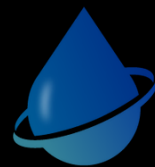


PLATA ENERGY

OIL & GAS CONSULTANTS



GLOBAL E&P SUMMIT

Exploration in LatAm: Current context and drivers for future investments

Global E&P Summit 2020

Max Torres

Managing Partner, Plata Energy

July 2nd, 2020

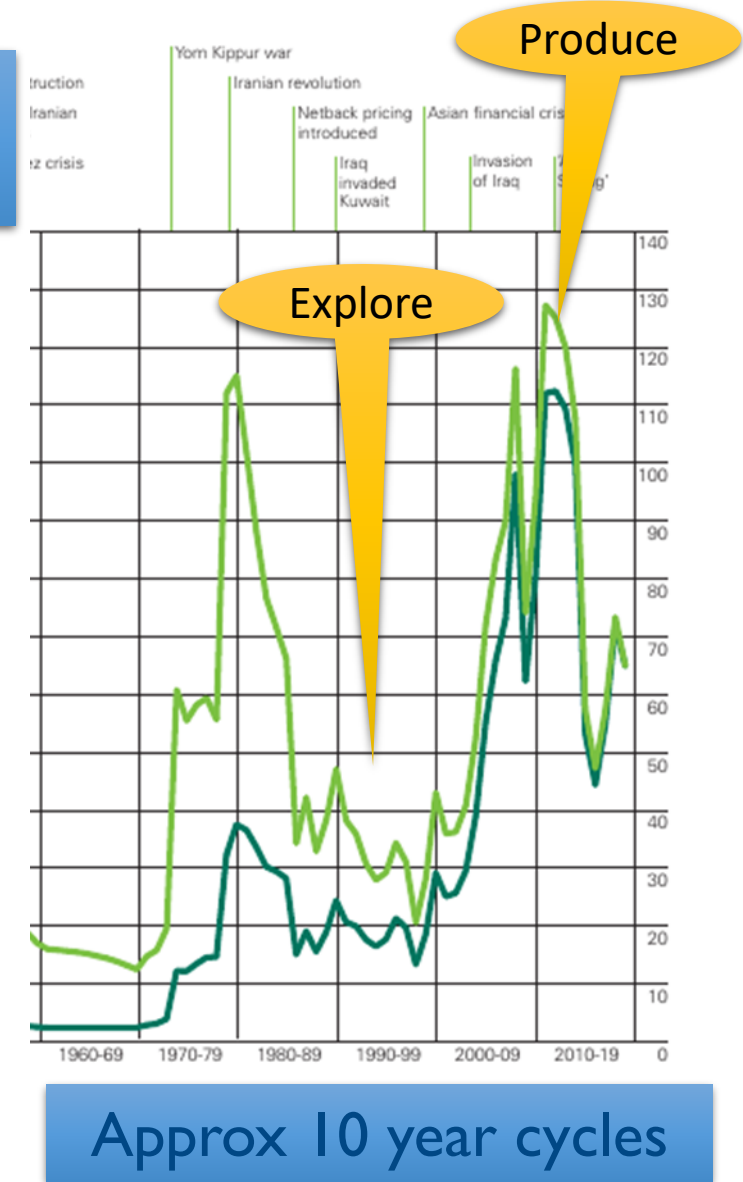
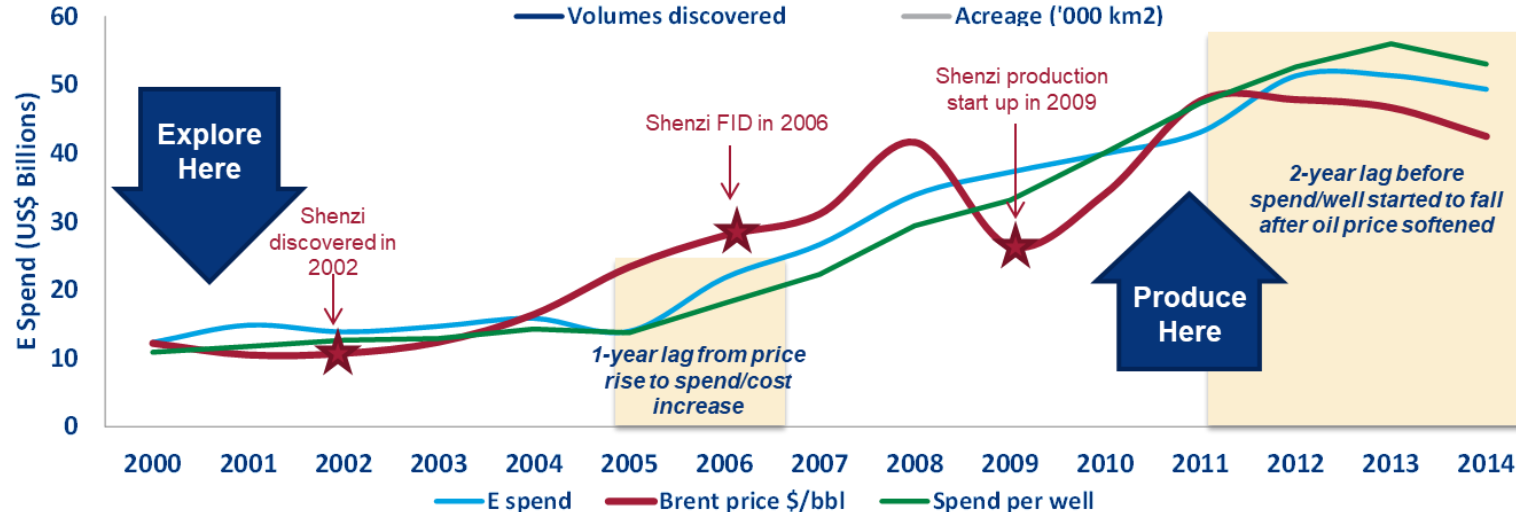
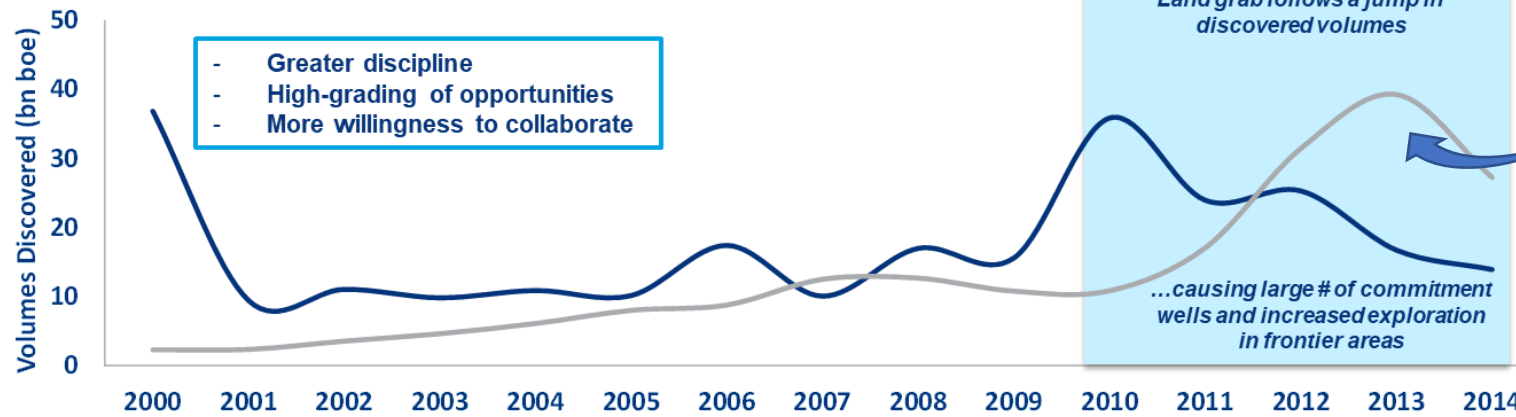
- ❑ Exploration investments and activity are coming to a worldwide historical low
- ❑ Investors should consider a counter cyclical positioning to harvest the benefits in the next high price cycle
- ❑ Latin America has distinctive benefits when considering building a position for the next cycle, compared to other regions
- ❑ Positives : Large resources, undeveloped markets and low breakeven prices
- ❑ Negatives: Political instability and high Government Takes
- ❑ Latin America could be transformed into a dominant player in the next cycle

