

LatAm Oil & Gas

LatAm Oil & Gas Week Feedback: Selective growth & stronger balance sheets

Industry Overview

Key themes: growth, cost inflation & policy support

Latin American Oil & Gas week saw presentations from BofA Global Research's Commodity expert Francisco Blanch and fireside chats with 14 companies representing Brazil, Mexico, Colombia, Argentina and Peru. Key themes discussed were 1) growth prospects vs balance sheet management, 2) political influence and policy changes in Peru, Colombia and Argentina, 3) cost inflation across all geographies, 4) energy transition across the board and 5) capital allocation priorities.

Brazil: shifting priorities Under new Administration

Petrobras continues to focus on its growth path and the steps it will be incorporating on decision making, corporate governance and incorporating energy transition. Production curve estimates are positive but conservative, indicating there is possibility of upside. 3R Petroleum has significantly improved from the operational standpoint and management sees the company as well prepared to continue delivering organic growth. 3R management expects to achieve a production of approximately 60kboed by the end of the year. Regarding Enauta, the company continues focused on Atlanta – with approx. 90% of the capex of the project concluded, management is confident that the Full Development System (FDS) will start-up by mid-year with no delays.

Colombia: balancing growth with energy transition

Ecopetrol focused on the strong 2023 with many records (production, reserves, transportation) and went into details on plans of the company's energy transition and growth in both its traditional business and new lines of business. Higher prices for gasoline & diesel shall lead to a sharply reduced FEPC balance by YE2024. Independent oil & gas operators are focusing on stable production, balance sheet strength and balanced capital allocation. Investors increasingly focus on reserve replacement ratios.

Argentina: new govt + new policies = growth

Growth in Vaca Muerta remains front and center and is expected to remain strong although there is still uncertainty of energy policies under the new Milei Administration. The country needs to build additional infrastructure such as pipelines to deliver additional oil & gas production to new markets (exports, Chilean pipelines, etc). The framework for the industry has improved since the election last year with: 1) the devaluation of the FX, 2) close in the gap between local oil prices and export parity, and 3) fuel prices adjustments.

Peru: political stability and reduced political tensions

Hunt Oil of Peru expects another solid year in 2023, with slightly lower revenues and EBITDA than in 2022 on lower prices. While the current political situation is not ideal, there is more stability and little interference in day-to-day business decisions. The government has focused more supporting PetroPeru (national oil company) and less on private companies such as the Camisea Consortium or others.

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Global Oil Outlook 2024

Francisco Blanch, BofA Commodity and Derivatives Strategist

The tug of war between supply & demand

BofA Global Research's commodity team is projecting Brent at US\$80 for YE24, in the context of slower global growth, an expected decline in interest rates and inflation, and possibly a weaker dollar on lower U.S. rates. Oil is a natural hedge if deflation forces take hold, but prices can pick up quickly if economic growth accelerates. Against this backdrop, Blanch sees three main drivers for price movements in 2024:

- 1) Inventory restocking as interest rates go down could drive up demand. This would be from countries who sold their stocks hoping to buy them back later.
- 2) Central banks don't trust other central banks, leading to strong demand for gold from official sectors.
- 3) Geopolitics could offset softer demand and rising supplies across the radar screen, particular in the Middle East but other regions as well.

The U.S. Administration understands that GDP growth is tied to inflation so they are doing whatever they can to push down headline inflation, which means keeping oil prices low. High levels of shale oil & gas production in the U.S. helped keep prices low and reduced the trade deficit. But shale production may now be decreasing. Even though Saudi production is dropping, Brent prices are still declining on weaker demand and slower GDP growth. On the other hand, the U.S. government is still looking to rebuild its strategic reserves which it depleted in 2022 which would boost demand.

So, while there is still pressure on the demand side, we also see excess supply pressure coming from countries like Russia, Iran, Venezuela, Guyana, Canada and Brazil.

Saudi trying to pre-empt further weakening, with limited impact to date

Saudi Arabia has extended its 1mm bpd output cut in 2024 in order to support prices. However, WTI and Brent prices continue to be weaker on a YoY basis. Other OPEC+ members have also agreed to cut more, but OPEC+'s market share continues to slip and many don't believe members will maintain compliance.

In the U.S. growth is probably a delayed response to higher prices in 2022

This is a different dynamic with some attributing recent growth to rising efficiencies in well productivity and longer laterals. Efficiencies have been roughly flat since 2018.

Russian crude oil has remained resilient.

Production has reached as high as 11,000 bpd, limiting the impact that sanctions and other measures have had on Russian production. Waterborne crude exports have increased while gasoline & distillate have actually decreased.

Future oil prices are very dependent on demand, with modest surplus in 2024

Demand growth is expected to slow in 2024, but still be positive. Balances are likely to show small surpluses in 2024. OPEC hopes to keep inventories low ahead any sign of softer demand.

Disruptions around the world make it difficult to calculate tail risks

Iran and Venezuela are a source of uncertainty for the oil market. Most conflicts have settled down recently but could easily come back again. We haven't forgotten the Iraq Civil War, Nigeria unrest, Canadian wildfires, Russia invasion of Ukraine, Libya civil War and Saudi Arabia drone attack.



Cia General de Combustibles

Diego De Aramaca, IR Manager

Sharpe increase in size and production and new agreements signed

Over the past decade, CGC has seen an important increase in production driven initially by the acquisition of Petrobras assets (2015) and later Sinopec Argentina assets (2021). Production in 2023 was 62.3 mboe/day while 1P reserves have doubled to 141.2 mm bbls, of which 46% is oil and 54% gas. Reserve replacement ratio remains strong at 212% for oil and 200% for gas. Total 3P reserves are equal to 217.7mm boe. Of total production in 2023, about 35% was crude oil and the balance natural gas and a small amount of LPG. In terms of revenues, 60% came from crude oil and 40% gas sales.

Extended concessions & new contracts

After purchasing Sinopec Argentina's assets, CGC's concession in Santa Cruz province, specifically the San Jorge Gulf Basin was extended until 2032. In terms of supply contracts, CGC obtained the extension of the contract Plan GasAr until December 2028 in Round 5.1 of natural gas supply agreements with CAMMESA.

Plan Gas 5.2

To increase gas production in Argentina, Plan Gas 5.2 provided higher prices to encourage greater gas volumes. Replacement of more expensive imports of LNG was the main focus of this plan. CGC could avoid transportation bottlenecks of Vaca Muerta producers since it is located in the Austral Basin and San Jorge Gulf. Because of this, the government granted higher prices for new drilling and the development of the necessary pipelines. In Plan Gas 5.1, CGC had a tender price of 3.46 US\$/MMBTU. Prices in Plan Gas 5.2 were as high as US\$9.50/MMBTU through YE25 and declining to US\$5.00/MMBTU as of 2027.

