Latin America | Energy

LatAm Octant #6: Chasing Namibia's look-a-like exploration plays in LatAm

Recent large oil finds in Namibia have increased industry appetite to chase similar geological play types in the under-explored offshore basins of Argentina, Uruguay & Brazil. YPF's upcoming Argerich well (in partnership with EQNR & SHEL) in Argentina's deepwater Colorado basin offers a key test of the South Atlantic conjugate margins. Whilst Argerich is undoubtedly a high risk well, its sheer prospective size and follow-on potential could transform YPF.

Namibian oil finds drive renewed interest in South Atlantic Conjugate Margin exploration: The story of oil & gas exploration in the South Atlantic conjugate margins has seen ups and downs over the past 15 years but has been recently reinvigorated by the string of large oil & gas discoveries in Namibia's Orange basin. The Orange basin formed in the Late Jurassic/Early Cretaceous period, as South America and Africa started to rift apart, and studies show that it shares geological similarities with South America's under-explored Colorado (northern Argentina), Punta del Este (Uruguay) and Pelotas (southern Brazil) offshore basins. This has driven a strong push from Global Majors, particularly Shell, in the region through a combination of active participation in licensing rounds (eg, Brazil's Pelotas basin) and farm ins (eg, Uruguay).

All eyes on Argentina's Argerich deepwater well: Whilst the market appears focused on YPF's immediate future (in our view, rightly so given Argentina's volatility), it seems to have paid little attention to its potentially transformational offshore exploration push medium term. YPF, in partnership with Equinor (35%, operator) and Shell (30%), is due to imminently start drilling the high impact Argerich well in the CAN-100 block in Argentina's Colorado basin. Argerich is the first deepwater well to be drilled in the country and targets a four-way closure Turonian-age structure, similar to recent Namibian finds. YPF will be carried by its partners in this well and indicates 1.7bn boe of unrisked prospective resources with an upside case of c7.5bn boe with c20% chance of success. The well should take some 60 days to drill and the partners do not plan to flow test it at this stage, in the event of a discovery. A success case at Argerich could significantly de-risk the acreage in the basin and the partners have already identified a number of follow-on prospects such as the Najdorf prospect located next to the Argerich prospect.

Work on Uruguay and southern Brazil basins is moving ahead too: Whatever the result of the Argerich well in Argentina, it should have limited direct read-across to the nearby offshore Pelotas & Punta del Este basins in Brazil and Uruguay but should help operators calibrate their geological models in them. Work in these two basins is moving ahead, with developments in Uruguay being more advanced than in southern Brazil (the blocks in Brazil were only awarded in late 2023). Indeed, operators in Uruguay have already identified several prospects and initial indications point to potential drilling in 2026/27.

Raising YPF PT to US\$23.5 (from US\$20.5). Reflecting improving crude oil price realisations in Argentina and a reduction in LT liabilities coming from its mature fields disposal plan, we raise our Price Target on YPF to US\$23.5 from US\$20.5. We retain our Hold rating on YPF and see more compelling stories in Argentina's energy space, namely Vista Energy (Buy) and Pampa (Buy).

Equity Research April 23, 2024

KEY STOCKS FEATURED INCLUDE:								
TICKER	RATING	PRICE TARGET						
YPF	HOLD	\$23.50						
KEY CHAN	NGES INCLUDE	:						
TICKER	RATING	PRICE TARGET						
YPF	HOLD	 \$23.50 (\$20.50) 						

Exhibit 1 - LatAm - National oil companies share px in USD terms (indexed)



