional operating and financial costs and be subject to loss of the Company's licenses and authorizations, any of which may adversely affect the Company's business, the Company's financial condition and the Company's operational results, and could have a negative effect on the Company's ability to meet its obligations under the Bond Terms.

The Company may face significant product liability claims and product recalls, which could harm its business and reputation

The Company may face exposure to product liability and other claims if its products cause harm, are alleged to have caused harm or have the potential to cause harm to consumers. In addition, the Company’s products or products manufactured by its customers using its products could be subject to a product recall as a result of The Company’s failure to meet product specifications or other causes. A product recall could result in significant losses due to the costs of a recall, the destruction of product inventory and production delays to identify the underlying cause of the recall.

The flow and transport of hydrocarbons involve risks that may result in accidents and operating costs for the Company

Interruptions or stoppages in the transportation of the products caused by adverse weather conditions, strikes, blockages, delays or other incidents may impair the Company's ability to move the hydrocarbons produced by the Company.

In addition, some transport venture through environmentally sensitive areas and if any problem occurs in connection with transport, such as leakage or rupture, the Company's operations may be paralyzed, which may result in financial loss. These risks can also cause fatalities, significant damage to the Company's or third parties' properties, pollution and environmental damage and interruption of operations, which, in turn, may result in significant financial and reputational losses.

The transportation and handling activities of the tailings produced in the fields operated by the Company, or sludge oil as production waste from other refineries like Petrobras, are the Company's responsibility and involve a variety of inherent dangers and operational risks, such as leaks, accidents and mechanical problems, which may cause significant financial losses for the Company.

The proximity of storage locations for hazardous products to populated areas, including residential, commercial and industrial facilities, may increase the extent of damage resulting from these risks. The occurrence of any of these events may adversely affect the Company's image, reputation, results of operations, cash flow and financial condition, and could have a negative effect on the Company's ability to meet its obligations under the Bond Terms.

There are risks of social movements and/or unions taking actions that negatively affect the Company's operations and/or cause damage to the Company's assets

The Company expects that a substantial number of the Company's employees, and some of the employees of the Company's subcontractors, will be represented by labor unions and covered by collective bargaining or other labor agreements, which are subject to periodic negotiation. Adverse labor relations or other factors could result in strikes, work stoppages, work slowdowns and other labor disruptions. This could at any of the Company's operations could adversely affect the operation of facilities and the timing of completion and cost of the Company's capital projects.

Social movements and labor unions are more active in Brazil than is common in many European countries and such groups may oppose the Company's operations or their expansion. Invasion and occupation of facilities such as the Company's by large numbers of opponents is a common occurrence, and in certain regions, remedies such as police protection or eviction procedures might be inadequate or unavailable. As a result, there is a risk that the Company's assets will be subject to invasion or occupation by opponents. In these cases, the Company's operations, image and reputation may be negatively affected, and the Company may be subject to legal and administrative proceedings that could result in criminal or administrative penalties.

Community and stakeholder relations

The Company's relationships with the community in which it operates are critical to ensure the future success of its existing operations and the construction and development of its projects. The future success of the Company is reliant on a healthy relationship with local communities in which the Company operates. While the Company is committed to operating in a socially responsible manner, there is no guarantee that its efforts will be successful, in which case interventions by third parties could have a material adverse effect on the Company’s business, financial position and operations.

The Company's insurance policies may not be sufficient to cover all claims

The Company's operations are subject to a number of hazards and risks associated with such operations, including, but not limited to, fires, explosions, and oil spills, each of which could result in substantial damage to production facilities, other property, and the environment, or result in personal injury and business interruption.

Although the Company maintains liability insurance that the Company considers adequate and consistent with industry standards, the Company's insurance policies may not adequately cover all risks and hazards to which the Company is exposed. A significant claim that is not covered by the Company's insurance, in full or in part, may result in large expenditures by the Company. Moreover, the Company may not be able to maintain insurance policies in the future at reasonable costs or on acceptable terms, which may adversely affect the Company's business and reduce the value of the Bonds. As insurers move away from insuring assets in the oil and gas sector, the Company may find that insurance may be cost prohibitive, restrictions on terms and conditions may develop or adequate insurance capacity may not be available in the market.

