Argentina Energy

Argentina Conference – what did we learn about the energy sector?

Industry Overview

We held our first Argentina Conference

We held our first Argentina Conference (on Feb 21-22) with a strong attendance (>40 investors, 11 companies C-level). We discussed key themes including: 1) politics and macro adjustment, 2) energy sector within the new administration and 3) utilities tariffs.

#1: Milei's fiscal adjustment is impressive so far

According to our economists, President Milei's fiscal adjustment is surprising to the upside. The government is already implementing large spending cuts, leading to a fiscal surplus. The orthodox program is already leading to an inflation decline (20.6% MoM in Jan vs 25.5% in Dec). The new administration did a good start in the FX adjustment (+120% ARS increase in Dec), but the slow ARS depreciation since then is pressuring the parallel FX (gap vs official ARS jumped to 35%) and we think BCRA could accelerate the FX by March. Capital controls removal is gradual amid negative international reserves.

#2: However, lack political support is still a risk

On the other hand, some of the structural reforms proposals are facing important hurdles in the Congress and the courts (including the Mega-Deregulation Decree). The Omnibus bill with pro-market reforms was withdrawn from congress due to lack of support. However, political experts see room for negotiations. In addition, tensions with governors are running high amid cut of transfers and could impact the oil & gas supply to other regions. Government popularity remains high (above 40%), and Milei is still the most popular politician in Argentina.

#3: Energy sector will remain a key macro driver

According to political experts and companies, the oil and gas production growth will remain a key driver for the macro stabilization. Some investors are bullish on the sector de-regulation pushing higher oil domestic prices (currently at ~10% discount to Brent). However, the timeline for the additional infrastructure to increase the gas production of Vaca Muerta is still uncertain and some investors are concerned on potential local gas oversupply in an eventual full market de-regulation. On companies' specifics, YPF is focusing on non-conventional energy with possible conventional asset sales.

#4: Utilities regulation improves but questions remain

In the past weeks, utilities tariffs faced important improvements towards the regulatory de-risking: 1) regulators approved the transitory tariffs adjustment for the power distribution margin (Edenor's VAD +320%) and 2) regulators released the rules for the automatic monthly inflation adjustment. Regulators will start the discussions for the comprehensive tariff review to reset the regulatory returns and we expect the final terms to be published by December. Within power generation, companies are bullish on the potential market de-regulation that could yield higher prices for the "legacy" capacity (ARS-linked), but the terms and timing is still uncertain

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Equity
Americas
Utilities-Other

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ARS: Argentine peso

BCRA: Banco Central de la República Argentina (Central Bank of Argentina)

CAMMESA: Compañía Administradora del Mercado Eléctrico Mayorista S.A (Argentine Wholesale Electricity Market Clearing Company)

Refer to important disclosures on page 12 to 15. Analyst Certification on page 9. Price Objective Basis/Risk on page 8.
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Macro: pro-market reforms, questions on political support

Milei's government: Shock therapy and pro-market reforms
Javier Milei's government is implementing a decisive stabilization plan including a large 5% of GDP fiscal adjustment (targeting zero-deficit), a strong devaluation and correction of relative price distortions, to deal with a challenging inheritance. The government is removing price regulation in several markets (food, fuels, health, home rents).

Fiscal adjustment impressive so far
The government is already implementing large spending cuts leading to a fiscal surplus in January not seen in years. Finance minister Caputo's "orthodox stabilization plan" (meaning that dollarization will not be immediate) is already leading to a decline in inflation from 25.5% mom in December to almost 20% mom in January and it will continue declining. But relative price corrections in regulated tariffs, will weigh on inflation in Feb-Apr. We forecast inflation at 205% this year and 100% in 2025.

The side effect of the "orthodox plan" is a deep frontloaded recession, but a better harvest (normal weather) and hydrocarbons outlook will cushion the drop. We forecast a 3.5% GDP decline this year, with downside risks. Governability issues (Milei has a minority in congress) and social and political tensions are important risks.

FX adjustment, good start, questions arise now.
The ARS devaluation (+120% ARS increase in December) allowed a strong FX reserves accumulation ($6.4b since Dec/11). However, the slow ARS depreciation since then (2% monthly) is putting pressure on the parallel FX (gap vs official ARS jumped to 35%) and we think BCRA will have to accelerate the exchange rate by March.

The government implemented a new automatic system to allocate imports in shorter periods, a less discretionary regime. BCRA is also offering USD bonds to importers to pay the large excess debts with providers. We forecast a current account surplus of almost 1% of GDP this year (from a 4.4% deficit last year).