In 2023 Dow Chemical subsidiaries committed US\$200mm in Convertible Notes

The notes, issued by CGC have similar terms as the 2025 Notes. These notes will be zero interest rate, with a bullet amortization in 60 months. If fully converted, Dow Chemical and its subsidiary PBB Polisor, would have a 10% stake in CGC equity and one director on the board. The notes are dollar linked but payable in pesos, will mature in five years. Offshore, the company entered in the activity closing an agreement with Equinor to explore and drill Tierra del Fuego area.

CGC & YPF agreement in Palermo Aike for shale gas

In 2023, the company signed a new agreement with YPF for exploration shale potential in the Austral Basin, targeting the Palermo Aike shale formation. CGC drilled the first horizontal well in October. CGC is the operator with 65% of the concession. Production can come online faster in the Austral Basin because of the infrastructure already in place, including pipeline and transportation. Capex is needed but is less significant for the first three years. Currently CGC production in the Austral Basin is around 5mm m3/d. The basin is second largest after Vaca Muerta.

New debt issuance rose to US\$1.1bn at 3Q23.

As of December 2023, total debt had risen to US\$1.1bn, from US\$735mm at the end of 2022. Total debt to EBITDA at risen to 3.4x, and with cash balances of US\$200mm net leverage was 2.1x. The cost of borrowing is relatively low at 2.28% average life. For 2024, CGC has US\$171mm in short-term debt which it will either repay or roll-over in the local capital markets.

CGC's local credit ratings have been upgraded to AA- (FixScr/Moody's), although international rating remains at CCC- (Negative) by S&P.

Ecopetrol

Milena Lopez, CFO

Last year (2023) Ecopetrol set a number of records.

This included record production (741 mboe/d as of 3Q), record refinery output (410 mbd as of 3Q) and maintaining transported levels above 1mm bbl/d (1,127 mbd as of 3Q). On financial performance, 2023 was the 2nd best year, despite international (US\$17.8bn EBITDA for LTM ending 3Q23) oil prices from US\$99/bbl to US\$80/bbl. The company also advanced its agenda to lower emissions significantly, as well increase renewable energy use, which the company expects to continue into 2024.

Ecopetrol's energy transition strategy dividend in two phases

In line with its strategy published at the end of 2023, Ecopetrol plans to maintain the size of its oil & gas business, while diversifying and growing in new areas. This began with the acquisition of a controlling stake in Interconexión Eléctrica (ISA), which now represents 12% of Ecopetrol EBITDA. Going forward, Ecopetrol has a two-phase approach to its energy transition strategy.

Phase one is based on Ecopetrol's expected increasing need for additional energy, linked to growing enhanced recovery in its oil & gas business. New renewable energy projects will allow Ecopetrol to achieve significantly lower energy costs, increase energy efficiency and advance its decarbonization agenda. Projects can be developed via greenfield, partnerships, PPAs, and/or M&A. ISA will remain purely involved in transmission assets, and will not own or construct any of these renewable power generation assets. Ecopetrol targets double-digit IRRs for its renewable projects.

Phase two will focus on larger hydrogen projects that will require increased renewable power capacity. ECOPET cited this phase will happen gradually over longer time frame.

Ecopetrol capex plan split 60% oil, 40% energy transition (incl. gas)

Ecopetrol cited its US\$5.6-6.6bn capex plan, of which 60% will be destined to the oil segment (Colombia & Permian basin), with around US\$600-700mm going to Permian basin assets. 12% of capex will go to natural gas (both onshore and offshore). 22% of capex will go to ISA, for transmission projects in Colombia, Brazil, Chile and Peru.

Multi-pronged approach to increasing supply of natural gas for Colombia market

Ecopetrol confirmed El Niño has caused temporarily higher domestic natural gas demand. Given depletion of some gas fields over the coming years, Colombia will likely see natural gas consumption outstripping production.

To increase Colombia's natural gas supply, Ecopetrol is:

- Maximizing production at existing onshore fields;
- Accelerating near field production in the Llanos region – which could provide more natural gas for the next 3 years
- Accelerate offshore natural gas production via partnerships with Petrobras (2-5 TCF potential and Shell (2.7-7 TCF potential) – both partners with significant offshore gas production experience. First gas is expected from Petrobras by end of 2027.

Lifting cost inflation remains a challenge

Ecopetrol is projecting 2024E lifting costs at US\$10.5-10.7/bbl. The company cited the whole industry is dealing with inflation in lifting costs, but it remains focused on operational efficiency. Roughly one quarter of lifting costs are energy. Increased enhanced recovery will also require more energy going forward, and Ecopetrol plans for renewables to help reduce the cost of its own energy requirements.

The FEPC¹ deficit at 3Q23 was close to COP26trn but will decline this year

A big share of this was offset by dividends to the government from Ecopetrol of 8trn COP (US\$2bn) through 3Q23. For 2024, the balance is expected to decrease given that prices for gasoline have gradually increased over time and are currently above the market prices and helping reduce the deficit. Now the government is in talks with transporters to increase the price of diesel. It's possible that the FEPC balance could close at COP4trn – 5trn. If Ecopetrol assumes no increase of diesel prices from today, the company would close 2024 with an FEPC bill of COP\$4-5trn (if the government does nothing).

Permian Basin is an asset Ecopetrol will keep and would like to see it grow.

Production at its Permian Basin in the U.S. have performed well above expectations and has been an important driver of Ecopetrol growth. The company plans to remain in the Permian basin, where fracking is utilized. Permian's contribution to Ecopetrol production in 2024 will be higher than 2023. Ecopetrol will also begin funding some Permian operations at the Permian level.

Midstream business foresees crude oil pipeline conversions.

Ecopetrol flagged that today Colombia has excess crude oil pipeline capacity but is lacking in natural gas and other products. Future offshore natural gas production could benefit from additional natural gas pipeline capacity to the center of the country. Additionally, Colombia has a deficit of refined product pipeline capacity, with around 30k bbl/day being moved in trucks.

The company plans to pursue the conversion of its OCD crude oil pipeline (which connects the coastal region to the center of the country) to natural gas, although the project has not been formally approved. This would be significantly faster and cheaper than building a new natural gas pipeline. The company could convert the Bicentenario crude oil pipeline into a refined product pipeline, that could occur in the next 1-1.5 years.

Refineries: no new capacity expected

Increases to Ecopetrol refining capacity are not currently part of its plan. The company plans to make its refineries as efficient as possible, while optimizing their footprint. While Ecopetrol may increase capacity of existing pipelines in certain parts of the country (given those pipelines are at capacity), no new pipelines themselves are expected to be undertaken.

Government not involved in capex allocation conversations.