LatAm exploration investments: Cyclical nature of E&P

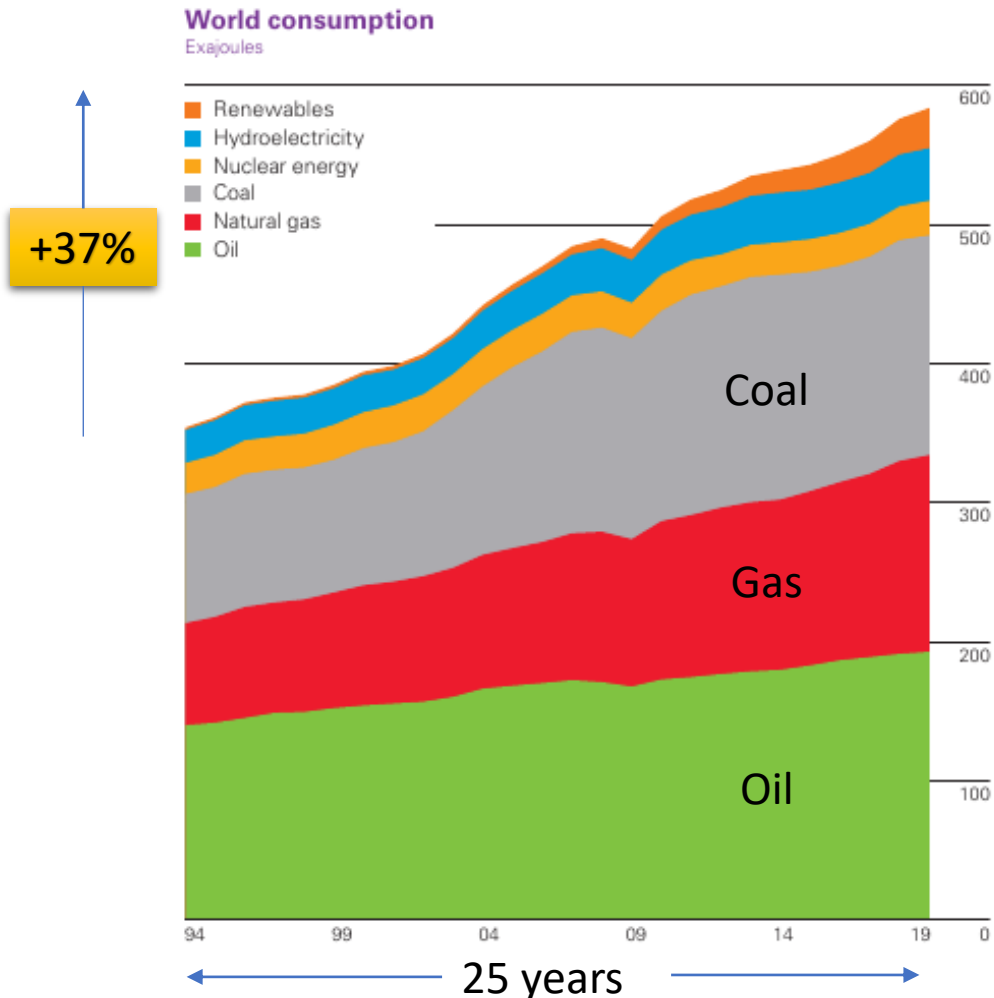
Counter-cyclical investing

Value destruction 2010 - 2014

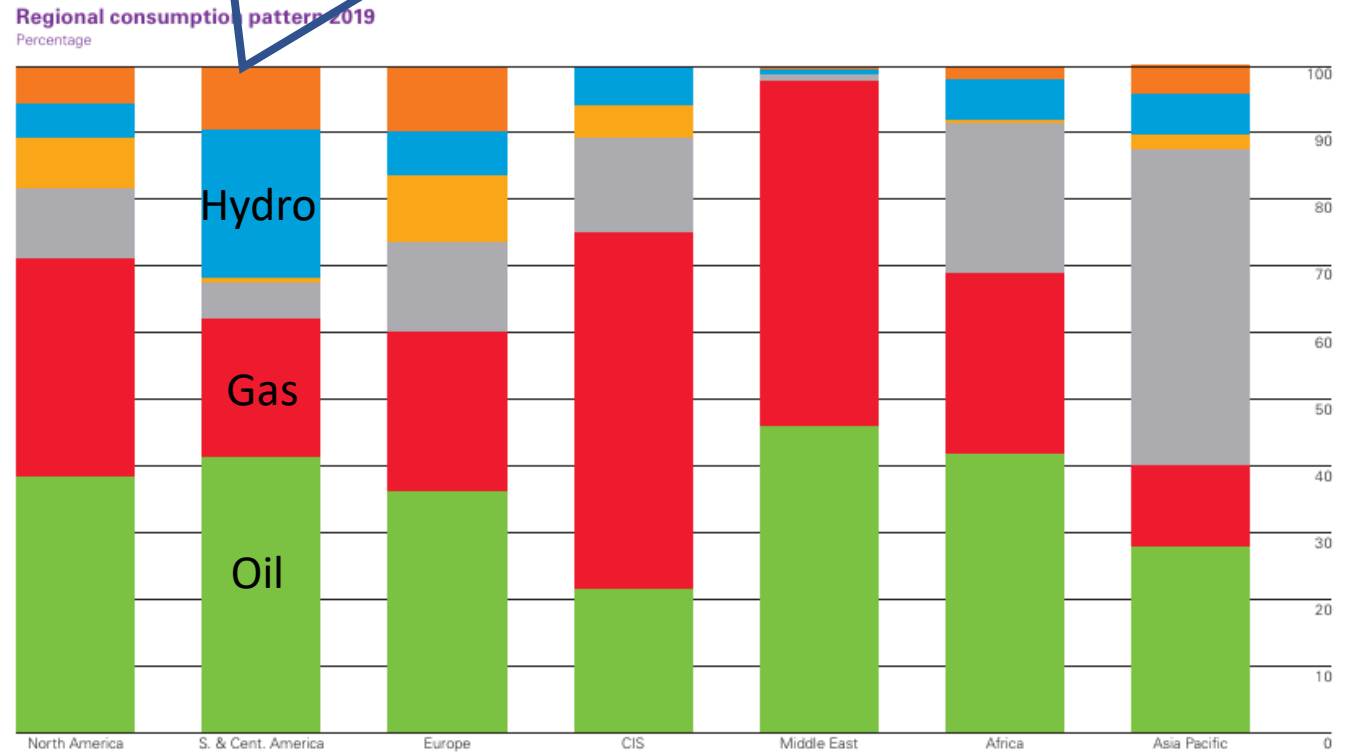
Cyclical Nature of Exploration



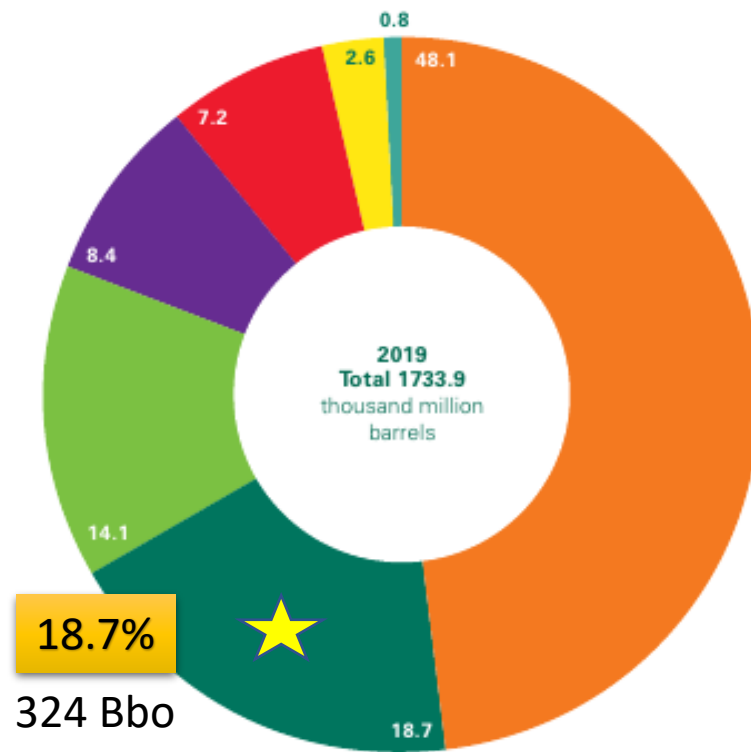
Energy World Consumption



World Consumption Pattern LatAm different pattern = Opportunity

