LatAm Oil & Gas

Drilling for oil pays dividends; assessing 2024-25 total cash returns

Industry Overview

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Equity
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Drilling for oil pays dividends, comparing PBR with peers

Following Petrobras' (PBR) release of its 2024-28 Strategic Plan with updates to guidance for production and capex, among others, investors have asked how the updated cash return prospects stack up vs. peers. In this report, we collaborated with our colleagues from the U.S., Europe and Asia oil teams to assess how Petrobras will be positioned over the next two years compared to other International Oil Companies (IOCs).

Petrobras' valuation to be driven by total cash return yield

As we have been flagging, we expect PBR's valuation to be driven by the market's expectations over its total cash return, especially given the high yields that are being offered by global peers. Given Petrobras' profile as an SOE (state-owned enterprise), we believe that investors demand a higher yield compared to its peers to account for potential government influence over strategic decisions such as investments, fuel pricing and dividend policies, among other things.

BofAe for PBR's yield: 11.9% for 2024 and 7.0% for 2025

Assuming oil prices of US$80/bbl for 2024 and US$70/bbl for 2025, we reach total cash returns of US$13.1bn (11.9% yield) and US$7.7bn (7.0% yield), respectively, under the 45% Free Cash Flow formula. We highlight, however, that we do expect PBR to announce extraordinary amounts given that its cash generation will likely be positive even after paying regular dividends. According to mgmt., these decisions do not consider only past information, including most recent cash position, but mainly a forward-looking and risk-averse approach, taking into account forecasted inflows and outflows along with several risk factors. We note that PBR's net debt is well below the company's optimal level of US$57 billion – it ended the 3Q23 with net debt of US$43.7 billion. Going forward, as we expect Petrobras to continue generating cash, its net debt will likely reduce.

Peers are expected to pay ~9.4% for 2024 and 8.9% for 25

Assuming the same oil prices mentioned above and looking to Petrobras' peers, BofA teams globally forecast total cash yields of 9.4% for 2024 and 8.9% for 2025. While we see Petrobras trading at a premium in 2024 vs. the average of the other oil companies (European companies have higher yields vs. PBR), Petrobras' cash returns in 2025 seem to be well below the peer average.

Potential upside to BofAe: higher prod. and lower capex

We note, however, that there could be upside to our estimates from a cash return perspective. There are two sources of upside that would likely improve our estimates for PBR (other than higher oil prices): 1) higher production – we believe that Petrobras's production guidance is somewhat conservative (see our 31 January report); and 2) lower capex – we believe that Petrobras could deliver lower capex vs. our estimates as the company has been having difficulties in hiring new platforms amid tight supply.

Timestamp: 14 February 2024 07:38PM EST

Drilling for oil pays dividends; assessing 2024-25 figures

It is important to note that our figures for Petrobras in this report are on a cash-basis. This means that our figures for 2024 consider 4Q23, 1Q24, 2Q24 and 3Q24. For 2025, we assume 4Q24 plus three quarters of 2025. Separately, we expect potential extraordinary dividends payment in the 4Qs.

In addition, the sensitivities below assume the same oil prices for both years. For example, under the US$90/bbl scenario, we assume this same oil price for 2024 and 2025. This can lead to some differences in terms of FCFE and working capital vs. our official expectations (where we assume US$80/bbl for 2024 and US$70/bbl for 2025).

BofAe PBR cash yields: 11.9% in 2024 and 7.0% in 25

Assuming BofA's base case for oil prices of US$80/bbl for 2024 and US$70/bbl for 25, we estimate Petrobras' total cash returns reaching US$13.1bn (11.9% yield) and US$7.7bn (7.0% yield), respectively, under the 45% Free Cash Flow formula. We note that our estimates for 2025 drops significantly as: 1) we assume lower oil prices in 2025 vs. 24; and 2) we assume Petrobras's capex guidance from the 2024-28 Strategic Plan of US$21 billion (vs. US$18 billion in 2024).

Under the 45% FCF scenario, Petrobras could not be that attractive vs. peers

Looking to Petrobras's peers and assuming the same oil prices mentioned above, BofA international teams forecast total cash yields of 9.3% for 2024 and 8.8% for 2025. While we see Petrobras trading with premium of in 2024 vs. the average of the other oil companies, Petrobras' cash returns in 2025 seem to be well below its peer average.

PBR's attractiveness improves under higher oil prices

Of note, Petrobras' cash returns have higher elasticity to oil prices compared to international peers. This, in our view, can be largely explained by the fact that Petrobras' differentiating value driver is its world class Upstream operation, led by its massive offshore reserves.