The costs related to decommissioning and abandonment of assets are unknown and can be substantial

The Company is responsible for the costs related to the abandonment and recovery of the Company's mining areas and facilities used for the production of the products (decommissioning). The costs related to decommissioning may impair the Company's ability to focus capital on other businesses. In addition, the Company may remain liable for decommissioning and abandonment of fields even after they have been sold or transferred prior to the end of production, which could adversely affect the Company's financial condition, results of operations and prospects, including because decommissioning may occasionally involve recovering contaminated areas.

Failure to properly deactivate and/or decommission may expose the Company to administrative penalties, including fines as high as BRL 50 million, and/or warnings, embargo on activities and partial or total suspension of activities. Moreover, the Public Prosecutor Office in Brazil may commence civil proceedings to investigate irregularities and seek to recover environmental damages and/or indemnification. It might also file a public civil action seeking the same results. At the criminal level, the Company may be subject to fines, restriction of rights and rendering of services to the community; and individuals who are eventually determined to have contributed to the investigated acts, including those that were aware of a criminal act and did not act to stop it (i.e., directors, managers, employees and others), may be subject to imprisonment. Further, in some cases, environmental remediations may be time consuming and expensive.

The costs estimates can vary in response to many factors, including changes to relevant legal requirements, the emergence of new restoration techniques or experience at other production sites. The expected timing and amount of expenditure can also change, for example, in response to the changes in reserves or changes in laws and regulations or their interpretation.

Litigation

In the normal course of the Company's operations, it may become involved in, named as a party to, or be the subject of, various legal proceedings. The outcome of outstanding, pending or future proceedings cannot be predicted with certainty and may be determined adversely to the Company and as a result, could have a material adverse effect on the Company's assets, liabilities, business, financial condition and results of operations. The Company's intellectual property may be misappropriated or subject to claims of infringement.

Intellectual property rights including trade secrets, are an aspect of the Company's business, either in what has been purchased through third party technologies, or that which has been developed. The Company attempts to protect its intellectual property rights, and third parties that it may be associated with, provided they also have intellectual property and trade secrets according to best practice and non-disclosure agreements.

The Company relies on trade secret protection to guard confidential unpatented technology, manufacturing and mining expertise, and technological innovation. The Company cannot guarantee that this protection provides meaningful protection or that adequate remedies will be available in the event of an unauthorized use or disclosure of its intellectual property or trade secrets, or a claim of infringement. Any such claims or contestation, whether in the Company or outside of the Company, may ultimately prove without merit; however, the necessary management attention to and legal costs associated with defending these intellectual property or trade secret issues could be significant.

Information security and information technology systems

The Company is heavily dependent on its information systems and computer based programs. Failure, malfunction or security breaches by computer hackers and cyberterrorists of any such systems or programs may have a material adverse effect on the Company's business and systems, potentially affecting network assets and people's privacy. The Company manages cyber security risk by ensuring appropriate technologies, processes and practices are effectively designed and implemented to help prevent, detect and respond to threats as they emerge and evolve. The primary risks to the Company include, loss of data, destruction or corruption of data, compromising of confidential customer or employee information, leaked information, disruption of business, theft or extortion of funds, regulatory infractions, loss of competitive advantage and reputational damage. A significant disruption to the Company's information technology systems could adversely affect its business and operating results.

Climate change, weather and other occurrences

Inclement or unusual weather conditions or other occurrences like for instance forest fire or drought may impact the Company's operations, assets and mining activity resulting in a material adverse effect on the Company's business, results of operations and future prospects.

