

Argentina – Corporates

February 15, 2023

O&G sector: Argentina's new engine

- **Among all the sectors, we believe that O&G has the highest growth potential.** The increase in LNG prices awakened the government to the importance of its development, with benefits on tax collections and the balance of payment. In the past 2 years, natural gas production was the matter of the moment due to the launch of the Plan Gas Ar that made visible its importance in Argentina's energy matrix. However, in the upcoming years, the main driver of country's hydrocarbon production will be crude oil. The main driver is to capture the differential between the international and local market price.
- **Currently, Argentina is not an important export player globally. However, this could change, considering that only 8% of Vaca Muerta area is developed.** YPF announced several midstream projects carried out together with other private players so that it can ramp up production and export crude oil at a significant level. Works have already started in some of them. We believe they will be financed with internal cash generation and the local market.
- **Regarding the Nestor Kirchner pipeline, the sector consensus is that it will be completed on time, which will be a milestone in Argentina.** There are incentives from the companies involved in its construction and from the government to continue financing the works to accomplish it.
- **Argentine O&G companies are solid.** YPF and Pampa Energia have shown positive FCF since 2018, while Vista since 2021. We believe the management has shown to be conservative in the past three years. They mainly focused on increasing FCF and lower the companies' leverage ratios which translated in more robust results consecutively, despite the restrictions to access the FX market and with the international financial markets closed to Argentina.
- **We expect 2023 and 2024 to be a transition year for YPF and Vista,** as the companies will ramp up crude oil production once the projects are finished by 2025-2026. Given that YPF is involved in several projects, we expect the company's capex to increase by ~35% yoy to USD5.6Bn in 2023, and thus, its FCF to turn negative. Similarly, we expect Pampa Energia's Capex to increase by ~60% yoy to USD610mn in FY23, due to it will have to increase natural gas production to comply with the committed levels in the Plan Gas for the filling of the Nestor Kirchner pipeline. However, by 2024, YPF and Pampa Energia should start reaping the rewards, leading FCF to stand again on positive territory.
- **We initiate coverage of equity, starting for YPF (YPF), Pampa Energia (PAM), and Vista Energy (VIST) at Overweight, with a target price of USD28.70, USD45.30 and USD35, respectively. We recommend buying a mix of the three companies.** We believe that due to the increasing expectations on a regime change this year, multi asset portfolio managers should shift the attention from fixed income to equity due to its higher upside potential. However, we still find attractive YPF DAR 2025s Old, 2026s Secured, 2029s New, and 2033s and PAMPAR 9.5 26s. We expect the international environment to become more benign for EM markets, and thus, to give an extra-boost in prices.
- **Our analysis of the three companies' sustainability reports showed that they are all working on improving ESG metrics. However, Vista was the only one that compromised to become net zero in Scope 1 and 2 emissions by 2026.**

O&G sector: Argentina's new engine

Among all the sectors, we believe that the O&G has the highest growth potential, while other sectors such as banking, retail, consumers, transportation, and telecommunications will still suffer from the increasing inflation and its negative effect on real wages. What makes the O&G sector different is that its development is not only convenient for companies to diversify revenues and increase cash inflows in hard currency but also for the government to diminish LNG imports pressure on reserves and increase tax collections.

In the past 2 years, natural gas production was the talk of the town due to the launch of the Plan Gas Ar that made visible its importance in Argentina's energy matrix. However, in the upcoming years, the main driver of country's hydrocarbon production will be crude oil, there are several midstream projects on the agenda, some of them are already in construction, to boost crude oil exports.

We believe Argentine O&G companies are solid. YPF and Pampa Energia have shown positive FCF since 2018. During 2020, Pampa Energia revenues were more resilient than that of YPF, thanks to its power generation business. However, YPF has showed a strong recovery in terms of profitability and deleverage from 2Q20. In 3Q22, YPF and Pampa Energia net leverage was at the same level at 1.2x. We initiate coverage of Vista Energy, which despite of being a relatively new and small company, it navigated smoothly through the pandemic, thanks to its low-cost structure mainly focused on shale.

It is worth mentioning that to take the leap, YPF and Pampa Energia will increase Capex substantially this year. For this reason, we expect the companies to show negative FCF in FY23E. However, by 2024 it should stand again on positive territory while the jump in sales to be materialized in 2025-2026 once the projects reach COD.

We expect the international environment to become more benign for EM markets, and thus, to give an extra-boost in prices. Currently, Argentina is classified as a Frontier Market by the MSCI. We believe that the reclassification of Argentina to an Emerging Market status backed in 2018 was at a bad timing. Argentine O&G companies' stocks have been on the bottom since 2020-1H22. In this sense, the scenario looks more similar to that of 2013-2014 than that of 2017-2018. For this reason, we set YPF, Pampa Energia and Vista Energy ADRs target prices at USD28.70, USD45.30 and USD35, respectively. On the fixed income side, among YPF's bonds we find attractive the 2025s Old, 2026s Secured, 2029s New, and 2033s. Among Pampa Energia's bonds we prefer PAMPAR 9.5 26s, although it has an amount outstanding of USD293mn.

We acknowledge that not all readers are currently involved in Argentina. For this reason, in the following pages we give a brief overview of the oil and natural gas sector in the past years. We introduce the main players. We also analyze the main oil projects and the Nestor Kirchner natural gas pipeline, as well as the Plan Gas Ar. On the last pages you will find our expectations for YPF, Pampa Energia and Vista performance in 2022E-2026E. Also, a comparative analysis of the stocks and bonds performance in the past years. Finally, given the increasing importance of ESG, we included a short section on the companies' measures taken in the matter.

Argentina’s oil production: a regional and historical perspective

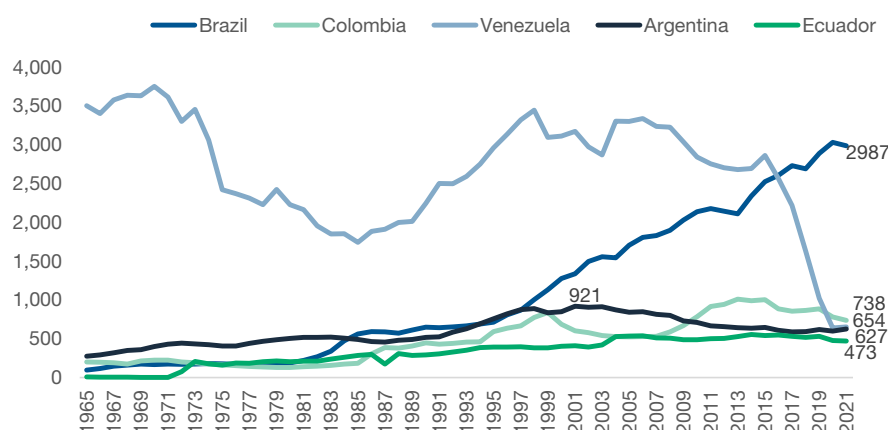
Argentina is the 4th largest oil producer* in South & Central America, with a total production of 627kbbld, after Venezuela (654kbbld), Colombia (738kbbld) and Brazil (2,987kbbld) (Source: BP Statistical Review of World Energy 2022). However, Argentina has not always occupied that rank. From 1965 to 1984, it ranked 2nd after Venezuela. Since 1985, Brazil's production has taken off while Argentina's increased at a slower pace. In 2001, Argentina's oil production peaked at 921kbbld which was difficult to maintain in the following 2 years with the economic crisis. Then, the downward trend continued due to the lack of incentives to such a degree that Argentina needed to import crude oil from 2012 until 2018. In this way, Argentina's oil production focus over the first decade of 2000 shifted from export to concentrating almost entirely on the local market. Therefore, Argentina got left behind by Colombia, which ranks as the 3rd largest oil producer since 2010.

However, since 2021, efforts have been to maintain production levels, partly thanks to the solid international price environment. Shale production became key to offset the decline of the conventional fields. In Dec-2022, shale accounted for 90% of Neuquen’s total production and 45% of Argentina’s total production.

Currently, Argentina is not an important export player globally. In 2021, crude oil exports were 58.5kbbld vs. Colombia's 459kbbld and Brazil's 1,323kbbld (Source: IAPG, ANP, DANE). However, this could change, considering that only 8% of Vaca Muerta area is developed and that there are at least 5 midstream projects to export crude oil.

Figure 1: In 2021 it was evident that Argentina needed to revert its oil production decline. Otherwise, it was going to start weight on the balance of payment and government accounts

Oil production* | KBOED



*Includes crude oil, shale oil, oil sands, condensates (lease condensate or gas condensates that require further refining) and NGLs (natural gas liquids - ethane, LPG and naphtha separated from the production of natural gas).

Source: TPCG Research based on bp Statistical Review of World Energy 2022

Vaca Muerta’s crude oil incremental production heading to export markets

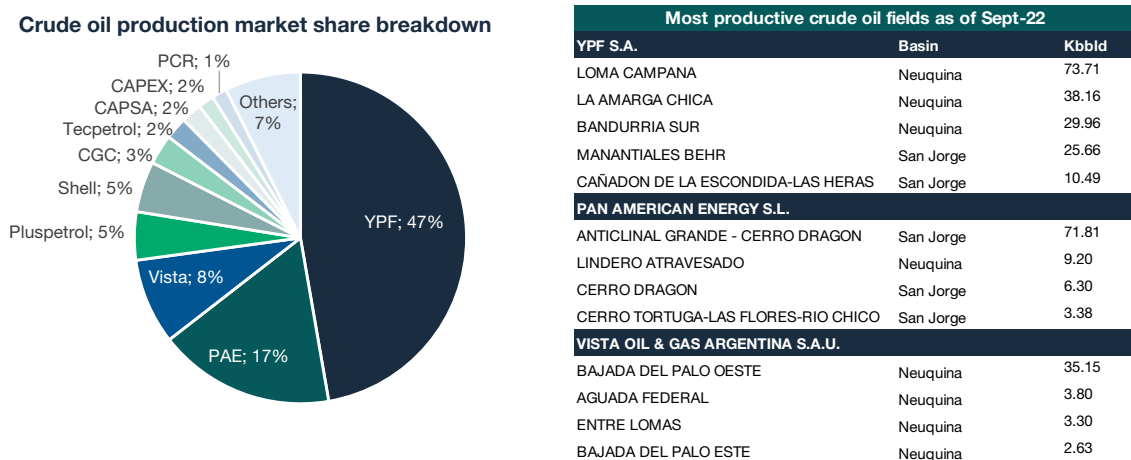
The main oil producers are YPF, accounting for 47% of total production, Pan American Energy ("PAE") with 17%, and Vista Energy ("Vista") with 8%, as of Sept-22 (Source: IAPG). Founded in 1922, YPF has historically been Argentina's leading oil and gas producer. YPF's main shareholder is the Argentine government, with 51% of the total, and the other 49% floats (80% in NYSE as "YPF" and 20% in BYMA).