Source: FactSet

Exhibit 2 - South Atlantic Margin - Licensed exploration blocks

Par	Country	Basin	Block
YPF (35%); Equinor (35%, op); Shell (Argentina	Colorado	CAN-100
YPF (50%); Equinor (50%	Argentina	Colorado	CAN-114
YPF (50%, op); Equinor (Argentina	Colorado	CAN-102
Shell (60%); QP (Argentina	Colorado	CAN-107
TotalEnergies (50%, op); BP (Argentina	Colorado	CAN-111
Equinor (1	Argentina	Colorado	CAN-108
TotalEnergies (50%, op); BP (Argentina	Colorado	CAN-113
Shell (60%); QP (Argentina	Colorado	CAN-109
Chevron (60%); CEG (Uruguay	Punta del Este	OFF-1
Shell (1	Uruguay	Punta del Este	OFF-2
CEG (1	Uruguay	Punta del Este	OFF-3
APA (50% op); Shell (Uruguay	Punta del Este	OFF-4
YPF (1	Uruguay	Punta del Este	OFF-5
APA (1	Uruguay	Punta del Este	OFF-6
Shell (1	Uruguay	Punta del Este	OFF-7
Petrobras (50%, op), Shell (30%); CNOCC (Brazil	Pelotas	26 Blocks
Petrobras (70%, op), Shell (Brazil	Pelotas	3 blocks
Chevron (1	Brazil	Pelotas	11 blocks

Source: Company data; ANP; ANCAP; Secretaria de Energia Argentina; Jefferies

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Please see analyst certifications, important disclosure information, and information regarding the status of non-US analysts on pages 10 - 16 of this report. * Jefferies GmbH + Jefferies International Limited

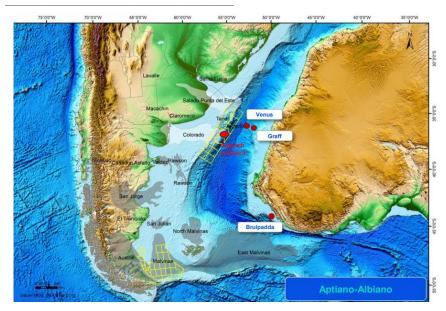
Summary of Changes

			Adj EPS Estimates				P/E
Company	Rating	Price [^]	Price Target	2023	2024	2025	2023 2024 2025
YPF	HOLD	\$20.79	\$23.50	\$3.65	\$8.50	\$9.23	5.7x 2.4x 2.3x
YPF			↑ +15%		↑ +9 %	<1%	
Previous			\$20.50	\$3.65	\$7.78	\$9.20	

^Prior trading day's closing price unless otherwise noted.

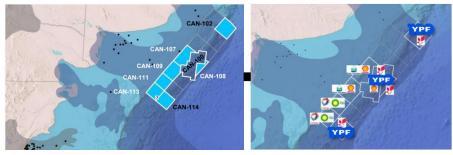
Chasing Namibia's look-a-like exploration plays in LatAm

Exhibit 3 - South Atlantic Margins - Tectonic Plates Reconstruction



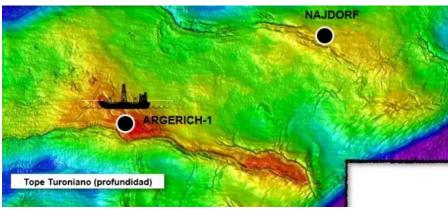
Source: YPF

Exhibit 5 - Argentina - Colorado basin licensed blocks by company



Source: YPF

Exhibit 6 - YPF's Argerich & Najdorf offshore prospects in 3D seismic



Source: YPF

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Exhibit 4 - South Atlantic Margin - Licensed exploration blocks

Block	Basin	Country	Partners
CAN-100	Colorado	Argentina	YPF (35%); Equinor (35%, op); Shell (30%)
CAN-114	Colorado	Argentina	YPF (50%); Equinor (50%, op)
CAN-102	Colorado	Argentina	YPF (50%, op); Equinor (50%)
CAN-107	Colorado	Argentina	Shell (60%); QP (40%)
CAN-111	Colorado	Argentina	TotalEnergies (50%, op); BP (50%)
CAN-108	Colorado	Argentina	Equinor (100%)
CAN-113	Colorado	Argentina	TotalEnergies (50%, op); BP (50%)
CAN-109	Colorado	Argentina	Shell (60%); QP (40%)
OFF-1	Punta del Este	Uruguay	Chevron (60%); CEG (40%)
OFF-2	Punta del Este	Uruguay	Shell (100%)
OFF-3	Punta del Este	Uruguay	CEG (100%)
OFF-4	Punta del Este	Uruguay	APA (50% op); Shell (50%)
OFF-5	Punta del Este	Uruguay	YPF (100%)
OFF-6	Punta del Este	Uruguay	APA (100%)
OFF-7	Punta del Este	Uruguay	Shell (100%)
26 Blocks	Pelotas	Brazil	Petrobras (50%, op), Shell (30%); CNOCC (20%)
3 blocks	Pelotas	Brazil	Petrobras (70%, op), Shell (30%)
11 blocks	Pelotas	Brazil	Chevron (100%)

