



OPERATIONAL AND FINANCIAL RESULTS

Fourth Quarter and Full Year 2020

ecopetrol



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OUR SPEAKERS



ALBERTO CONSUEGRA
COO



FELIPE BAYÓN
CEO



JAIME CABALLERO URIBE
CFO





Strategic progress under challenging conditions

Safety in our operations

- Designed and implemented action plan prioritising the commitment to safety in our operations
- + COP 88 B in social investment commitments to humanitarian aid to support the pandemic
- New Cultural Declaration launched
- Innovation and technology in our core
- **+ 5,000** average daily recurring connections
- **+ 8,000** daily virtual meetings

Profitable growth

- Focus on reserves protection
- Strengthened our gas strategy
 - EBITDA Margin in excess of 50% in 2020
 - Shell –strategic partner in the Colombian Offshore
- Progress in unconventional reservoirs
 - Awarded Kalé, first CEPI Project
 - Permian contributed 5.2 mboed in 2020
- Intensified focus on cost efficiency
 - Savings of ~ COP 0.7 T in 2020

TESG

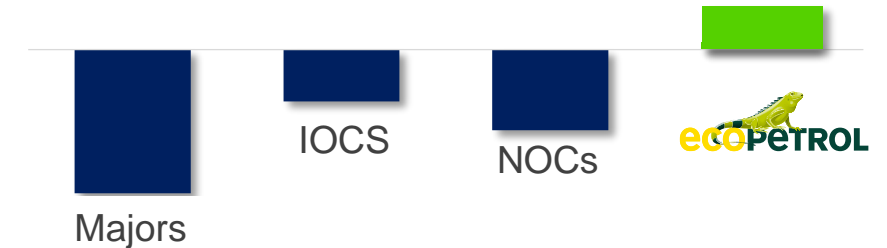
- Updated renewable energy's capacity target to 400 MW by 2023
- Started construction of 59 MW - San Fernando Solar Park-
- Delivered cleaner fuels, gasoline with <50 ppm
- Increased alliances for Digital Transformation



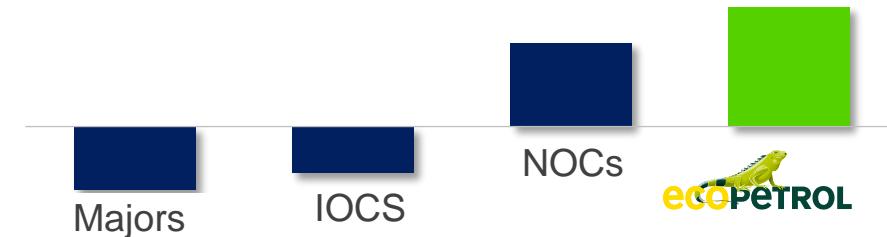
Ecopetrol continues to deliver superior results

METRICS	2020 TARGET	2020 REAL
Capex (US\$ M)	US\$2,500 - US\$3,000	US\$2,674
Operating cash flow generation	~US\$ 1,900 M	US \$ 2,500
Cash breakeven*	< US\$30 /BI	US\$ 32.7 /BI
Gross debt/EBITDA	<3.5x	2.8x
Production (mboed)	~700	697
Throughput (mbd)	300-320	320
Exploratory wells	17	18
Transported volume (mbd)	~1,000	1,017

Net Income US\$ B



ROACE (%)



Gross Debt/EBITDA (Times)



Majors: Exxon, Total, Shell, Chevron, BP. IOCS: Hess, Repsol, ConocoPhillips. NOCs: Equinor, PTTEP, ENI

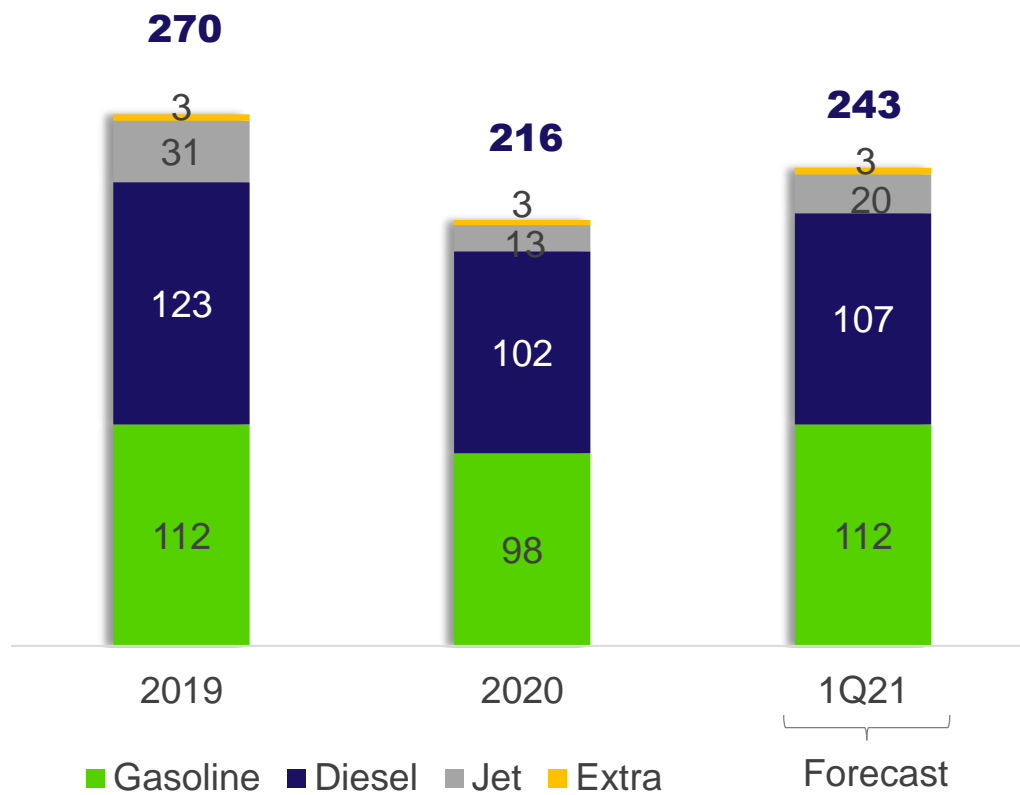
* Calculated as the Brent price variation that results in a minimum year end cash balance, as defined by Ecopetrol after operating cash generation, capex, dividends and financing.