Ecopetrol confirmed on the finance side, the Colombian government remains very integrated in conversations related to FEPC and setting dividend payments. However, as related to capex and capex allocation, Ecopetrol confirmed the government is not involved, and Ecopetrol sets its own strategy, as approved by its board of directors.

¹ FEPC is the acronym for Colombia's Oil Stabilization Fund" Fondo de Estabilización de Precios de los Combustibles

Foresea

Bruno Carluccio, Head of Corporate Finance and Cristina Guedes, Inv.Relat.

Foresea is the spinoff of Ocyan's drill rig business post debt restructuring

The restructuring of Ocyan's bonds was completed last year (June 2023) with investors receiving equity in the new company (Foresea) and a newly issued \$300mm bond maturing in 2030. Creditors also provided a new money injection of US\$197mm. Current ownership of Foresea is 92% former bondholders, 1.5% management and 6.5% Ocyan. Ocyan maintains a presence at the board level with one chair out of seven members, five of whom are independent. The current management team, is the same people from Ocyan, since they were recognized for delivering strong operational results over the past seven years. The 2030 bond is backed by 4 ultra deep-water drill-ships (6th generation) and one semisubmersible rig.

Backlog of \$1.7bn and track record of high operational uptime

With a history greater than 40 years in drilling, Foresea represents 18% of Brazil's drill-rig fleet and consistently achieves 97% operational uptime or better. The current backlog is US\$1.7bn (up from \$0.4bn in September 2022) and the average uptime was 98.1% in 9M23. A significant portion of its contracts are with Petrobras, with only the Norbe VI rig still operating under the Libra consortium but set to begin a contract with Petrobras by the end of the year.

Oil prices around \$80 are favorable for Petrobras' E&P investments.

Foresea believes that oil prices around \$80 per barrel are favorable for Petrobras' investments in Brazil. At Petrobras' most recent strategic plan, investments in E&P were increased by 14% compared to the previous plan, allocating \$7.5bn for exploration from 2024 to 2028. Foresea believes the industry expects day rates for 6th and 7th generation floaters to increase to \$400k and \$500k in the coming years, reflecting a tightening rig supply.

Average rates to increase as legacy contracts are replaced by market rates

In Brazil, the demand for drill rigs is on the rise, with the total fleet increasing from 27 rigs in 2021 to 35 rigs today, 31 of which are contracted by Petrobras and the consortiums where it is a member. Foresea's rigs are fully contracted, with potential for renewal with upward trend in day rates. The average day rate for its fleet is expected to rise from \$238k in 2023 to \$377k in 2027, as legacy rates are replaced with market rates.

Revenues growth and better margins expected for 2024

Since 2022, contracts with Foresea no longer include an operational availability performance bonus. Despite a decrease in revenues from \$300mn in 9M22 to \$249mn in 9M23 due to non-recurring events, the company expects better results and margins in 2024. Financially, Foresea has significantly reduced its debt to \$274mn, a sharp contrast to the \$2.8bn before restructuring.

Frontera Energy Corp

Rene Burgos, CFO, Claudia Contreras IR

Frontera's key focus continues to be value (& efficiency) over volumes

In recent years Frontera has focused on reducing production costs to produce most value-maximizing barrels. Another focus for the company is cash flow generation. The Guyana investment is mostly completed so there is no need for big cash expenditure. The company has healthy 2P reserves of 11.6 years as of 2022 (new guidance will be released soon with 4Q results) and the intention is to continue diversifying and strengthening reserves.

Exploration in Ecuador, and focus on winners

Frontera intends to increase its operations in Ecuador. The key program on the exploration side is VIM-1 in Ecuador which is on schedule to be drilled and management is very optimistic about this opportunity. The company also participates in a JV with Geopark which owns stakes in two blocks in Ecuador. In Colombia, the growth of the CPE-6 field in a high priority with Frontera looking to maximize production of the field. Finally the SAARA project where the Frontera is finalizing the pilot phase partnering with Ecopetrol with very good results. The SAARA is a green project, with reduced water injection with a capacity of 1mm barrels.

Explorations in Guyana

The JV in which Frontera partners with CGX Energy announced the discovery of 342 feet of net pay at North Corentyne. Frontera has drilled 2 wells in Guyana in the Corentyne block near where the major discoveries have been found by other companies, management believes the trend is very positive. The company is looking for strategic options for its Guyana exploration business.

Production costs pressured by inflation

Frontera's production cost has increased US\$1/boe to US\$13/boe in 9M23 (vs 2022) pressured by inflation. The main driver for inflation has been higher energy costs which doubled last year as result of a very dry season in the region, leading to poor hydrology of the country which relies heavily on hydropower. Management expects that the "El Niño" effect will help bringing energy costs down by second half of the year. Frontera has been able to manage non-energy costs by combining some operational synergies and reducing drilling costs.

Midstream operations – Reficar agreement signed

As part of its midstream operations the company owns 99.9% of Puerto Bahia in Colombia. Frontera also owns 35% of ODL and has recently signed the Reficar Connection agreement with Ecopetrol. Frontera expects the Reficar construction to start very soon and will take approximately 12 months until it is finished. Reficar is a multi-purpose line with a capacity of 84,000 barrels. The cost of the connection is estimated to be US\$30mm. These mid-stream assets generated US\$89.3mm in EBITDA during 9M23, up from US\$48mm in 9M22. Cash was US\$54.7mm, while total debt was US\$123.8mm.

Cash taxes have declined with elimination of non-deductibility or royalties

At US\$80/bbl, withholding for cash taxes was about US\$40-60mm. However, the elimination of non-deductibility reduced this by about 30-40% (or US\$15-20mm), for the benefit of Frontera. The company still has some net operating losses (NOL's) that can be used against its tax base.

GeoPark

Andrés Ocampo, CEO / Jaime Caballero Uribe, CFO

2023 production came lower than expected on shut-ins in CPO-5 block

Geopark reported 2023 exit production of 38,361 boepd, which is slightly lower than the initial production guidance of 39,500 to 41,500 boepd. The main issue was shut-in production of the Indico 6 and Indico 7 wells in the CPO-5 block (10-11,000 bpd), due to the regulator's (ANH) request to suspend production until surface facilities were completed. The shut-in took place at the end of 2022 and beginning of 2023 and resumed only in the last quarter of 2023.

Llanos 34 is the main asset is plateauing at 55,000 -65,000 bpd since 2019

The company indicates that this was the biggest discovery in the last 20 years in Colombia where it has a 45% working interest. Cash flow before taxes to date has been US\$2bn, with cumulative production of over 170mm bbls. For 2024, 18-20 development and injector wells are planned to include 5-7 wells to continue the horizontal drilling campaign. Production for 2023 was 24,425 boe/day.