Source: Company data; ANP; ANCAP; Secretaria de Energia Argentina; Jefferies

CAN-100 block exploration - 20 years in the making

The history of the CAN-100 block can be traced back to 2004 when the Argentine government created its state-owned company Enarsa (at that point YPF was still partially owned by Repsol) and awarded it all offshore exploration acreage in the country. One of the key blocks awarded at that time was the so called Enarsa-1/E-1 block (the predecessor of the CAN-100 block) in the Colorado Marina basin. In 2006, YPF, Petrobras Argentina and PetroUruguay acquired 35%, 25% and 5% working interests, respectively, and offered a carried interest to Enarsa. Whilst there was some activity in the block (eg, 2D/3D seismic), no drilling took place in it – one of the reasons was that YPF and Repsol preferred to drill their first offshore well in the country (the Malvinas X1 well) in the southern basins and this came out dry at a cost of some US\$150m in 2011.

With the subsequent reform of the Hydrocarbons Law, the nationalization of YPF in 2012, the exit of partners (Petrobras Argentina and PetroUruguay) and the withdrawal of Enarsa from upstream activities, YPF took over the E-1 block (and released the other Enarsa offshore blocks) in 2018. In April-19 the E-1 block was renamed as CAN-100 and in August 2019 YPF sold a 50% stake in it to Equinor for an undisclosed amount with Equinor becoming the operator of the block.

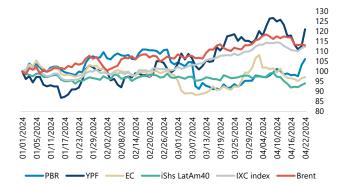
In January 2021, Equinor and YPF jointly farmed out a 30% stake in the block to Shell. This brought Equinor's and YPF's working interest in CAN-100 to 35% each with Equinor retaining operatorship.

YPF and its partners have identified several prospects and leads in the CAN-100 block with the so called Argerich and Najdorf deepwater prospects looking to be the most attractive. According to YPF's data, the Argerich prospect in located roughly in the centre of the block and is a 4-way closure Turonian-age structure. The well is to be drilled some 300 kms offshore Argentina, in water depths of approximately 1,500 meters, to an expected total depth of around 4,000 meters. The plan is to drill the Argerich prospect in 2Q24 with the Valaris DS17 drillship, which has just arrived to the country.

Preliminary indications by YPF call for a potential development of the Argerich prospect (in a success case) through an FPSO with crude oil processing capacity of 200,000 bbl/d and natural gas being re-injected.

LatAm Large Cap Oils - Valuation & Performance

Exhibit 7 - LatAm - National oil companies share px in USD terms (indexed)



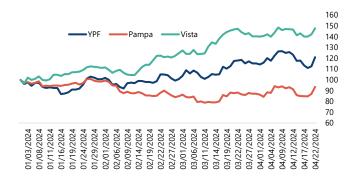


Exhibit 8 - Vista Energy, YPF and Pampa share prices - indexed (US\$ terms)

