

2018 GLOBAL ENERGY CONFERENCE

BANK OF AMERICA MERRILL LYNCH



November 2018

Photo: Cartagena Refinery- Archives: Ecopetrol



LEGAL DISCLOSURE

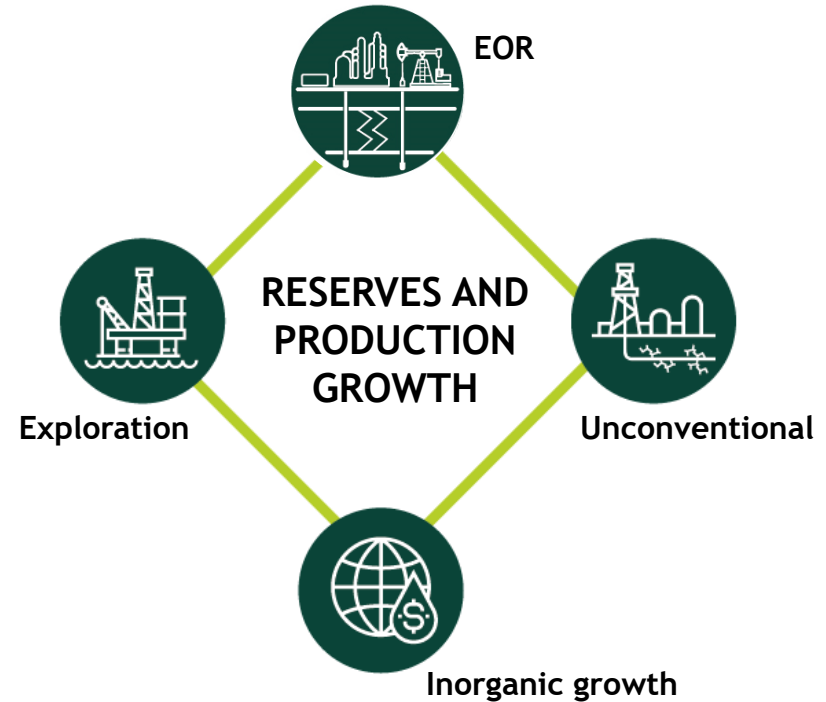
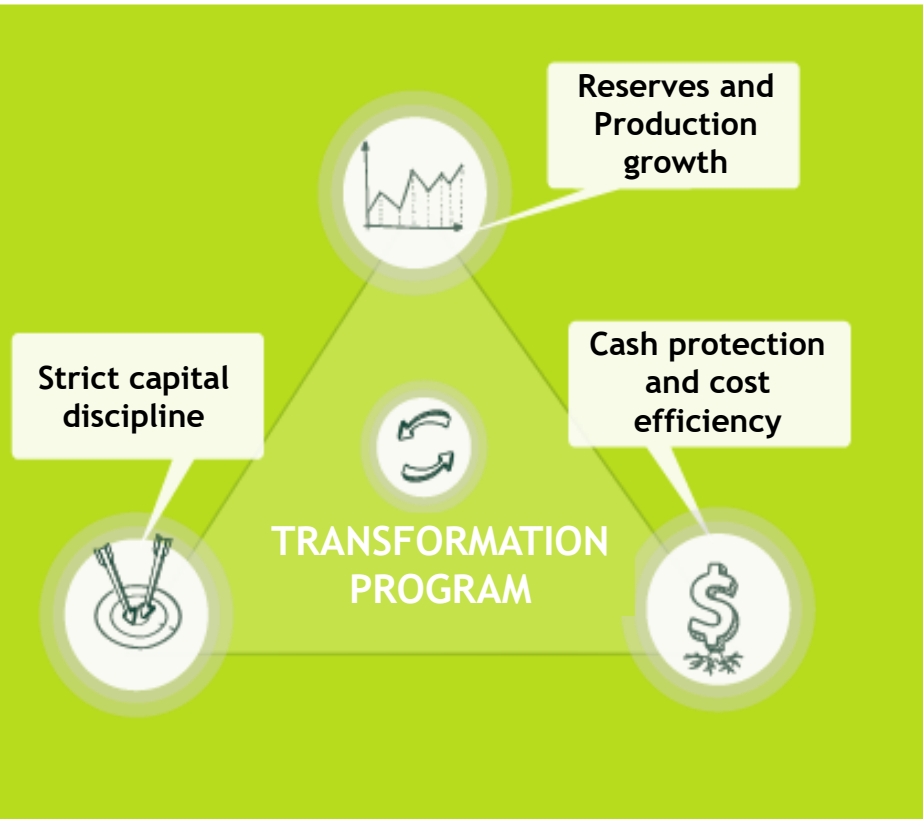
This document was prepared by Ecopetrol S.A. (the “Company” or “Ecopetrol”) with the purpose of providing the market and interested parties certain financial and other information of the Company.