Pan American Energy ("PAE") follows it, being the largest oil and gas private producer. It was founded in 1997 through the alliance between Amoco Corp, which had operations in Argentina since 1958, and Bidas Corporation. In 1999, Amoco Corp merged with and into BP plc. Currently, BP plc owns 50% of the shares, while Bidas Energy Holdings and CNOOC International Ltd have indirect participation of 25% each. Pan American Energy is not listed.

In contrast, Vista is a relatively new company, founded in 2017 by Miguel Galuccio, who was YPF's Chairman and CEO between May 2012 and March 2016. In 2019, the company was listed in the NYSE as "VIST". The company's capital stock is comprised of 89,197,408 shares. 72% of the shares are ADS floating in the NYSE. Then, Kensington Investments B.V. holds 17% of them, which the government of the Emirate of Abu Dhabi in

the United Arab Emirates indirectly owns. Miguel Galuccio, who serves as the Chairman of the Board & CEO, holds 8.9%.

Figure 2: YPF leads crude oil production, followed by PAE and Vista



Source: TPCG Research based on IAPG

Given YPF and PAE long history, crude oil production is mainly from conventional fields, mostly from San Jorge basin in Chubut, while Vista's is from shale fields located in the Neuquina basin. Despite this, YPF has been very active in shale in the past 3 years compared to PAE, which 82% of its production comes from Cerro Dragon in the San Jorge basin. The share of shale oil in YPF's total production increased to 34% in 3Q22 from 18% in 4Q19. This is because YPF could not wait for that much to develop its shale fields. YPF crude oil production had fallen by 2% yoy in FY16 and 7% yoy in FY17.

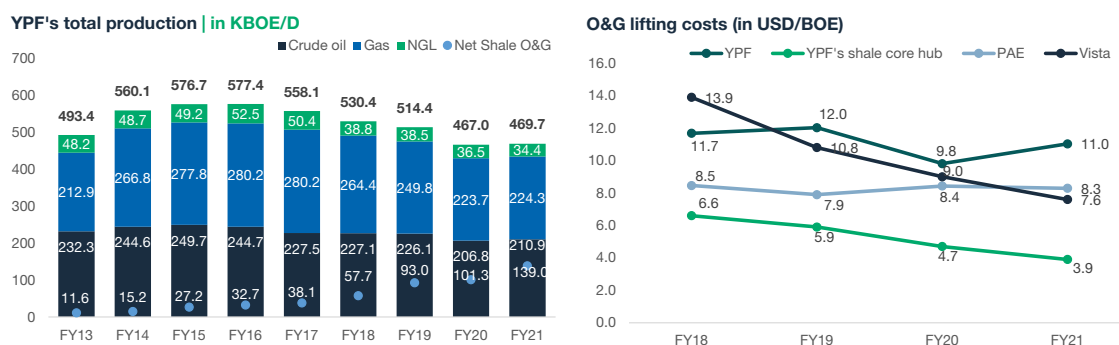
Unlike PAE, which exports 20% of its crude oil production, YPF's production is almost entirely for the supply of its refineries, with crude oil exports accounting for only 0.3% of revenues vs. 17% PAE. Therefore, if YPF production comes down, the company must increase crude oil purchases from third parties. In FY17, YPF's crude oil purchase volumes from third parties increased by 49% yoy. This matters because YPF has a dominant position, leading the formation of local crude oil prices. Due to the weak international price environment, the pricing agreements between producers and refiners were favorable for the last one. However, this could entail a decrease in the company's bargaining power in the context of high international prices.

In view of this, YPF needed to produce unconventional oil to compensate for its matured fields' declined production. In FY18 and FY19, YPF succeeded in maintaining production relatively flat; the pandemic halted this recovery. Since the ease of confinement measures, efforts were made toward resuming production growth. For this reason, we see that YPF's most productive crude oil fields are Loma Campana, La Amarga Chica, and Bandurria Sur in the Neuquina basin. In the first case, YPF has a JVs with Chevron, the second with Petronas, and the third with Shell and Equinor Argentina AS. Even so, YPF's shale production still has a long way to go, as Loma Campana is at 37% of development, while La Amarga Chica and Bandurria Sur are at 11% and 4%, respectively.

Conventional oil accounts for 64% of YPF's total crude oil production, mainly from Manantiales Behr. The field is under tertiary recovery. Given the positive results of using 8 Polymer Injection Units which led production to reach 26.6Kbbkd in Oct-22 from 25.6Kbbld in Sept-22, the company started implementing the process in other 3 fields. In this way, YPF is trying to slow down the natural decline of mature fields while ramping up shale production.

Vista's oil production is oriented to the export market, like PAE but at a lower scale. In 3Q22, crude oil exports accounted for 53% of total revenues and 48% of crude oil production. Vista's oil production is mainly derived from Bajada del Palo Oeste field, in which the company holds a 100% interest. The field daily average shale production was 26Kbbld in 3Q22, representing 82% of the company's total oil shale production and 63% of total oil production.

Figure 3: YPF's shale production has increased materially in the past 2 years



Source: TPCG Research based on YPF, PAE & Vista Energy

Vaca Muerta holds the fourth-largest oil shale reserves in the world. The crude oil has a wide range of densities, with an API (American Petroleum Institute) gravity ranging from 20° to 65°, depending on the field, but mainly above API 40° gravity. Given that, it is easy to produce and that with the increase in production, development costs will continue to decline, we believe it is improbable that Vaca Muerta's activity slacked if international prices dropped to 2016 levels. For instance, Vista built a sand mine and washing plant with a Capex of USD10mn to supply itself with sand. The company was using sand from Entre Rios and Chubut provinces in Vaca Muerta. With the new project the cost of sand is reduced significantly due to transportation costs. The fact that investments in Vaca Muerta are starting to bear fruit is key to our view.

YPF's shale oil production increased by +368% to 77kbbld from 16.5kbbld in FY17. At the same time, shale core hub' development costs decreased to USD8.1/boe in 3Q22 from USD16.3/boe in FY17 while lifting costs improved to USD3.7/boe in 3Q22 from USD8.7/boe in FY17. Vista also has reported efficiency gains. Vista's shale oil production increased to 26.4kbbld in 3Q22 from 6.7kbbld in 3Q19, while lifting costs were down to USD7.5/boe from USD9.8/boe in 3Q19. Development and operational costs are higher than YPF's shale core hub because 25% of Vista's production is conventional. What this shows is that as long as the companies' production in Vaca Muerta increase, thus, the higher the share of unconventional vs. conventional production, the lower the costs.

Even though it has been several years since companies' managers have been talking about Argentina becoming a net oil exporter, and it seems that it never comes, this time is different, in our view. In the past 3 years, YPF focused on being FCF positive, lowering its net leverage, and increasing its shale fields' productivity to offset the decline of its matured fields' production. It did this despite the restrictions to access the FX market and with the international financial markets closed to Argentina. With this accomplished, debottlenecking is the next objective to ramp up production and export crude oil at a significant level. YPF has already announced several midstream projects:

- **Trasandino Oil pipeline (Otasá).** The pipeline has been out of operation since 2006. The project cost USD13mn. The crude oil produced by YPF and Chevron will be transported through it to supply Bio Bio refinery, owned by ENAP, which has a capacity of 70kbbld, the rest will be export it through the pacific. The pipeline will have a maximum capacity of 110kbbld. It will be operative in 2Q23.
- **Oldeval pipeline expansion (Proyecto Duplicar).** YPF owns 37% of Oldeval, which transports 45% of Argentina's crude oil and 82% of the Neuquina basin's crude oil. The company aims to increase the oil transportation capacity from 43,000m3/d to 72,000m3/d (or 452kbbld) in 2 stages that would last 11 months each. With an estimated cost of USD1.2Bn, the project aims to increase crude oil exports by 180-250kbbld in 2023, 280-300kbbld in 2024 and 500-550kbbld in 2025.
- **Ote terminal expansion.** Oiltanking Ebytem S.A. ("OTE") manages the largest crude oil maritime terminal in Argentina, Puerto Rosales, which receives crude oil from the Oldeval pipeline and vessels of up to 106,000 Deadweight Tonnage (DWT). The company accounts for 18 tanks with a storage capacity of 480,000m3, of which 150,000m3 are for Medanito crude oil, which is used in the local refineries. OTE owners are Oiltanking GmbH, with a 70% stake, and YPF with the other 30%. The project of USD312mn will increase Puerto Rosales terminal capacity by +50% to 250,000m3. With the end of the first stage, which is expected by 1Q24, the terminal will be able to operate ships with a capacity of 120,000 DWT and of 60,000DWT by 1Q25. The Oldeval pipeline and the Ote terminal expansions projects will be carry out at the same time, as they are complementary.
- **Vaca Muerta Norte – new pipeline.** The 150km pipeline with a capacity of 250kbbld that will link La Amarga Chica core hub with Puesto Hernandez, to transport crude oil to Mendoza and then

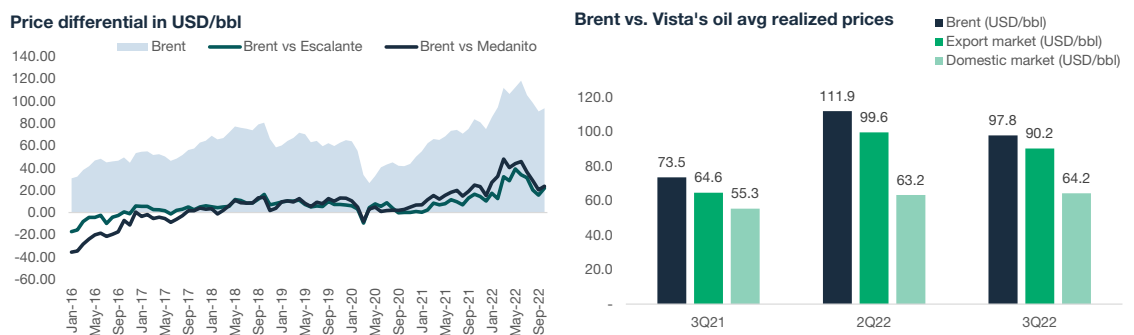
export it to Chile. There are already 4 large players interested in participating in this project of ~USD300mn.