Source: Factset

Source: FactSet

Exhibit 9 - LatAm NOCs - Valuation

	Share px	Market Cap	Net debt	EV (US\$		EV/D	ACF			P/	Έ			Dividen	d yield		P/Book	Net Debt /
		(US\$ mn)	(US\$ mn)	mn)														EBITDA
					2022	2023	2024E	2025E	2022	2023	2024E	2025E	2022	2023	2024E	2025E	2023	2023
Petrobras (ADR)	USD 16.9	107,184	39,854	147,038	2.7x	3.4x	3.1x	3.3x	3.2x	3.4x	3.4x	4.0x	38.2%	14.5%	18.8%	13.6%	1.2x	0.7x
YPF (ADR)	USD 20.8	8,176	7,392	14,290	2.5x	2.6x	2.9x	2.7x	2.1x	5.7x	2.4x	2.3x	0.0%	0.0%	0.0%	0.0%	0.9x	1.8x
Ecopetrol (ADR)	USD 11.6	23,786	25,056	54,533	6.8x	11.5x	5.1x	5.1x	2.8x	5.0x	5.4x	5.5x	21.3%	14.6%	11.9%	11.8%	1.4x	1.8x
LatAm NOCs median					2.7x	3.4x	3.1x	3.3x	2.8x	5.0x	3.4x	4.0x	21.3%	14.5%	11.9%	11.8%	1.2x	1.8x
European Majors median*					3.9x	4.7x	5.0x	5.1x	5.9x	8.3x	8.6x	8.9x	3.7%	4.4%	4.5%	4.7%	1.5x	0.7x
US Majors median**					5.8x	8.1x	6.5x	5.6x	8.6x	12.5x	11.7x	10.4x	3.2%	3.4%	3.6%	3.7%	2.1x	0.3x
EU Integrateds median**					3.1x	3.7x	5.1x	5.1x	3.8x	5.9x	8.0x	7.5x	3.6%	4.1%	4.5%	4.9%	0.9x	0.6x
Global big oil median					3.9x	4.7x	5.1x	5.1x	5.9x	8.3x	8.6x	8.9x	3.6%	4.1%	4.5%	4.7%	1.5x	0.6x

Source: Factset and Jefferies estimates. *Shell, BP, TTE; ** XOM, CVX; ***Galp, Eni, OMV, EQNR, REP

YPF - Financials

Exhibit 10 - YPF - summary P&L (USD mn)

YPF - summary P&L (USD mn)	2018	2019	2020	2021	2022	2023	2024E	2025E	2026E	2027E
Brent oil price (US\$/bbl)	71.6	63.7	41.7	70.9	101.4	82.0	81.1	75.0	70.0	70.0
Oil & Gas prod (kboe/d)	530	514	467	469	503	514	545	577	611	646
Upstream EBITDA	3,498	2,411	1,249	2,636	3,067	2,807	4,124	4,520	4,622	4,957
Refining (RTM) EBITDA	789	1,238	586	1,104	1,415	1,130	1,735	1,701	1,705	1,710
Other EBITDA/Corp	123	(43)	(381)	100	466	120	(208)	(128)	(128)	(128)
Adj Group EBITDA	4,410	3,607	1,454	3,839	4,947	4,057	5,652	6,093	6,199	6,539
% increase	8.8%	-18.2%	-59.7%	164.0%	28.9%	-18.0%	39.3%	7.8%	1.7%	5.5%
Depreciation	(3,324)	(3,270)	(2,760)	(3,070)	(2,819)	(3,255)	(3,262)	(3,517)	(3,744)	(3,907)
EBIT	1,086	337	(1,306)	769	2,128	802	2,389	2,576	2,454	2,632
% increase	-0.20%	-6.50%	11.20%	10.20%	14.90%	14.60%	114.60%	114.60%	114.60%	114.60%
Net Financial expenses	1,588	175	(167)	(232)	187	897	(311)	(305)	(291)	(262)
Equity consolidation	111	154	168	278	446	94	176	176	176	176
EBT	2,785	666	(1,306)	814	2,761	1,793	2,255	2,447	2,340	2,546
Tax	(2,112)	(693)	(188)	(699)	(822)	(1,020)	(564)	(612)	(585)	(636)
Minorities/Other	(10)	12	(16)	(10)	6	(55)	(20)	(20)	(20)	(20)
Attributable net profit	664	1,395	(1,510)	105	1,945	718	1,671	1,815	1,735	1,889

Source: Company data; Jefferies estimates

Exhibit 11 - YPF - summary C/F (USD mn)