This document may include strategy discussions and forward-looking statements regarding the probable development of Ecopetrol’s business. Said projections and statements include references to estimates or expectations of the Company regarding its future and operational results. Potential investors and the market in general should be aware that the information provided herein does not constitute any guarantee of its performance, risks or uncertainties that may occur or materialize. Actual results may fluctuate and differ from those provided herein due to several factors outside of the control of the Company. Such forward-looking statements speak only as at the date in which they are made and neither Ecopetrol nor its advisors, officers, employees, directors or agents, make any representation nor shall assume any responsibility in the event actual performance of the Company differs from what is provided herein. Moreover, Ecopetrol, its advisors, officers, employees, directors or agents shall not have any obligation whatsoever to update, correct, amend or adjust this presentation based on new information or events occurring after its disclosure. Additional factors that may affect the future results of Ecopetrol are set forth in the section entitled “Risk Factors” in the Company’s Report on Form 20-F for the year ended December 31, 2017 and in the Company’s other filings with Securities and Exchange Commission (the “SEC”), which are available at www.sec.gov.

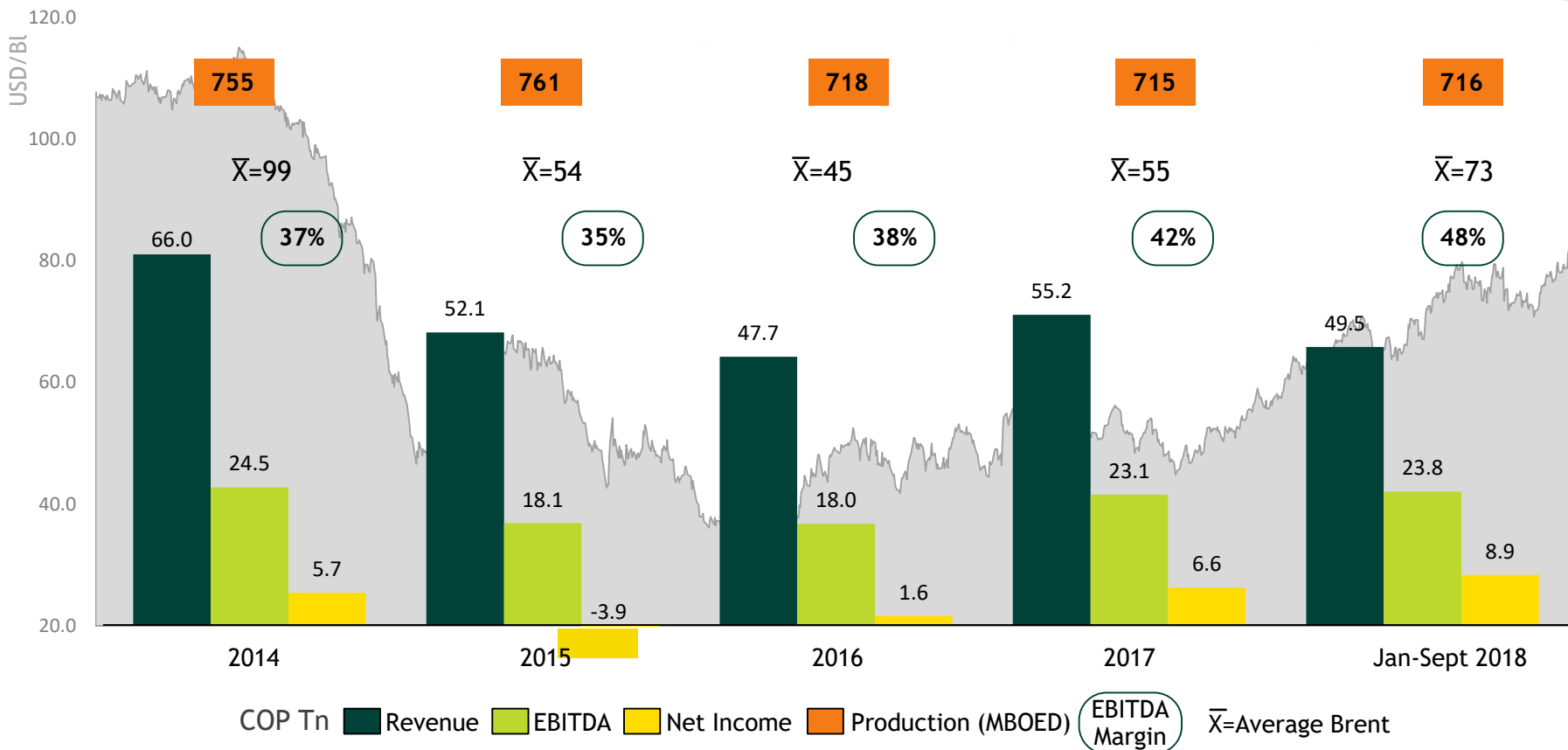
This presentation is for discussion purposes only and is incomplete without reference to, and should be viewed solely in conjunction with, the oral briefing provided by Ecopetrol. Neither this presentation nor any of its contents may be used for any other purpose without the prior written consent of Ecopetrol.