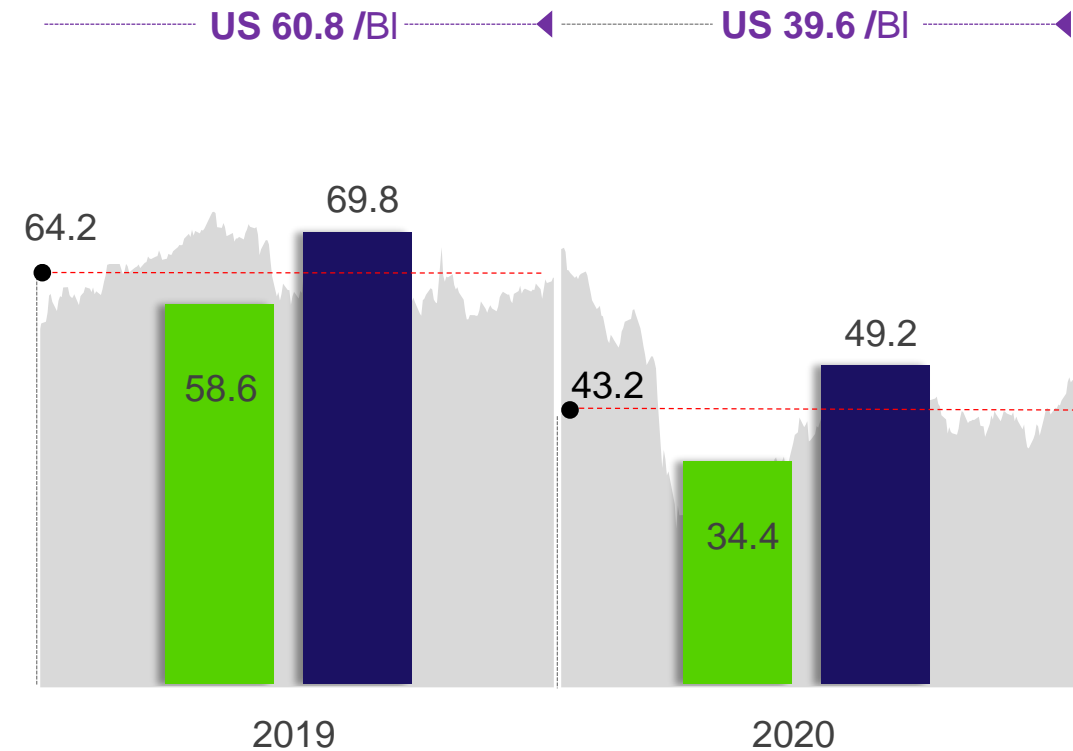
We faced an unprecedented price and demand contraction

DOMESTIC FUELS DEMAND*

mbd



BASKET PRICE US\$/BL**



Reliable operations that adapted to circumstances

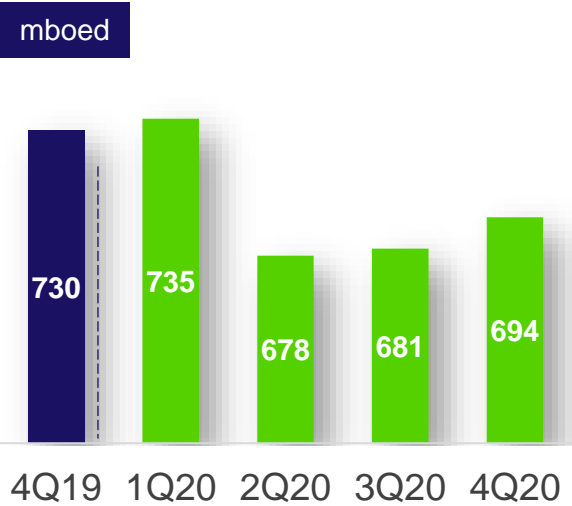
Exploration

WELLS
18
drilled in 2020 vs.
target of 17

INCREASE OF
47%
in cumulative
production vs. 2019

RESERVES
4.2 mmboe
Andina field y Esox
(Gulf of Mexico)