At each US$10/bbl increase/decrease in Brent prices, our estimates for Petrobras' yields change by ~1.4% for 2024 and ~2.1% for 2025. In this regard, under stronger oil prices scenarios, we believe that Petrobras is likely to perform better vs. its international peers.

Exhibit 1: Total Cash Return 2024 – Sensitivity analysis

Each US$10/bbl increase/decrease in Brent, Petrobras' yields change by 1.4%

	2024 Total Cash Return (US$ million)				
Brent (US$/bbl)	60	70	80	90	100
Petrobras	9.0%	10.4%	11.9%	13.3%	14.8%
Exxon	8.3%	8.3%	8.3%	8.3%	8.3%
Chevron	6.0%	7.0%	10.6%	10.6%	10.6%
BP	9.4%	10.0%	10.5%	11.1%	11.7%
Shell	10.8%	11.4%	12.0%	12.6%	13.2%
Total	10.0%	10.7%	11.4%	12.1%	12.8%
ENI	7.8%	8.7%	9.5%	10.3%	11.1%
PetroChina	4.6%	5.1%	5.9%	6.2%	6.8%
Sinopec	6.3%	6.6%	7.0%	7.3%	7.7%
Avg.	**8.0%**	**8.7%**	**9.7%**	**10.2%**	**10.8%**
Avg. ex-PBR	**7.9%**	**8.5%**	**9.4%**	**9.8%**	**10.3%**

Source: BofA Global Research Estimates

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Exhibit 2: Total Cash Return 2025* – Sensitivity analysis

Each US$10/bbl increase/decrease in Brent, Petrobras' yields change by 2%

	2025 Total Cash Return (US$ billion)				
Brent (US$/bbl)	60	70	80	90	100
Petrobras	4.3%	6.3%	8.4%	10.4%	12.5%
Exxon	8.7%	8.7%	8.7%	8.7%	8.7%
Chevron	7.8%	9.7%	10.5%	10.5%	10.5%
BP	9.4%	10.0%	10.5%	11.1%	11.7%
Shell	10.2%	10.7%	11.3%	11.9%	12.5%
Total	10.3%	11.0%	11.7%	12.4%	13.1%
ENI	8.5%	9.4%	10.3%	11.2%	12.1%
PetroChina	4.5%	5.1%	5.9%	6.2%	6.8%
Sinopec	6.1%	6.4%	6.7%	7.1%	7.4%
Avg.	**7.8%**	**8.6%**	**9.3%**	**9.9%**	**10.6%**
Avg. ex-PBR	**8.2%**	**8.9%**	**9.5%**	**9.9%**	**10.4%**

Source: BofA Global Research Estimates | * the sensitivities assume the same oil prices for both years, which leads to differences in FCFE and working capital vs. BofAe

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As we have already flagged, we believe that investors demand a higher yield from Petrobras compared to its peers due to its profile as an SOE (state-owned enterprise) – accounting for potential government influence over strategic decisions such as investments, fuel pricing and dividend policies, among other things. Assuming no extraordinary dividends, we would see Petrobras trading in line with its European peers. In this regard, observing Petrobras current stock price, we believe that the market is expecting extraordinary dividends.

Assessing potential extraordinary dividends

Although we do not factor any extraordinary amount into our estimates (given the lack of policy related to it) – there is room for Petrobras to pay these given that its cash generation will be positive after paying regular dividends.

According to the management, the decision to pay extraordinary dividends does not consider only past information, it includes other factors such as, most recent cash position, and **mainly** a forward-looking and risk-averse approach, considering forecasted inflows and outflows along with several risk factors. In this regard, we note that Petrobras' net debt is well below the company's optimal level of US$57 billion – Petrobras ended the 3Q23 with a net debt of US$43.7 billion. Going forward, as we expect Petrobras to continue generating cash, its net debt will likely reduce.

In addition to that, we expect the government to be supportive of extraordinary dividends, especially given Brazil's current fiscal situation.

Petrobras could pay the equivalent of its Free Cash Flow to Equity (FCFE)

In our most recent interactions with investors, we have discussed the possibility of Petrobras paying its free cash flow to equity in dividends/buybacks.

In this scenario, Petrobras total cash return for 2024 would beat international peers in any scenario of oil prices. For 2025, given the high capex incorporated in Petrobras' Strategic plan (US$21 billion), Petrobras' FCFE would be lower vs. total cash return from peers at scenarios below US$80/bbl. We highlight, however, that PBR would still have a net debt below its optimal capital structure, of US$57 billion, in this case.