2020+ STRATEGY

FOCUS ON PROFITABLE GROWTH




BEST FINANCIAL RESULTS IN THE PAST 4 YEARS



SOLID RESULTS

PROFITABLE GROWTH

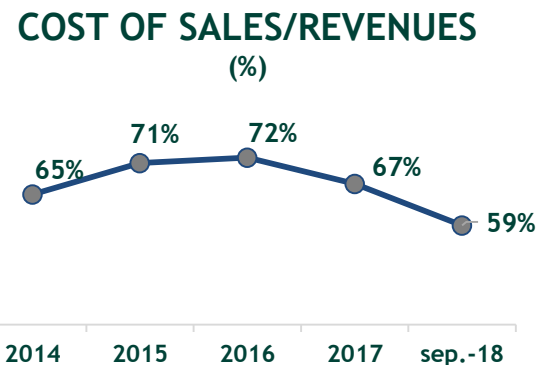
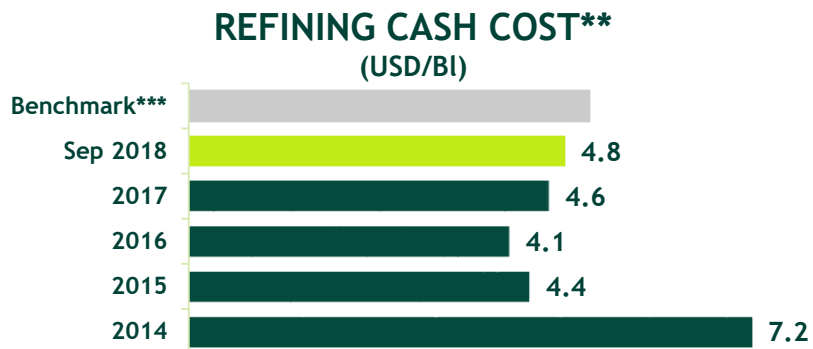
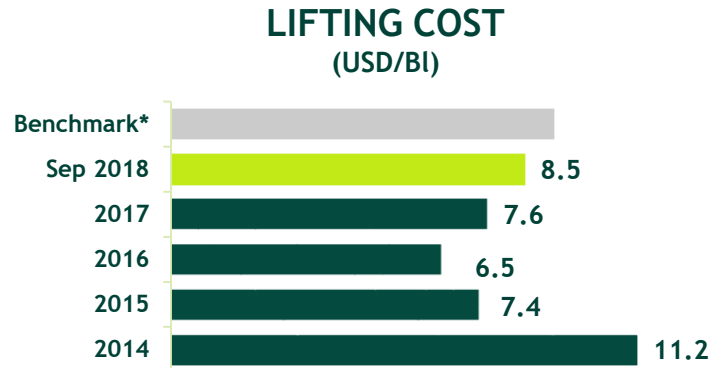
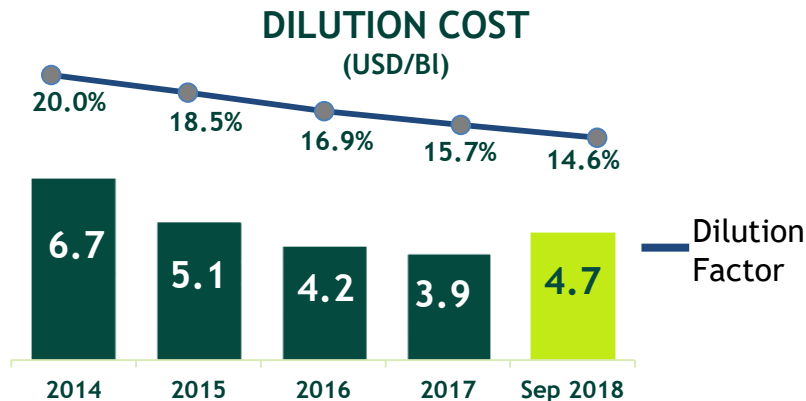
	2016	2017			Jan-Sep17	Jan-Sep18
1P RESERVES MMBOE	1,598	1,659		NET PROFIT COP Tn	3.19	8.90
AVERAGE RESERVE LIFE Years	6.8	7.1		EBITDA MARGIN	43%	48%
RESERVE REPLACEMENT RATIO	-7%	126%		NET DEBT/EBITDA	1.7x	1.1x
				DOWNSTREAM Throughput/MBD	340	371

- ✓ Upstream:
- Strategic access to Santos Basin in Brazil
 - Successful recovery program (166 mboed)

- ✓ Midstream:
- San Fernando-Monterrey System came into operation in 1Q18.
 - Stable operation at 600 cst

- ✓ Downstream:
- Consolidated operation that generates value to the GE
 - Greater synergies between refineries