Main climate change risks are associated with changes in the frequency, intensity, spatial extent, duration, and timing of weather and climate events and conditions. Potential effects, such as those related to flooding, droughts, forest fires, insect outbreaks, erosion, landslides and others, may pose risks to operations and their safety, environmental, social and financial performance. Potential adverse effects may occur in terms of geotechnical stability, water supply systems and water balance, working conditions (humidity, heat stress), construction schedules, site access, reclamation as well as supply chain disruptions (e.g. access to inputs, shipping of products), among others. Economic implications of climate change may pose additional risks through reduced global demand for products and increased costs of inputs, among others. The nature and intensity of potential adverse impacts of climate change cannot be precisely ascertained.

Pandemics, epidemics and global health crisis

Pandemics or epidemics, as for instance the COVID-19 pandemics, and efforts to contain these may have a negative impact on the Company's business. These may extend to local impacts at the operational level, international travel restrictions, together with the broader global economic fallout, the Company's ability to continue its operations may be impacted. Similarly, the Company's ability to obtain financing and the ability of the Company's vendors, suppliers, consultants and partners to meet obligations may be impacted as a result of such and efforts to contain these. This may have a material adverse effect on the Company's operations.

Legal and regulatory risks

The Company's oil and gas concession agreements are subject to expiration, and the Company may not be able to renew those agreements

Each of the Company's concession agreements with the ANP have an expiry date for the corresponding field, which is a notice to the ANP stating that the field is suitable for commercial development, subject to extension periods if approved by the ANP.

The possibility of an extension, to be negotiated and approved by the ANP, is provided by article 43, II of the Petroleum Law, as well as in the concession agreements themselves. The Company may apply for an extension of the term of a concession prior to the end of the relevant concession agreement, subject to the presentation of a new development plan for the related fields, including proposed new investments, and compliance with applicable legal and regulatory requirements. Any contractual extension is subject to approval of the new development plan by the ANP. The ANP is not required to approve the Company's requests for extension of any of the Company's concession agreements, and may condition its approval of any extension on certain modifications to the development plan and the investments to be made. As a result of these factors, the Company may not be able to renew concession agreements relating to the Company's fields on time or at all, which could have a material adverse effect on the Company's results of operations and financial condition, and, as a consequence, on the Company's ability to meet its obligations under the Bond Terms, as well as the market price and value of the Bonds.

Oil and natural gas companies in Brazil do not have title to oil and natural gas reserves

In Brazil, the federal government retains ownership of oil and gas reserves, transferring to the concession holders exclusive rights to explore, develop and produce oil and gas pursuant to concession agreements with the ANP. The concession holder is in turn entitled to perform oil exploration and production activities for its own account, using its own equipment and facilities, and retaining property rights to oil and gas produced. The federal government defines the energy policy through the Brazilian National Council for Energy Policy and performs regulatory functions through the ANP. If the federal government imposes additional restrictions or obstacles for production of oil and gas by reforming or amending the current legal framework, the Company's ability to generate revenue could be affected, which could have a material adverse effect on the Company's results of operations and financial condition, and, as a consequence, on the Company's ability to fulfil its obligations under the Bond Terms, as well as the market price and value of the Bonds.

Operations in the oil and gas industry are subject to extensive regulation in Brazil

The oil and natural gas industry in Brazil is subject to extensive regulation and intervention of the federal government. Regulation and government intervention include the imposition of specific drilling and exploration obligations or requirements, production restrictions, price controls, taxation, restrictions for disposal of assets, foreign currency controls, nationalization and expropriation or cancellation of contractual rights. Compliance with applicable regulations may entail significant expenses, including in connection with obtaining licenses to conduct operations, production individualization processes (if production extends to adjacent deposits), compliance with local content policies, and taxation. The Company is also subject to federal, state and municipal environmental laws and regulations, which could result in delays to the Company's projects, prohibit or severely restrict the Company's activities in environmentally protected or sensitive regions or areas, or impose obligations with significant compliance costs.