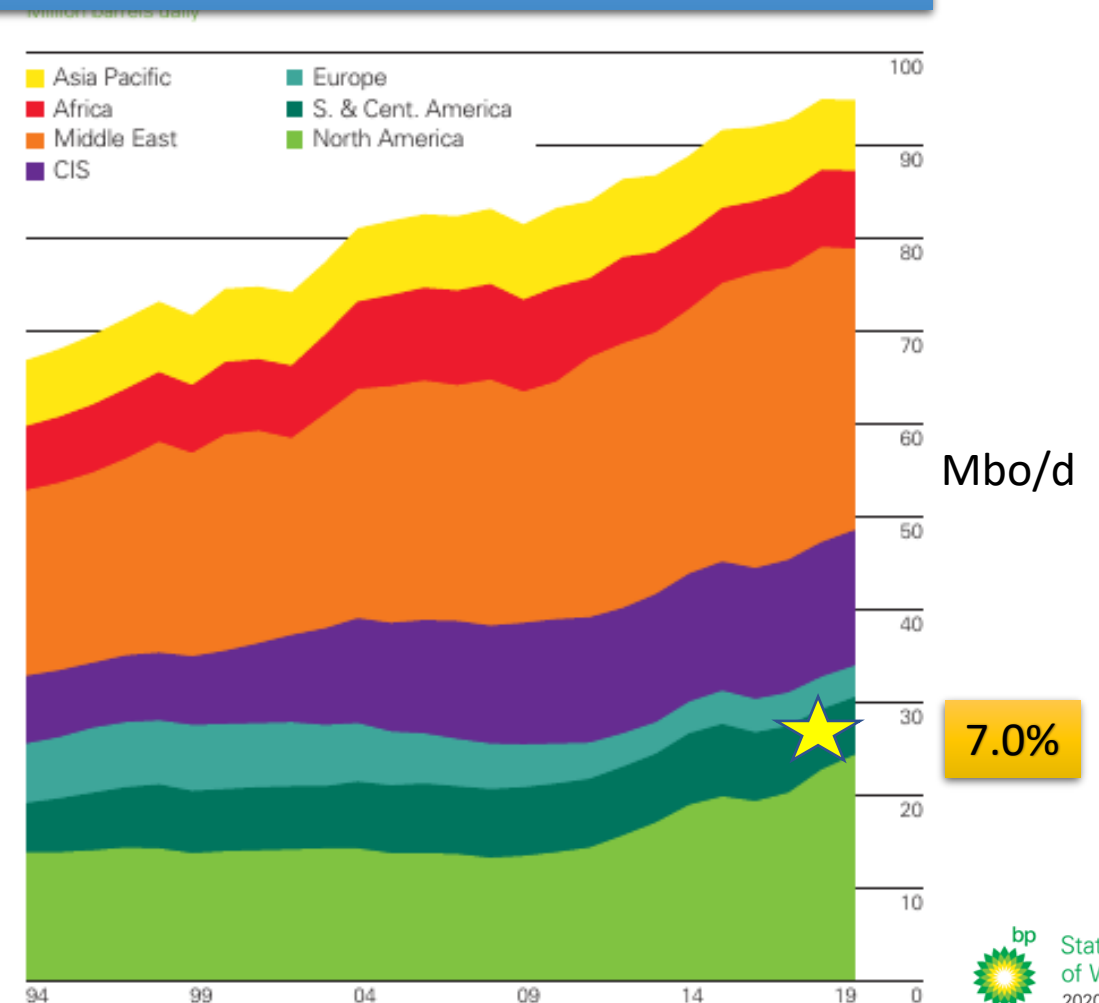


Proven Reserves 2019 LatAm 18.7%



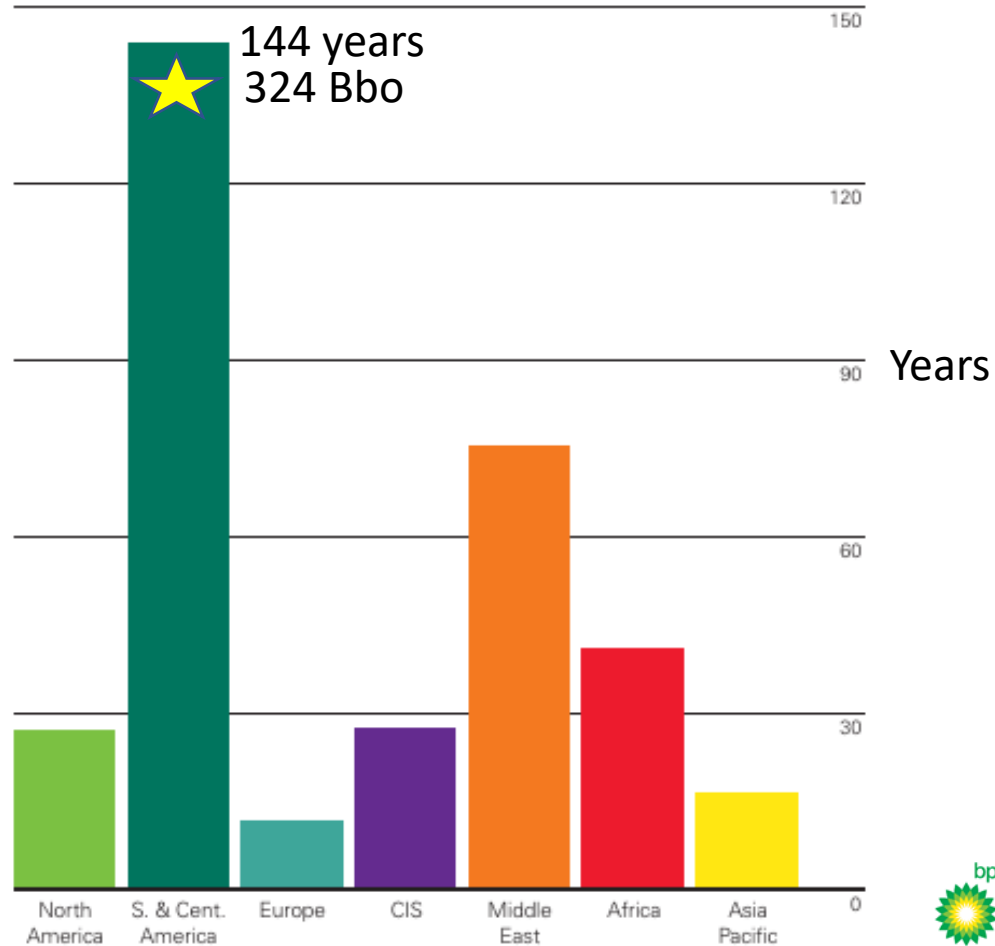
18.7% Reserves with only 7% Production

World Production by region LatAm 7% (5.8 Mbo/d)



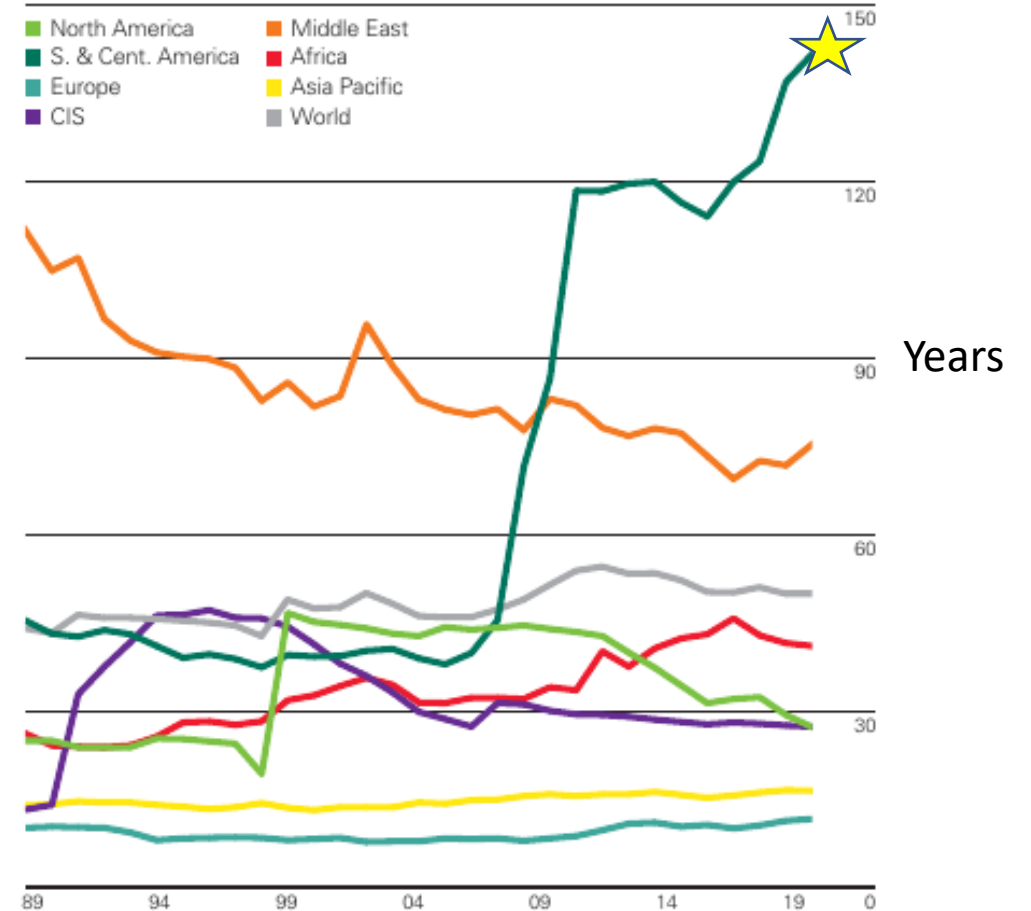
Ratio Reserves/Production by Region Latam 18.7% of world total 1734 Bbo