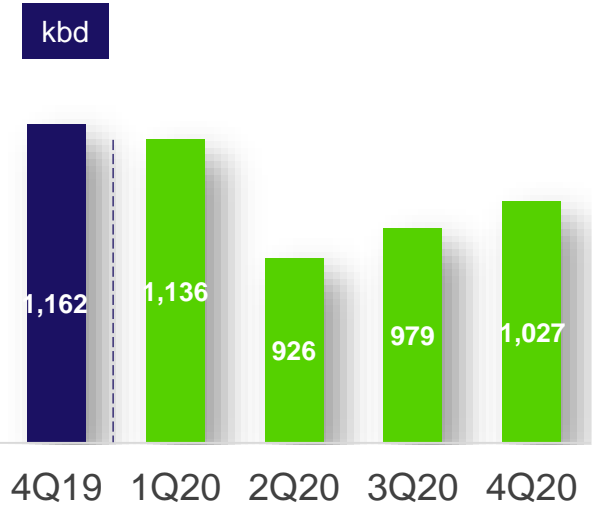
Production



725	697
2019	2020
PRODUCTION	
(mboed)	

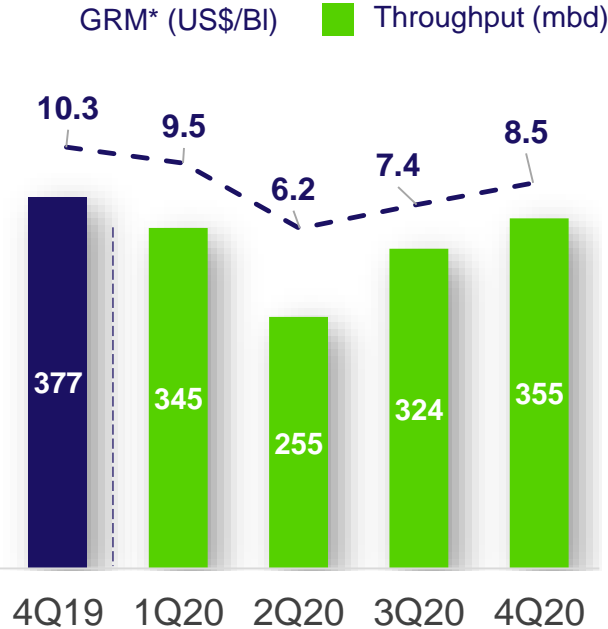
GAS EBITDA Margin **>50%** in 2020
17% of annual production

Midstream



1,153	1,017
2019	2020
TRANSPORTED VOLUME	
(mbd)	

Downstream



374	320
2019	2020
THROUGHPUT	
(mbd)	

*GRM: Gross refining margin



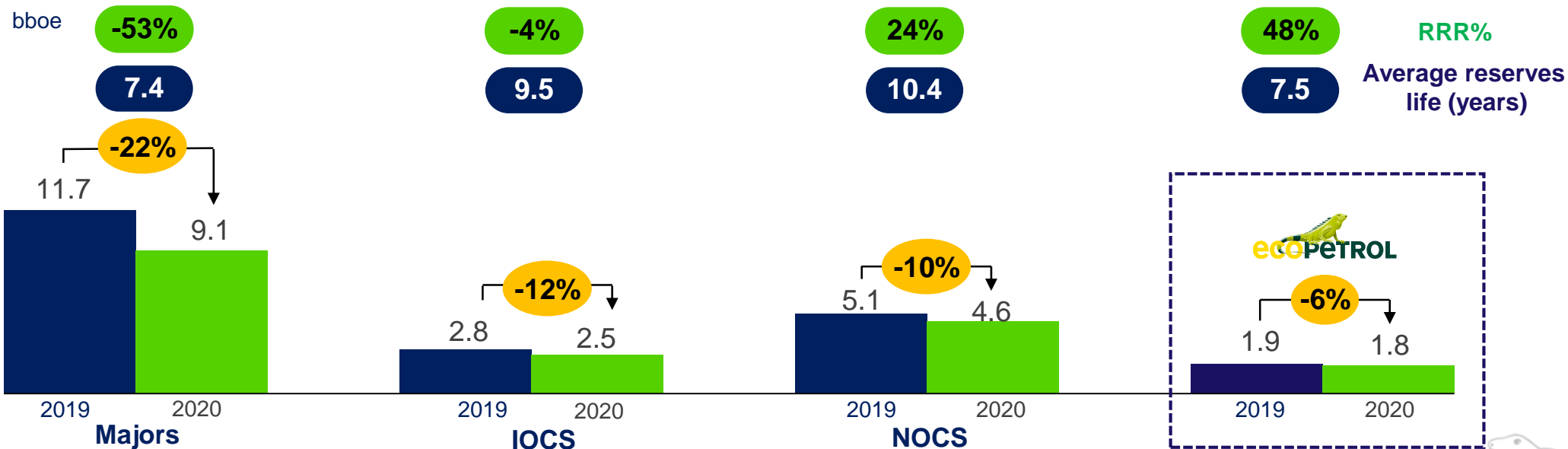
Increasing resilience of our reserves portfolio

**AVERAGE
RESERVES LIFE
7.5 YEARS**
2020 | Last 3
years
average

**RRR
115%**
Last 3 years
average

**INCORPORATION
113 MBOE**
2020

COMPOSITION
71% LIQUIDS | **29% GAS**



*Economic factors include Price effect and reevaluated projects.