YPF - summary CF (USD mn)	2018	2019	2020	2021	2022	2023	2024E	2025E	2026E	2027E
EBITDA	4,410	3,607	1,454	3,839	4,947	4,057	5,652	6,093	6,199	6,539
Tax paid / other	(619)	1,531	1,950	860	(226)	1,588	(705)	(764)	(729)	(739)
CFFO pre-WCR	3,791	5,137	3,404	4,699	4,721	5,645	4,946	5,329	5,469	5,800
Working capital change	665	(681)	(430)	(490)	982	(109)	-	-	-	-
CFFO	4,456	4,457	2,974	4,209	5,703	5,536	4,946	5,329	5,469	5,800
Capex	(3,143)	(3,371)	(1,678)	(2,452)	(4,086)	(5,640)	(4,901)	(5,034)	(5,068)	(4,722)
Acquisitions/Disposals	(14)	(102)	215	46	6	(4)	-	-	-	-
FCF	1,298	984	1,510	1,803	1,622	(108)	46	295	401	1,078
Dividends paid	(32)	(46)	-	-	-	-	-	-	-	-
Other	(226)	(955)	(1,226)	(1,151)	(1,169)	(644)	-	-	-	-
Increase/Decrease in cash	1,040	(17)	284	652	453	(752)	46	295	401	1,078

Source: Company data; Jefferies estimates Exhibit 12 - YPF - summary B/S (USD mn)

YPF - summary BS (USD mn)	2018	2019	2020	2021	2022	2023	2024E	2025E	2026E	2027E
PPE	18,593	17,879	16,413	16,003	17,323	19,737	21,442	23,022	24,400	25,248
Other assets	2,727	4,008	3,341	3,872	4,140	3,650	3,650	3,650	3,650	3,650
Inventories/ Receivables	3,350	3,321	2,478	2,805	3,242	2,656	2,742	2,724	2,696	2,850
Cash & equivalents	1,224	1,106	650	611	773	1,123	10,098	10,393	10,794	11,872
Total assets	25,894	26,314	22,882	23,290	25,478	27,166	37,933	39,789	41,540	43,619
Equity	9,637	9,167	8,131	8,265	10,552	9,051	10,722	12,537	14,272	16,161
Long-term financial debt	7,188	7,019	6,277	6,534	5,948	6,682	6,682	6,682	6,682	6,682
Short-term financial debt	1,724	1,791	1,793	845	1,140	1,508	10,438	10,438	10,438	10,438
Lease liabilities	-	676	288	276	272	325	325	325	325	325
Other Liabilities	7,346	7,661	6,393	7,371	7,566	9,600	9,766	9,807	9,823	10,013
Total liabs + Eq	25,894	26,314	22,882	23,290	25,478	27,166	37,933	39,789	41,540	43,619

Source: Company data; Jefferies estimates

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The Long View: YPF

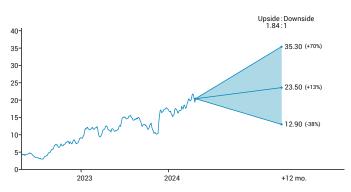
Investment Thesis / Where We Differ

• We see YPF as one of the most levered names in our coverage to Argentina's macro situation due to its limited FCF, relatively high financial gearing, sizable debt maturities over the next 2-3 years and downstream exposure

• YPF's extensive shale portfolio in Argentina's Vaca Muerta basin offers significant growth opportunities. However, to achieve this growth, YPF requires material investments over the next few years which should limit its FCF generation

• YPF is Argentina's largest refiner & fuel retailer and its ability (or not) to pass through cost increases/inflation to consumers is key to YPF's cash flow generation





Base Case, \$23.50, +13%

- Gradual development of Vaca Muerta shale oil assets; limited low-carbon capex
- YPF exports 20-30% of its upstream production by 2030; no LNG exports
- YPF's local fuel prices increase in line with Argentine inflation, with a lag
- Our model and PT are based on long-term Brent oil price of USD70/bbl
- Limited access to external financing; FCF neutral/slightly negative to 2030

Upside Scenario, \$35.30, +70%

- Acceleration of production growth through 2030
 VDC's demonstration fund prices outproce Acception's
- YPF's domestic fuel prices outpace Argentina's
- inflation
- Long-term Brent oil price of USD80/bbl
- Improved macro conditions in Argentina improve YPF's access to external financing
- Gradual investments in low-carbon activities and lithium
- Group capex reaches US\$6-7bn pa and FCF turns positive from 2025