2019 by region



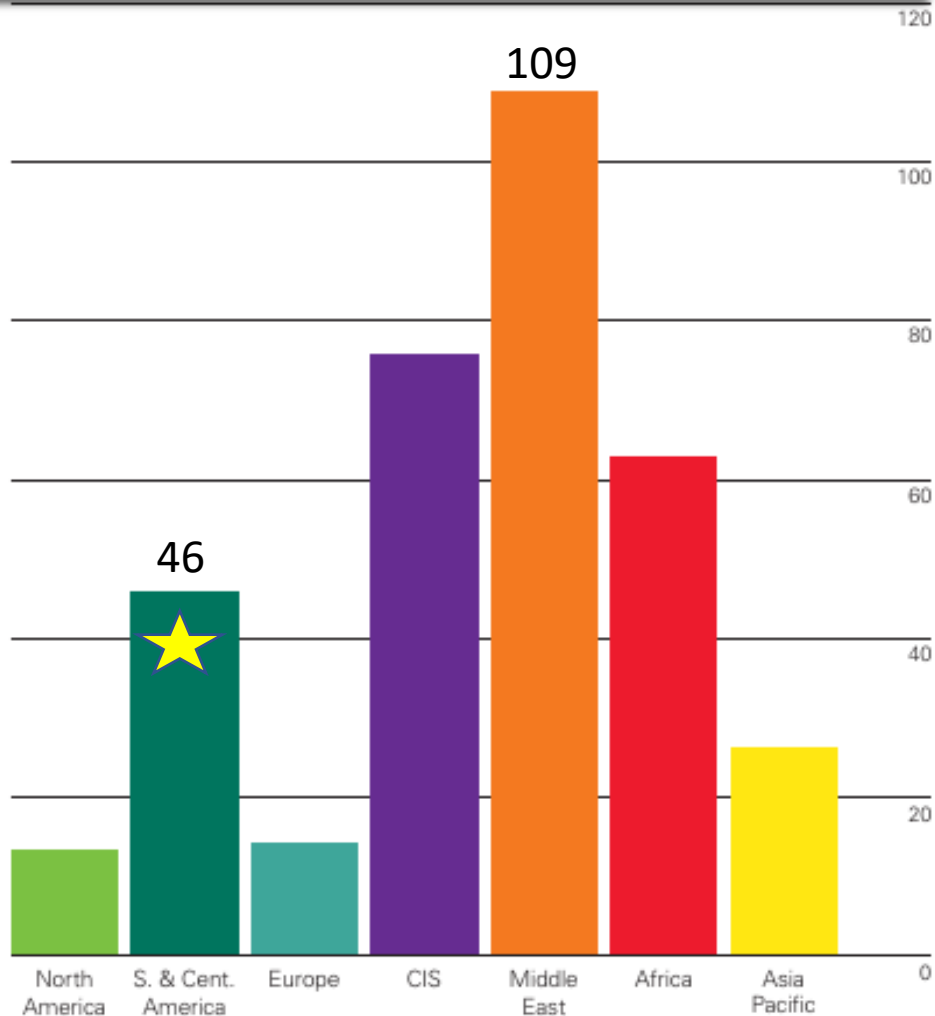
R/P Historical Venezuela (17.5%) and Brazil PSalt

History

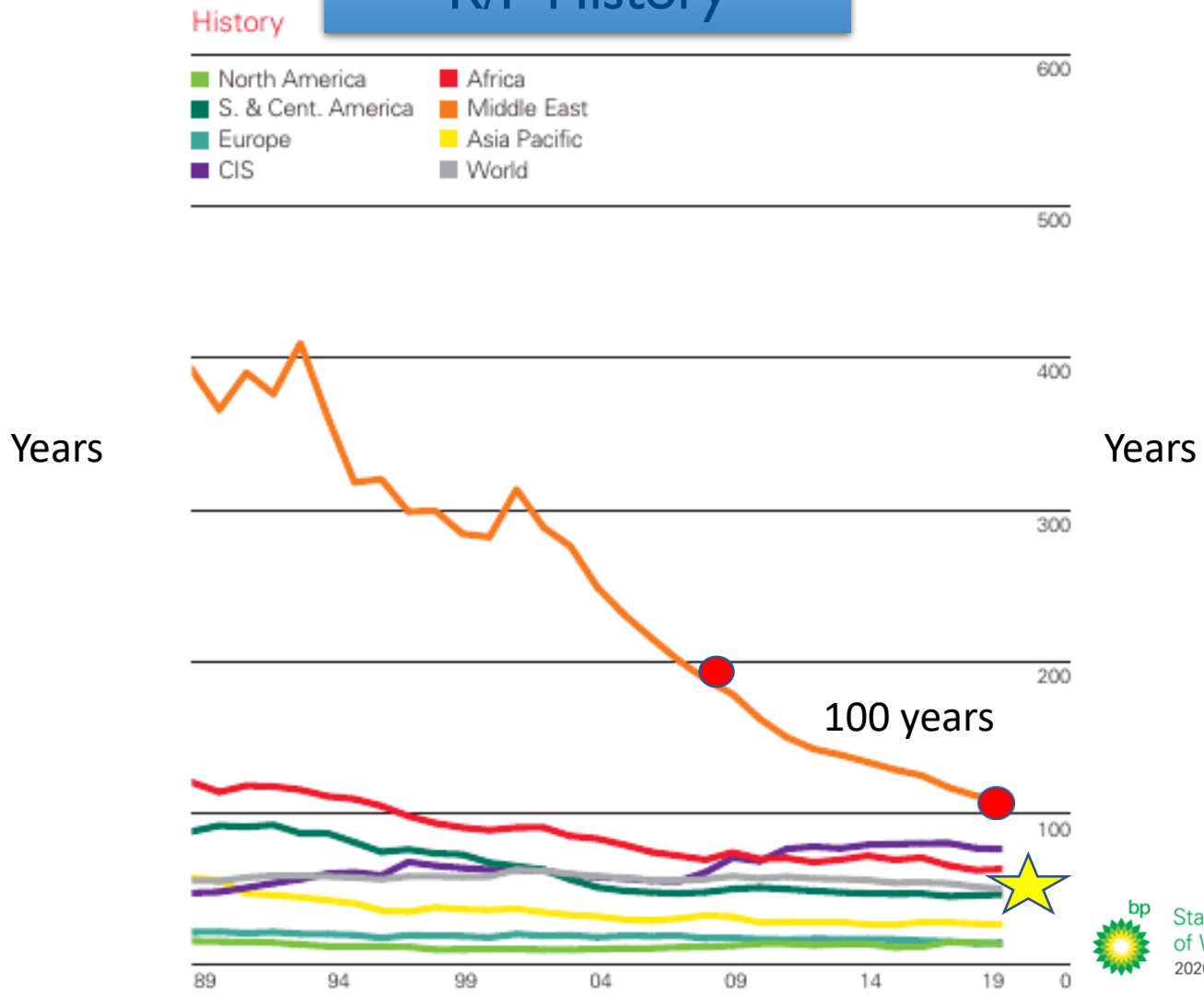


LatAm exploration investments: Why LatAm? Gas story

Ratio Reserves/Production Gas
LatAm 282 Tcfg (World 7019 Tcfg)



R/P History



LatAm exploration: World class E&P plays in LatAm



Venezuela Faja HO
Production 0.1 Mbod
Proved Reserves 303 B
Resources

Guyana Suriname
Production 0.12 Mbod
Proved Reserves 1 Bbo
Resources 8 Bboe

Brazil PreSalt
Production 1.5 Mbod
Proved Reserves 12.7 B
Resources 60 Bboe

Colombia Offshore
Production 0
Proved Reserves 6 Tcfg (T)
Resources 200 Tcfg?