Majors: Shell. IOCs: Hess, Repsol, ConocoPhillips. NOCs: Equinor, PTTEP, ENI. Reserves information for Exxon, Total, Chevron, BP is not available as to date.

We continue to make progress in unconventional reservoirs

KALÉ PROJECT

PUERTO WILCHES,
SANTANDER

Platform

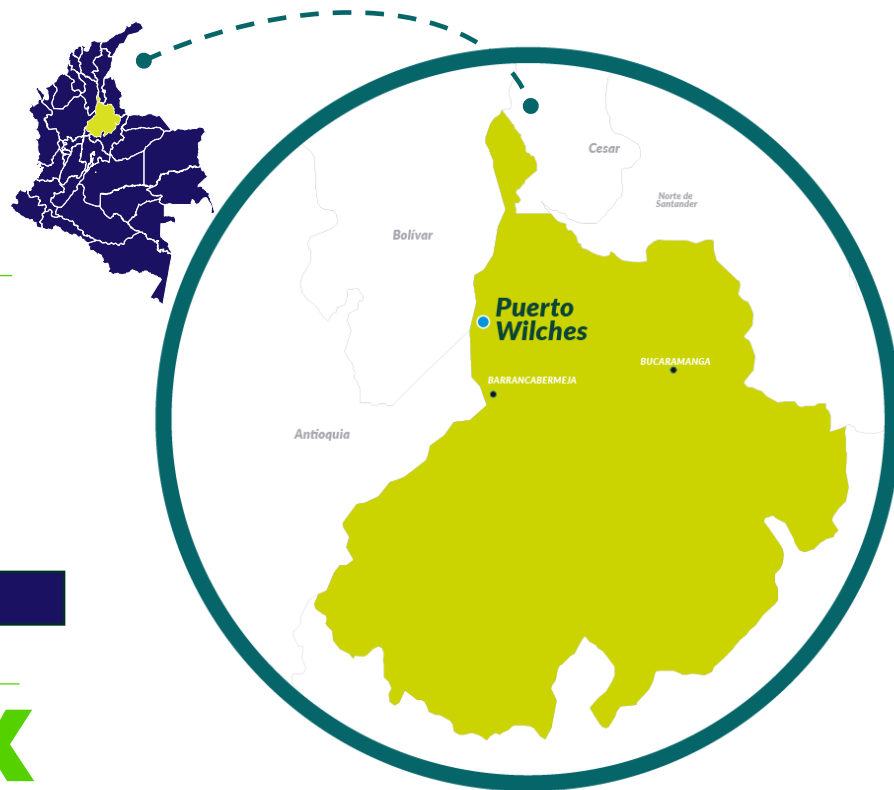
4.5 hectares

CEPI* awarded
by ANH

ENLISTMENT
Stage

MINIMAL IMPACT
Technologies (MIT)