SUSTAINED IMPROVEMENT IN KEY OPERATING METRICS

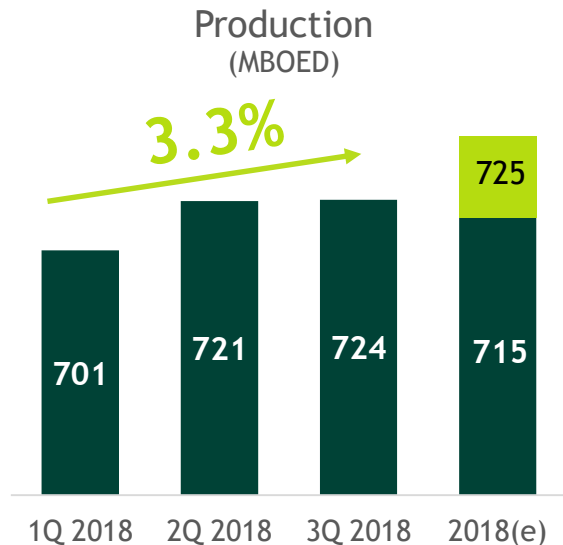


UPSTREAM



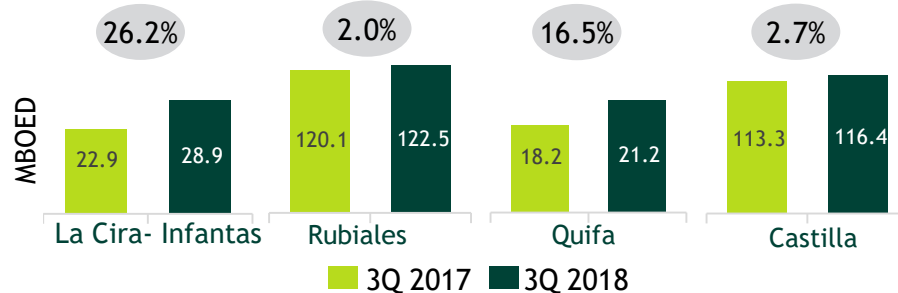
PRODUCTION

ON TRACK TOWARDS GOAL

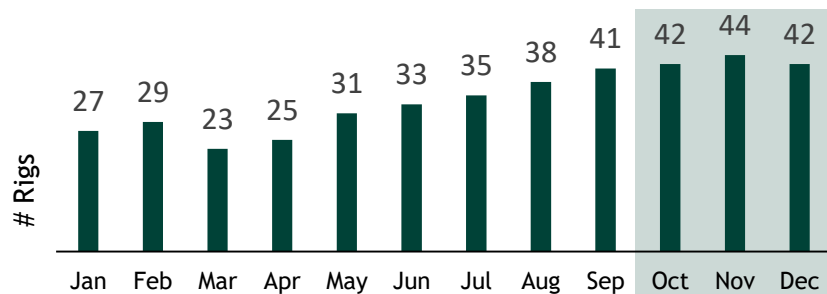


- Increase in gas production due to incremental sales and development of new demand
- Recovery program accounts for 23% of Production (166 mboed)

DRILLING CAMPAIGN RESULTS (+14.5 MBOED in 4 fields)