Vaca Muerta Shale
Production
Proved Reserves 2.4 B
Resources 20 B

Proved reserves: 317 Bboe
Resources: 148 Bboe

Large reserves volumes to be developed or discovered

- ❑ Largest R/P ratio (144 years) showing large undeveloped reserves volumes (Oil reserves proven 324 Bbo vs 1734 Bbo world)
- ❑ Large untapped resources opportunity (Venezuela, Brazil, Argentina, Guyana and Colombia)
- ❑ Gas consumption share much lower than world. Opportunity to develop gas markets
- ❑ LatAm offers potentially large gas resources in new gas plays (Offshore Colombia, Venezuela ..)
- ❑ Unique resource and market conditions to develop a significant position if region places right terms and use them intelligently in the next cycle

Significant drop in global EP Investments in 2010 - 2020

Global exploration as % of total EP expenditure

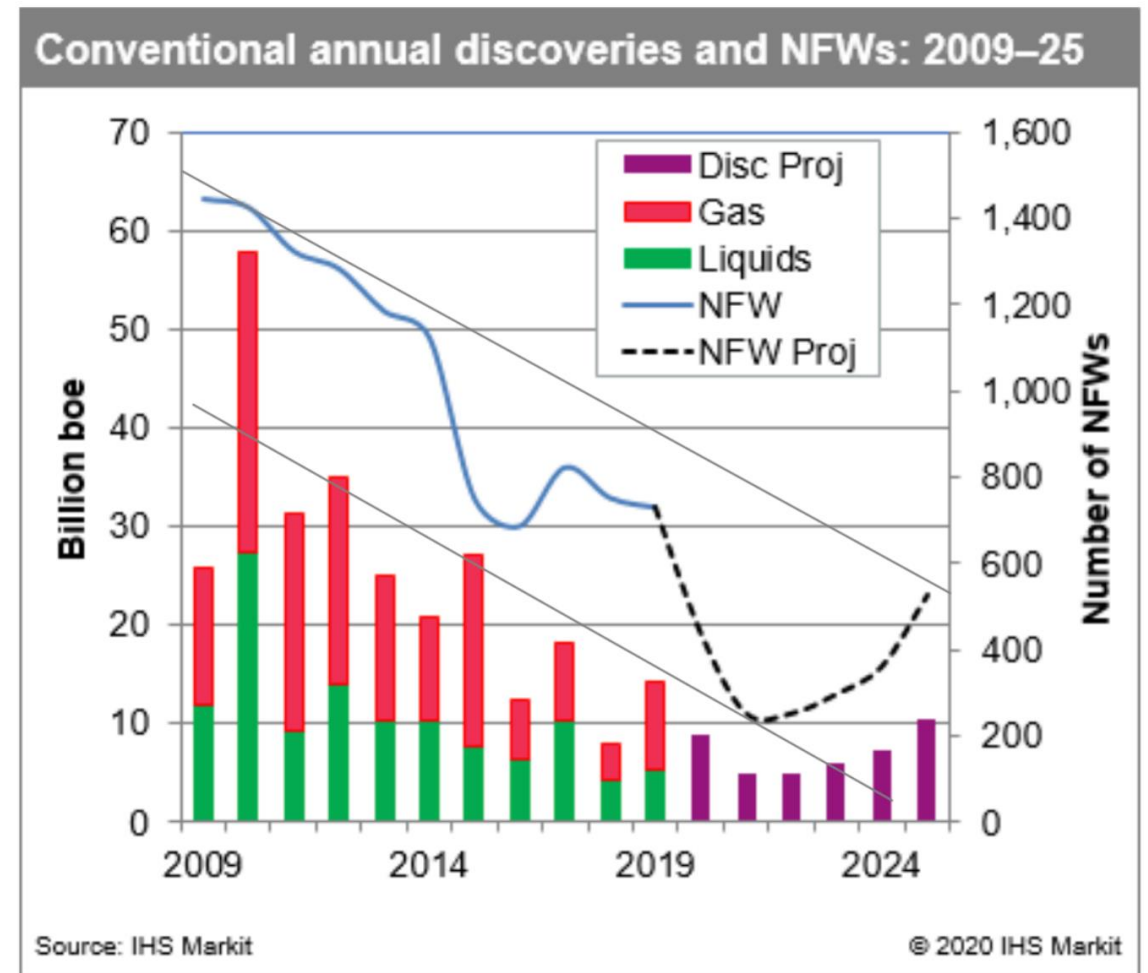
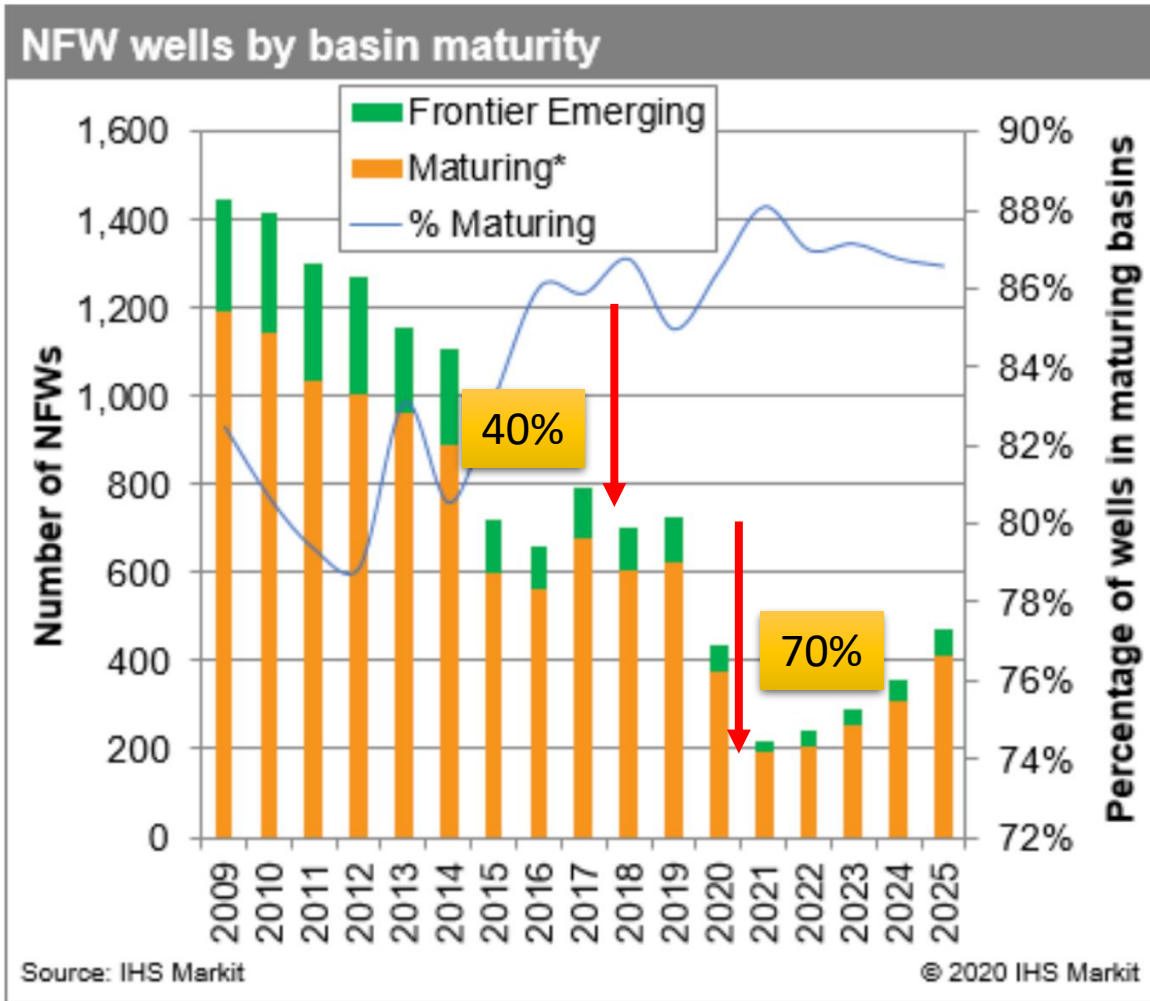


2020 -30%

Source: Modified from IEA analysis with calculations based on Rystad Energy (2019).