Downside Scenario, \$12.90, -38%

- Upstream production grows at 2-4% CAGR through 2030 due to limited investments
- Argentina's macro conditions deteriorate and domestic fuel price increases are materially below inflation in the country
- Limited access to external financing keeps group capex at US\$3-5bn pa through 2030
- Assumed long-term Brent oil price of USD50/bbl

Sustainability Matters

Top Material Issues: Transforming the company's business model for a lower-carbon world while keeping acceptable returns. This includes:

- 1. **GHG Emissions:** Addresses Scope 1 & 2 (direct) emissions associated with company's operations
- 2. Water & Wastewater Mgmt: Addresses company's water use and disposal and its potential impact on the watershed
- Ecological Impacts: Addresses issues relating to ecosystem impacts directly or indirectly related to operations or products
- 4. Governance/ Business Ethics: Managing business ethics and maintaining an appropriate level of transparency

Key Company Targets:

- 30% reduction in GHG direct emissions' intensity by 2026 vs 2017
 - 30% reduction in methane emissions intensity by 2030 vs 2021
- Other ESG targets:
 - 25% of leadership positions held by women by 2025
 - Reduce freshwater withdrawal intensity by 2026 vs 2019

Catalysts

Acceleration of Vaca Muerta portfolio development

Start-up of new pipeline capacity to enable the ramp-up of production and acceleration of exports
Improving macro conditions in Argentina to enable YPF improve access to external funding

Estimate changes

USD	2023A	2024E	2025E	2026E
EBITDA (MM)	4,057.0	5,651.6	6,092.9	6,198.6
		↑ +3%		
Previous		5,467.3		
Adj EPS	3.65	8.50	9.23	8.82
		↑ +9%	<1%	<1%
Previous		7.78	9.20	8.79
Production Volumes	514	545	577	611
TEV/DACF	3.0x	3.0x	2.8x	2.7x
	↑ +8%	↑ +5%	↑ + 8%	↑ +8%
Previous	2.8x	2.9x	2.6x	2.6x

Valuation metrics

	2023A	2024E	2025E	2026E
FY P/Adj EPS	5.7x	2.4x	2.3x	2.4x

Company Description

YPF

YPF, 51% owned by the Argentinean government, is Argentina's national oil company. The company operates in an integrated basis and is the main oil & gas producer and the main refiner in the country. The company's strategy now focuses on the development of Argentina's vast unconventional oil & gas resources in the Vaca Muerta shale basin. This is set to require significant investments in both drilling and infrastructure developments over the next decade which looks to limit the company's FCF generation near term.

Company Valuation/Risks

YPF

We value YPF based on a 3.5x EV/DACF (a c10% discount to the target multiple we use for Petrobras and Ecopetrol).

We believe that the key risks to attaining our price target includes:

• Energy price risk: YPF is fully integrated, and its activities range from oil & gas to electricity generation. A significant drop in oil and gas prices as well as wholesale electricity prices and fuel retail prices in Argentina could impact the company's developments and its earnings.

• Currency risk: the oil industry is by and large US\$ denominated, and significant FX moves could impact the cost base.

• Political/fiscal/environmental risk: the assets are generally assigned on concessions, licenses or profit-sharing contracts and these could be terminated or nationalised unexpectedly. Similarly, taxation (even in OECD countries) could be significantly changed unexpectedly, impacting the value of the assets. In addition, any spill or environmental damage due to exploration and production activity could have a material impact on the value of the firm.

• Corporate governance risk: YPFs is controlled by the Brazilian government and at times the interests of the controlling shareholder may not be fully aligned with those of minorities, impacting the share price.

• Exploration/appraisal and access to infrastructure risk: Exploration and appraisal success is key to share price performance and to the ultimate value of oil & gas players. Thus, a sustained period of exploration/appraisal activity disappointments could have a material impact on the stock. In addition, access to evacuation infrastructure is key to commercialise YPF's upstream volumes and any significant restriction in accessing it could impact the company's earnings.