Capex guidance of US\$150mn-200mn for 2024

Geopark disclosed a capex guidance within the range of US\$150 to US\$200mn for 2024, of which 20% to 30% is intended for exploration purposes while the remaining is for appraisal and development. Management expects the drilling of 35 to 45 gross wells, of which 5 to 10 are exploration wells, sufficient to maintain current production. There may be some limited growth in Ecuador during 2024 as well. Adjusted EBITDA should be around US\$420mn to US\$550mn and FCF between US\$90mn and US\$160mn at US\$80 – US\$90 Brent. (LTM EBITDA has been US\$466m)

Geopark has a carbon intensity 30% below the average of the industry

Current targets for decarbonization are to reduce carbon intensity by 35-40% by 2025 or sooner, reduce by 40-60% by 2030 and achieve net zero emissions by 2050. The company has an average carbon intensity of 30% lower than the industry and one of their key measures to reduce their carbon emissions were the shutdown of their diesel generators in Colombia back in 2021. Geopark invested in the interconnection of the core Llanos 34 Block to Colombia's national grid, which improved carbon performance and reduced the cost of energy generation. Additionally, they installed a solar power generating plant of 10MW, which became operational at the end of 2022. Geopark's MSCI ESG Rating has been upgraded from BBB in 2021 to A in March of 2023.

El Niño's weather driving up costs in addition to inflation and FX rates.

Average lifting costs for 2024 are likely to be about US\$12-13/bbl. with an all-in cash cost of about US\$25/bbl. The company experienced an increase in the production cost throughout 2023 driven by dryer weather caused by El Niño, which drove the energy costs up in Colombia due to weaker hydrology. Additionally, costs were hurt by inflation and the appreciation of the Colombian peso, which had a direct impact on Geopark's since local currency costs are about 70% of total production costs. In 2023, Geopark saw a US\$1/bbl increase in Opex and expects another US\$1/bbl increase for 2024.

Llanos and CPO-5 Block expected to grow in 2024

Geopark began divesting non-core and low-netback operations in Chile and expects to close it in the first quarter of 2024. Platanillo and Chile assets are expected to have declined production in 2024, as well as Brazil, which was previously expected to be flat. Llanos and specially the CPO-5 block are expected to grow in 2024. The new discoveries in Llanos basins will contribute with around 30,000 barrels a day (gross), with the drilling of at least 4 wells. The company drilled 50 wells in 2023 but expects a slightly lower number of wells to be drilled this year. 2024 production guidance stands at 37,000 to 40,000 boepd.



Gran Tierra Energy

Ryan Ellison, CFO and EVP

Highest reserves in the company history

Production in mid-point of the guidance provided in December 2022 at 32.647 boe/d for 2023. Overall, it was a good year. Even that, 4Q was a down by around 700 barrels below what expected. Fifth consecutive year of 1P reserve growth. 1P, 2P and 3P reserves in levels of 90 MMBOE, 147 MMBOE and 207 MMBOE respectively. Reserves are balanced across the assets. On a per share basis, the company increased its 2P NAV after tax by 7% to \$42.71, showing the underlying value of the assets.

Bond maturities extended, debt reduced, more flexible payment schedule.

The company successfully extended the maturities of 2025 and 2027 Senior bonds to 2029 with an amortizing structure. This is better aligned with the expected cash flow and the company now has a more comfortable debt profile. Net debt has declined and management expects to put more money into debt reduction going forward.

2024 outlook – Increase production and cash flow

The company expects production between 32,000 to 35,000 BOPD across all Brent cases. EBITDA is estimated to be between US\$395mm to US\$540mm. Free Cash Flow projected to be in the range of US\$90 mm to US\$160mm in the High case and US\$20mm to US\$90mm in the Low case. The number of projected Development wells is turning around 13 to 17 in all the cases. The development plan is focused on core asset corridor, drilling in Acordionero and Costayaco for 2024. As well, Capex is expected to be modest to increase reserves. Exploration plan for 2024 focused on Colombia and Ecuador, what is going to be a key pillar of growth for the company. 2024 and 2025 growth around 8% to 10% per year, what means 50 to 55 thousand barrels range. Operating costs expected target drop down to US\$10 per barrel.

Free cash flow likely to be used for debt reduction and share buy-backs

The company would prefer to use its free cash flow for net debt reduction and share buy-backs, rather than dividends. The annual limit is 10% of market capitalization, which represent US\$20mm to US\$25mm.

The company does not expect M&A activity in the short term.

The company does not think that there are good opportunities of merging Colombian independent oil & gas companies. However, there might be some opportunities if there is no overlap in acreage between the two companies and a combination could result in a stronger and more complex company, mainly due to production diversification.

Canada provides more interesting opportunities on valuation.

In line with growth, infrastructure and costs of entrance, the company found the most interesting opportunities in Canada, trying to capture most of the conventional assets. Transactions left 1.8x to 2x Cash Flow on EBITDA basis.

No concerns about regulatory matters for the time being

The company recently received a 20-year extension under the new administration on their Surorient block, after more than 3 years working in the agreement. This was possible by committing to higher capital expenditures, reserves and oil production. The company drilled 21 wells without any regulatory issue last year. Most recently, the ability to deduct royalties from taxes has been re-instated, eliminating one of the major tax levies implemented by the current Administration.

Hunt Oil of Peru

Martin Grisolle, General Manager, Alice Lopez, Investor Relations

2023: will be one of the top five years for HOCP, even if not as strong as 2022

The company expects that EBITDA will come in somewhere between US\$350-400mm for the year, which is lower than the US\$640mm registered in 2022 but higher than many previous years. The year started out with strong prices, but export prices for natural gas exports declined during the year. Prices right now in the Northern Hemisphere (winter-time) are good, but not quite as strong as last year (US\$8-9/MM BTU vs. US\$12-14/MM BTU) for JKM, NBP, TTF markers.

Currently the political situation is much calmer than early 2023

Social unrest has decreased substantially, but the government and general population haven't been willing to actively engage in social unrest as in the previous few years. There have been almost no discussions with the current administration about issues related to the Camisea concession, expansion to Southern Peru or other key regulatory issues. The government has been heavily focused on addressing issues at PetroPeru over the past year and has largely not interfered with the private sector.

Discussions on distribution gas to S.Peru continue but nothing concrete

Conversations on different methods to deliver gas to Southern Chile continue for pipelines via the highlands or via a coastal route. HOCP believes the coastal route provides the best options in terms of cost and reaching the highest number of clients.

Increase in capex to support maintenance of current production at Block 56

Capex for 2024 is likely to be near US\$400mm, of which US\$240-250mm will be for a special project at Block 56 to increase deliverability of natural gas. This will also include connecting Pagoreni West field to the system, with plans to have it connected by year-end 2024. Production from Block 56 is dedicated to the export market (mostly through Peru LNG). The field doesn't currently have enough reserves to produce for another 18 years past the contract end in 2028.