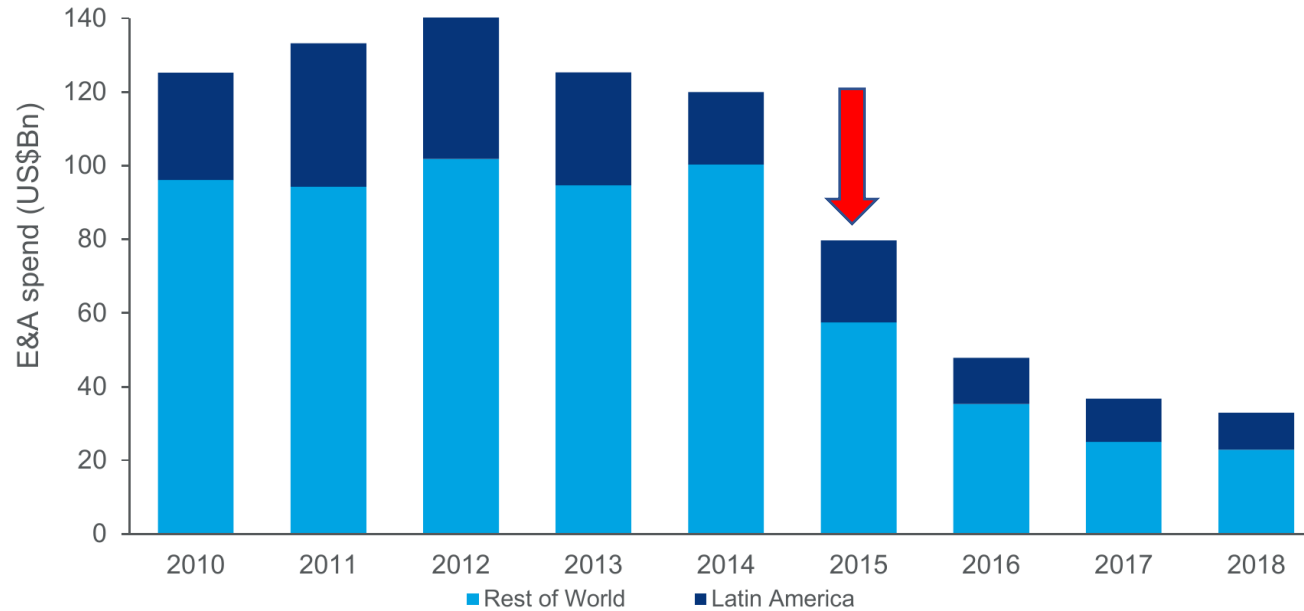
Significant drop in exploration drilling.
Focus in maturing basins vs frontier

Decreasing discovered volumes



LatAm exploration investments: Capex cuts 2010 - 2020

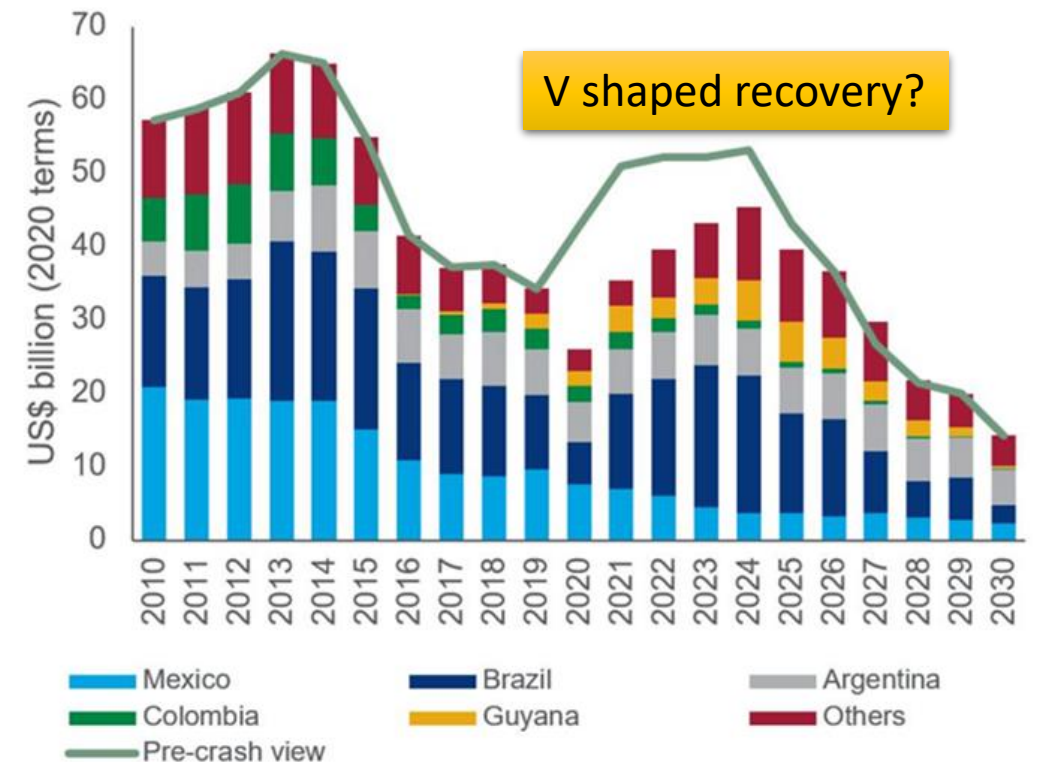
LatAm not an exception. Huge drop in Exploration investments



Source: Wood Mackenzie Exploration Service Tool

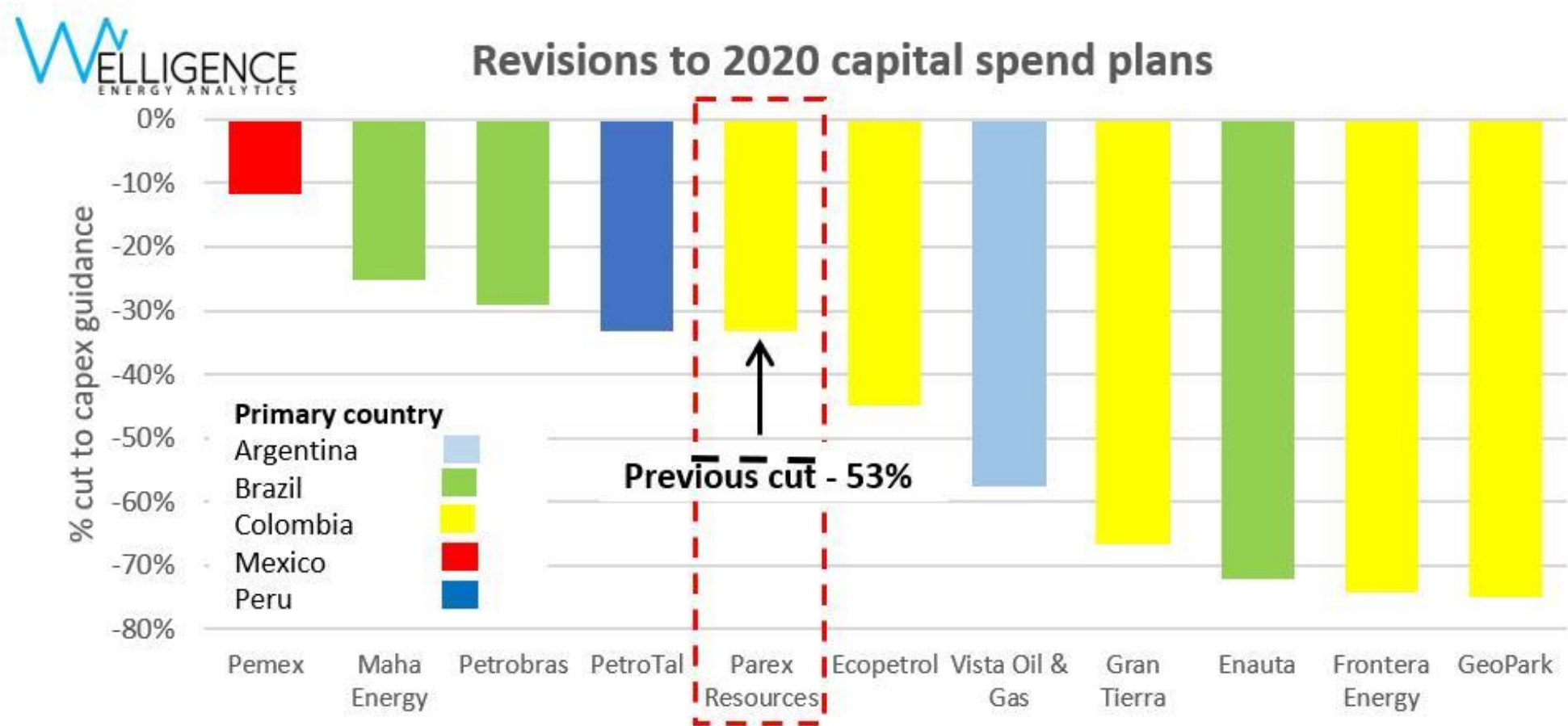


E&P Capex down 39% in 2020



Source: Wood Mackenzie Lens Upstream. Development capital expenditure excludes exploration, abandoni