• Production performance, delay/cost overrun risk: the value of the assets are particularly sensitive to the performance of reservoirs, and these could develop unexpected issues that could affect production. Similarly, asset values could be materially impacted by cost overruns, or delays in the startup or ramp-up of fields.

• Argentinian political & economic environment risk: YPF's assets are mainly located in Argentina. A further deterioration of the Argentinean economic and/or political environment could significantly impact the company's value.

<u>Upside risks</u>

We believe that the key upside risks on YPF include a faster than anticipated improvement of the Argentine economy and the ability of the company to increase domestic fuel prices in US\$ terms faster than we anticipate.

ECOPETROL S.A.

We value Ecopetrol based on a sum-of-the parts approach based on the current market value of its stake in ISA; 4x EV/DACF for Ecopetrol's oil & gas business (in line with our target multiple for Petrobras) and a 4.5x EV/EBITDA for its infrastructure subsidiary Cenit.

We believe that the key risks to attaining our price target include:

• Energy price risk: Ecopetrol is a fully integrated oil & gas player. A significant drop in oil and gas prices as well as wholesale fuel prices in Colombia could impact the company's developments and its earnings.

• Currency risk: the oil industry is by and large US\$ denominated, and significant FX moves could impact the cost base;

• Political/fiscal/environmental risk: the assets are generally assigned on concessions, licenses or profit-sharing contracts and these could be terminated or nationalised unexpectedly. Similarly, taxation (even in OECD countries) could be significantly changed unexpectedly, impacting the value of the assets. In addition, any spill or environmental damage due to exploration and production activity could have a material impact on the value of the firm;

• Corporate governance risk: Ecopetrol is controlled by the Brazilian government and at times the interests of the controlling shareholder may not be fully aligned with those of minorities, impacting the share price

• Colombian political & economic environment risk: Ecopetrol's assets are mainly located in Colombia. A further deterioration of the Colombian economic and/or political environment could significantly impact the company's value;

• Production performance, delay/cost overrun risk: the value of the assets are particularly sensitive to the performance of reservoirs, and these could develop unexpected issues that could affect production. Similarly, asset values could be materially impacted by cost overruns, or delays in the startup or ramp-up of fields;

• Exploration/appraisal risk: Exploration and appraisal success is key to share price performance and to the ultimate value of the stock. Thus, a sustained period of exploration/appraisal activity disappointments could have a material impact on the stock.

<u>Upside risks</u>

We believe that the key upside risks on Ecopetrol include a faster than anticipated recovery in the outstanding balances of the fuel stabilisation fund (FEPC) and the ability of the company to increase production volumes over the next 2-3 years.

PAMPA ENERGIA SA

We set our price target for Pampa Energia (Pampa) in line with our estimated net asset value (NAV) for the company, based on a long-term US\$70/ bbl Brent oil price assumption.

We believe that the key risks to attaining our price targets include:

• Energy price risk: Pampa's activities range from oil & gas to electricity generation. A significant drop in oil and gas prices as well as wholesale electricity prices in Argentina could render some of the company's developments uneconomical.

• Currency risk: the energy industry is by and large US\$ denominated, and significant FX moves could impact the firm's cost base.

• Political/fiscal/environmental risk: the assets are generally assigned on concessions, licenses or profit-sharing contracts and these could be terminated or nationalised unexpectedly. Similarly, taxation (even in OECD countries) could be significantly changed unexpectedly, impacting the value of the assets. In addition, any spill or environmental damage due to exploration and production activity could have a material impact on the value of the firm

• Exploration/appraisal and access to infrastructure risk: Exploration and appraisal success is key to share price performance and to the ultimate value of oil & gas players. Thus, a sustained period of exploration/appraisal activity disappointments could have a material impact on the stock. In addition, access to evacuation infrastructure is key to commercialise Pampa's natural gas volumes and any significant restriction in accessing it could impact the company's earnings.

• Production performance, delay/cost overrun risk: the value of the assets are particularly sensitive to the performance of reservoirs (oil & gas assets) and power generation equipment (electricity assets), and these could develop unexpected issues that could affect production. Similarly, asset values could be materially impacted by cost overruns, or delays in the start-up or ramp-up of the assets.