Exhibit 3: FCFE Pre-dividends 2024 – Sensitivity analysts for brent
FCFE Yield pre dividends of 19.5% for brent price at US$80/bbl

	2024 FCFE pre-dividends (US$ million)				
Brent (US$/bbl)	60	70	80	90	100
Petrobras	14.5	18.1	21.7	25.3	28.9
yield %	13.1%	16.4%	19.6%	22.9%	26.1%

Source: BofA Global Research Estimates

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Exhibit 4: FCFE Pre-dividends 2025* – Sensitivity analysts for brent
FCFE for 2025 is lower YoY given higher capex

	2025 FCFE pre-dividends (US$ million)				
Brent (US$/bbl)	60	70	80	90	100
Petrobras	2.7	8.0	13.3	18.6	23.9
yield %	2.4%	7.2%	12.0%	16.8%	21.7%

Source: BofA Global Research Estimates | * the sensitivities assume the same oil prices for both years, which leads to differences in FCFE and working capital vs. BofAe

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Assessing PBR's potential of extraordinary (Net debt = US$57bn)

In this analysis, we assess what could be Petrobras' total cash return assuming that the company will seek to optimize its capital structure in 2023 and 2024 – by paying extraordinary amounts in the 4Q23 and 4Q24 – and try to end both years with a net debt of US$57 billion.

For 2024, if Petrobras optimizes its capital structure, the company's total cash returns would beat peers' by far. For 2025, Petrobras is more attractive under scenarios above US$80/bbl. We highlight, however, that the company could opt to optimize its capital structure only in 2024-25 instead of doing in 2023 as well. In this scenario, Petrobras cash yields for 2025 could beat its peers.

Exhibit 5: Total Cash Return 2024 – Sensitivity analysis for brent

Petrobras' total cash return is higher than peers in 2024 in all scenarios

	2024 Total Cash Return (US$ million)				
Brent (US$/bbl)	60	70	80	90	100
PBR (45% FCF)	9.0%	10.4%	11.9%	13.3%	14.8%
Potential ext.	8.9%	9.3%	9.3%	9.3%	9.3%
PBR with ext.	17.9%	19.7%	21.2%	22.6%	24.1%
Exxon	8.3%	8.3%	8.3%	8.3%	8.3%
Chevron	6.0%	7.0%	10.6%	10.6%	10.6%
BP	9.4%	10.0%	10.5%	11.1%	11.7%
Shell	10.8%	11.4%	12.0%	12.6%	13.2%
Total	10.0%	10.7%	11.4%	12.1%	12.8%
ENI	7.8%	8.7%	9.5%	10.3%	11.1%
PetroChina	4.6%	5.1%	5.9%	6.2%	6.8%
Sinopec	6.3%	6.6%	7.0%	7.3%	7.7%

Source: BofA Global Research Estimates

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Exhibit 6: Total Cash Return 2025* – Sensitivity analysis for brent

PBR's total cash return is higher than peers with brent above US$80/bbl

	2025 Total Cash Return (US$ billion)				
Brent (US$/bbl)	60	70	80	90	100
PBR (45% FCF)	4.3%	6.3%	8.4%	10.4%	12.5%
Potential ext.	0.0%	2.0%	4.6%	7.1%	9.6%
PBR with ext.	4.3%	8.3%	12.9%	17.5%	22.1%
Exxon	8.7%	8.7%	8.7%	8.7%	8.7%
Chevron	7.8%	9.7%	10.5%	10.5%	10.5%
BP	9.4%	10.0%	10.5%	11.1%	11.7%
Shell	10.2%	10.7%	11.3%	11.9%	12.5%
Total	10.3%	11.0%	11.7%	12.4%	13.1%
ENI	8.5%	9.4%	10.3%	11.2%	12.1%
PetroChina	4.5%	5.1%	5.9%	6.2%	6.8%
Sinopec	6.1%	6.4%	6.7%	7.1%	7.4%

Source: BofA Global Research Estimates | * the sensitivities assume the same oil prices for both years, which leads to differences in FCFE and working capital vs. BofAe

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How BofAe for yields could change?

While we expect Petrobras to continue delivering strong cash returns to investors, we highlight that there could be upsides and downsides to our estimates. Two variables are important to analyze within this context: 1) production curve, and 2) capex.