LatAm Capex revisión 2020 by company



Source: Company reports, Welligence Energy Analytics

LatAm exploration activity: High impact wells 2019

High impact discoveries 2019 19 BBOE Contingent Resources



Suriname / Guyana
with high impact
wells in 2019

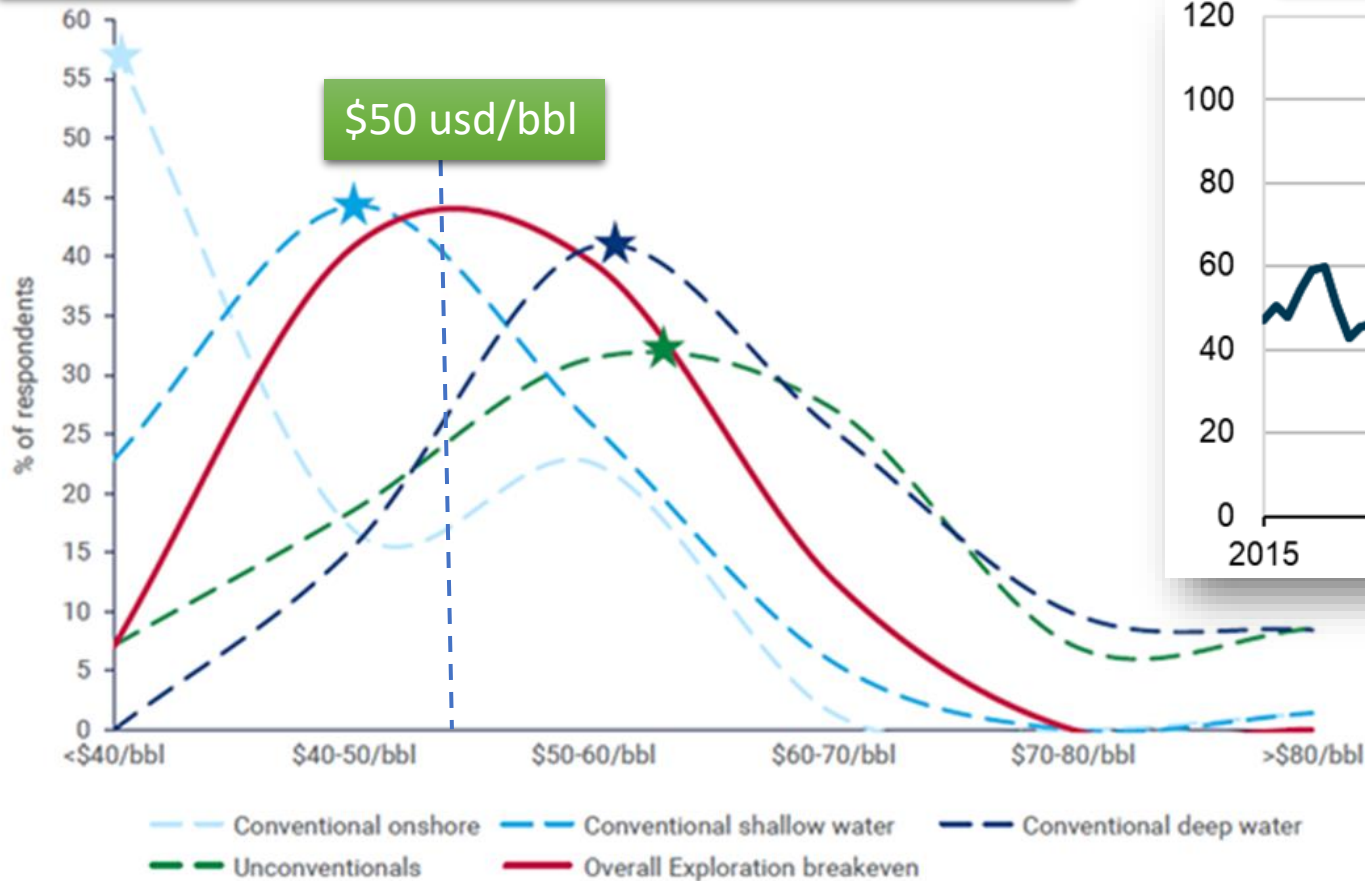


- Large caps
- Mid caps
- Others
- Majors
- NOC

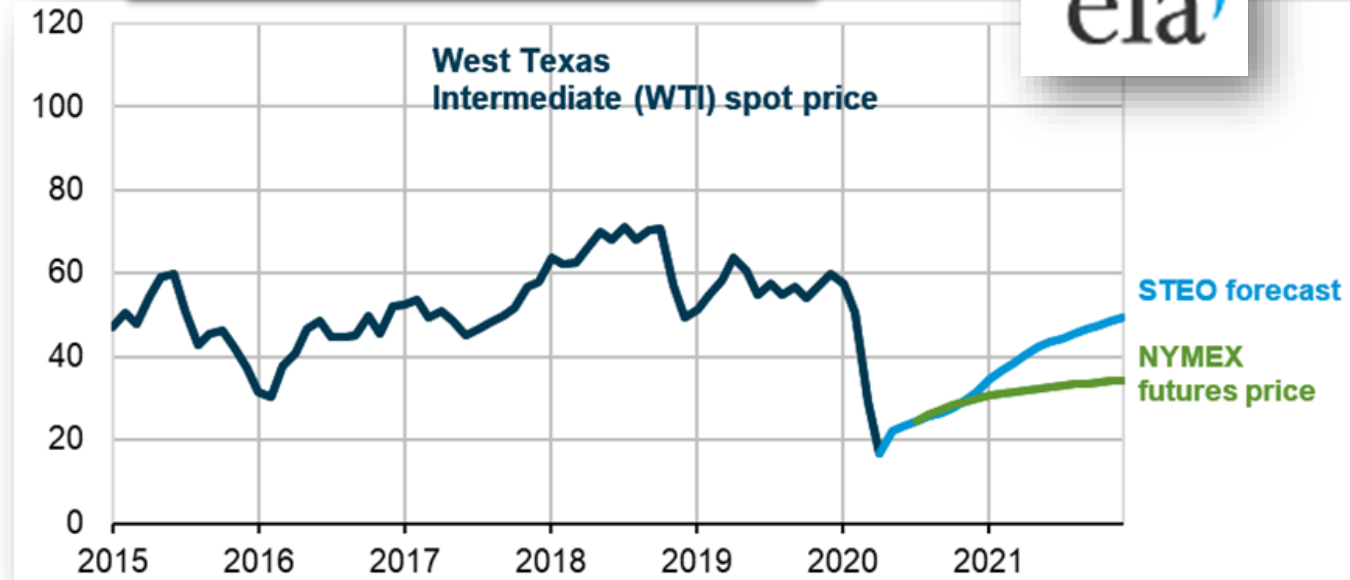
- Gas
- Oil

LatAm exploration investments: Price and breakevens

Exploration Breakeven price by theme



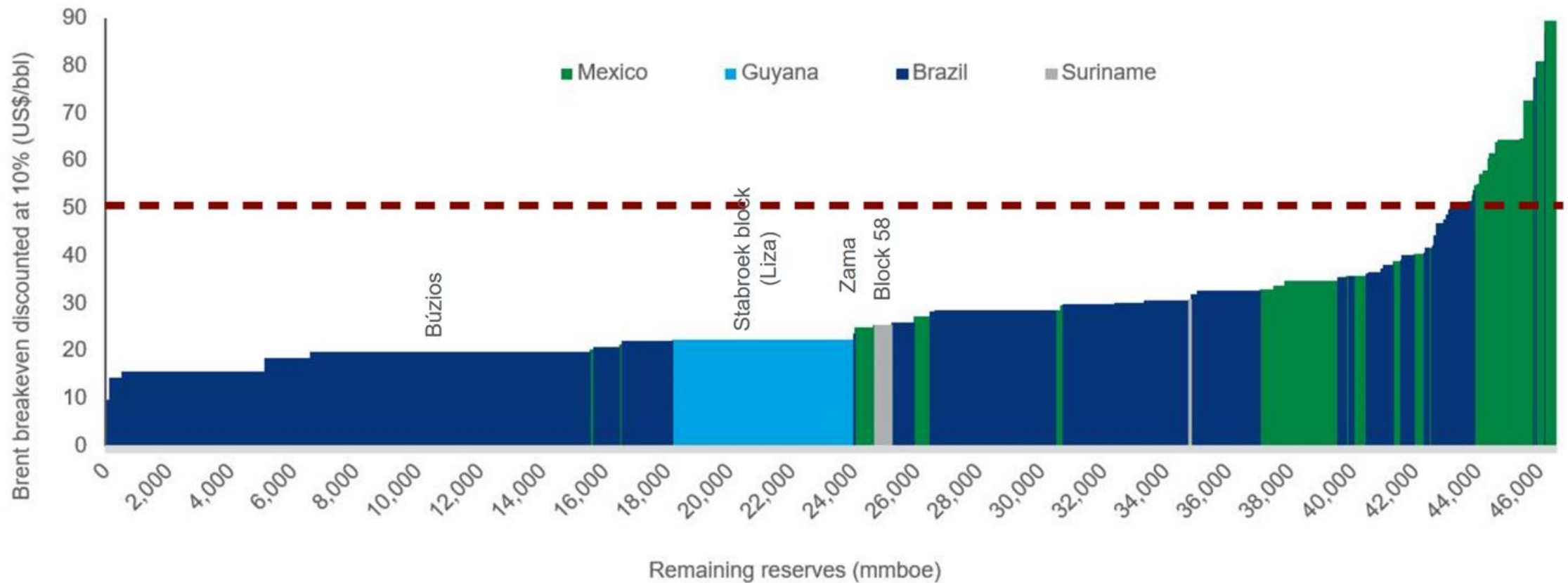
Price forecast 2021 \$40



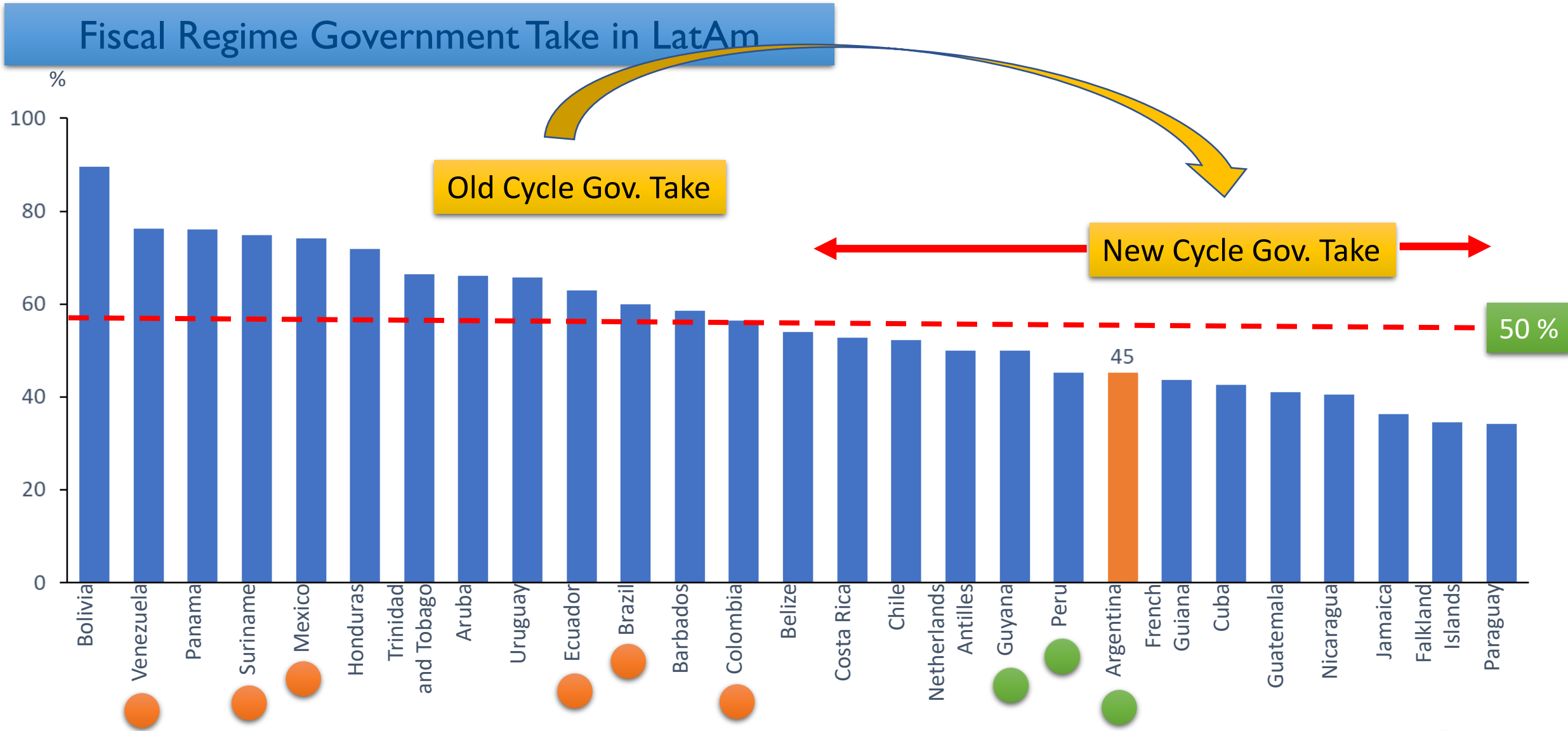
B/E (NPV=0) Average Price for Exploration projects is **\$50/bbl**

43 Bboe in FID priority list with breakevens below \$50/bbl

Point-forward breakeven and remaining reserves for Brazil, Guyana, Mexico and Suriname



LatAm exploration investments: Regional Government take



- ❑ Industry perception that existing resources are enough to satisfy future demand. Possibly not a correct assumption
- ❑ Investments in exploration dropped from 45% to 5% as % of EP in 20 years. NFW wells from 1400 to less than 200 in 10 years
- ❑ Resources discovered volumes dropped from 30 to 5 BBO/year
- ❑ World average Breakeven prices for Exploration Portfolios are near \$50/bbl
- ❑ LatAm has large offshore projects (43 Bboe) with B/E below \$50
- ❑ LatAm needs to restructure Government Takes to below 50% to attract the next wave of investments