Hunt Oil raised US\$500mm in 10 yr notes in Sept-23 w/ 8.55% coupon

Some of the proceeds were used to reduce the balance of the 2028 bonds, which now have a balance of US\$218mm (down from an original issue size of US\$600mm), although some principal was previously repaid due to the amortizing structure of the bond. The Exchange Agent indicated that 56.19% of the original principal amount was tendered. The new bonds are rated Ba1/NR/BBB.

Increased domestic demand in '23 came from thermal generators.

Approx. two-thirds of the increased demand came from thermal power generators who were dispatched to offset lower hydroelectric generation due to an extremely dry season and low reservoir levels. The 2023-24 system started with a lot of rain and expect to see domestic demand for natural gas to drop by 80-100 mm m3, almost all related to power generation.

Distribution to shareholders to be less frequent and larger.

HOCP distributed US\$75mm in October and another US\$75mm in January. Dividends will be based on an evaluation of cash flow needs from operations and maintenance of a healthy cash balance (minimum of US\$50mm, although it is currently above US\$100mm). There is no specific dividend policy.



Pampa Energia

Lida Wang, IR and Sustainability Officer

Gas production growth: additional infrastructure is a key

The gas production growth will remain a key driver for ARS stabilization plan and will improve Argentina fiscal balance. The gas production growth in the short-term will replace imports from Bolivia and LNG. In the mid-term, Argentina could export the gas production to Brazil or through LNG. However, the production growth should be backed by additional gas pipelines. After the Nestor Kirshner Gas Pipeline operational start in mid-2023 (+11mcmpd) Argentina has +10mcmpd contracted transportation capacity growth in the Eastbound region (see [Will Argentina \(utilities\) score again?](#)). However, Argentina government has 52 mcmpd in projects of additional capacity to be auctioned, however the regulatory framework and the operation and maintenance is still uncertain. Pampa expects that government will continue to the PlanGas program to fulfill the additional gas transportation capacity, and Pampa is well positioned to capture the upsides. In addition, Pampa believes that increasing B2B contracts could be an upside risk. Pampa expects the production growth will drive a decrease in the lifting costs.

Oil production could be an opportunity for exports

Pampa did an asset swap with Total Austral in mid-2023 and acquired the Rincon de Aranda greenfield oil block in exchange of PEMC wind farm (100MW installed capacity). Pampa expects a 15-20kboed production plateau by 2027 which could translate into +US\$100-150mn free-cash-flow assuming US\$60/bbl Brent. On the other hand of the gas sector, Argentina had a surplus in the oil production and does not have the same oil transportation bottlenecks. The additional production will have an exports focus.

Power: (+) “legacy” contracts remuneration, (-) growth

Pampa will remain a relevant player in the power generation sector in Argentina (Pampa is the largest private player in the sector). However, the company is not optimistic in installed capacity growth given the lack of power transmission capacity and possible generation curtailments. On the other hand, Pampa sees opportunities for better “legacy” contracts remuneration. “Legacy” assets accounts for 70% of Pampa’s installed capacity but only 27% of power generation EBITDA. The mismatch is driven by years of halted and below-inflation “legacy” prices readjustments. Under this scenario, Pampa expects that Argentina government could propose higher returns with some automatic inflation readjustments or USD-indexation to regain investors’ confidence in the sector.

TGS and Transener affiliates: all eyes on tariff review

Pampa holds a 26.3% stake in the Transener (power transmission) and a 29.3% stake in TGS (gas transportation and liquids). Besides the petrochemicals sales business in TGS, the regulated revenues for power transmission and gas transportation are under an unattractive regulation since end of 2019 due to below-inflation tariffs readjustments. Pampa sees opportunities to regain returns in the regulated business in 2024 given the much-awaited comprehensive tariff review for regulated tariffs in Argentina. Utilities tariffs could also face some transitory tariffs adjustments before the full tariff review. Given that, TGS already requested a 550% transitory tariff readjustment in 3-installments (March, February and April), which could result in US\$150mn EBITDA for regulated business. Transener requested a +250% tariff readjustment and is waiting the final terms to be published in early February.

Petrobras

Leandro da Rocha Santos, IR Manager

Production – guidance has been seen as conservative by the market

Discussions were focused on the company's production curve. In its 2024-28 Strategic Plan, Petrobras shared a 2.2Mbpd guidance for 2024, which has been considered as conservative by the market. In this context, Mr. Santos highlighted that the company feels more comfortable being conservative and prudent in their estimates, which was already presented on the Petrobras deep dive held in New York last week ([see our feedback note](#)). He explained that Petrobras's forecast model uses historical inputs and considers potential issues and disruptions that they might face in the supply chain or in the operations itself. In this regard, we believe that there could be some upside to the company's figure as new technology is likely to improve the development of the pre-salt. Mr. Santos also emphasized the company's willingness to continue investing in new technologies to improve efficiency and profitability.

Cash returns – alignment between minority shareholders and government

Mr. Santos highlighted Petrobras' commitment with shareholder return policies, accentuating the dedication of the company to pay their minimum dividend policy (45% of their FCF). Regarding potential extraordinary amounts, Petrobras' process to decide contemplates backward and forward-looking inputs: 1) For the backward analysis, the company considers cash position, maximum debt level of US\$65 billion and its balance sheet; 2) For the forward-looking analysis, it considers FCF forecasts in the future. We estimate a ~3.8% total cash return yield for 4Q23 which could rise to ~12% accounting for extraordinary dividends. The speaker reminded that their incentives to pay this value is aligned with minority stakeholders and the government as well.

Seeing the downstream segment as a more important business

Last year, the company had a strategic shift and the board of Directors approved investments for higher integration down the value chain, which led the downstream segment to be seen as a more important business. Currently, management is proposing an increase in diesel capacity via an expansion in RNEST (their main brownfield that produces 70% diesel) and increasing diesel capacity at existing refineries. On RNEST, they have been operating at 90kbpd since 2014 and can reach up to 260kbpd in the future. This business is a great opportunity, because its expansion has already been approved and they have the infrastructure, so it is profitable going forward.

New opportunities stem from Equatorial Margin, Natural gas market and Renewables

New opportunities for the company can arise from three fronts: 1) Exploration of the Equatorial Margin; 2) Growth in the Natural Gas market; and 3) Investment in renewable energy.

Regarding the Equatorial Margin, the company remains very optimistic that it will be allowed to drill in the future, as discussions with IBAMA (Brazilian Institute of Environment and Renewable Natural Resources) have been very constructive. However, it is important to note that it should take a long time before the area starts being developed – we do not expect production in the Equatorial Margin in this decade.