Political tensions amid fragmented congress and the adjustment
Some of the pro-growth structural reforms proposals are facing important hurdles in the Congress and the courts (including the Mega-Deregulation Decree). The Omnibus bill with pro-market reforms (including privatization) was withdrawn from congress due to lack of support. Labor reform was suspended by a court. The government is facing strong frictions with the governors as it cut transfers to provinces to a minimum and some governors are going to court. So far Milei's government popularity remains moderately high, above 40%, which shows part of the population is having patience.

Slow capital controls removal
Capital controls removal is being gradual (amid negative international reserves). The government committed with the IMF to provide a roadmap by 2Q for lifting capital controls and eliminate multiple exchange regime. Export stimulus should be removed by June and import taxes by December. Capital controls to buy dollar for savings or to pay importers debts remain tight. Dollarization is not off the table but MIlei has said is more likely in 2025 as they continue cleaning the balance sheet of the central bank.

Capacity to pay improves but doubts remain
Bonds have rallied, reflecting the adjustment policies and FX reserves accumulation. But investors still assign a substantial probability to a restructuring in 2025 (reflecting in low bond prices) due to the low starting point (negative international reserves) and doubts about the sustainability of the adjustment. The government needs to replace transitory taxes that expire this year and should change a pension formula that gives inertia to spending if inflation declines. The government needs a congress agreement. We see room for a fiscal pact with governors on these points, but once tensions ease. Social tolerance for the adjustment and risks of protests are key focus.

Company notes

YPF: New team, increased focus on non-conventionals

Pedro Kearney, Director of Finance & Valentina Lopez, IR Analyst

YPF is an integrated oil company with operations in E&P, refining, distribution and petrochemicals that is expected to see better trends over the next few years. The company has total oil and gas reserves of 1,043mn boe (56% oil) and total production of 511tboepd in 2021 (53% oil/NGLs). Virtually all of its operations are in Argentina.

Accelerating non-conventional production: With the new government in place in Argentina and at YPF, the company is looking at accelerating and increasing its focused on non-conventional energy and reducing the focus on conventional oil.

Asset sales are possible: YPF is analyzing some conventional asset sales, where profitability might be lower and capex requirements higher. It won't be a large amount, but it will help YPF focus its resources on the more profitable Vaca Muerta non-conventional fields.

Production was 520 kboe/d in 3Q23, with shale production (both oil & gas) equal to 202 kboe/d or about 40% of total production. Production is roughly split between oil and gas production.

Prices: there have been a series of price increases since the Presidential elections and domestic prices are currently about 10% lower than Brent prices.

Exports represent 4% of YPF's oil & gas output. They also represent about 9% of exports of downstream products such as naphtha, LPG, jet fuel, kerosene, bunker and others.

Oldeval: There is some delay in the Oldeval pipeline, but the expansion is moving forward. YPF has a 37% stake and is the largest shareholder. The project is to double capacity. While the final step is still expected to be completed by June 2025, about 20kbpd should be added in Oct-24, reaching 300kbpd of capacity. There should be a jump of about 50kbpd for the system 4Q.

Vaca Muerta Norte pipeline is already working, and YPF's share of net exports is 20kbpd. There are four other companies who are also exporting crude oil to Chile.

YPF has submitted two bids for Exxon's oil & gas assets. Local news reports indicate that Exxon is hoping to raise US$1bn from such a sale. The company has received a number of offers, but there is no specific time-frame for providing a response.

Recent debt exchange was key to 2024's refinancing plan. The company is now beginning to think of options for the 2025 refinancing plan and has a number of alternatives under consideration.

Central Puerto: bullish on market liberalization

Enrique Terraneo, CFO & Pablo Calderone, Corporate Finance Manager

Central Puerto is a power generation company with 7,115MW installed capacity (thermal, renewable, and hydro power plants). Central Puerto has stakes in 3 gas thermal power plants (combined cycles) and 3 minority stakes in gas distribution and transportation companies. Central Puerto has US$295mn in FONI receivables outstanding to be collected until May/2028.

Central Puerto is bullish on the potential market liberalization as they could sell its energy generation capacity in B2B contracts – it could imply better remuneration of old “legacy” assets contracts (vs current ~US$5-10/MWh). Depending on the terms proposed by the regulators, they could sign USD-linked contracts in the “legacy” capacity (vs currently ARS-linked).

The company believes in a new role of the CAMMESA in the sector, as a clearing house only, losing the role of an energy trading entity. Depending on the final terms, companies could even profit from a positive margin in the fuel costs.