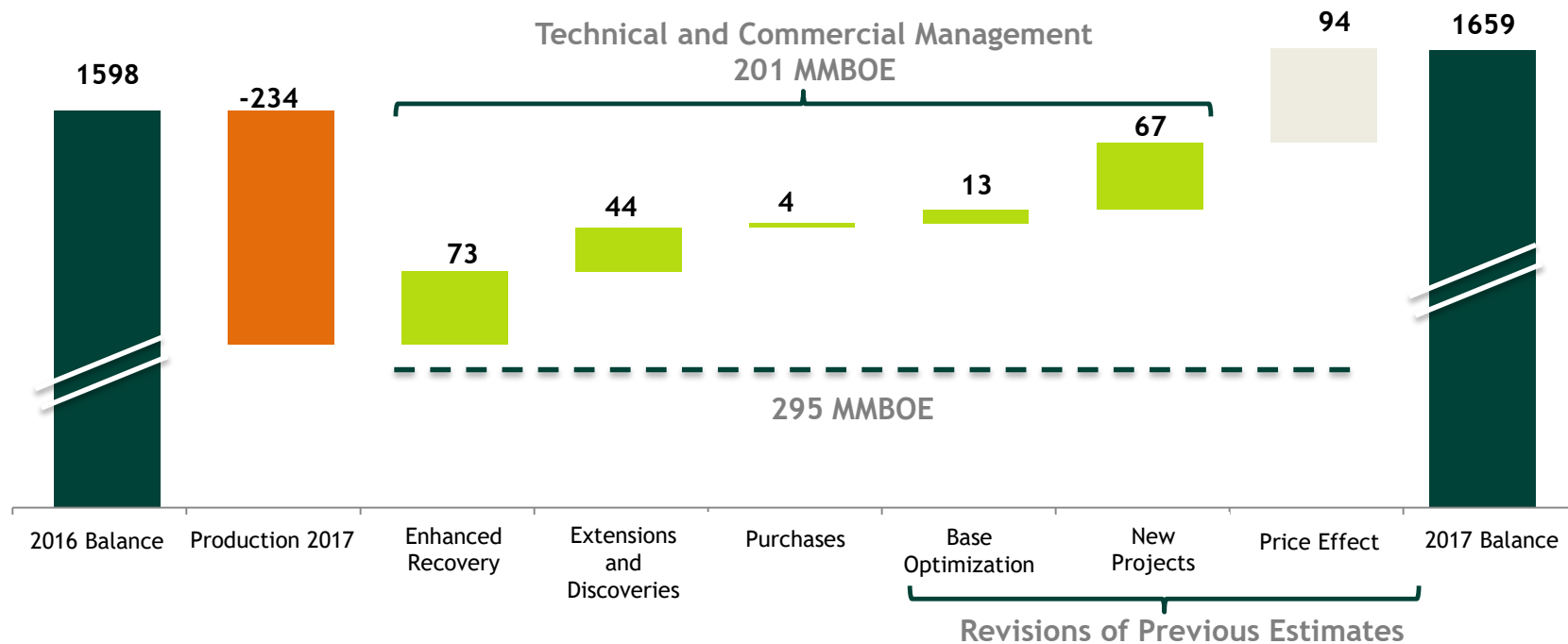


RIGS



SUCCESSFUL RESERVES ADDITION

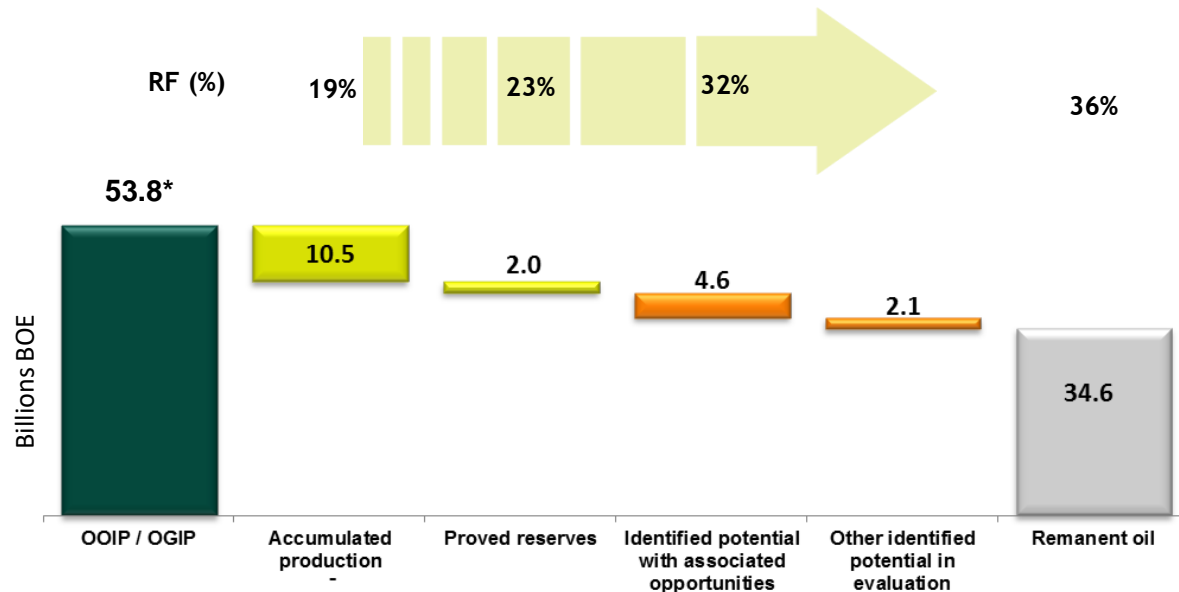
295 MMBOE IN ADDITIONS FOR A REPLACEMENT OF 126% AND
EXTENDED RESERVES LIFE TO 7.1 YEARS



✓ Recovery program delivering new reserves

✓ More opportunities are feasible in our portfolio

SIGNIFICANT POTENTIAL FROM EXISTING FIELDS



36% Recovery Factor

Potential RF
through Primary,
EOR and IOR
technologies

*OOIP does not include: 6.4 BBOE of exploration and 7.6 BBOE of Subsidiaries
Closing figures 2017, gross unrisks numbers

RF: Recovery Factor

ECOPETROL WINS SUB-SALT EXPLORATION BLOCK IN BRAZIL



- ✓ Santos: one of the most prolific basins in the World
- ✓ High materiality combined with low risk
- ✓ Strategic partners with experience in the offshore
- ✓ Opportunity for portfolio growth

Block Pau-Brazil
1.184 Km²
2.200 m. Water Depth

CONSORTIUM



50%



30%

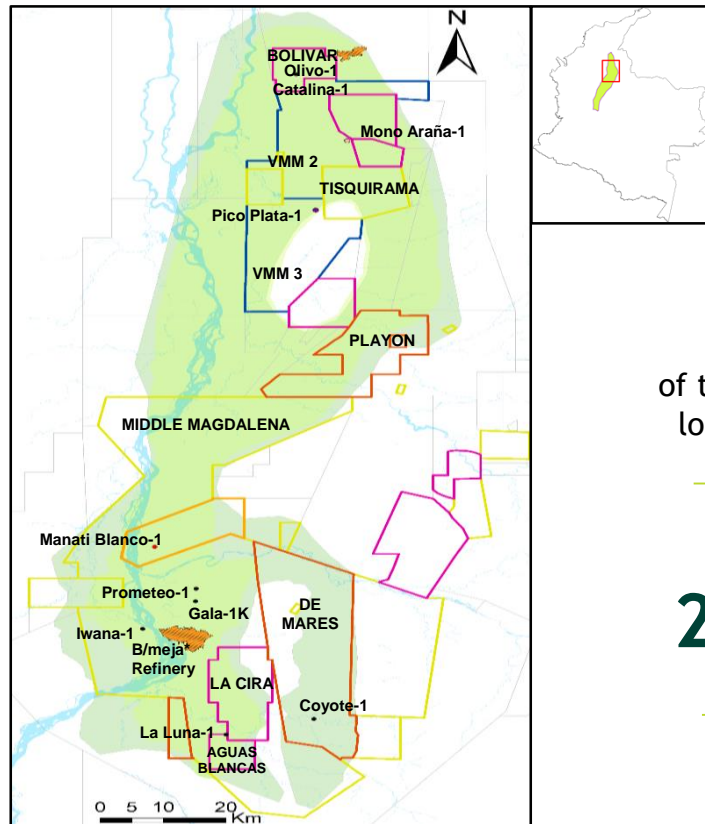


20%

UNCONVENTIONAL POTENTIAL

MIDDLE MAGDALENA VALLEY BASIN

-  Association Contracts with ECP
-  ECP E & P Agreement
-  ExxonMobil
-  ConocoPhillips
-  La Luna Play
-  Tablazo Play