CAPEX
~80 US\$ M
2021 - 2023



PERMIAN

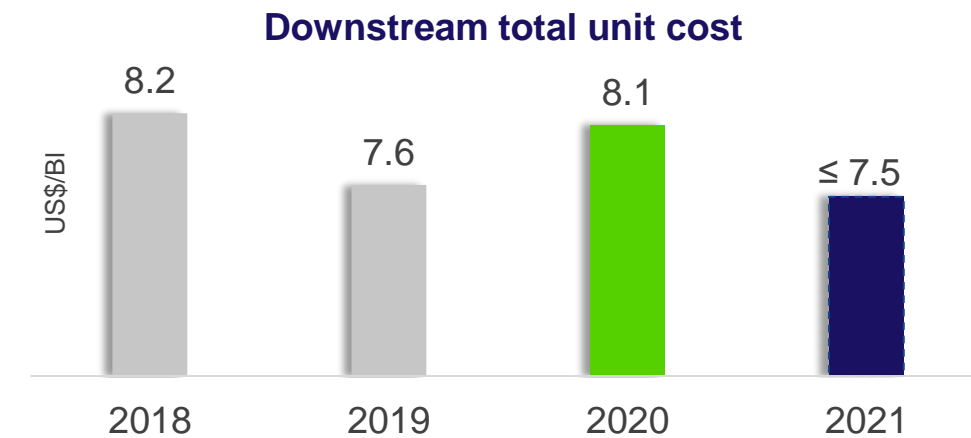
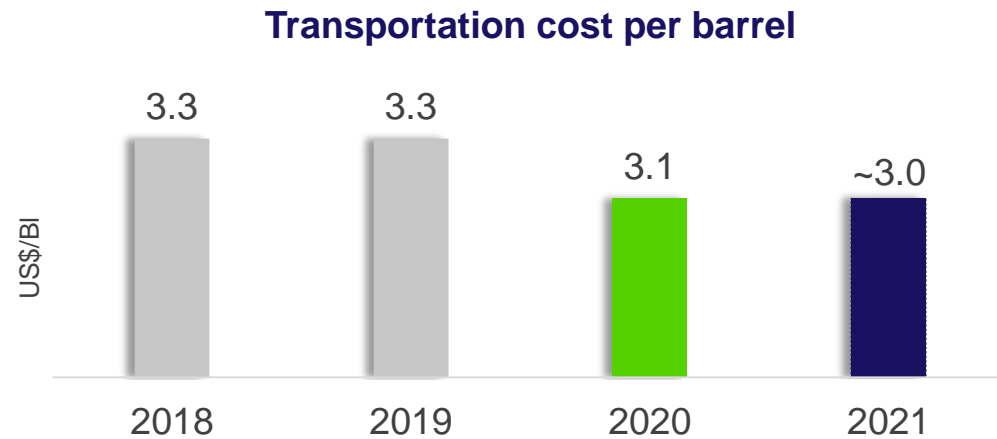
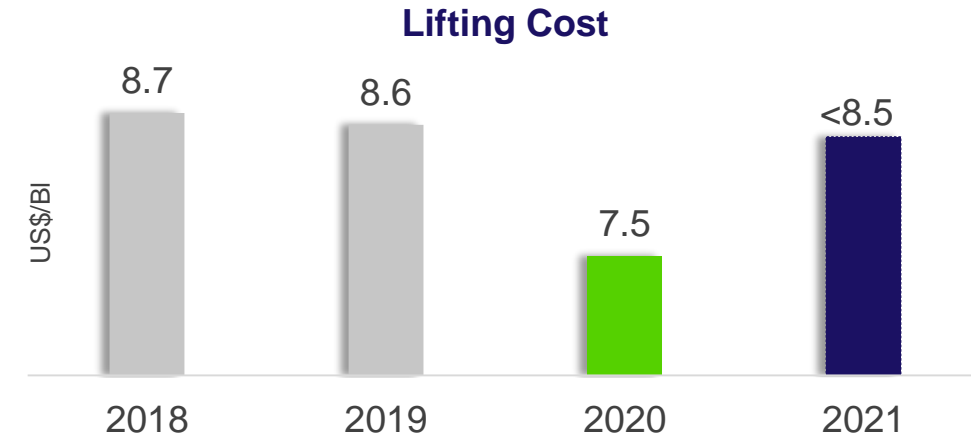
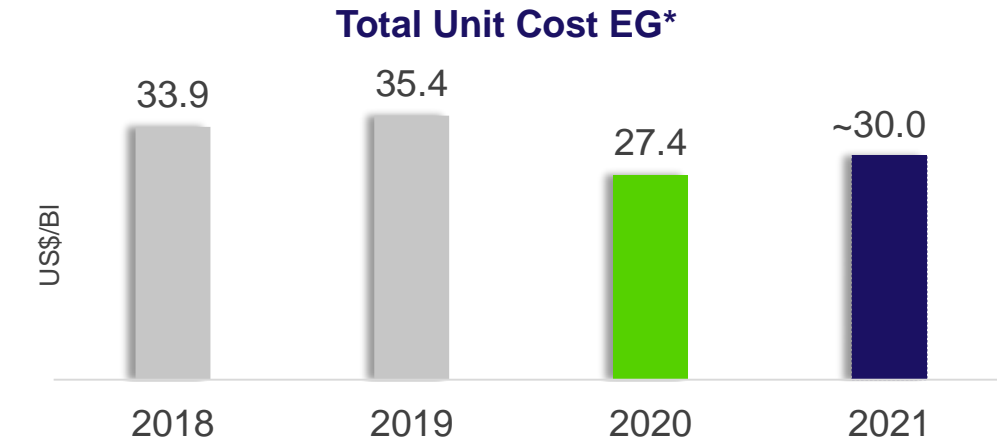