- **Vaca Muerta Sur – new pipeline and terminal.** The Project is being discussed under the table due to the political implications that could arise from deciding the location of the new port terminal. Chevron would be one of the interested companies to partnership with YPF. The project has an estimated cost of USD2.2Bn and would reach COD in 1H26.

What reinforce our view that the projects will materialize is that exporting crude oil is attractive given the price differential with the local market. The domestic price has historically lagged the international in a rising environment. Conversely, the government applied the *Barril Criollo* to support the industry when international commodity prices plunged, like in the Pandemic. In 3Q22, Vista's average export realized oil price was USD90.2/bbl (net of export taxes), +USD26 higher than the one realized in the domestic market and just USD7.6 lower than Brent.

From the demand side, Argentine companies focused on market development during the pandemic to make Vaca Muerta's oil known. Argentina has historically exported Escalante blend, which is a sweet crude oil, with a low sulfur content of 0.2%, it has a 24° gravity. In contrast, most Vaca Muerta's crude oil is above 40 ° gravity and the sulfur content is less than 0.5%. YPF's core-hub wells are mainly in the area where crude oil API gravity stands between 40-55°, whereas Vista's field Bajada del Palo Oeste crude oil stands between 35-40° API. The U.S. has historically imported heavier crude oils, like the Escalante, to mix it with its less dense crude oil. However, refineries from the main crude oil import countries, like the U.S., China and the E.U., are heading towards using lighter crude oils and with a low sulfur content to produce more eco-friendly diesel and naphtha, and thus, cut emissions. In the case of the U.S., this was underpinned by the Permian and Eagle Ford boom. In this sense, YPF is also revamping its refineries used to Medanito blend with a 30-35° gravity. This is reflected on the reduction of the price differential between the Brent and the Medanito and Escalante.

Figure 4: What makes increasing production to export so attractive is capturing the price gap between local and export prices.



Source: TPCG Research based on the Secretariat of Energy, Vista Energy reports

Source of financing

The projects mentioned above will be carried out by the private sector, unlike the Nestor Kirchner pipeline, raising the question of their financing. Considering that tapping the international market is not an option for the next 2 years, we believe YPF could turn to the local market, export facilities, bank and private lending. In the past 3 years, YPF main source of financing became internal cash flow generation. Total debt has decreased by 24% since 2019, the year when YPF issued the YPFDAR 8.5 29s its last international bond to raise new money. Since then, YPF has been canceling its bank loans until January 2022, when it received a USD300mn multilateral loan to pay the amortization of the YPFDAR 8.5 2024s bond. Export pre-financing represented 5-8% of the company's total loans; in 2020, it dropped significantly.

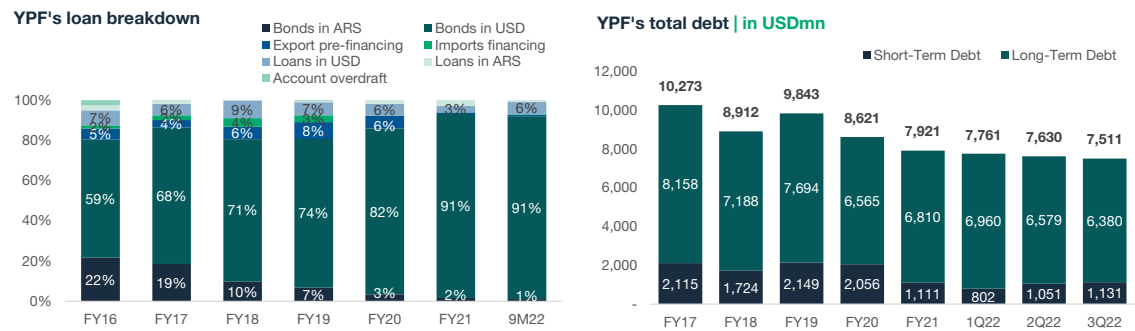
After achieving a net leverage of 1.2x, we believe YPF has room to increase its indebtedness level. In the past 2 years, companies preferred not rolling-over bank loans and issuing in the local market due to the lower interest rates. YPF is moving in this path. It was the first Argentine company to tap the market this new year. The last time the company issued a bond locally was in 2020. In January 2023, YPF tapped the local market issuing a USD230mn dollar-linked bond at a 1% coupon maturing in 2026. In case the local market is insufficient to fulfill YPF's needs, the company has a long-dated strong relationship with banks to turn to. What's key is that banks' loan portfolios have been shrinking, being more willing to lend. Multilateral lending would be preferable as it offer lower interest rates and are not reached by the FX regulation that push companies to restructure their hard currency short-term maturities. Ultimately, YPF could also turn to private

lending, as many power generation companies did between 2015-2017, before Argentina entering into the international scene.

Vista Energy and Trafigura JVs is also an example that YPF could replicate with other international companies to finance the projects. Even more, if we consider that they have difficulties repatriating dividends due to foreign exchange controls. Therefore, they would be more willing to finance these projects with internal cash flow generation.

In October 2022, Vista Energy announced the JV with Trafigura to develop 3 pads in Vaca Muerta. Vista will be the operator of the wells, retaining 75% of the hydrocarbon production rights while Trafigura will keep the other 25%. By the same percentages are split Capex, royalties, and direct taxes. Vista will bear all the other costs, including operating and midstream within the block. Trafigura will have to pay Vista USD1.7mn for each tied-in well and a fee on its share of production. With this contract, Trafigura will secure its crude oil supply in 2023 and Vista will count on another source of financing for the development of the wells. This was not the first JVs with Trafigura, the first one was for the development of 7 pads, in which Vista retained participation of 80% and Trafigura the other 20%. In this case, Trafigura paid Vista USD5mn for each tied-in well and a fee on its share of production.

Figure 5: We believe YPF has room to increase its indebtedness level from a wide range of sources.



Source: TPCG Research based on YPF FFSS.

Natural gas: an indispensable source of energy in Argentina

Argentina is the largest natural gas producer* in South & Central America, with a total production of 38.6Bcm or 3.74Bcf as of 2021 (Source: BP Statistical Review of World Energy 2022). Natural gas proved reserves were 415,988MMm3, 171,399MMm3 conventional and 244,589MMm3 unconventional. 64% of Argentina's natural gas production comes from the Neuquina basin, where Vaca Muerta is located, the second-largest gas shale reserve in the world after Permian.

Natural gas production is key for Argentina's energy matrix, accounting for 52% of primary energy in 2021. Power generation is the main consumer of natural gas, representing 38% of total demand. It is because thermal plants generate 60% of electricity in Argentina. In 2021, 85% of the power generated by thermal plants was with natural gas, 13% was with diesel oil, and 2% was with carbon.

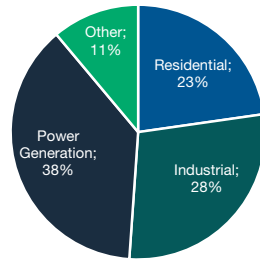
During winter, the share of natural gas tends to decrease in favor of diesel oil, despite natural gas production increasing driven by the Plan Gas Ar. However, given that it is not enough, the country must import LNG and natural gas from Bolivia. In 2022, the fuel mix changed towards diesel because importing it was cheaper than LNG as prices skyrocketed because of the Russia-Ukraine war. For this reason, the share of natural gas came down to 52%, while diesel increased to 45% in June. Plan Gas provided 78% of the natural gas used by thermal plants, LNG 18%, and Bolivia, 2%. Then, in November, natural gas represented 86% of thermal plants' fuel and diesel 13%. Plan Gas Ar provided 92% of the natural gas while Bolivia 6%. Argentina didn't import LNG.

In retrospective, the Plan Gas Ar proved to be successful, given that it boosted production at a significantly low price, saving the government from importing a higher % of other alternative fuels. The price paid under the Plan Gas Ar was around USD4.3 vs. USD19.96 Bolivia's imports, USD32.65 from the LNG cargoes that arrived at Escobar port and USD34.23 from the LNG cargoes that arrived at Bahia Blanca port.

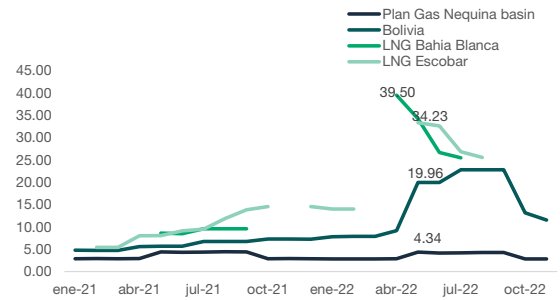
* Excludes gas flared or recycled. Includes natural gas produced for Gas-to-Liquids transformation.