50%-70%
of the potential resources are
located in blocks owned by
ECOPETROL

Ranging between
2.0-7.0 BBOE
Recoverable resources

Midstream



MIDSTREAM

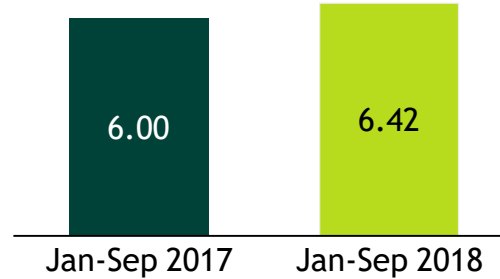
STRONG EBITDA GROWTH



EBITDA

COP Tn

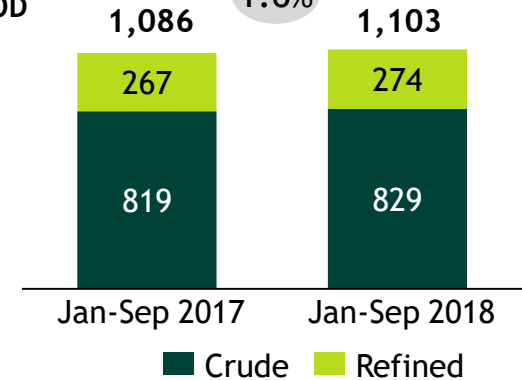
7.1%



Transported Volume

MBOD

1.6%



- ✓ San Fernando - Monterrey System came into operation in 2018 and P135 in the second half of 2017
- ✓ The transported volume of crude oil remained stable due to the reversal strategy on the Bicentenario Oil Pipeline

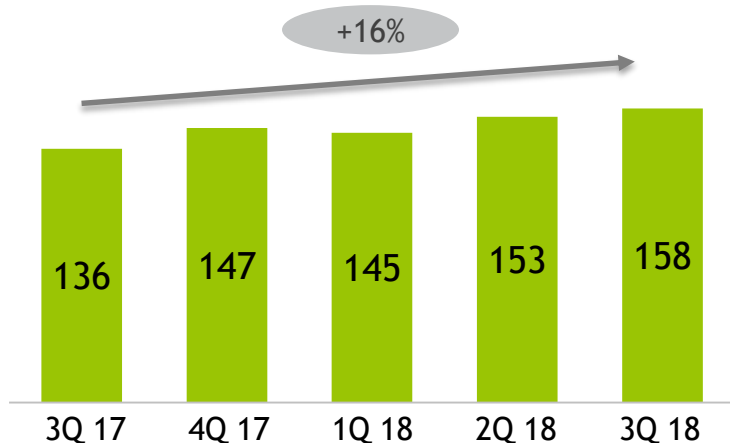
Downstream



DOWNSTREAM

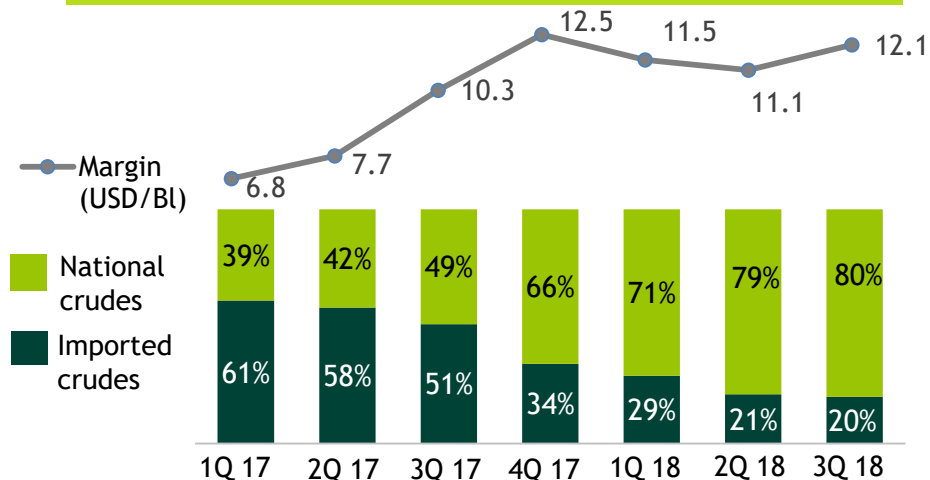
CARTAGENA REFINERY

Throughput (MBD)



- Successful stabilization process
- Highest average throughput (161 MBD - September 2018) since the start of operations

Margin and throughput composition

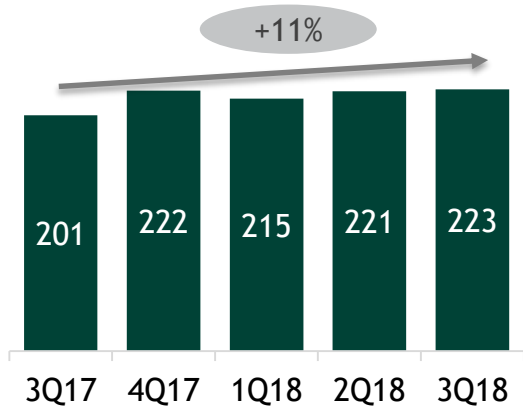


- Feedstock optimization with national crude
- Higher yield of medium distillates and gasoline