As for the Natural Gas market, Petrobras sees it as a huge opportunity given the growing demand in Brazil. Regarding investments in renewable energy, the company sees it as one of the best alternatives to help it to navigate through the energy transition wave. Focus has been on profitable wind onshore and offshore, hydrogen and other projects. For now, the company is looking mainly for minority stakes, because it does not have the expertise to run this kind of business yet.

SierraCol

Alejandro Piñeros, CFO / Daniela Papagayo, Investor Relations

Independent company of oil E&P with the most prolific assets

SierraCol is a prominent independent exploration and production of oil company in Colombia that started its operations in December of 2020. They have acquired in 2020 the onshore operations of Occidental de Colombia LLC, also known as Oxy. The company's asset portfolio includes prolific fields such as La Cira Infantas and Caño Limón, which are known for their high-quality light oil as well as for their industry-leading netbacks with low transportation expenses.

Higher oil quality driving higher realized oil prices

SierraCol operates around 88 kboed of oil, which makes them one of the largest independent gross oil producers of Colombia. Their production is focused on light and medium oil (98% of production), but they also produce heavy oil and gas, which represent, respectively, 1% and <1% of the production. With an API ranging between 25 and 35 and low sulfur, a high-quality oil, SierraCol drives a premium to Colombia's heavier Vasconia marker (API of 21) and therefore captures higher realized oil prices than other peers.

Reduced transportation costs with advantageous infrastructure

The Caño Limón area and the La Cira Infantas oil field are, both, areas with transport infrastructure built close to their fields. This allows SierraCol to face lower transportation costs. In LTM 3Q23, SierraCol's transportation costs were of US\$0.8/bbl while their peers had an average cost of US\$8.5/boe.

Ecopetrol & BP sales agreement

Ecopetrol, Colombia's national oil company, has made an agreement, (Caño – Limón, La Cira Infantas and Teca – Cocorna Offtake) with the company for 95% of their production due to the strategic relevance of SierraCol's crude. The remainder of crude, produced in Central Llanos, is sold under the COG Offtake Agreement to BP, a British multinational oil & gas company that is worldwide recognized by its revenues and profits.

SierraCol received top-tier worldwide ESG rating

SierraCol received from Sustainalytics a low-risk ESG rating and was ranked 5th out of 315 global Oil & Gas companies. This result was achieved through a variety of projects that SierraCol implemented, such as energy efficiency and transition programs that have allowed them to reduce 40% of their carbon emission in 2022. They replaced self-generated energy from crude oil with clean energy from the Colombian National Interconnected System, most recently in their Caño Limón area. SierraCol's energy consumption comes 76% from renewable energy. The company continuously pursues efficiency in their operations to reduce their emissions, eliminate gas flaring and measure their methane issuance. They intend to reduce their scope 1 and scope 2 emissions by 50% in 2023 and reach carbon neutrality by 2030.

Robust reserve base

They have a sustained production profile on a robust high-quality reserve, with a track record of over 100% 2P RRR. The 2023 reserves audits reported a 113% 2P RRR and delivered a solid 110% 1P RRR. SierraCol has a stable track record of production and management does not intend increase their production, as they prefer stable activities.

SierraCol's two main debt instruments: 2028 senior note & RCF

The company has a 2028 note issued in 2021 with a face value of US\$600mn and 6.00% coupon rate and a RCF (Revolving Credit Facility) for a principal amount of US\$120mn.

Vista Energy

Alejandro Chernacov; Co-founder, Strategic Planning & Investor Relations Officer

Vista is the second largest player in Vaca Muerta

Vista is a leading independent operator, with its main assets in Vaca Muerta, the largest shale oil and shale gas play under development outside North America. It is the second largest player in Vaca Muerta, with 1,150 wells (237 under production and 913 to be drilled). Over the past five years, Vista was able to double its production from 24.5kboed to ~50kboed in 2023. Meanwhile, its reserves grew five times from 2018 to 2023 (from 57.6Mboe to 251.6Mboe). Despite tremendous growth, the company still have high expectations for the upcoming years; in their last strategical plan they shared they forecast of 100kboed of production for 2026, with an EBITDA of US\$1.7 billion and US\$500 million of annual cash generation.

The framework for the industry has improved

Since the presidential elections in Argentina, the framework for the local Oil & Gas industry has significantly improved. Regarding local oil prices (Medanito), Mr. Chernacov stated that prices are currently much more aligned with the export parity – local oil prices were around US\$66/bbl, only ~9% below export parity. The recent devaluation of the FX has also helped the industry, but there is still important points that are being analyzed by the congress. According to management, 80% of Vista's exports are made with official FX and the other 20% with the blue chip swap.

Management believes that the regulatory framework for the industry is good as of now, but there are still some topics that should be discussed in the future, such as the export taxation. Mr. Chernacov also highlighted that the investments to debottleneck Vaca Muerta's limited infrastructure remain very important for the industry.

Strategy and operational: Focus on organic growth in Vaca Muerta

On the company strategy side, Mr. Chernacov believes that Vista is in a comfortable position in terms of efficiency, but the company is always looking to improve in terms of efficiency and profitability. The company has a ~20-year inventory in Vaca Muerta and it expects to drill only 4-4.5% of this until 2026. In terms of revenues, today Vista exports 55% of their hole production volume. In addition, Vista continues to be fully focused on Vaca Muerta and it is unlikely to increase its exposure to other geographies at least in the short-term. According to Mr. Chernacov, Exxon is in the process of selling its assets in Argentina and Vista is looking into it given the high-quality of the assets, but this is not a priority as there are other players that are also interested in these.

Capital allocation: options to be analyzed in the future

With the expectation to have an annual cash generation of US\$500 million, investors raise questions about capital allocation and shareholder returns. According to Mr. Chernacov, Vista will probably assess more profoundly this question next year as it will have more inputs in the equation. The options of capital allocation include: 1) investments in the operation (e.g., see if they will need more rigs); 2) Amortization of debt; 3) Create a formal dividend policy; 4) Recreate a buyback program. Vista has already carried out buybacks in the past and sees it as an interesting option. If it opts for dividends, the company would like to create a formal and regular policy.

YPF

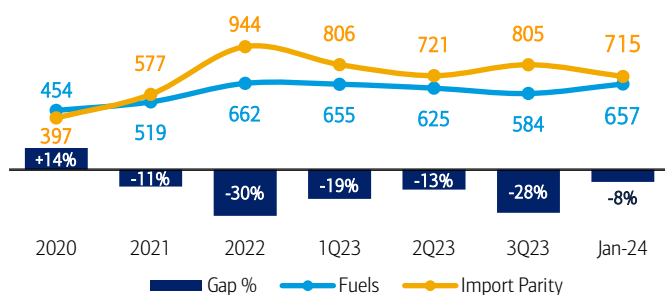
Pedro Kearney; Director of IR, Corporate Finance & Trading Desk; and Margarita Chun; IR

The framework for the industry has improved

Argentina's fuel market has improved significantly since Milei's election in the end 2023, as of January, fuel prices and import parity gap has narrowed to less than 10%. The new government is supportive of the Oil & Gas sector and has shown positive signs as they have not interfered in the price increases led by companies recently. According to YPF, the it has been able to engage in free negotiation with other players to increase prices again in February. The company also highlighted the focus on exports for them and for Argentina. Today, YPF exports less than 10% of their crude oil production, and their idea is to export 35-40% of their volume by 2028.