Figure 6: In the winter month of June 2022, Plan Gas provided 78% of the natural gas used by thermal plants

Argentina's natural gas demand breakdown



Price of Cammesa's sources of natural gas | USD/MMBTU



Source: TPCG Research based on ENARGAS, CAMMESA.

YPF is the leading natural gas producer with a 25% share, followed by Total Energies (23%), Tecpetrol (14%), PAE (13%), and Pampa Energia (7%). YPF accounts for 34% of total production within unconventional gas, Tecpetrol 22%, and Pampa Energia 13%. In the Neuquina basin, YPF and Tecpetrol's are the main natural gas shale producers, while Pampa Energia has been producing tight gas and will shift to shale this year. Within the Austral basin, CGC is the most important tight gas producer onshore. TotalEnergies, Wintershall Dea Argentina, and PAE consortium lead offshore production.

We already talked about YPF and PAE ownership, now let's talk about Pampa Energia, CGC, and Capex SA.

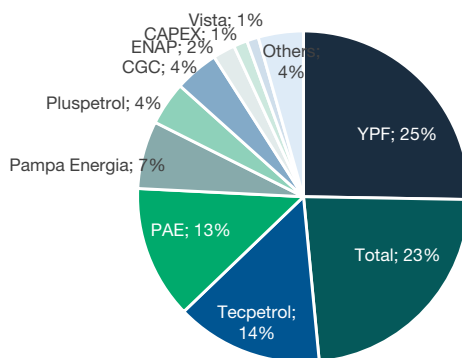
Founded in 2005, Pampa Energia is Argentina's largest power generator and the 6th largest upstream producer, although it ranks 1st in tight gas production. The company is also in the petrochemicals, midstream, and electricity transmission business. In 2009, the company's ADR started trading on the NYSE as "PAM". In 2021, the company's capital was comprised of 1,389.9mn stocks and 56mn of ADRs, of which 72.6% floats in the NYSE and ByMA, while the management holds 26.2%.

CGC is the 7th largest upstream producer, owned by two multi-industry Argentine holdings: Corporacion America, through Latin Exploration S.L.U. with a stake of 70%, and Sociedad Comercial del Plata S.A., with the other 30%. The company is not listed. In 2021, the company acquired Sinopec Argentina, increasing total production by +108% y/y to 122.2kboed. The company used to be focus on natural gas production and with the acquisition the share of oil in the total output was up from 13% in 2020 to 47% in 2021.

Capex SA is a vertically integrated energy company like Pampa Energia but of a smaller size. It produces LPG, propane, and butane from the oil and gas extracted from its fields. In addition, it generates electricity through a thermal energy plant and two wind farms and accounts for a plant to produce hydrogen and oxygen from water electrolysis. The main shareholders are the Gotz family, which founded the company in 1988, and the ANSES (10.7%). The company is listed as CAPX at BYMA.

Figure 7: YPF is the main natural gas producer, with most of its production coming from Loma La Lata and Rincon del Mangrullo fields.

Natural gas production market share breakdown



Most productive natural gas fields as of Sept-22

TECPETROL S.A.	Basin	Mm3/d
FORTIN DE PIEDRA	Neuquina	17,036
PAMPA ENERGIA S.A.		
EL MANGRULLO	Neuquina	7,269
PAN AMERICAN ENERGY S.L.		
ANTICLINAL GRANDE - CERRO DRAGON	San Jorge	6,738
AGUADA PICHANA OESTE	Neuquina	6,138
YPF S.A.		
LOMA LA LATA-SIERRA BARROSA	Neuquina	6,152
RINCON DEL MANGRULLO	Neuquina	5,989
AGUADA DE LA ARENA	Neuquina	2,961
EL OREJANO	Neuquina	2,742
LOMA CAMPANA	Neuquina	2,489
COMPAÑIA GENERAL DE COMBUSTIBLES S.A.		
CAMPO INDIO ESTE - EL CERRITO	Austral	3,762

Source: TPCG Research based on IAPG

In 2022, companies' production growth reached a ceiling due to transportation being at full capacity. The Nestor Kirchner pipeline ("GPNK") aims to increase gas transportation capacity so that natural gas production grow, and therefore, Argentina will cease importing LNG. The project is divided into 2 stages. The first is the Tratayen-Saliquelo that will be completed in 2 tranches. The first one will add 11MMm3/d of transportation capacity in July 2023 to end in 22MMm3/d in January 2024 with the addition of the loops and compression stations to Neuba II pipeline. The second stage is the Saliquelo-San Jeronimo, which will increase its capacity to 44MMm3/d by the winter 2024.

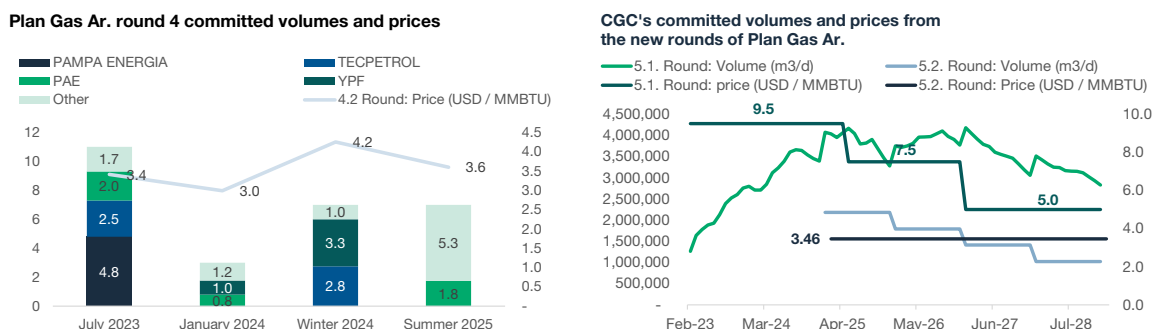
In December, the government launched new Plan Gas Ar rounds. Round 4 was for production from the Neuquina basin, while round 5 was from the Austral and Northwest basin. Round 4.1 extended the Plan Gas Ar 1 and 3 contracts to 2025-2028. The government awarded 47.97MMm3/d at USD3.592/MMBTU, and for the winter season, 3.0MMm3/d of additional volumes at USD3.435/MMBTU. This time CFI (Consejo Federal de Inversiones), METRO HOLDING S.A. and Capex S.A. decided not to participate. The rest of the companies participated with the same amounts. Round 4.2 was to fill up the GPNK as of July 2023. The government awarded 11MMm3/d at a USD3.41/MMBTU. Then, CGC and PAE, participated in the 5.1 round, which comprised the 2025-2028 period, while only CGC participated in the 5.2 round, which included the 2023-2028 period. Interestingly, CGC was granted a higher price than the companies with the Neuquina basin.

YPF SA was the company that was awarded the highest volumes: 20.9MMm3/d, representing 44% of the total volumes awarded from the Neuquina basin in Round 4.1. Regarding Round 4.2, the company will start supplying natural gas to the GPNK in January 2024, first with 965Mm3/d, and then as of winter 2024, it will addition 3.3MMm3/d. Pampa Energia ranked third, being awarded 4.9MMm3/d in Round 4.1 plus 2.0MMm3/d incremental production for the winter season and 4.8MMm3/d to supply the Nestor Kirchner pipeline.

In our view, there are more push factors so that the GPNK reaches COD as scheduled:

- **On a company level**, Pampa Energia and Tecpetrol were the highest bidders for the GPNK, compromising to supply 4.8MMm3/d and 2.5MMm3/d, respectively, 66% of the total as of July 2023. Interestingly, two companies linked with them are working on building the pipeline: SACDE and Techint, which formed a UTE (similar to a JV). SACDE's president and CEO is Damian Mindlin, also Pampa Energia's Director, while Techint is Tecpetrol's parent company. Therefore, incentives were set so that the infrastructure companies do not get delayed with the project; otherwise, they will negatively impact Pampa Energia and Tecpetrol 2H23 revenues.
- **From a macro and political perspective**, the government did not renew the contract with Excelerate's LNG regasification vessel at the Bahia Blanca terminal for 2023. 14 LNG cargoes arrived at Bahia Blanca terminal: 2 in May, 4 in June, 5 in July, and 3 in August. The vessel regasified on average 12.55MMm3/d in 2022, almost the same amount awarded on the Plan Gas 4.2 to fill up the GPNK. The government will be on the tightrope if the project is not completed on time; it will have to import more LNG or diesel, probably at a higher price, for short notice. With the elections, the project's failure to complete on time will be negative news that the government will try to avoid. For this reason, the government to boost natural gas production in the Austral basin and secure natural gas supply validated CGC's bid prices, paying USD9.5/MMBTU in 2023-2024 vs. USD3.5/MMBTU from the natural gas from Vaca Muerta.

Figure 8: Pampa Energia and Tecpetrol committed the highest volumes of natural gas to fill the GPNK in round 4 of the Plan Gas Ar.



Source: TPCG Research based on Boletín Oficial, Subsecretaría de Hidrocarburos

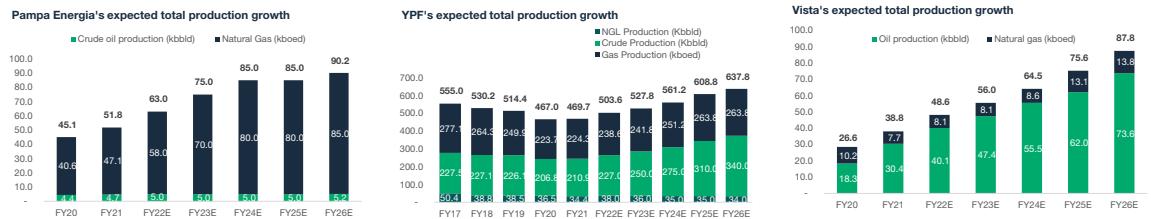
To finance the GPNK, which has an estimated cost of USD2.5Bn, the government formed a trust, the Fondo de Desarrollo Gasífero Argentino (Fondesgas). The primary sources of financing are the cash from the national

government transferred to Energia Argentina (ex IEASA), financial instruments, National Budget, and the WEM (Wholesale Electricity Market). In addition, the government received a USD540mn loan from CAF.