Failure to comply with such laws and regulations may also result in suspension or termination of operations and subjection to administrative, civil and criminal penalties. These laws and regulations may be changed or the enforcement authority may change its interpretation with respect to them, so as to substantially increase costs. Under laws and regulations applicable to the oil and gas industry in Brazil, there is potential liability for personal injury, property damage and other harm. Any such liability could have a material adverse effect on the Company's financial condition and results of operations, and, as a consequence, on the Company's ability to fulfil its obligations under the Bond Terms, as well as the market price and value of the Bonds.

The Company's operating results may be impacted by changes in Brazilian tax laws

The Company's operating results may be impacted by changes in Brazilian tax laws, including changes in applicable tax rates or the introduction of new temporary or permanent taxes. These changes may impact the Company's financial margins and adversely impact the Company's operating and financial results, and thereby on the Company's ability to fulfil its obligations under the Bond Terms as well as the market price and value of the Bonds.

There are proposals being discussed in the Brazilian congress to implement a broad tax reform, which may include a complete change in Brazilian indirect taxes (e.g., consolidation of existing taxes into a single tax). If there is a tax reform or any other change in the applicable legislation and regulations that alters the applicable taxes or special regimes from which the Company currently benefits, the Company's business may be affected and the Company may consequently experience an adverse effect on the Company's financial and operating results.

It is also possible that a 15% withholding tax will be implemented on dividend payments from Brazilian companies to foreign shareholders.

The Company's activities are subject to environmental, health and safety regulations, which may become more stringent in the future and cause an increase in the Company's liabilities and capital expenditures

The Company's activities are subject to environmental, health and safety regulations and evolving industry standards and international conventions. More stringent environmental legislation or regulations are also expected to be enacted over time, either through the approval of new standards or stricter interpretations of existing laws and regulations. If the Company fails to comply with applicable regulations, the Company may be subject to warnings, fines, embargoes, partial or total suspension of activities, cancellation of licenses and the revocation of authorizations or other restrictions on its development, construction, maintenance and sales activities, adversely affecting the Company's financial condition. If the legislation and regulations become more stringent in the future, the Company may also incur additional environmental compliance expenses and experience project delays or difficulty in obtaining all necessary licenses and permits.

Regulatory initiatives relating to the protection of endangered or threatened species in Brazil could have an adverse impact on the Company's and its customers' ability to expand operations

To the extent that protected species or species that will be protected in the future live in the areas where the Company or its customers operate, both the Company and its customers' abilities to conduct or expand operations and construct facilities could be limited or be forced to incur material additional costs. The designation of previously unidentified endangered or threatened species or new critical or suitable habitat designations could indirectly cause the Company to incur additional costs, cause its future operations to become subject to operating restrictions or bans, and limit future development activity in affected areas. The designation of previously unprotected species as threatened or endangered or new critical or suitable habitat designations in areas where the Company or its customers might conduct operations could result in limitations or prohibitions on the Company's future operations and could adversely impact its business.

The Company is exposed to corruption risk and risks related to anti-corruption and anti-money laundering compliance in Brazil

The oil industry in Brazil is deemed to be high risk from a corruption perspective, and the Company is therefore exposed to corruption risk. The Company is subject to anticorruption, anti-bribery, anti-money laundering and sanctions laws and regulations, including but not limited to, Brazilian Federal Law No. 12,846/2013 (the Clean Company Act). The Clean Company Act imposes liability on companies that engage in bribery of government officials, either directly or through intermediaries. Although the Company is taking required precautions and has policies in place to mitigate any corruption risks, a failure by the Company to comply with such laws and regulations could result in criminal liability, administrative and civil lawsuits, significant fines and penalties, forfeiture of significant assets, as well as reputational harm.