• Argentinian political & economic environment risk: Pampa's assets are mainly located in Argentina. A further deterioration of the Argentinean economy could significantly impact the company's earnings.

Petroleo Brasileiro SA

We value Petrobras using a 4x EV/DACF 2025E target multiple (15% discount to peer average) on which we set Petrobras's price targets at USD21.2/ ADR for the common shares (PBR) and US\$19.3/ADR for the preferred stock (PBR/A).

We believe that the key risks to attaining our price targets include:

• Energy price risk: Petrobras is a fully integrated oil & gas player. A significant drop in oil and gas prices as well as wholesale fuel prices in Brazil could impact the company's developments and its earnings.

• Currency risk: the oil industry is by and large US\$ denominated, and significant FX moves could impact the cost base;

• Political/fiscal/environmental risk: the assets are generally assigned on concessions, licenses or profit-sharing contracts and these could be terminated or nationalised unexpectedly. Similarly, taxation (even in OECD countries) could be significantly changed unexpectedly, impacting the value of the assets. In addition, any spill or environmental damage due to exploration and production activity could have a material impact on the value of the firm;

• Corporate governance risk: Petrobras is controlled by the Brazilian government and at times the interests of the controlling shareholder may not be fully aligned with those of minorities, impacting the share price

• Brazilian political & economic environment risk: PBR's assets are mainly located in Brazil. A further deterioration of the Brazilian economic and/or political environment could significantly impact the company's value;

• Production performance, delay/cost overrun risk: the value of the assets are particularly sensitive to the performance of reservoirs, and these could develop unexpected issues that could affect production. Similarly, asset values could be materially impacted by cost overruns, or delays in the startup or ramp-up of fields;

• Exploration/appraisal risk: Exploration and appraisal success is key to share price performance and to the ultimate value of the stock. Thus, a sustained period of exploration/appraisal activity disappointments could have a material impact on the stock.

Vista Energy, S.A.B. de C.V.

We set our price target for Vista Energy in line with our estimated net asset value (NAV) for the company, based on a long-term US\$70/bbl Brent oil price assumption.

We believe that the key risks to attaining our price target include the following:

• Oil price risk: a significant drop in oil prices could render some of Vista's developments uneconomical.

• Currency risk: the oil industry is by and large US\$-denominated, and significant FX moves could impact the cost base.

• Political/fiscal/environmental risk: the assets are generally assigned on concessions, licenses, or profit-sharing contracts, and these could be terminated or nationalised unexpectedly. Similarly, taxation (even in OECD countries) could be significantly changed unexpectedly, impacting the value of the assets. In addition, any spill or environmental damage due to exploration and production activity could have a material impact on the value of the firm.

• Exploration/appraisal and access to infrastructure risk: Exploration and appraisal success is key to share price performance and to the ultimate value of oil & gas players. Thus, a sustained period of exploration/appraisal activity disappointments could have a material impact on the stock. In addition, access to evacuation infrastructure is key to Vista's exports, and any significant restriction in accessing it could impact the company's earnings.

• Production performance, delay/cost overrun risk: the value of the assets is particularly sensitive to the performance of reservoirs, and these could develop unexpected issues that could affect production. Similarly, asset values could be materially impacted by cost overruns or delays in the startup or ramp-up of fields.

• Argentinian political & economic environment risk: Vista's assets are mainly located in Argentina. A further deterioration of the Argentine economy could significantly impact the company's earnings.

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(Article 3(1)e and Article 7 of MAR)

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- ECOPETROL S.A. (EC: \$11.57, UNDERPERFORM)
- PAMPA ENERGIA SA (PAM: \$46.25, BUY)
- Petroleo Brasileiro SA (PBR: \$16.94, BUY)
- Petroleo Brasileiro SA (PBR/A: \$16.06, BUY)
- Vista Energy, S.A.B. de C.V. (VIST: \$43.56, BUY)

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Distribution of R	latings		IB Serv./P	ast12 Mos.	JIL Mkt Serv./Past12 Mos.		
	Count	Percent	Count	Percent	Count	Percent	
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