The sector consensus is that the GPNK will be completed on time, which will be a milestone in Argentina. The companies have already initiated the welder works to join the 36" diameter tubes.

Given that the GPNK will be completed sooner than most of the aforementioned oil projects, we expect Pampa Energia to show double digit increase in hydrocarbon production in 2023 and 2024 driven by the completion of the first and second stage of the GPNK, respectively. In contrast, YPF and Vista's oil production will increase gradually in the next year until it will ramp up considerably in 2025-2026.

Figure 9: We expect Pampa Energia to show the highest production growth in the next 2 years, while YPF and Vista, as of 2025



Source: TPCG Research estimates

It is important to consider that there are some differences between being a natural gas producer from an oil producer. The first one is clients. In the case of Pampa Energia, 45% of natural gas sales are with Cammesa, as it accounts for 50% of the Plan Gas Ar sales. Consequently, bill collections depend on the government paying on time. Cammesa payments behavior cyclically, concentrating the highest delays during the winter season. In contrast, Vista's clients are local refineries and international offtakers. YPF crude oil production goes almost entirely to its refineries. In fact, around 20% of the crude oil processed is bought to third parties. This percentage will diminish gradually over the years. However, we do not expect it to reach 0% given that it is the only indirect tool to control local prices.

Secondly, natural gas prices move in line with the Plan Gas Ar, while crude oil local prices depend mostly on YPF pricing policy. In the case of exports, natural gas prices stood at around USD8/MMBTU vs. the local at an average annual price of USD3.6/MMBTU in 2022. Currently, the Medanito export price has a USD4/bbl discount from Brent. The price differential had changed from a maximum discount of -USD13/bbl to stand at a premium of +USD1-2/bbl. The main reason behind this were changes in transportation costs and shifts in international demand from lighter to heavier blends. Natural gas export volumes continue to be relatively small although prices are materially higher. For this reason, they do not have a material impact on the companies' cash generation in hard currency. On the crude oil side, Argentina is currently self-sufficient of crude oil, thus, all the incremental production would go to exports. What makes increasing production to export so attractive is capturing the price gap between local and export prices. In view of this, we do not rule out Pampa Energia starting to develop its oil fields.

This difference is also reflected in the companies' margins. Vista shows the highest profitability levels with the Adj. EBITDA margin at 70% in 3Q22 vs. YPF's Upstream segment at 63% and Pampa Energia E&P segment at 62%. YPF's production mix increased towards crude oil in 2022, albeit natural gas remains to account for the highest share at 48%. We believe that in 2023, crude oil production will increase to 250kbbld, surpassing natural gas at 242kboed. Despite this, what drives down YPF's consolidated Adj. EBITDA margin to 29% is its downstream segment, with EBITDA margin has been at around 10%.

In the past 2 years, YPF gasoline and diesel prices in the domestic market were below 2017-2018 levels, despite the high price international environment. Due to the increase in inflation, YPF needs to get the government green light to adjust prices. In December 2022, the government stated that gasoline and diesel monthly price increases could only be of up to 4% from December to February and up to 3.8% in March. In the previous legislative election, YPF did not increase pump-prices from May until January 2022.

Although this year we have presidential elections, we believe YPF does not have room to freeze pump prices for an extended period if it wants to offset the decline in its conventional wells production. Even more if we consider that it will need to increase capex for all the new projects. This is because 41% of YPF production is shale and 20% of a shale well total production is extracted in the first year and that productivity halved in the second year.

In the case of Pampa Energia, the consolidated Adj. EBITDA margin was 49% in 3Q22. It is mainly due to the power generation business, which performance has been affected by the government increasing the Energia Base tariff below inflation. The Power Generation segment EBITDA margin came down to 53% in 3Q22 from 82% in 3Q20.

After analyzing companies and the sector key points, let's move to what we expect for next years.

YPF

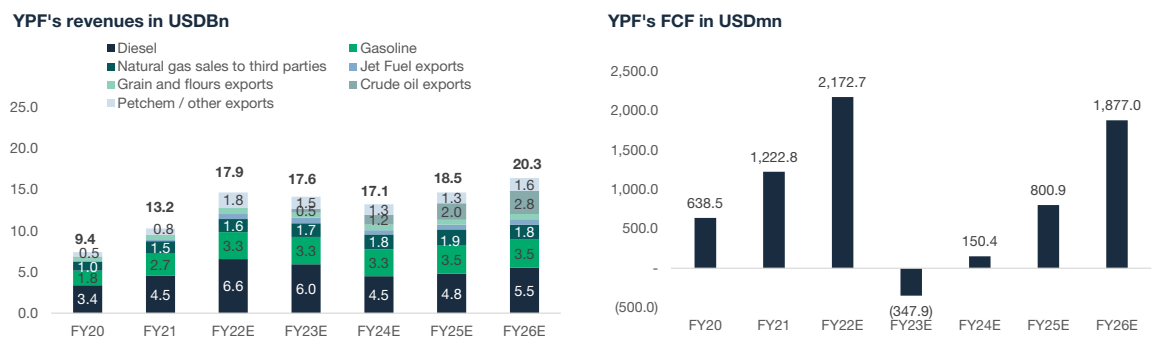
For FY23 and FY24, we expect revenues to come down to USD17.6Bn and USD17.1Bn, respectively, mainly due to lower diesel sales. In FY22, diesel sales reached an all-time high, we estimate of USD6.6Bn, up +45% yoy. We believe this was particular of 2022. Cammesa decided to provide thermal power plants with a higher share of diesel than natural gas on the back of the increase in LNG prices. As LNG prices decrease and the GPNK stages are completed, demand for diesel should decline.

Demand for diesel also depends on the agribusiness sector performance. The 2021/2022 cropping season was slightly better than the previous one, up by +0.5% yoy, thanks to higher yields despite of the area sown was lower due to the lack of humidity and high temperatures. The draught continued in October-December affecting the soybean second crop and wheat production. According to the last report from the Bolsa de Comercio de Rosario, it would be the worst harvest in the past 5 years. This not only has an impact on diesel volumes sold but also in grain and flour exports, which accounted for 36% of total exports and 5% of total revenues in 9M22. For FYE23, we expect grain and flours exports of USD594mn vs. USD812mn FY22E and USD627mn in FY21.

This is especially important for the 2026 bond Exports Collection Account. However, it will be more than enough to cover USD61.8mn in interest payments and USD238.7mn in amortizations. YPF should start exporting crude oil in May 2023 when the Trasadino pipeline reaches COD, but exports will become material for the company by 2H25.

We expect FCF to stand in negative ground in FY23E, with Capex increasing by ~35% yoy to USD5.6Bn and standing around that level in the following years. By FY24E, YPF should be increasing crude oil exports by 1.5x yoy, driven by the completion of the first stage of the Oldeval pipeline expansion. In addition, it will receive a new stream of cash from the GPNK. From our perspective, the company will fulfill its financial needs first by issuing in the local market, given that the market continues validating low coupons in dollar-linked bond issuances. As several companies already did, YPF by issuing in the local market to cancel global debt can reduce the cost of financing. In second stance, the company could turn to multilateral loans and export financing, as we mentioned before. By FY25, YPF's FCF should increase substantially to address the payment of the 2025 Old bond. In our view, the company will announce a friendly exchange offer, similar to the 2021 bond offer made in August 2020, which resulted in the issuance of the YPF DAR 8.5 23/3/2025.

Figure 10: We expect YPF's 2023 and 2024 to be transition years.



Source: TPCG Research estimates

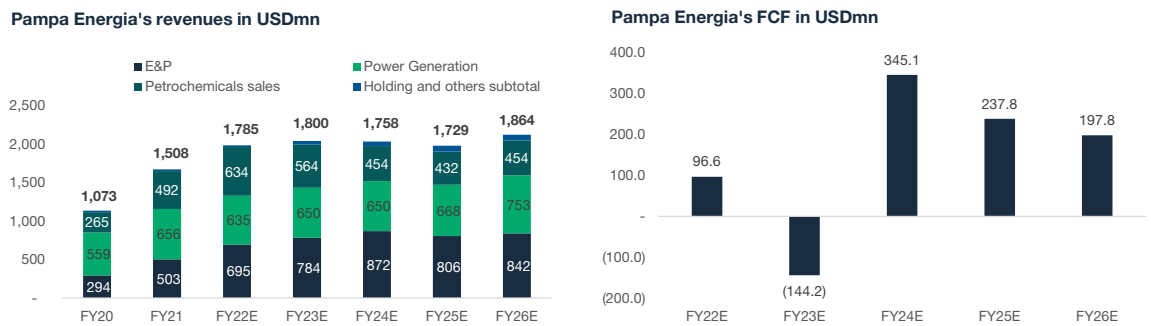
Pampa Energia

In the case of Pampa Energia, we believe that revenue growth will be limited by the decline in international crude oil prices which will impact the petrochemical business and crude oil sales and by the insufficient adjustments of Energia Base tariffs. Even so, among the companies analyzed it should show the most stable E&P revenues thanks to the committed levels under Plan Gas Ar. To compensate for the dilution of revenues under Energia Base in USD terms, the company is trying to increase its portfolio of PPAs, which are dollar-linked. The company bought Arauco II wind farm, with 100MW gross installed capacity, from the Government of La Rioja in December 2022. The electricity produced is under Renovar PPA contract. Currently, it is building

PEPE IV wind farm, which will add 81MW of capacity, with 1Q23 as its estimated COD. The electricity generated by the wind farm will be for private off-takers.