Exhibit 1: Fuels price vs. import parity (US\$/m3)

The gap of fuel prices has closed since the election

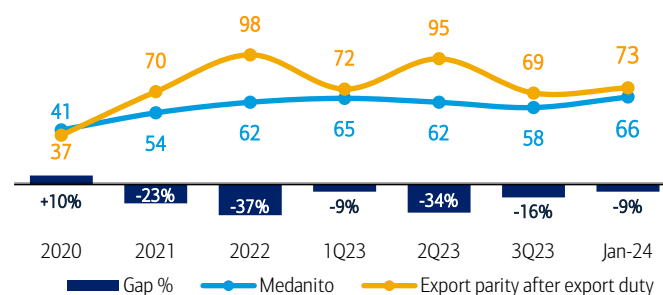


Source: YPF Presentation, Central Bank of Argentina, Secretary of Energy

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Exhibit 2: Medanito price vs. export parity (US\$/bbl)

The gap of oil prices has closed since the election



Source: YPF Presentation, Central Bank of Argentina, Secretary of Energy

BofA GLOBAL RESEARCH

Besides price increases, YPF also could benefit from Argentina's possible new regulatory framework. With the approval of the Omnibus bill, management expects all the restrictions on prices of the hydrocarbons sector to be dropped out, exporting processes to be facilitated, and large/important infrastructure to be incentivized, leading to growth in the industry. Regarding a potential privatization, the team highlighted that it is not probable that the government will be able to privatize the company, as the government would need the approval of two-thirds from the congress. Furthermore, if a privatization goes through, management believes that it would change the company's strategy in terms of efficiency and productivity in a significant way.

Strategy, Investments, and capital allocation

YPF has been significantly investing in Midstream projects, and recently has focused in three main projects: 1) Vaca Muerta North, 2) Vaca Muerta South and 3) Oldeval pipeline. These projects are necessary to achieve production targets to double oil production over the next years (these are also important to the development of Vaca Muerta as a whole).

The Vaca Muerta North project has been already completed, with a total capacity of 140kbpd (YPF has a 40% stake in this). As for the Vaca Muerta South, it is a total new pipeline that will connect to the Atlantic port in the south part of the country, with ~200kbpd capacity. Both projects are financed ~30% by local market and 70% from the equity side.

In addition, YPF is assessing its conventional assets and it is analyzing if they could divest some these assets. Lastly, management expects to focus on cash returns by 2025 onwards and it wants to have a formal dividend policy, but we do not think that returns should be significant, at least in the short-to-mid term.

Rating for the covered stocks

Ecopetrol: Neutral Rating

Despite concerns arising from govt. ownership of ~88% of Ecopetrol and resulting influence on pricing policy and investment decisions, we believe these risks are priced in. We believe that the dividends in 2024 will continue to be attractive and that the govt. is committed to closing the gap between oil-products prices and int. references in 2024.

Petrobras: Buy Rating

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 do not have a clearer idea of PBR's total dividends to be distributed (and buyback to be executed). Yet we maintain our Buy given: 1) we see substantial growth in upstream production ahead; 2) minimum dividend yields are still enticing; and 3) its pricing policy more aligned with international prices.

Ypf: Underperform rating

We maintain our cautious investment thesis and Underperform rating on YPF. We would like to have clearer visibility on the conditions in which the Omnibus bill and other measures will be implemented given their potential unpopular consequence (inflation). At least in the short term, we think that the development of Vaca Muerta, and therefore YPF, could continue to face: 1) challenging economics (high inflation, financing difficulties, FX devaluation); 2) capital controls; 3) government involvement in oil/gas/oil product pricing; and 4) restricted access to oil services/ equipment. For more detail, please see our recent resumption of coverage report on YPF entitled: Above-ground concerns could keep Vaca Muerta's vast potential buried.

Pampa Energia: Buy rating

In our view, the softer performance of Pampa stocks was driven by: 1) investors' skepticism about gas production growth as the halt of public works may impact new gas pipelines, 2) lower beta. However, we see PAM benefiting from: 1) lower restriction to gas exports, 2) better remuneration of legacy power generation, and 3) regulatory de-risking of TGS and Transener equity stakes. We also like PAM's predictable CF with 85% of its EBITDA USD-linked ([see Will Argentina \(utilities\) score again?](#)).

We currently have no coverage of the other companies that presented during the Latin America Oil & Gas week (Cia. General de Combustibles, Foresea, Frontera, Geopark, Gran Tierra, Hunt Oil of Peru, SierraCol and Vista).

Stocks mentioned

Prices and ratings for stocks mentioned in this report

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
EC	EC US	Ecopetrol S.A.	US\$ 11.79	C-2-8
XESSF	ECOPETL CB	Ecopetrol S.A.	COP 2320	B-2-8
PAM	PAM US	Pampa Energia	US\$ 48.59	C-1-9
PPENF	PAMP AR	Pampa Energia	ArP 2535.1	C-1-9
PBR	PBR US	Petrobras ON	US\$ 17.01	C-1-8
PBRQF	PETR3 BZ	Petrobras ON	BRL 42.33	C-1-8
PBRA	PBR/A US	Petrobras PN	US\$ 16.48	C-1-8
PTRBF	PETR4 BZ	Petrobras PN	BRL 41.03	C-1-8
YPF	YPF US	YPF SA	US\$ 17.18	C-3-9
YPFSF	YPFD AR	YPF SA	ArP 22537.6	C-3-9

Source: BofA Global Research



Price objective basis & risk

Ecopetrol S.A. (XESSF / EC)

Our price objective of COP2,765 (US\$14/ADR) is based on a DCF-based valuation using the BofA base case oil price scenario, which sees a rise in the price of Brent to US\$80/bbl in 2023, US\$90/bbl for 2024, and US\$70/bbl for 2025 and beyond. We use a 12.8% WACC and a LT growth rate of 2%. Ecopetrol trades at a discount to international peers, warranted in our view by the company's current challenges.

Upside risks to our price objective are oil price movements and faster-than-expected implementation in the company's production and development projects. Downside risks to our PO are negative oil price trends, slower-than-expected oil and gas production growth, possible changes to energy policy in Colombia, which could affect risk perceptions as well as the company's assets.