We are subject to risks associated with non-compliance with the Brazilian General Data Protection Law and may be adversely affected by the application of fines and other types of sanctions

The Brazilian General Data Protection Law ("**LGPD**"), governs the collection, use, processing and storage of personal data in all economic sectors, and prescribes the rights of the data subjects, the legal bases applicable to the protection of personal data, the requirements for obtaining consent, the obligations and requirements relating to security incidents and leaks and data transfers, as well as authorization for the creation of the National Data Protection Authority (the "**ANPD**") the government agency responsible for ensuring compliance with data protection standards and for applying sanctions in case of breach of the LGPD. The LGPD came into force on September 18, 2020, except for articles 52, 53 and 54 of the LGPD, which address administrative penalties, which came into force on August 1, 2021.

However, even prior to the entry into force of the above mentioned articles, non-compliance with any provisions in the LGPD already had certain risks, including (i) potential filings of individual or collective lawsuits claiming reparations for damages arising from violations based on the LGPD or existing data protection legislation; and (ii) penalties under the Consumer Protection Code and the Brazilian Internet Law by consumer protection agencies, as these have already been applied before the LGPD and the organization of ANPD, particularly in cases of security incidents resulting in unauthorized access to personal data.

With the entry into force of the LGPD's penalties (since August 1, 2021), in the event we are not in compliance with the LGPD, we and our subsidiaries may be subject to sanctions, in an isolated or cumulative manner, of warning, incident disclosure, temporary blocking and/or deletion of personal data, and a fine of up to 2% of our, the group's, or Brazilian conglomerate's revenues, excluding taxes, or up to the global amount of BRL 50 million per infraction. In addition, we may be liable for material, moral, individual or collective damages caused and be considered jointly and severally liable for material, moral, individual or collective damages caused by us or our subsidiaries, due to non-compliance with the obligations set forth in the LGPD.

Thus, failures in the protection of personal data processed by us, as well as the breach of any obligations provided for in the applicable legislation, may result in high fines, disclosure of the incident to the market, elimination of personal data from the database, and even a suspension of operations, which may negatively affect our reputation and results, and, consequently, the value of our Bonds. Unfavorable decisions on judicial or administrative proceedings related to the LGPD could result on a material adverse effect on us.

Financial risks

The Company will require a significant amount of cash to service current and future debt and sustain its operations and its ability to generate sufficient cash depends on many factors beyond its control

The Company's ability to make payments on, or repay or refinance, any debt and to fund working capital and capital investments will depend on its future operating performance and ability to generate sufficient cash. This depends on the success of its business strategy and on general economic, financial, competitive, market, legislative, regulatory, technical and other factors, many of which are beyond the Company’s control. The Company cannot assure that its business will generate sufficient cash flow from operations or that future debt and equity financings will be available to it in an amount sufficient to enable it to pay its debt or to fund its other liquidity needs. The Company cannot provide assurance that it will be able to refinance any debt, including the Bonds, on commercially reasonable terms or at all. There can be no assurance that any assets that the Company may elect to sell can be sold or that, if sold, the timing of such sale will be acceptable and the amount of proceeds realized will be sufficient to satisfy its debt service and other liquidity needs.

If the Company is unsuccessful in any of these efforts, it may not have sufficient cash to meet its obligations, which could cause an event of default under any debt arrangements, including the Bonds, and could result in the debt being accelerated, lending reserves and certain bank accounts being frozen, enforcement of security and the Company and its subsidiaries being forced into bankruptcy or liquidation, which could result in an investor losing its investment in the Bonds in its entirety.

The Company's financing agreements contain financial covenants which the Company could fail to meet

The Company primarily finances its operations through equity, own cash flow and interest-bearing debt and unsecured working capital facilities with Brazilian banks.

The Company's financing arrangements contain certain covenants and general undertakings, which are customary in financing of this type, which impose restrictions on the Company's operations, and impose financial restrictions on the Company, as well as covenants that require specific actions from the Company.

Any default or failure to comply with the covenants set forth in the Company's credit agreements may result in the acceleration of the Company's obligations under such agreements and enforcement of any collateral securing such agreements, which may materially adversely affect the Company. Any such default or failure to comply may also lead to stricter dividend restrictions being imposed by the lenders, which could have a negative effect on the Company's ability to meets its obligations under the Bond terms.