We expect Pampa Energia’s FCF to turn negative in FY23E, with Capex increasing by around 60% to USD627mn, as the company will have to increase natural gas production to comply with the committed levels for the GPNK. In addition, Pampa will have to cancel USD92.9mn of the PAMPAR 7.375 07/21/2023. Regarding the USD109mn of maturing bank loans, we believe the company will roll over them or tap the local market to cancel them. For FY24E, we expect capex to halved to USD306mn as we do not see the company entering into major investment projects. In addition, the PAMPAR 9.5 2026 will pay the first amortization of 33% (a total of USD96.6mn) on December 8th, 2024. As of FY25E, we expect capex to increase gradually, driven by shale production growth, however, by that time the GPNK should be completed.

Figure 11: Pampa Energia’s is a more defensive company vs. YPF and Vista, thanks to having most of its energy production under contract.



Source: TPCG Research estimates

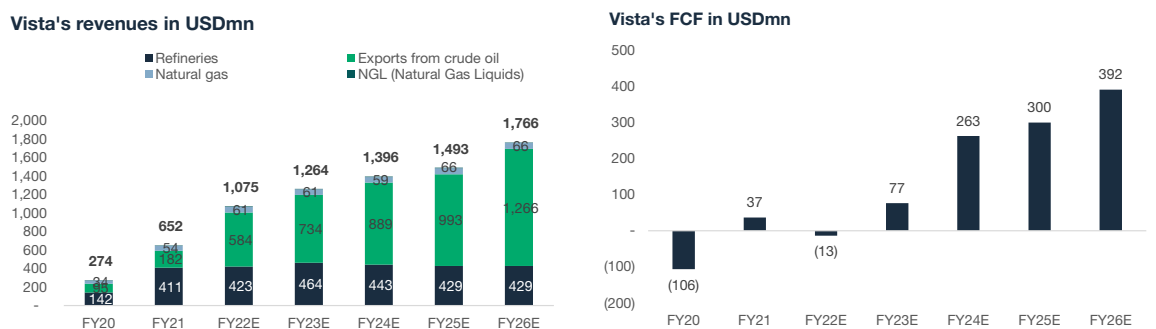
Vista

The increase in crude exports will mainly drive Vista’s revenue growth. We expect export revenues to increase from USD584mn in FY22E to USD1,266mn in FY26E, considering that the average export realized crude oil price would decrease gradually, standing 20% below 2022 levels at USD64.80 in FY26.

We expect the company’s FCF to be slightly negative in FY22E, mainly due to the increase of numbers of wells tied in. We believe Vista’s wells tied in grew from 20 in FY21 to 32 in FY22. We expect the figure of wells tied in to remain at 32 until 2024 and then to increase to 36 in 2025 and 40 in 2026 on the back of the finish of the midstream major oil projects. Consequently, we see capex gradually increasing from USD505mn in FY22E to USD520mn in FY25E and FY26E.

What differentiates Vista from YPF and Pampa Energia is that it does not have any global bond. The company has 12 local bonds outstanding, of which 4 are hard-dollar and 6 are USD-linked, totaling ~USD450mn and debt with Santander International, Banco Galicia, Itau Unibanco and ConocoPhillips Petroleum totaling ~USD100mn. This partly explains why it is the company with one of the lowest net leverage ratios at 0.5x in LTM3Q22, including leases at 0.6x, vs. YPF and Pampa Energia both at 1.2x.

Figure 12: We expect Vista’s revenues to increase by more than 40% in the next four years.



Source: TPCG Research estimates

Our analysis of the three companies shows that all are currently cheap, mainly YPF, which accounts for the lowest EV/EBITDA at 1.8x in FY22, followed by Vista at 2.5x and Pampa Energía at 2.9x.

Figure 13: YPF, Pampa Energía and Vista estimated EV/EBITDA and EPS

	FY22E	FY23E	FY24E	FY25E	FY26E
EV/EBITDA					
YPF	1.80	1.85	1.74	1.51	1.38
Pampa Energía	2.93	2.72	2.74	2.72	2.54
Vista	2.54	2.17	2.02	1.93	1.59
EPS					
YPF	5.86	6.47	5.80	5.68	6.79
Pampa Energía	7.84	8.33	7.18	7.50	8.49
Vista	3.75	2.96	2.54	1.78	2.18

Source: TPCG Research estimates

However, in our view, the market will continue to penalize YPF stock for being partly owned by the government, even more after the January global bond curve was restructured. Another important point will be the Maxus and Burford legal cases outcomes. Regarding the first case, the last information we found is that YPF's lawyers proposed paying USD130mn to resolve the case.

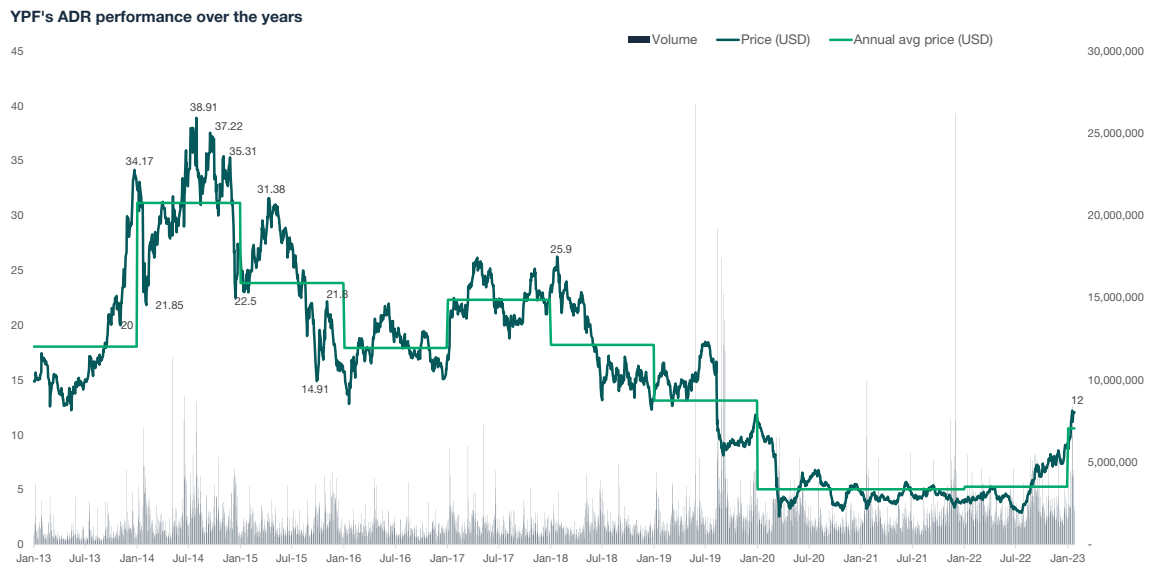
Even so, we believe the price upside potential is huge, as the stocks' performance have been weak in 2020-2H22, despite the strong results reported by the companies each quarter. We already analyzed the companies from the fundamental side. In the next section, we discuss the international environment that will help to sustain valuations.

A broader perspective

Since July 2022, YPF stocks have rallied, increasing by 2.8x from USD3.13 to around USD12 in January. Even so, the stock remains well below pre-pandemic levels. Our analyze of the stock performance since 2013 up to date show that the strongest performance was from the 2013 primary Legislative Elections (PASO) to August 2014 not the Presidential elections of 2015. In our view, it was partly due to the reverse in EM flows.

In October 2013, Sergio Massa, with the Frente Renovador party, obtained 43% of the votes in Buenos Aires province, beating Martin Isaurralde from Frente para la Victoria. The results gave optimism for a regime change, given the concerns about the Kirchners, which were ruling for the third consecutive term, radicalizing, and turning to a government similar to Venezuela. Interestingly, despite Argentina entered into selective default on June 30th, 2014, the stock continued uphill, reaching a record high of USD38.91 on July 30th, 2014. The following months, the performance was wobbly and for Nov-Dec 2014, the stock plunged. In 1H15, it recovered. On April 8, 2015, Petersen Energía Inversora, S.A.U. and Petersen Energía, S.A.U., former shareholders of YPF's Class D shares, sued the Argentine Republic and YPF in the United States District Court for the Southern District of New York. A week later, the stock peaked at USD31.38. The October 2015 presidential elections optimism last only about a month. YPF stock jumped from USD14.91 in Sept-28th, 2015 to USD21.8 in Nov-4th, 2015. However, the stock never stood again above USD30, neither when Argentina's country risk was at its lowest levels at around 350bps in December 2017.

Figure 14: YPF's stock strongest rally was in 2013-2014



Source: TPCG Research based on Bloomberg

On the fixed income perspective, YPF tapped the international market by issuing the YPFDAR 8.75 2024 on April 4th, 2014, when Argentina also had capital controls, import and export restrictions, The National Institute of Statistics and Censuses (INDEC) was intervened, with inflation accelerating and GDP dropping by -2.5% yoy. A year later, on April 22nd, 2015, it issued the YPFDAR 8.5 2025 bond. What this show is that despite the weak economic environment, YPF issued 2 bonds in the international market. However, the coupon was more than 2pp higher than other Latam issuers like Pemex, Cemex, BRF, Intercement, among others of that time. Even so, being already in the corporate debt market helped YPF to lower its cost of debt in 2017 when Argentina after years of not being on the radar, was positioned as the third largest bond issuer in Latin America, after Mexico and Brazil. Although we see unlikely YPF tapping international markets this year, not only because global interest rates remain high but also because the company counts on access to cheaper sources of financing like the local market and, ultimately, multilateral loans, this is important to consider.

A comparative analysis between YPF stocks and bonds, shows that the bonds performance was more stable than equity during 2016-2017, while they moved almost in tandem between 2018-2020. After the pandemic, the stock and bonds performance decoupled, with the stock being relative flattish at around USD5. However, this has reversed since 1H22 with the sustained increase of stocks.