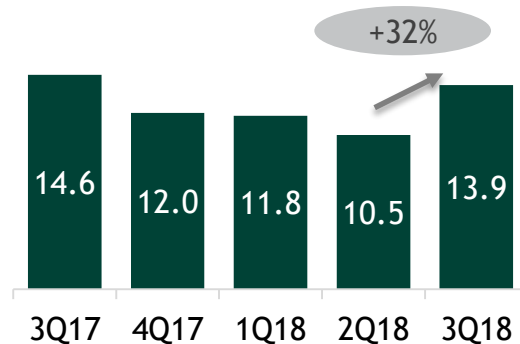
DOWNSTREAM

BARRANCABERMEJA REFINERY

Throughput (MBD)



Gross Margin (USD/Bl)



- Synergies between refineries
- Stability of operation

- Margin recovery

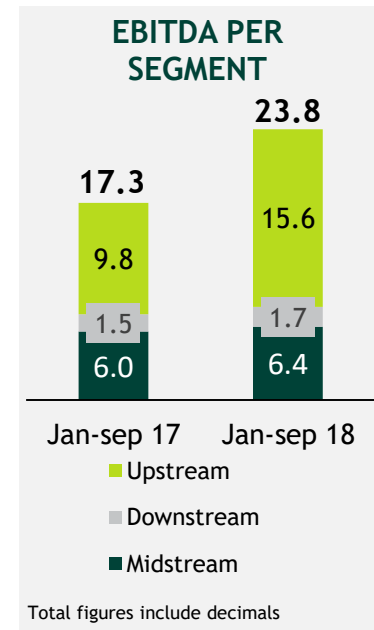
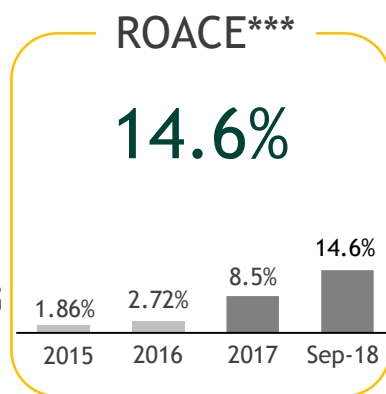
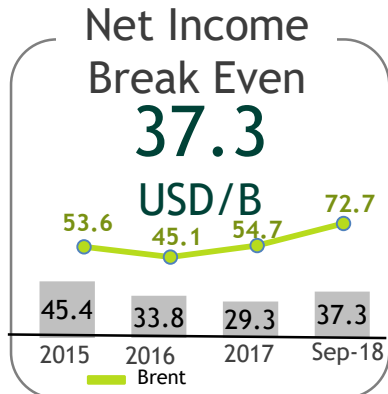
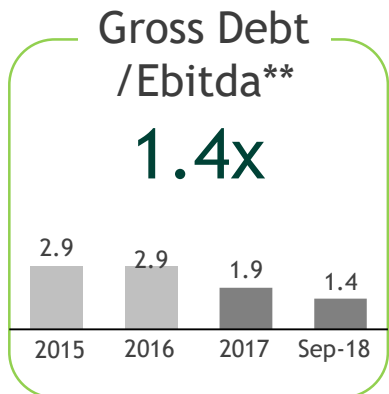
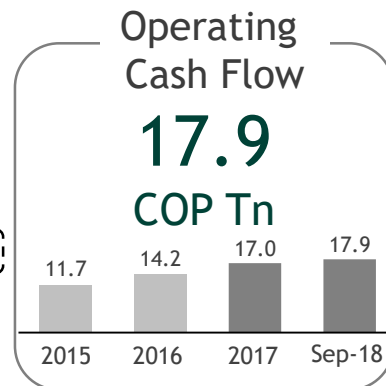
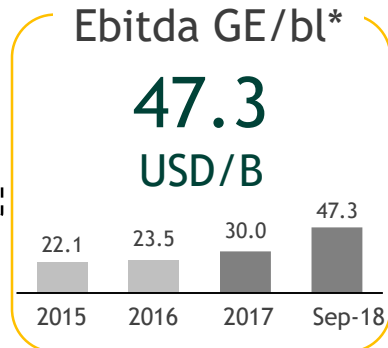
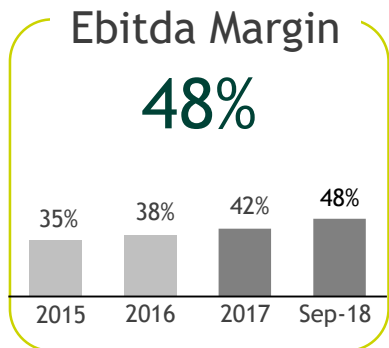
3Q 2018 maximum throughput and margins of the year for the two refineries