The Company's assets are pledged as security under the financing agreements. Any failure by the Company to make debt repayments on a timely basis could cause an event of default under any of the financing arrangements and could result in enforcement of the securities, with the effect of the Company losing title to such assets, which would have a materially adverse effect on the Company and the Company's ability to meet its obligations under the Bond terms.

The Company is exposed to currency risk

The Company’s functional currency is USD. The Company expects that most of the Company's revenues will be derived from sales of the products quoted in or with reference to USD and be subject to price fluctuations. On the other hand, the Company expects that a substantial part of the Company's costs will be denominated in BRL (Brazilian reais). Therefore, changes in exchange rates may result in losses or gains on the Company's net USD-denominated indebtedness and accounts receivable and fair value losses or gains on currency derivatives the Company uses to stabilize the Company's cash flow in USD.

Movements in foreign exchange rates could negatively influence the Company’s cash flow and results. Factors such as significant volatility in currency prices may also result in disruption of foreign exchange markets, which could limit the Company's ability to transfer or to convert certain currencies into USD and other currencies for the purpose of making timely payments of interest and principal on the Company's indebtedness.

Further, the Company may enter into hedging contracts with respect to both product prices and foreign exchange movements, which could represent financial expenses and, in the context of oil price fluctuations, may limit the Company's earning potential as a result of the hedging strategy executed (e.g., minimum and maximum price locks) and the Company may not necessarily earn the full potential of future increases in price. If the Company does not enter into hedging transactions, the Company may be more susceptible to reductions in product prices or exchange rate fluctuations.

Macroeconomic Risks

The Brazilian government exercises significant influence over the Brazilian economy and government actions may materially adversely affect the Brazilian market and the Company

The presidency of Luiz Inácio Lula da Silva, who assumed office on 1 January 2023, may result in changes in Brazil's economic policies, including credit, monetary, tax and exchange policies, that are averse to the oil and gas industry, including annulment of transactions and/or agreements made under the Petrobras divestment program. Such changes may materially adversely affect the Company.

In addition, uncertainty regarding the guidelines of economic policy may contribute to a lack of confidence and increased volatility in the Brazilian capital markets, as well as in the price of securities of Brazilian issuers, including the Company. It is not possible to predict with any certainty how the approval of any reforms, such as labor, social security, political and tax reforms, will impact on the Brazilian economy. Continuing political uncertainty may affect the approval of important measures and lead to reversals in expectations.

It is difficult to foresee which measures may be adopted by the Brazilian government, or which measures (if and when implemented) may create instability in the Brazilian economy. For example, the deterioration in federal, state and municipal governments' fiscal results in recent years has led to an unprecedented increase in gross debt, as well as in the gross debt to gross domestic product ratio. In this environment, the government may encounter difficulty honoring its commitment to pass on to the Company the credit instalments deducted from the salaries of its employees, increasing the Company's provisions for credit in general.

Due to the current political and economic instability in Brazil, there are substantial uncertainties in relation to future economic policies. Any changes in the regulations that govern the Company's sale of oil, for example, or continued policy uncertainty, may materially adversely affect the Company, and thereby on the Company's ability to fulfil its obligations under the Bond Terms as well as the market price and value of the Bonds.

The Brazilian capital markets have experienced an increase in volatility on account of the uncertainties generated by corruption investigations, led by the Federal Public Prosecutor's Office and other authorities, and its impact on the Brazilian economy and political environment. Certain members of the federal executive and legislative branches, as well as senior officers of large state-owned companies, have faced allegations of political corruption due to having allegedly accepted bribes in contracts awarded by the Brazilian government to various construction, infrastructure, oil and agribusiness companies. There can be no assurance that individuals directly or indirectly connected to the Company, including employees, executive officers, board members, suppliers, service providers, or subcontractors, are not or will not be involved in criminal investigations (whether or not related to corruption) that may adversely affect the Company's reputation, and thus also its financial condition, and, as a consequence, on the Company's ability to meet its obligations under the Bond Terms, as well as the market price and value of the Bonds.