However, the discussions for the market liberalization in Argentina are still in the very early stages with no clear timeline. The power generation sector reform does not need Congress approval or public hearing.

Central Puerto wants to continue with its capital allocation strategy in the power generation sector (CEPU announced 2 brownfield acquisition and 1 greenfield in 2023 with USD-linked revenues). However, **they do not see many growth opportunities in the renewables given the power transmission bottlenecks.**

The company wants to continue its efforts in the forestry business to add revenues diversification in the results. The wood sales should remain to local companies, but Central Puerto has a long-term to industrialize its assets and become a pulp player in the future.

The company sees a US$55-60/MWh Levelized Cost of Energy (LCOE) for renewables in Argentina at current cost of capital and capex levels.

Edenor: tariffs regulation improves but questions remain

German Ranftl, CFO & Solange Barthe Dennin, Investor Relations Manager

Empresa Distribuidora y Comercializadora Norte (Edenor) is the largest power distribution company in Argentina, serving >3mn clients in the northwestern zone of the greater Buenos Aires. Edenor operates under a highly regulated environment with regulation (e.g. tariffs) subject to the Argentine National Electricity Regulator (ENRE).

Edenor received a ~320% transitory tariff adjustment in its power distribution margin (VAD). In addition, regulators released a statement for the automatic monthly tariff adjustment, one of the main companies' requests (BofAe +20% NPV).

Regulators will begin the comprehensive tariff review process (e.g. new regulatory returns, asset base calculation and regulatory opex) and Edenor expects the final terms to be published by December.

The company does not expect impacts on energy losses and delinquency as they could increase its capex plan to control the operations. However, we could see some downward pressure on volumes given lower macroeconomic activity.

We could see some political friction during the public hearings of the power distribution tariff review, but the regulation is already given (same methodology of 2017 tariff review) and the government doe not need to approve any law in Congress to complete the tariff review.

A renegotiation of the outstanding debt with CAMMESA (~US$150mn) due to past energy purchase contracts **could be discussed during the comprehensive tariff review**.

Edenor's new capex plan should focus on the quality of the service (e.g. blackouts prevention and smart meters).

Vista Energy: Strong Reserve Replacement Ratio

Miguel Galuccio, Chairman & Alejandro Chernacov, IRO

Vista (not covered) 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 has high expectations for the upcoming years;

Production to increase 25% in 4Q23, EBITDA +55% YoY. Oil production will reach 100,000 bpd (previously 80,000bpd), this is a 25% increase YoY. Adjusted EBITDA to reach US$1.7bn vs. US$1.1bn previously (+55%). According to the company, cash availability will stay at US$1bn

Vista is expecting a 35% growth in production for 2024, with its current rigs. Currently has two rigs and added a spot rig to speed up work on two pods in recent days. Discussion for an additional rig is on-going.

The company has already reported **very strong reserve replacement ratio of 450% for 4-years**.

Vista's 2030 Vision is to reach 150,000 mboe/day and US$500 million of annual cash generation.

Prices and politics: Management is disappointed the Milei's Omnibus bill wasn't passed, particularly since they wanted to see Article 6 which provided less intervention in oil prices. Currently 50% of Vista's production goes to the exports.

Eventually, Vista will participate in the Vaca Muerta South Pipeline as it will need the pipeline capacity to bring its production to market

Investment in Mexican assets has been disappointing. Production in 4Q23 was less than 1,000 bpd.

GHG Intensity (kg CO2e/boe) will decline from 9 to 7 (-22%)

TGS (PAM's affiliate): reg. tariffs improve, liquids and midstream continue

Leandro Perez Castano, Finance and IR Manager

TGS is the largest gas transportation company in Latam, operating 9,233km of pipelines through a concession until 2027 (extendable for additional 10-years). TGS is also the #2 producer of NGL with +1m ton/year of capacity (33% exports).

TGS requested for a ~550% transitory tariff adjustments in its gas transportation regulated business to compensate all the halted adjustments since 2019. With the adjustments, TGS could post up to US$150mn EBITDA in the regulated business (vs US$50mn in 2023). Company could post up to US$250mn EBITDA in 2025 in the segment.

TGS will also face a comprehensive tariff review in 2024 to reset regulatory returns (BofAe 10% reg. WACC after-tax). However, we expect a lower RAB (in USD) vs 2017 tariff review due to investments below regulatory depreciation in the period.