Financial Results



OUTSTANDING RESULTS

AS OF SEPTEMBER 2018



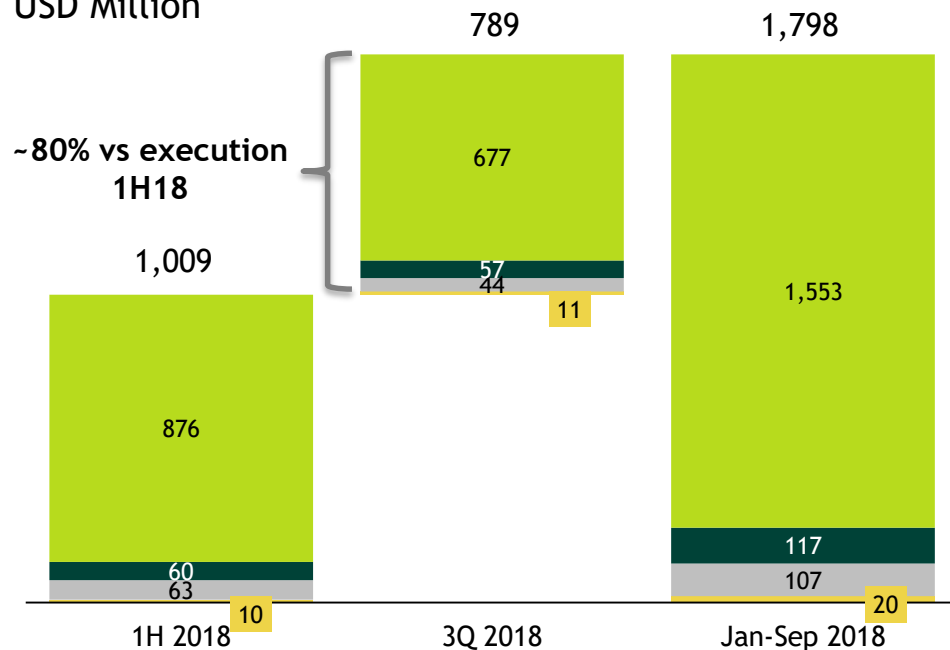
*Normalized TRM; ** Ebitda calculated for the last twelve months. ***ROACE= Operating income after taxes / Capital employed

Without the effect of the León exploration write-off (767 billion pesos)

CAPEX

FOCUSED ON PROFITABLE GROWTH

USD Million

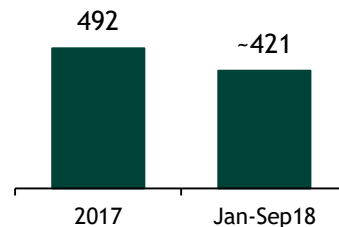


Up Mid Down Corp

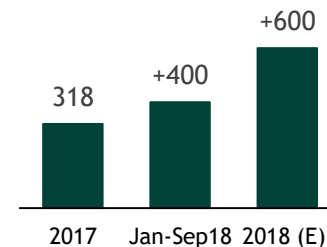


Increased Activity

Development Wells



Workovers



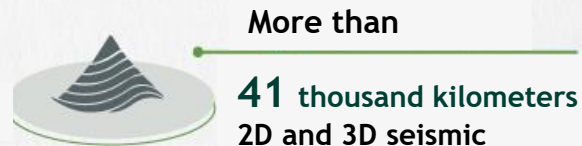
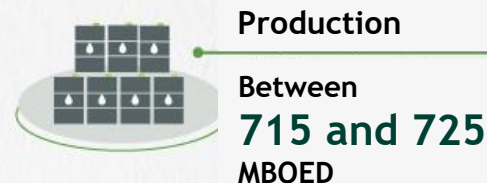
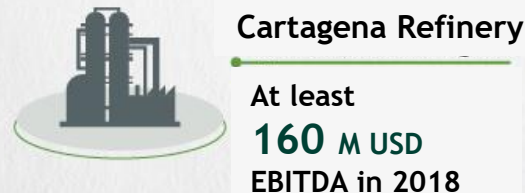
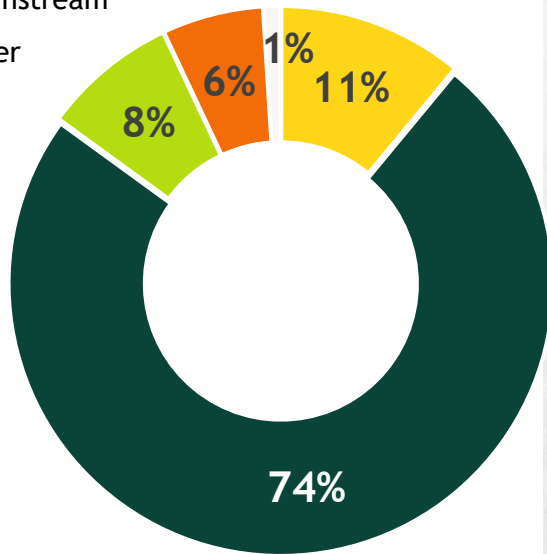
Future Growth

- ✓ Pau-Brasil block
- ✓ Development of enhanced oil recovery technologies
- ✓ Studies on formations such as Tibú, Área Sur, Caño Sur, Provincia, Llanito and Yariguí
- ✓ Maximizing gas value: Cupiagua condensate stabilizer unit
- ✓ Seismic acquisition

2018 INVESTMENT PLAN

USD \$3.0 TO \$3.5 BILLION

- Exploration
- Production
- Midstream
- Downstream
- Other



2018 OUTLOOK

PROFITABLE AND SUSTAINABLE GROWTH



Committed to production goal: 715 -725 MBOED



Increase in activity in line with the investment plan



Capital discipline under current oil price scenario



Cleaner fuels and incorporation of sources of renewable energy





Ecopetrol S.A. All rights reserved. The re production of this presentation
is forbidden without the written authorization of Ecopetrol S.A.



OIL AND GAS INFRASTRUCTURE