Brazil's credit ratings have been, and may be further downgraded, which may have a material adverse effect on the Company's funding costs

Rating agencies regularly evaluate Brazil and its sovereign ratings based on a number of factors, including macroeconomic trends, physical and budgetary conditions, debt metrics and the prospect of changes in any of these factors. The rating agencies began to review Brazil's sovereign credit rating in September 2015, and subsequently, three major rating agencies downgraded Brazil's investment-grade status. As a result of Brazil losing its investment grade status with the three major rating agencies, the trading prices of debt and equity securities issued by Brazilian issuers were adversely affected. Any further downgrades of Brazil's sovereign credit rating could increase investors' risk perception and, consequently, may increase the Company's future borrowing costs and could have a material adverse effect on the Company's results of operations and financial condition, and, as a consequence, on the Company's ability to fulfil its obligations under the Bond Terms, as well as the market price and value of the Bonds.

Brazilian foreign exchange controls and regulations could restrict conversions and remittances abroad of the dividend payments and other shareholder distributions paid in Brazil in BRL arising from the Company's Brazilian subsidiaries

Brazilian law provides that whenever there is a serious imbalance in Brazil's balance of payments or reasons to foresee such a serious imbalance, the Brazilian government may impose temporary restrictions on the remittance to foreign investors of the proceeds of their investments in Brazil. Such restrictions may hinder or prevent the Company from converting distributions, as the case may be, into USD and remitting such USD out of Brazil. Any BRL so held will be subject to devaluation risk against the USD. In addition, the likelihood that the Brazilian government would impose such restrictions may be affected by the extent of Brazil's foreign currency reserves, the availability of foreign currency in the foreign exchange markets on the date a payment is due and the size of Brazil's debt service burden relative to the economy as a whole. The Company cannot assure investors that the Brazilian Central Bank will not modify its policies or that the Brazilian government will not institute restrictions or delays on cross-border remittances.

Adverse conditions in the global economy and disruptions in the financial markets could negatively affect the Company’s results of operations and financial condition

Volatility and disruptions in the financial markets could limit the Company’s future customers’ ability to obtain adequate financing or credit to purchase and pay for its products, which would decrease future sales volume and increase the risk of non-payment by customers. Changes in governmental banking, monetary, and fiscal policies to restore liquidity and increase credit availability may not be effective. It is difficult to determine the extent of economic and financial market problems and the many ways in which they could negatively affect the Company’s future customers and business. In addition, if the Company is required to raise additional capital or obtain additional credit during an economic downturn, it could be unable to do so on favorable terms or at all.

ESG

During Q1 2025, PX Energy continued the rehabilitation of approximately 6 hectares of areas impacted by mining.

Additionally, as part of its strategy, the company has defined the partial transition of its energy matrix, prioritizing the use of biomass-fired boilers to supply heat to its industrial processes. Implementation is scheduled for December 2025.

The 1Q 2025 was concluded with a workforce of 237 direct employees, of whom 24% are women, 1% are persons with disabilities (PWD) and 17% are Black.

In 1Q 2025, no notifications of environmental or regulatory non-compliance were recorded, and operations remained in full compliance with all licenses required for the plant's operation.

Non-IFRS and Other Financial Measures

Throughout this MD&A, the Company uses various non-IFRS and other financial measures to analyze operating performance and financial position. These non-IFRS and other financial measures do not have standardized meanings prescribed under IFRS and therefore may not be comparable to similar measures presented by other entities.