Petrobras' production curve could be considered conservative

Looking only to the 2024-25 horizon, Petrobras expects its oil + NGL (natural gas liquids) production to average 2.2Mbpd. However, it is important to note that the company's figure by the end of 2023 has reached levels close to 2.4Mbpd. In addition to that, three platforms that started up in 2023 are still ramping-up their production:

1) FPSO Anna Nery, in Marlim complex, with 70kbpd of capacity (100% PBR);

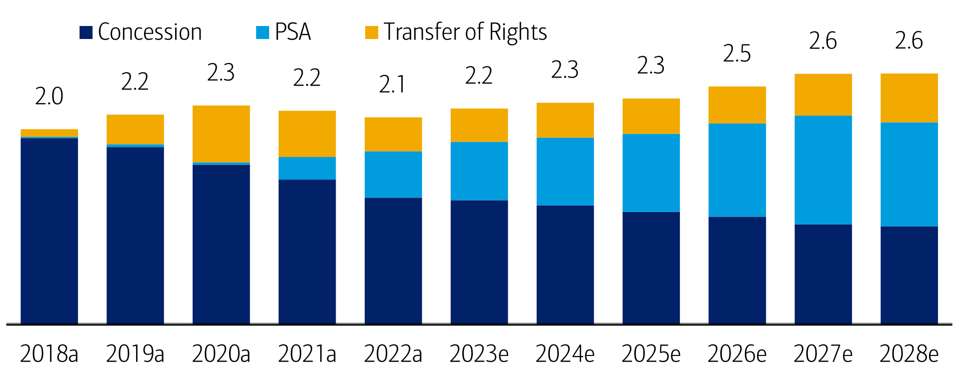
2) FPSO Anita Garibaldi, in Marlim complex, with 80kbpd of capacity (100% PBR); and

3) FPSO Sepetiba, in Mero field, with 180kbpd of capacity (~38.6% PBR).

Lastly, one new unit is also expected to start-up in 2024 – the FPSO Marechal Duque de Caxias will be allocated in Mero field with and will have a capacity of 180kbpd as well. In this context, we believe the production curve guided by the company in its latest Strategic Plan could be considered somewhat conservative. We assume that Petrobras will be able to deliver 0.1mbpd above its Strategic Plan for each of the years to come. However, we believe that there could be upside to our estimates.

Exhibit 7: BofAe - Petrobras' production curve (Mbpd)

We believe that Petrobras' production curve is conservative



Source: BofA Global Research Estimates

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Uncertainties regarding capex

Over the past several years, Petrobras has delivered a lower capex than the figures guided in its Strategic Plans. Analyzing the 2024-25 horizon, we see potential upsides and downsides for the company's capex guidance for over the next two years: 1) the tight FPSO supply market; and 2) potential M&As.

Tight FPSO supply market could lead to downward revisions…

Petrobras recently revised down its capex plan for 2023 to US$13 billion (vs. Strategic plan of US$16 billion). This, in our view, can be largely explained by the fact that Petrobras has had difficulties in hiring new platforms given the tight supply of FPSO supply market. Overall, with FPSO suppliers' capacity constrained by: 1) yard space limitations; 2) skilled labor shortages; and 3) costly financing and increased prices for EPCI (engineering, procurement, construction and installation) contracts; the oil and gas industry has been grappling with heightened costs and extended lead times.

All these factors abovementioned have been forcing Petrobras to postpone its expectations regarding the start-up of new platforms. Looking to Petrobras 2024-28 Strategic Plan, several platforms were delayed compared to the 2023-27 plan. Currently, Petrobras has four tenders for platforms in the market (Albacora Revitalization Project, SEAP 1, SEAP 2 and Barracuda-Caratinga Revitalization Project); and, although all these units are expected to start-up only in 2027 onwards, several news have reported that the SOE is facing difficulties to attract potential bidders in its tenders.

In this regard, we believe that Petrobras could revise down its capex guidance for 2024-25 as well (US$18.5bn and US$21 billion). We highlight that, although this "underdelivering" in capex could be positive from the cash return perspective in the short-term, it will affect the start-up of new units in the future (and consequently, Petrobras' long-term production growth).

… At the same time, M&As could increase capex for 2024-25

Although it is not our base case that Petrobras will make any acquisitions this year, we highlight that the company could pursue M&A in the short term. Petrobras' management has recently stated that its plans involve capturing 10% of Brazil's centralized wind and solar generation market by 2028. The company's latest 2024-28 Strategic Plan foresees Petrobras having around 5GW of solar and wind onshore capacity in operation or construction over the next five years. In this regard, the state-owned company expects to invest US$5.2 billion in renewable energy over the same period.

Additionally, according to management, Petrobras intends to acquire 2 GW of onshore wind and solar assets still this year. Management also highlighted that all these projects will be in partnership with other companies (it intends to have at most 50% in these projects).