Knowledge transfer
16 seconds



20 **5.2** Production
20 mboed prior to royalties
22 Wells
in production

20 **~600** CAPEX
21 US\$ M
~90 Wells
drilled

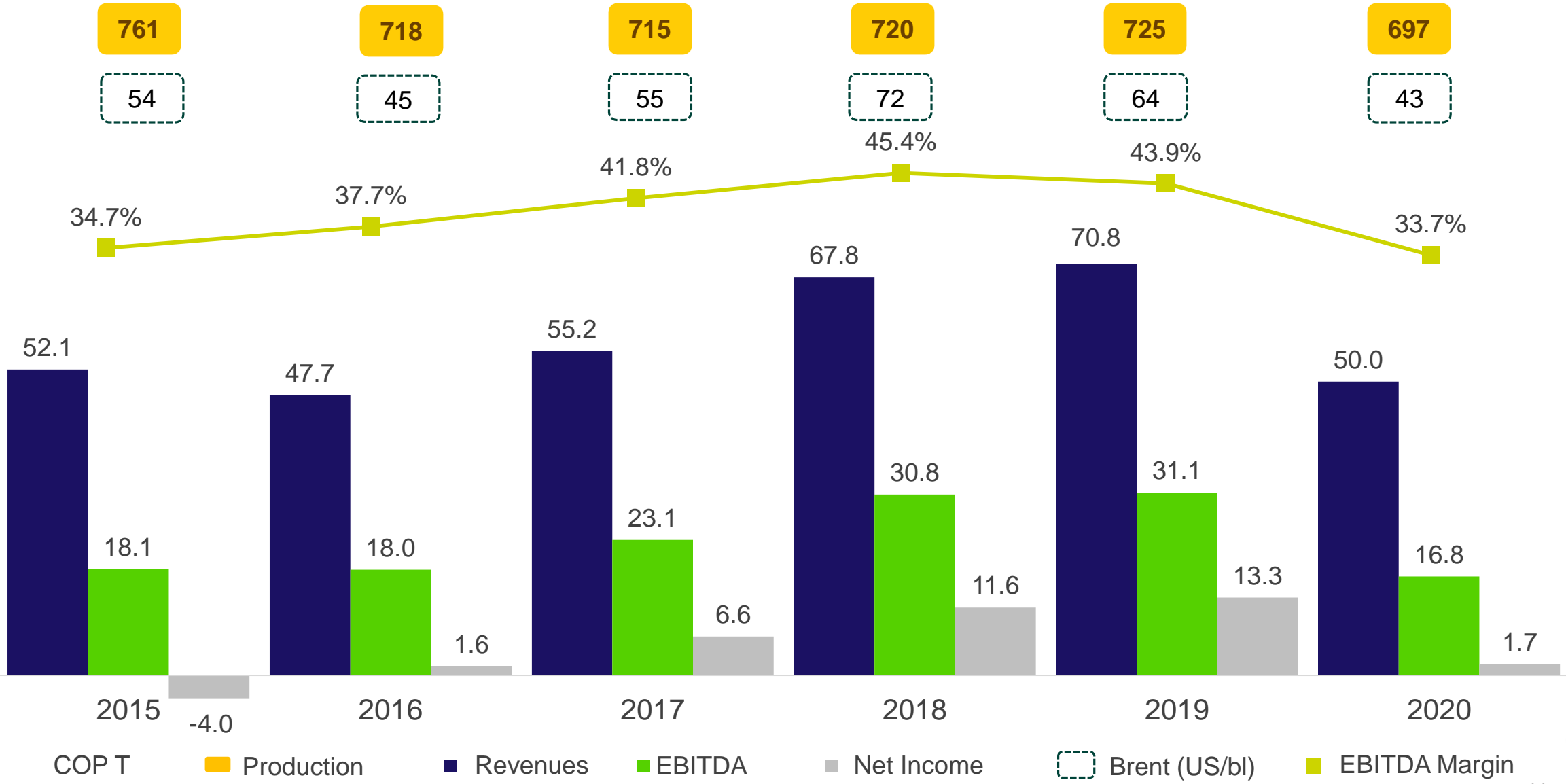
Competitive costs adjusted to activity level



*Includes: Cost of Transport, Operational Expenses, Operational Costs. Calculated over Barrels Sold.
Note: 2021 targets assumes Brent Price 45 US\$/Bl



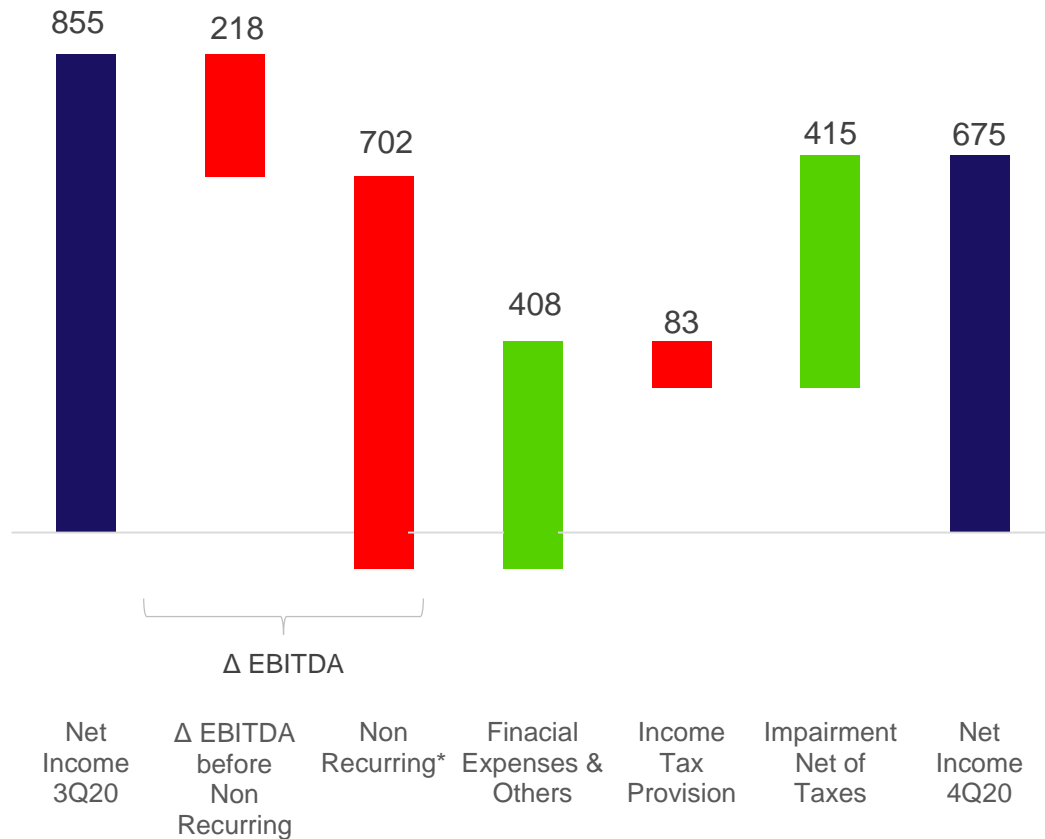
Proven resilience amidst challenging conditions