TGS got the operational and maintenance transitory concession (only 5 years) of the Nestor Kirshner Gas Pipeline but it will only yield US$3-4mn EBITDA Vaca Muerta development

They could participate into new gas pipelines tenders for operational and maintenance works, but not in the construction. The new gas pipelines could be built by E&P companies operating in Vaca Muerta (the Nestor Kirshner Gas Pipeline could require up to US$2bn capex).

TGS is posting a US$200mn EBITDA in the liquid's commercialization business (ethane, propane, butane and gasoline) due to the commodities prices hike after Ukraine-Russia war. We see a normalized level of US$150mn EBITDA in the segment.

The company has an upside risk of additional US$20mn EBITDA in the liquids business due to the possible end of government subsidies programs. However, it requires a law approval in Argentinean congress.

TGS expects to post a US$130mn EBITDA in the gas midstream business (non-regulated gas pipelines in Vaca Muerta), but it could yield up to US$260mn with the Vaca Muerta gas production growth and the pipeline spare capacity.

TGS could advance with the NGL project (US$2bn total capex) within the next years in a partnership with E&P companies to exports liquids through Bahia Blanca port. The project could yield up to US$400mn EBITDA once completed.

Exhibit 1: Stocks mentioned
Prices and ratings for stocks mentioned in this report

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
CEPU	CEPU US	Central Puerto	US$ 8.31	C-2-9
CEPUF	CEPU AR	Central Puerto	ArP 899.35	C-2-9
EDN	EDN US	Edenor	US$ 18.1	C-1-9
XEDTF	EDN AR	Edenor	ArP 998.2	C-1-9
PAM	PAM US	Pampa Energia	US$ 43.45	C-1-9
PPENF	PAMP AR	Pampa Energia	ArP 1904.85	C-1-9
YPF	YPF US	YPF SA	US$ 17.91	C-3-9
YPFSF	YPFD AR	YPF SA	ArP 19631.4	C-3-9

Source: BofA Global Research

BofA GLOBAL RESEARCH

Price objective basis & risk

Central Puerto (CEPU / CEPUF)

Our PO of US$11 / AR$2470 for Central Puerto is based on a DCF model, discounting the estimated free cash flow to equity at a 15.8% USD nominal cost of equity. Our key assumptions are: 1) no hydro concession renewal, 2) Power Generation "Legacy" contracts in-line with Argentina inflation, 3) steam sales revenues linked to US Dollars, 4) Forestry business revenues flat vs 1Q23 and linked to US Dollars, 5) SG&A and COGS increase linked to ARS Pesos and Argentina Inflation. We assume a 2,280 ARS/USD in FY24.

Upside risks: 1) new power generation growth opportunities with attractive returns, 2) better funding conditions, 3) higher remuneration for legacy generation projects, 4) higher sales prices in forestry business, 5) renewal of hydro plant Piedra del Águila concession.

Downside risks: 1) below Argentina inflation readjustments for legacy power generation contracts, 2) receivables delays in power generation contracts with CAMMESA, 3) Interest in FONIVEMEM plants could be diluted.

Edenor (EDN / XEDTF)

Our PO of US$30 / AR$3380 for Edenor is based on a DCF model, discounting estimated free cash flow to equity at a 18% nominal cost of equity in USD. Our key assumptions are: 1) Full Tariff Review in mid-2024 considering: 10% regulatory WACC, 30% capex to RAB haircut, no regulatory opex haircut vs current levels, 2) 2% Volumes growth in 2023-24 and 1.5% from 2025 onwards, 3) -100bps energy loss until 2025, reaching 15% vs 10% regulatory levels, 4) new debt as 50% of capex, 5) Edenor investing 1x of regulatory depreciation. We assume a 2,280 ARS/USD in FY24.

Upside risks: 1) higher-than-expected regulatory returns (reg. WACC), 2) lower capex-to-RAB haircut vs 15% base-case, 3) lower regulatory opex haircut vs 10% base-case, 4) higher energy demand growth, 5) energy losses improvement above 15% BofA base-case (vs 10% regulatory levels), 6) Compensation for unproper tariffs readjustments in 2019-22 period.

Downside risks: 1) worse than expected full tariff review results, 2) lower energy demand growth, 3) peso devaluation (100% revenues linked to ARS Pesos), 4) tariffs readjustment deferral with no compensation.

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 13.8mcmpd 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.

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)

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Analyst Certification

We, Gustavo Faria, Arthur Pereira, CFA, David Beker, Leonardo Marcondes and Paula Andrea Soto, CFA, 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	TAEE11 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
RSTR				
	Ambipar	XAPEF	AMBP3 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	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

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
	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

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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