In our view, M&As could also potentially involve other segments such as: fuel distribution, petrochemicals, and refining.

Assessing the impact from higher/lower production and capex

The analyses in this section consider Petrobras' regular dividends only (and, therefore, the 45% FCF formula). As we show below, each US$1 billion of addition/reduction in capex reduces/increases our estimates for total cash return by around US$340 million for 2024 (~0.3% yield) and approx. US$340 million for 2025 (~0.3% yield).

Each 50kbpd increase/decrease in oil production increases/reduces our estimates for total cash return yield by approximately US$400 million for 2024 (~0.4% yield) and by around US$350 million for 2025 (~0.3% yield).

Exhibit 8: Cash Return 2024* – Sensitivity analysis (US$ billion)
US$1 billion of addition/reduction in capex reduces/increases our estimates for total cash return by ~US$340 million

	Capex (US$ billion)				
Oil + NGL prod. (Mbpd)	16.0	17.0	18.0	19.0	20.0
2.23	12.8	12.5	12.1	11.8	11.5
2.28	13.3	12.9	12.6	12.2	11.9
2.33	13.7	13.3	13.0	12.7	12.3
2.38	14.1	13.7	13.4	13.1	12.7
2.43	14.4	14.1	13.8	13.4	13.1

Source: BofA Global Research Estimates | *Brent of US$80/bbl

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Exhibit 9: Cash Return 2025* – Sensitivity analysis (US$ billion)
US$1 billion of addition/reduction in capex reduces/increases our estimates for total cash return by ~US$340 million

	Capex (US$ billion)				
Oil + NGL prod. (Mbpd)	19.0	20.0	21.0	22.0	23.0
2.21	7.6	7.2	6.9	6.6	6.2
2.26	8.0	7.6	7.3	6.9	6.6
2.31	8.3	8.0	7.6	7.3	7.0
2.36	8.6	8.3	8.0	7.6	7.3
2.41	9.0	8.6	8.3	8.0	7.6

Source: BofA Global Research Estimates | *Brent of US$70/bbl

Exhibit 10: Cash Return Yield 2024* – Sensitivity analysis (%)
50kbpd increase in oil production reduces/increases our estimates for total cash return yield by ~0.4%

	Capex (US$ billion)				
Oil + NGL prod. (Mbpd)	16.0	17.0	**18.0**	19.0	20.0
2.23	11.6%	11.3%	11.0%	10.7%	10.4%
2.28	12.0%	11.7%	11.4%	11.1%	10.8%
2.33	12.4%	12.1%	11.8%	11.5%	11.2%
2.38	12.7%	12.4%	12.1%	11.8%	11.5%
2.43	13.1%	12.8%	12.5%	12.2%	11.9%

Source: BofA Global Research Estimates | *Brent of US$80/bbl

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Exhibit 11: Cash Return Yield 2025* – Sensitivity analysis (%)
50kbpd increase in oil production reduces/increases our estimates for total cash return yield by around 0.3%

	Capex (US$ billion)				
Oil + NGL prod. (Mbpd)	19.0	20.0	**21.0**	22.0	23.0
2.21	6.9%	6.6%	6.3%	6.0%	5.6%
2.26	7.2%	6.9%	6.6%	6.3%	6.0%
2.31	7.5%	7.2%	6.9%	6.6%	6.3%
2.36	7.8%	7.5%	7.2%	6.9%	6.6%
2.41	8.1%	7.8%	7.5%	7.2%	6.9%

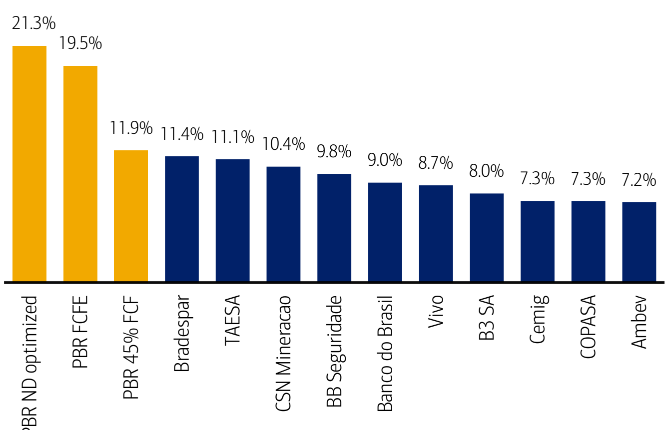
Source: BofA Global Research Estimates | *Brent of US$70/bbl

Drilling for oil pays higher dividends vs. other businesses

Petrobras currently represents approx. 13.3% of the Brazilian Stock Index (IBOV) and has been one of the main stocks responsible for the positive performance of the index in the recent past. In this regard, comparing Petrobras with other options in the Brazilian market, Petrobras would be amongst the top dividend payers. Below, we have separated the top 10 dividend payers in the Brazilian market (according to BofA estimates).