Figure 15: YPF's stocks lagged that of bonds in 2020-1H22, but it has been reversing



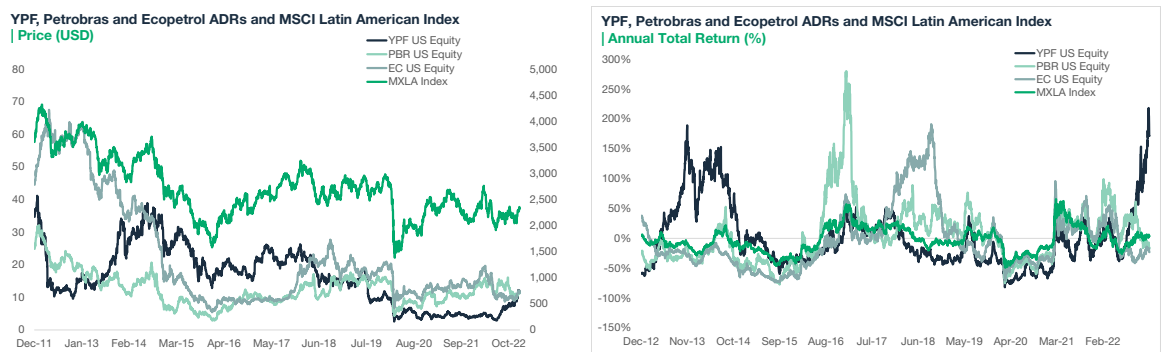
Source: TPCG Research based on Bloomberg

From our perspective, this time is different from 2015. First, the market consensus is that the Fed will be more dovish in the upcoming years. Second, our sense is that there are still several EM and distress funds with a high percentage of liquidity. These two points lead us to think that it will come more benign global financing conditions that will boost prices. That said, we do not rule out strong market swings in 2023, but by 2024, we should see the tide that lifts all boats. In this context, Argentina being reclassified from the Standalone status to the Emerging Market status by the MSCI increases becomes more plausible. It is important to consider

that Argentina was reclassified from a Frontier Market status to Emerging Market status in June 2018, in the middle of the strengthening of the U.S. dollar and the U.S. and China trade war that negatively impacted EM flows. If this happened, YPF ADR would be one of the most benefited companies, as it is already one of the MSCI Argentina Index constituents.

On a Latin America perspective, YPF is one of the few national oil companies (NOCs) with ADR in NYSE, with Petrobras and Ecopetrol. YPF outperformed Petrobras and Ecopetrol from 2Q13 to 1Q16, as well as the MSCI Latin American Index. During that period, YPF average equity price was USD24.48, implying a price differential of USD13.60 with Petrobras, while trading USD2.50 inside Ecopetrol. From 2Q16 to 2Q18, YPF performance was weaker. However, the price differential with Petrobras shrank to USD11.25 while it turned positive to USD10.42 with Ecopetrol. After the pandemic, YPF lagged Petrobras and Ecopetrol stocks, as well as the MSCI Latin American Index, that took off. As of 3Q22, this started to reverse. As we go to print, YPF price differential with Petrobras and Ecopetrol is around USD0.25. In our view, there is still room for YPF stock price to continue rallying, and thus, the price differential with the companies to widen.

Figure 16: YPF is one of the few NOCs with ADR in NYSE and included in the MSCI

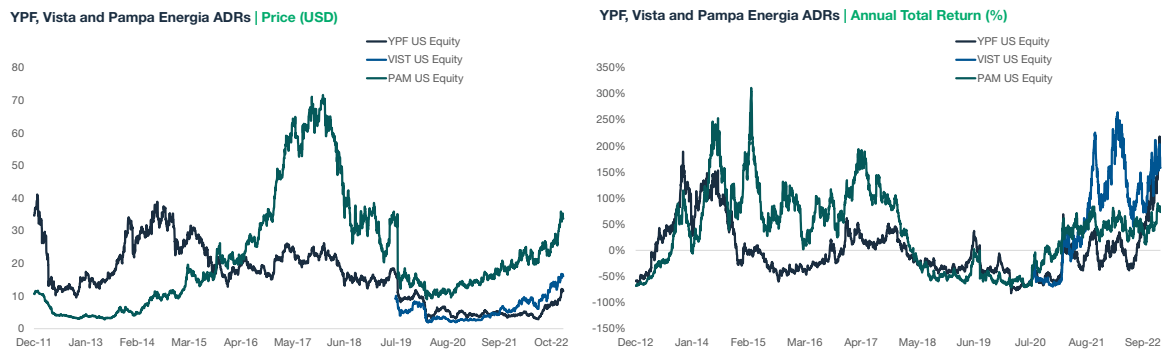


Source: TPCG Research based on Bloomberg; MSCI Inc

Comparing YPF with its local peers, the company underperformed Pampa Energia for the majority of the period analyzed. However, since 2021, Vista has not only outperformed YPF but also Pampa Energia. In our view, one of the reasons behind that is that Vista is only focused on the Upstream business, mainly on crude oil production, which export in a higher percentage than the other ones. In contrast, YPF and Pampa Energia are integrated energy companies with regulated businesses.

Pampa Energia's 2016-2017 stock and bonds rally was supported by the power generation business growth (led by combined-cycle thermal plants and wind farm projects) and the regularization of Edenor's accounts. This matters because the government focus has shifted toward the O&G sector, and we believe incentives will continue in that direction, considering the positive impact on the fiscal accounts and Central Bank reserves. In the upcoming years, Pampa Energia's revenue growth will be mainly driven by natural gas production. The power generation business performance will mainly depend on the government increasing Energia Base tariff. Revenue growth from PPAs will be limited, as the lack of investment in the electricity transmission system is the main obstacle to the surge of new projects that increase capacity generation.

Figure 17: VIST outperformed PAM and YPF since 2H22-to date



Source: TPCG Research based on Bloomberg

Strategy

With this report, we initiate coverage of equity, starting for YPF (YPF), Pampa Energia (PAM), and Vista Energy (VIST) at Overweight. We believe that due to the increasing expectations on a regime change this year, multi asset portfolio managers should shift the attention from fixed income to equity due to its higher upside potential.

We derived our 12-month YPF, PAM, and VIST share price target of USD28.70, USD45.30 and USD35, respectively, by using a DCF model. We used a discount factor of 13.3% in YPF, of 14% in Pampa Energia and 17% in Vista. Pampa Energia discount factor is higher than YPF for accounting for a lower percentage of debt. In the case of Vista, we used an even higher discount ratio not only because the company has a low percentage of debt, but also because it has never issued a global bond. In addition, the company is smaller and has a shorter track record than YPF and Pampa Energia, which have faced different macroeconomic and political scenarios.

As we go to print (Feb-14, 2023), YPF, PAM and VIST price are at USD11.82, USD33.92 and USD18.23, implying a potential upside of +143%, +34% and +92%, respectively. We recommend buying a mix of the three companies.

On the fundamental side, we believe the companies show healthy balance sheets and although we expect YPF and Pampa Energia to show negative FCF in 2023, the companies will start reaping the rewards as of 2024. In fact, we believe the management have shown to be conservative in the past three years. They mainly focused on increasing FCF and lower the companies' leverage ratios which translated in more robust results consecutively. In 9M22, the three companies showed EBITDA growth, positive FCF and adequate liquidity and indebtedness levels.

YPF net leverage decreased from 4.9x in FY20 to 1.2x in LTM3Q22. During 2020-2022, Pampa Energia showed the strongest liquidity levels and one of the lowest net leverage ratios vs peers. In 2020, Pampa Energia net leverage was 1.2x while power generators avg was at 3.2x and O&G producers at 3.1x. In LTM3Q22, Pampa Energia's cash + ST investments covered ST debt by 2.4x and its net leverage was 1.3x. Vista showed the lowest net leverage at 0.5x in LTM3Q22, down from 3.5x in FY20.