Pampa Energia (PAM / PPENF)

Our US\$62 / AR\$5580 PO for Pampa is based on a DCF, discounting estimated free cash flow to equity at a 14.8% US nominal cost of equity. We apply a reasonable lower cost of equity versus other utilities companies given Pampa's cash-flow profile 85% linked to USD and protected against ARS devaluation. Our key assumptions are: 1) Natural gas production reaching 13.8mcpmd in 2025 according to company guidance, 2) Oil Brent in US\$80/bbl in 2023, US\$90/bbl in 2024 and US\$70/bbl in 2025 onwards and Pampa selling its production with an 10% average discount, 3) Petrochemicals EBITDA growth in-line with Gas Upstream business, 4) Power Generation "Legacy" contracts in-line with Argentina inflation. We assume a 2,280 ARS/USD in FY24.

Upside risks: 1) gas production increase above base-case with NK Pipeline 2nd stage operational start and new sales contracts with CAMMESA or industrials, 2) new power generation growth opportunities with attractive returns, 3) better funding conditions, 4) tariff adjustments for regulated businesses in subsidiaries (TGS and Transener), 5) higher remuneration for legacy generation projects.

Downside risks: 1) delays in start-up of new generation plants and expansion of the electricity transmission system, 2) dependence on gas supply to thermal power plants, 3) below inflation readjustments for legacy power generation contracts, 4) receivables delays in power generation contracts with CAMMESA.

Petrobras (PBRQF / PBR)

Our price objective of US\$18.0/ADR (R\$45.00/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 / PBRA)

Our price objective of US\$18.0/ADR (R\$45.00/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.

YPF SA (YPF)

Our PO of US\$11.30/ADR (ARS 7,920.17/share) is based on a DCF methodology, using the BofA base case oil price scenario, which assumes Brent prices of US\$85/bbl in 2023, US\$90/bbl for 2024, and US\$70/bbl for 2025 and beyond. We use a 16.2% WACC and terminal growth rate of 3%.

Upside risks to our PO are: (1) new growth projects that are implemented in a way that allows for higher returns, (2) prices for refined products in Argentina, (3) energy policy in Argentina that could become more favorable for oil companies, (4) global energy price movements, (5) improvement in risk perceptions of Argentina.

Downside risks to achieving our price objective are: (1) worsening of Argentina's macroeconomic scenario and maintenance of capital controls, (2) increased government involvement in energy policy in Argentina, (3) execution risk in improving recovery factor in YPF's oil fields, (4) more restricted access to oil services and equipment.

YPF SA (YPFSF)

Our PO of US\$11.30/ADR (ARS 7,920.17/share) is based on a DCF methodology, using the BofA base case oil price scenario, which assumes Brent prices of US\$85/bbl in 2023, US\$90/bbl for 2024, and US\$70/bbl for 2025 and beyond. We use a 16.2% WACC and terminal growth rate of 3%.

Upside risks to our PO are: (1) new growth projects that are implemented in a way that allows for higher returns, (2) prices for refined products in Argentina, (3) energy policy in Argentina that could become more favorable for oil companies, (4) global energy price movements, (5) improvement in risk perceptions of Argentina.

Downside risks to achieving our price objective are: (1) worsening of Argentina's macroeconomic scenario and maintenance of capital controls, (2) increased government involvement in energy policy in Argentina, (3) execution risk in improving recovery factor in YPF's oil fields, (4) more restricted access to oil services and equipment.

Analyst Certification

We, Caio Ribeiro, Gustavo Faria and Leonardo Marcondes, hereby certify that the views each of us has expressed in this research report accurately reflect each of our respective personal views about the subject securities and issuers. We also certify that no part of our respective compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

Latin America - Utilities Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Alupar	XDFCF	ALUP11 BZ	Arthur Pereira, CFA
	COPEL	ELP	ELP US	Arthur Pereira, CFA
	COPEL PN	XLPUF	CPLE6 BZ	Arthur Pereira, CFA
	Edenor	XEDTF	EDN AR	Gustavo Faria
	Edenor	EDN	EDN US	Gustavo Faria
	Eletrobras	CAIFF	ELET3 BZ	Arthur Pereira, CFA
	Eletrobras	EBR	EBR US	Arthur Pereira, CFA
	Eletrobras-Pref	EBRB	EBR/B US	Arthur Pereira, CFA
	Eletrobras-Pref	CAIGF	ELET6 BZ	Arthur Pereira, CFA
	Energisa S/A	XLXGF	ENGI11 BZ	Arthur Pereira, CFA
	Eneva	XZUMF	ENEV3 BZ	Arthur Pereira, CFA
	Equatorial	XKERF	EQTL3 BZ	Arthur Pereira, CFA
	Neoenergia	XGXGF	NEOE3 BZ	Arthur Pereira, CFA
	Pampa Energia	PPENF	PAMP AR	Gustavo Faria
	Pampa Energia	PAM	PAM US	Gustavo Faria
	SABESP	CSBJF	SBSP3 BZ	Arthur Pereira, CFA
	SABESP	SBS	SBS US	Arthur Pereira, CFA
	Serena Energia	XZQAF	SRNA3 BZ	Arthur Pereira, CFA
NEUTRAL				
	Auren Energia	XZMXF	AURE3 BZ	Arthur Pereira, CFA
	Cemig	CIG	CIG US	Arthur Pereira, CFA
	Cemig	CEMCF	CMIG4 BZ	Arthur Pereira, CFA
	Central Puerto	CEPU	CEPU US	Gustavo Faria
	Central Puerto	CEPUF	CEPU AR	Gustavo Faria
	COPASA	CSAOF	CSMG3 BZ	Arthur Pereira, CFA
	TAESA	XTAEF	TAE11 BZ	Arthur Pereira, CFA
UNDERPERFORM				
	AES Brasil	XDFDF	AESB3 BZ	Arthur Pereira, CFA
	CPFL Energia	XPFGF	CPFE3 BZ	Arthur Pereira, CFA
	CTEEP	XOOTF	TRPL4 BZ	Arthur Pereira, CFA
	Engie Brasil	XZDDF	EGIE3 BZ	Arthur Pereira, CFA
	Sanepar	XJALF	SAPR11 BZ	Arthur Pereira, CFA
RVW				
	Ambipar	XAPEF	AMB3 BZ	Arthur Pereira, CFA

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	PRI03 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

Latin America - Natural Resources Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	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
	Klabn S.A	XLWDF	KLBN11 BZ	Caio Ribeiro
	Klabn S.A	KLBAF	KLBAF 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

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: Utilities Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	72	46.45%	Buy	52	72.22%
Hold	45	29.03%	Hold	32	71.11%
Sell	38	24.52%	Sell	21	55.26%

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}
Buy	≥ 10%	≤ 70%
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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