For 2024, Petrobras will likely be the company to bear the highest dividend yield in the Brazilian index. For 2025, we see room for PBR to continue being the top #1 dividend payer in Brazil, but management would need to opt for adjusting capital structure.

Exhibit 12: 2024 Dividend Yield for companies in the BOVESPA Index
Petrobras has the higher dividend yield in the index for 2024 ...



Source: BofA Global Research

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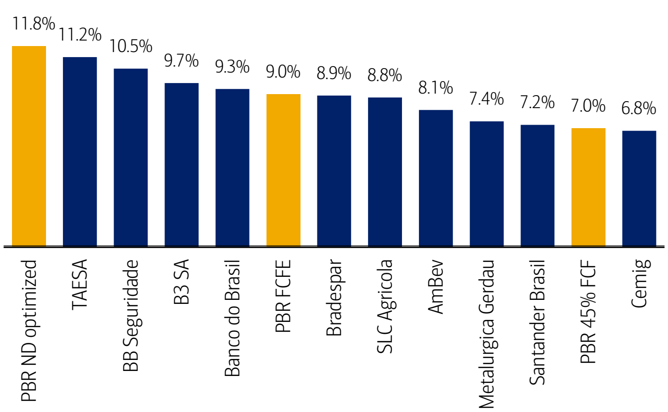
Exhibit 13: 2025 Dividend Yield for companies in the BOVESPA Index
... and could continue leading in 2025



Source: BofA Global Research

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Maintain Buy Rating for Petrobras

As we have been flagging, we expect PBR's valuation to be driven by the market's expectations over total cash return. Therefore, we do expect the stock to face some volatility at least in the short-term while investors get a clearer idea of PBR's total dividends to be distributed (and buyback to be executed). We maintain our Buy rating given: 1) we see substantial growth in upstream production ahead; 2) minimum dividend yields are still enticing for 2024 and potential to pay extraordinary dividends; and 3) its pricing policy is more aligned with international prices.

Price objective basis & risk

Petrobras (PBRQF; C-1-8; R$42.31 / PBR; C-1-8; US$16.92)
Our price objective of US$20.20/ADR (R$48.00/share) is based on a discounted cash flow (DCF)-based valuation using the BofA base case oil price scenario, which assumes a Brent price of US$80/bbl for 2024, and US$70/bbl for 2025 and beyond. We use a 14.70% weighted-average cost of capital (WACC) and an long-term growth rate of 2.0%.

Upside and downside risks to achieving our price objective are more favorable or less favorable results from the following factors: (1) oil price trends, (2) political/economic developments in Brazil, (3) possible increase in global risk aversion/higher interest rate environment, and (4) operational delays in production/development projects.

Petrobras PN (PTRBF; C-1-8; R$40.99 / PBRA; C-1-8; US$16.45)
Our price objective of US$20.20/ADR (R$48.00/share) is based on a discounted cash flow (DCF)-based valuation using the BofA base case oil price scenario, which assumes a Brent price of US$80/bbl for 2024, and US$70/bbl for 2025 and beyond. We use a 14.70% weighted-average cost of capital (WACC) and an long-term growth rate of 2.0%.

Upside and downside risks to achieving our price objective are more favorable or less favorable results from the following factors: (1) oil price trends, (2) political/economic developments in Brazil, (3) possible increase in global risk aversion/higher interest rate environment, and (4) operational delays in production/development projects.