With large untapped resources and undeveloped markets, LatAm could become a major player in next cycle. New favorable Gov. Takes and political stability are key to the success of the region

LatAm exploration investment:



Global E&P Opportunities Summit IN-VR Oil & Gas

Time Left

3h:3m



Reception



Stage



Sessions



Expo

Industry Sessions ⓘ

Recording

4 / 7

37

Leave



Carlos Garibaldi



You



Luis Felipe Fernández



Tomas Zapata



Chat

Polls



Stelios Papagrighoriou • an hour ago

Where is the future of Latin America E&P headed?

Pre-salt fields • 20% 5 Votes

Unconventional Hydrocarbons • 24% 6 Votes

Conventional Production • 56% 14 Votes



Stelios Papagrighoriou • 4 hours ago

When investing in a Frontier country, the

LatAm exploration investment:

PLATA ENERGY
OIL & GAS CONSULTANTS



Global E&P Opportunities Summit IN-VR Oil & Gas

Time Left

3h:2m



MT

Industry Sessions ⓘ

Recording

4 / 7

40

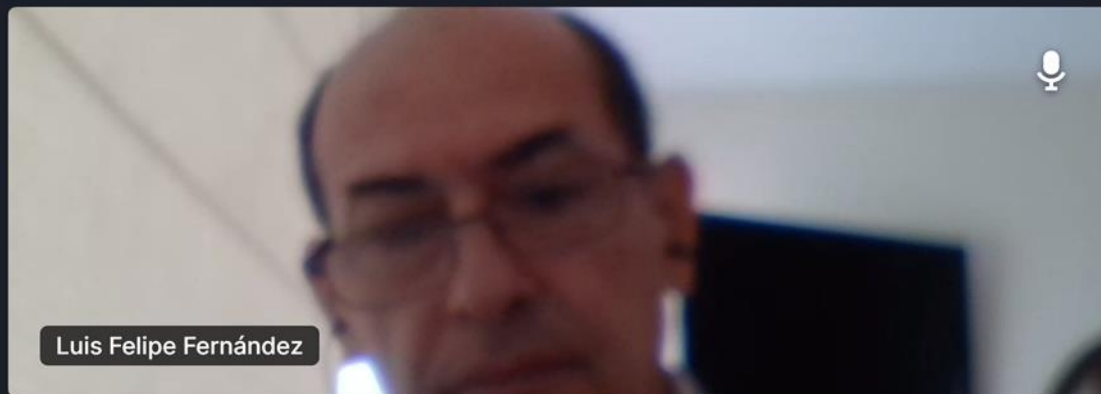
Leave



Carlos Garibaldi



You



Luis Felipe Fernández



Tomas Zapata



Reception

LIVE

Stage

NOW

Sessions



Expo

PLATA ENERGY

OIL & GAS CONSULTANTS



Main Contacts:

Carlos Garibaldi
Managing Partner

Carlos.Garibaldi@PlataEnergy.com

+1. 832.878.3695

Max Torres
Managing Partner

Max.Torres@PlataEnergy.com

+1. 346.351.5755

<https://plataenergy.com>