Non-IFRS Financial Measures

Total Cash COGS and SG&A

Total Cash COGS and SG&A are calculated as noted in the following table:

	1Q 2025	1Q 2024 (Restated)	Percentage Change
Total COGS, SG&A and Other	120,394	123,283	(2)
(-) Royalties	(4,887)	(3,429)	43
(-) Depreciation and Amortization	(13,051)	(14,137)	(8)
(-) Other operating expenses, net	7,496	585	1,180
Total Cash COGS and SG&A	**109,953**	**106,303**	**3**
Total Cash COGS and SG&A ('000 USD)	**18,788**	**21,469**	**(12)**

EBITDA and *Adjusted EBITDA*

EBITDA and Adjusted EBITDA are calculated as noted in the following table and reflects items that the Company considers appropriate to adjust including non-recurring income and expenses and items that do not relate to the primary operations of the business.

The Company believes that EBITDA and Adjusted EBITDA are useful supplemental measures to enhance understanding of the results generated by the Company's principal business activities prior to consideration of how those activities are financed, how the results are taxed, how the results are impacted by non-cash charges and charges that are irregular in nature or not reflective of PX's core operations. PX calculates these adjustments to enhance comparability of this MD&A. EBITDA and Adjusted EBITDA are used by the Company to determine PX's ability to pay debt, finance capital expenditures and provide for dividend payments to shareholders.

	1Q 2025	1Q 2024 (Restated)	Percentage Change
Net Income (Loss)	26,627	(28,648)	NM
(+) Income Tax and Social Contribution	4,262	(2,632)	NM
(+) Financial result	(8,644)	23,532	(137)
(+) Depreciation and Amortization	13,051	14,137	(8)
EBITDA	**35,295**	**6,390**	**452**
(+/-) Non-recurring result	4,301	33	12,933
Adjusted EBITDA	**39,596**	**6,423**	**516**

Capital Expenditures

The Company utilizes capital expenditures to measure total cash capital expenditures incurred in the period. Capital expenditures represent Acquisitions of Property, Plant, and Equipment and Intangible Assets in the statement of cash flows in the Company's interim financial statements.

Non-IFRS Ratios

Royalty Rate

Royalty Rate is a non-IFRS ratio used by management to better analyze the Company's performance against prior periods on a more comparable basis. It is defined as Royalty Expenses divided by Total Sales and expressed as a percentage.

Adj. EBITDA Margin

Adjusted EBITDA Margin is a non-IFRS ratios used by management to better analyze the Company's performance against prior periods on a more comparable basis. It is defined as Adjusted EBITDA divided by Total Sales and expressed as a percentage.

Per BOE numbers

This MD&A can represent various results on a per BOE basis including sales per BOE, costs per BOE etc. These figures are calculated using sales volumes as indicated on the "Production" section.

Definitions

- OCB1 is a designation given by Petrobras to specify fuel oils that, among other characteristics, have a maximum sulfur content of 1% by mass. The fuel oil must also have a maximum kinematic viscosity at 60°C of 620 mm^2/s, a minimum flash point of 66°C, a maximum pour point of -6°C, and a maximum vanadium content of 150 mg/kg.

- BBL, short for "barrel," is a unit of measurement commonly used in the oil industry to quantify the volume of crude oil and other petroleum products. One barrel (BBL) is equivalent to 42 U.S. gallons, or approximately 159 liters.

- LPG, or Liquefied Petroleum Gas, is a versatile and widely used fuel composed primarily of propane and butane, which are hydrocarbons derived from natural gas processing and oil refining. At normal temperatures and pressures, LPG is a gas, but it can be easily liquefied under moderate pressure, making it convenient to store and transport

- BOE, or Barrel of Oil Equivalent, is a unit of energy used in the oil and gas industry to standardize the measurement of energy content across different types of hydrocarbons, including crude oil, natural gas, and condensates. One BOE represents the amount of energy released by burning one barrel of crude oil, which is approximately 5.8 million British Thermal Units (BTUs) or about 1,700 kilowatt-hours. By converting various forms of energy into a common unit, BOE allows for the comparison and aggregation of oil, gas, and other hydrocarbon production, reserves, and consumption, providing a more comprehensive understanding of a firm's or country's energy assets.