Analyst Certification

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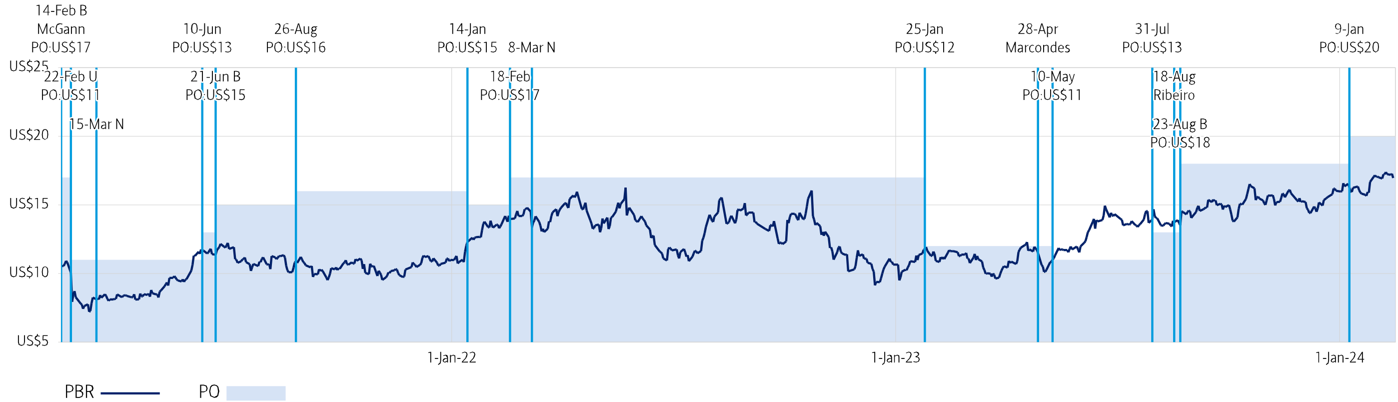
Latin America - Natural Resources Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	3R Petroleum	XPXXF	RRRP3 BZ	Leonardo Marcondes
	Alpek SAB de CV	ALPKF	ALPEKA MM	Leonardo Marcondes
	CSN	SIDHF	CSNA3 BZ	Caio Ribeiro
	CSN	SID	SID US	Caio Ribeiro
	Dexco SA	DURXF	DXCO3 BZ	Leonardo Neratika
	Empresas CMPC SA	XEMCF	CMPC CI	Leonardo Neratika
	Enauta Participacoes S.A.	QGEPF	ENAT3 BZ	Leonardo Marcondes
	Orbia	MXCHF	ORBIA* MM	Leonardo Marcondes
	Petro Rio	HRTPF	PRIO3 BZ	Caio Ribeiro
	Petrobras	PBRQF	PETR3 BZ	Caio Ribeiro
	Petrobras	PBR	PBR US	Caio Ribeiro
	Petrobras PN	PBRA	PBR/A US	Caio Ribeiro
	Petrobras PN	PTRBF	PETR4 BZ	Caio Ribeiro
	PetroReconcavo	XPXYF	RECV3 BZ	Leonardo Marcondes
	Suzano	XXRTF	SUZB3 BZ	Caio Ribeiro
	Suzano S.A.	SUZ	SUZ US	Caio Ribeiro
	Ternium	TX	TX US	Caio Ribeiro
	Usiminas SA	USNZY	USNZY US	Caio Ribeiro
	Usiminas SA	USSPF	USIM5 BZ	Caio Ribeiro
	Vale	VALE	VALE US	Caio Ribeiro
	Vale	VALEF	VALE3 BZ	Caio Ribeiro
	Vibra Energia SA	XUBRF	VBBR3 BZ	Leonardo Marcondes
NEUTRAL				
	Bradespar	BRDQF	BRAP4 BZ	Caio Ribeiro
	Companhia Brasileira de Alumínio	XZUDF	CBAV3 BZ	Leonardo Neratika
	CSN Mineracao	XZRAF	CMIN3 BZ	Caio Ribeiro
	Ecopetrol S.A.	XESSF	ECOPETL CB	Caio Ribeiro
	Ecopetrol S.A.	EC	EC US	Caio Ribeiro
	Gerdau S. A.	GGBUF	GGBR4 BZ	Caio Ribeiro
	Gerdau S.A.	GGB	GGB US	Caio Ribeiro
	Metalurgica Gerdau	MZGPF	GOAU4 BZ	Caio Ribeiro
	Ultrapar	XLRUF	UGPA3 BZ	Leonardo Marcondes
	Ultrapar Pa-ADR	UGP	UGP US	Leonardo Marcondes
UNDERPERFORM				
	Empresas Copec SA	PZDCF	COPEC CI	Leonardo Neratika
	Grupo Mexico	GMBXF	GMEXICOB MM	Caio Ribeiro
	Klabin S.A	XLWDF	KLBN11 BZ	Caio Ribeiro
	Klabin S.A	KLBAY	KLBAY US	Caio Ribeiro
	Southern Copper	SCCO	SCCO US	Caio Ribeiro
	YPF SA	YPF	YPF US	Leonardo Marcondes
	YPF SA	YPFSF	YPFD AR	Leonardo Marcondes
RSTR				
	Braskem SA-A	BAKAF	BRKM5 BZ	Leonardo Marcondes
	Braskem SA-ADR	BAK	BAK US	Leonardo Marcondes