Fourth quarter results are rising, net of non-recurring events

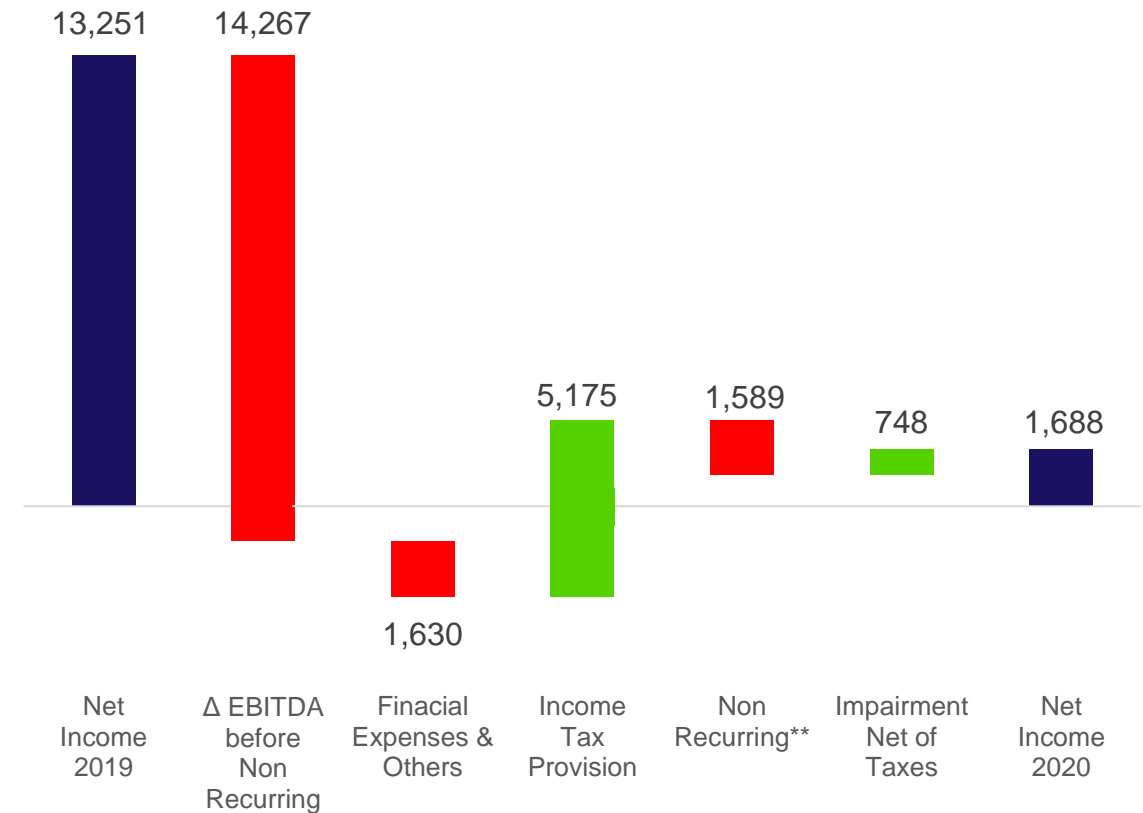
Net Income 4Q20 vs 3Q20

COP B



Net Income 2020 vs 2019

COP B



* Non-Recurring (after taxes) includes: Exploration Expenses (COP -312 B), Assets Write Downs (COP -208 B), Labor Expenses (COP -130 B); Others (COP 52 B).