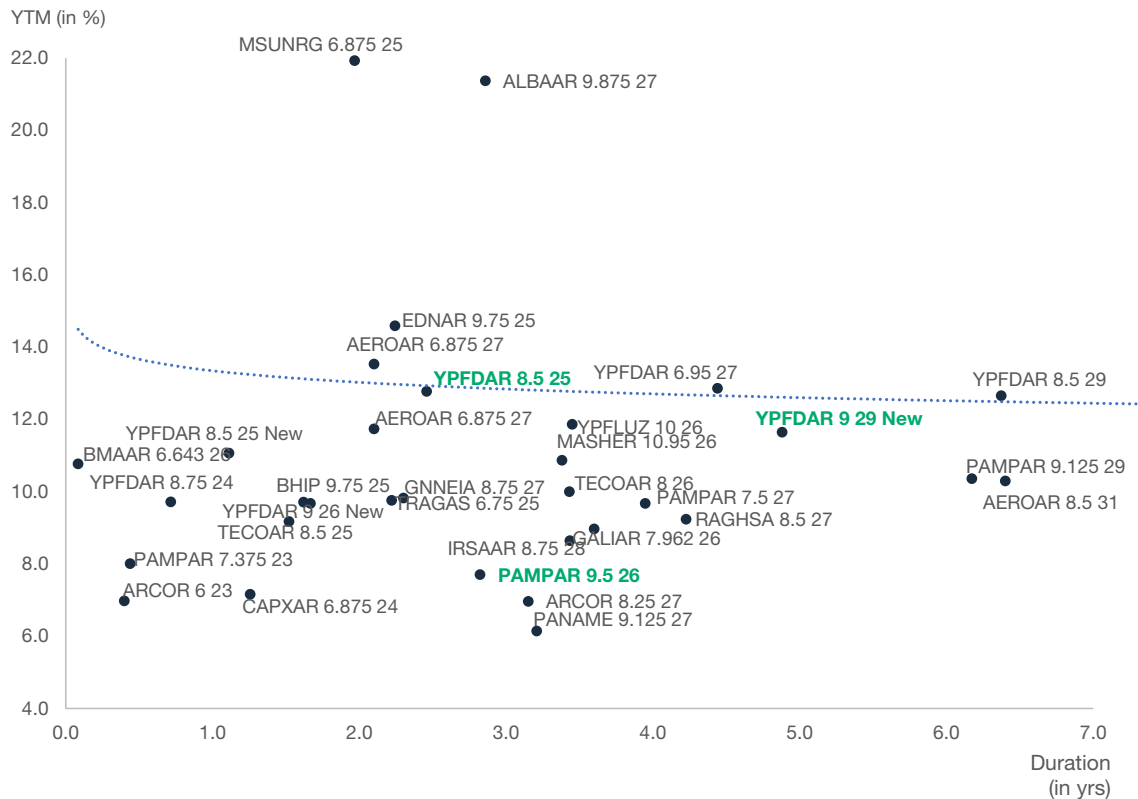
From a market perspective, what makes YPF attractive is that it is one of the most liquid stocks and the most famous Argentine company internationally, which leads us to believe that it will be the first company that investors will look at. Therefore, most inflows will go to it. And as we said before, the fact that it is already included in the MSCI Argentina Index is also a point in favor. On the downside, YPF's performance should be more volatile than VISTA and Pampa Energia as it should be more influenced by political risk and uncertainty on the advancement of the legal claims. Pampa Energia and Vista stocks should help to soften this. Pampa Energia and Vista are also good complements. Vista is a small and relatively new company with a higher growth perspective and with a higher % of revenues in hard currency but is more dependable on the crude oil international prices. Pampa Energia will have a more stable revenue over the years and with a longer track record in the market. In addition, Pampa is in the MSCI Argentina Index too.

On the fixed income side, among YPF's bonds we find attractive the 2025s Old, 2026s Secured, 2029s New, and 2033s. We believe the 2025 Old will become a gem in 2024 and the most resilient bond among YPF's together with the 2026 to price movements, as we noticed with the 2024 bond in 1Q22. What makes YPF bonds more attractive than Pampa Energia's is that its bonds have a higher amount outstanding. Only 2 out of YPF's 9 global bonds, the 25s New and 29s Old, have an amount outstanding of between USD300-400, the rest is above USD500mn. In contrast, only the PAMPAR 7.5 27s has an amount outstanding above USD500mn, of USD636mn. The 23s, 26s and 29s amount outstanding is below USD300mn. Even so, we believe the PAMPAR 9.5 26s is the most attractive due to its amortizations and high coupon.

In contrast, we believe that PANAME 9.125 27s and CAPXAR 6.875 24s are rich. Pan American Energy global bond look expensive vs. PETBRA and PEMEX short-dated bonds, while Capex SA global bond look expensive vs. TRAGAS 25s.

Figure 18: YPFDAR 25 Old, 29 New, 33s and PAMPAR 26s our top picks

Selected group of Argentine Corporate Global bonds.



Source: TPCG Research based on Bloomberg

ESG

Green, Social, Sustainability and Sustainability-linked bonds are gaining ground. On the Latin American corporate space, banks have been the most active internationally, like the CAF Development Bank of Latin America. With financing being directed to this kind of projects, companies started to publish the Sustainability report and set targets to reduce GHG (greenhouse gas) emissions. This should help them to get access to cheaper and wider sources of financing. In January 2021, a year later of the global bond curve restructuring, YPF received a USD300mn cross border A/B loan from CAF. The company needed to secure the payment of USD260mn of the 2024 bond first amortization. However, it was required that part of the loan was allocated into sustainability projects.

Among the companies recommended, Vista shows the most ambitious plan to reduce its carbon footprint. Vista Energy set a goal to reduce GHG emissions intensity by 63% from 24kgCO2e/boe in 2021 to 9kgCO2e/boe in 2026. To do that, Vista plans to complement this emissions reduction with the development of a portfolio of nature-based solutions in Argentina. The company's ambition is to become net zero in scope 1 and 2 emissions by 2026.

We noticed that Vista's reported that GHG emissions intensity is lower in shale production than in conventional. In 2021, conventional Scope 1 and 2 GHG emissions intensity was 36kgCO2e/boe while shale was 13kgCO2e/boe. This led us to think that YPF and Pampa Energia, which are also focusing on shale production, will also reduce GHG emissions in the Upstream segment. YPF's Upstream Unconventionals GHG emissions intensity was down by 16% to 21kgCO2 e/boe from 2017. By 2026, the company expects it to be at 17kgCO2 e/boe.

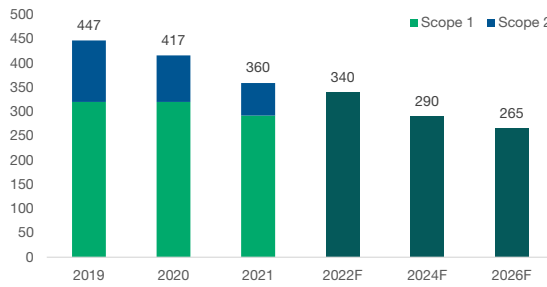
Unlike YPF, in which the Upstream business is the main GHG emissions generator, in the case of Pampa Energia is the Power Generation, accounting for 86% of total Scope 1 emissions. In 2021, thermal plants were supplied with a higher share of diesel and fuel oil than natural gas by Cammesa. As a result, Pampa Energia Scope 1 and 2 GHG emissions intensity increased from 23.5kgCO2e/boe in 2019 to 28.6kgCO2e/boe in 2021.

In our view, this should change with the completion of the GPNK, and the increase of natural gas supply to the system.

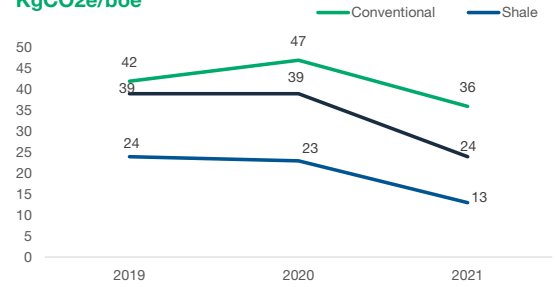
So far, no O&G Argentina company have issued any bond linked to ESG principles. Among the companies analyzed, only Pampa Energia issued a green bond but to finance the wind park PEPE III. In January 2021, it issued a ARS3,107mn (~USD30mn) Badlar +2% bond in the local market.

Figure 19: Vista set a goal to reduce GHG emissions intensity to 9kgCO2e/boe in 2026.

Vista's GHG Emissions | MTonCO2 e



Vista's Scope 1 and 2 GHG emissions intensity | KgCO2e/boe



Source: TPCG Research based on companies' reports. Scope 1 emissions include all direct emissions from owned or controlled sources. Scope 2 includes all indirect emissions derived from the generation of purchase of electricity, steam, heat, and cooling consumed by the reporting company.

TPCG Analysts & Staff

Research

Juan Manuel Pazos	Chief Economist	jmpazos@tpcgco.com	+54 11 4898-6606
Paula La Greca	Corporate Research Analyst	plagreca@tpcgco.com	+54 11 4898-6638
Federico Martin	Strategist	famartin@tpcgco.com	+54 11 4898-6633
Santiago Resico	LATAM Strategist	sresico@tpcgco.com	+54 11 4898-6615

Sales & Trading

Juan Manuel Truppia	Head of Sales & Trading	jmtruppia@tpcgco.com	+54 11 4898-6659
Juan Martin Longhi	S&T Director	jlonghi@tpcgco.com	+54 11 4898-6656
Lucia Rodriguez Pardina	S&T Director	lrodriguezpardina@tpcgco.com	+54 11 4898-6614
Agustina Guadalupe	Sales	aguadalupe@tpcgco.com	+54 11 4898-6682
Maria Pilar Hurtado	Sales	mhurtado@tpcgco.com	+54 11 4898-6616
Juan Ignacio Vergara	Sales	jivergara@tpcgco.com	+54 11 4898-1936
Santiago Baibiene	Sales	sbaibiene@tpcgco.com	+54 11 4898-6648
Pedro Nollmann	Sales	pnollmann@tpcgco.com	+54 11 4898-6617
María Ruiz de Castroviejo Salas	Sales	mruiздеcastroviejo@tpcgco.com	+54 11 4898-6643
Victoria Faynbloch	Desk Analyst	vfaynbloch@tpcgco.com	+54 11 4898-6635
Felipe Freire	Trader	ffreire@tpcgco.com	+54 11 4898-1921
Homero Fernandez Bianco	Trader	hfbianco@tpcgco.com	+54 11 4898-6667
Andres Robertson	Trader	arobertson@tpcgco.com	+54 11 4898-6693

Corporate Banking

José Ramos	Head of Corporate Banking	jramos@tpcgco.com	+54 11 4898-6645
Camila Martinez	Corporate Sales	cmartinez@tpcgco.com	+54 11 4898-6621
Fernando Depierre	Corporate Sales	fdepierre@tpcgco.com	+54 11 4898-6636
Sol Silvestrini	Corporate Sales	ssilvestrini@tpcgco.com	+54 11 4898-6641
Nicolas Iglesias	Corporate Sales	niglesias@tpcgco.com	+54 11 4898-6612

Capital Markets

Fernando Lanus	Head of Capital Markets	flanus@tpcgco.com	+54 11 4898-6632
Nicolás Alperín	Investment Banking Analyst	nalperin@tpcgco.com	+54 11 4898-6604

Asset Management

Ileana Aiello	Portfolio Manager	iaiello@tpcgco.com	+54 11 4898-6611
Claudio Achaerandio	Portfolio Manager	catchaerandio@tpcgco.com	+54 11 4898-6618

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