Disclosures

Important Disclosures

Petrobras ON (PBR) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

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Petrobras ON (PBRQF) Price Chart

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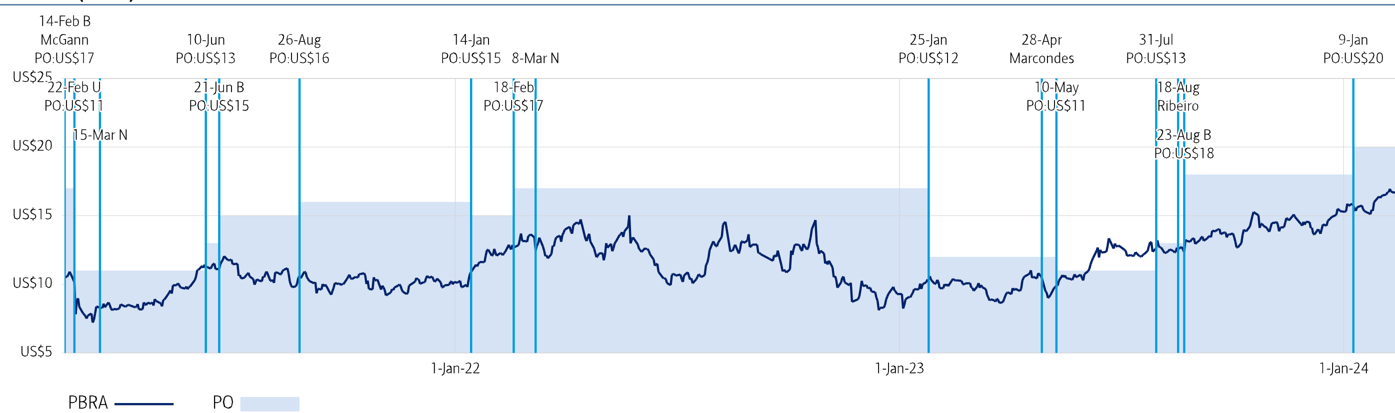
Petrobras PN (PBRA) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

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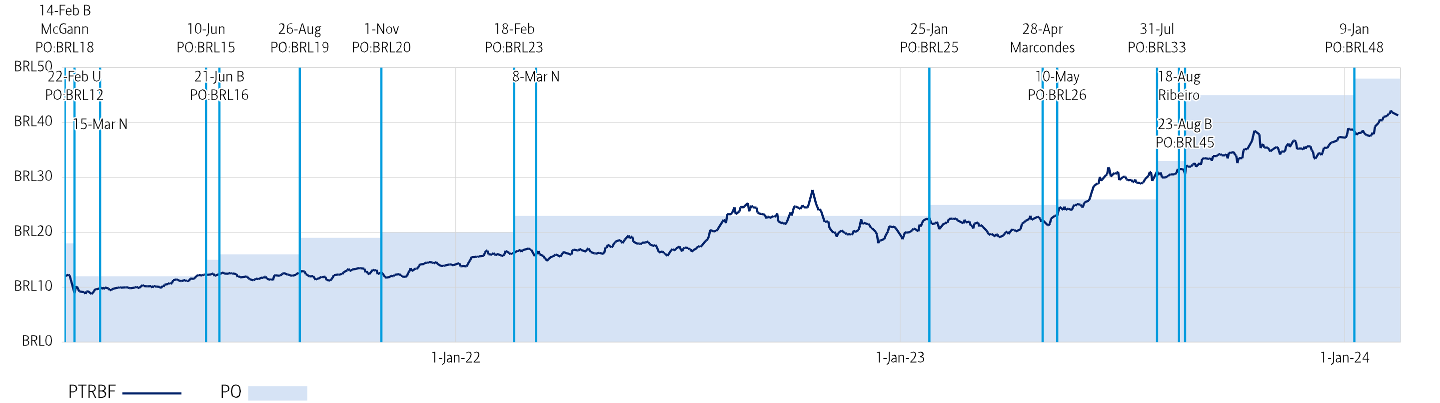
Petrobras PN (PTRBF) Price Chart



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Equity Investment Rating Distribution: Energy Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships [R1]	Count	Percent
Buy	83	61.48%	Buy	64	77.11%
Hold	28	20.74%	Hold	21	75.00%
Sell	24	17.78%	Sell	18	75.00%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships [R1]	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

[R1] Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster[R2]
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Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

[R2] Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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