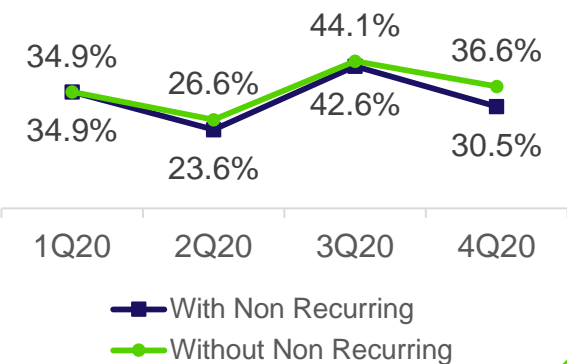
** Non-Recurring (after taxes) includes: Deferred Tax USA 2019 (COP -1,544 B), Invercolsa 2019 (COP -1,049 B), Guajira Asset and Bioenergy (COP 1,004 B).



Solid financial indicators after the crisis

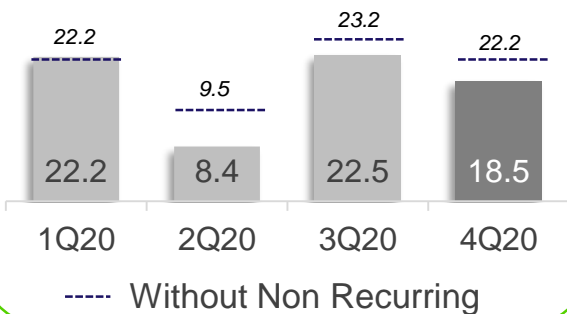
EBITDA Margin

30.5%



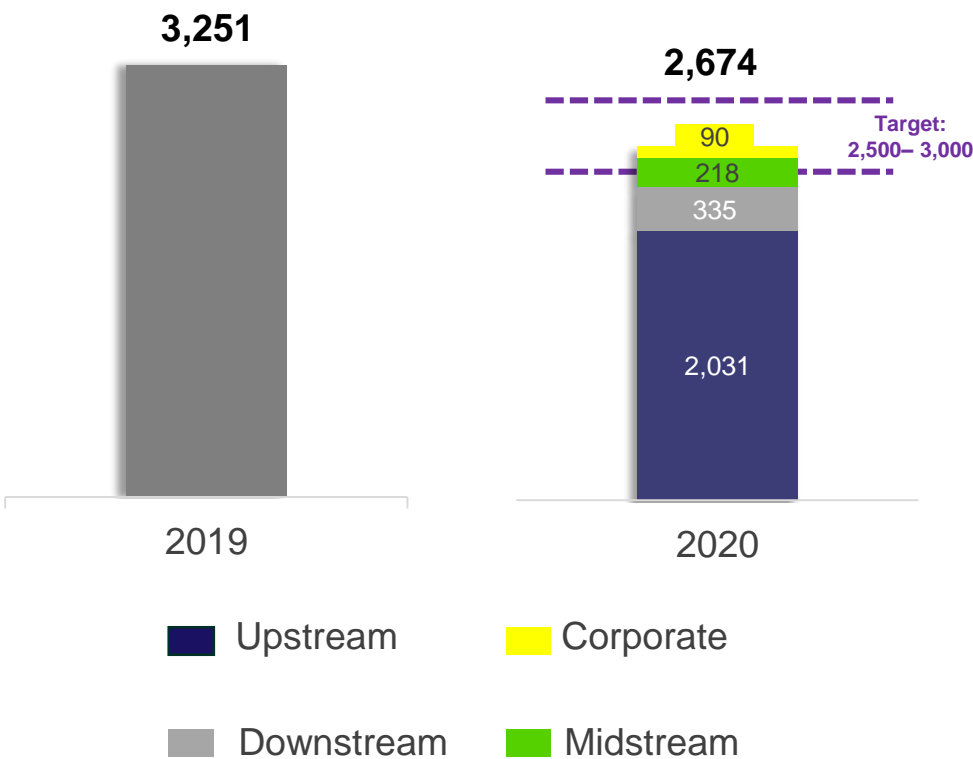
EBITDA/BI

18.5 US\$/BI



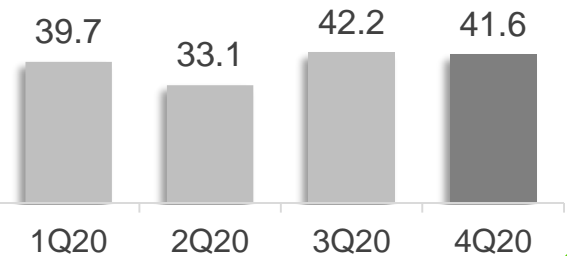
Organic investment within the target

US\$ M



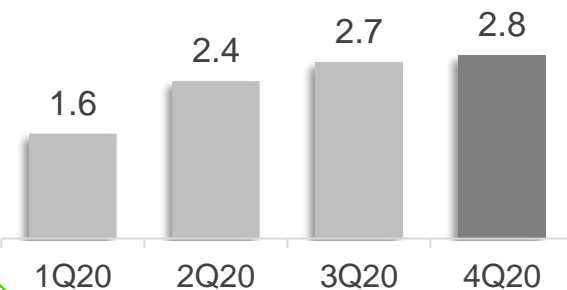
Net Income Breakeven

41.6 US\$/BI



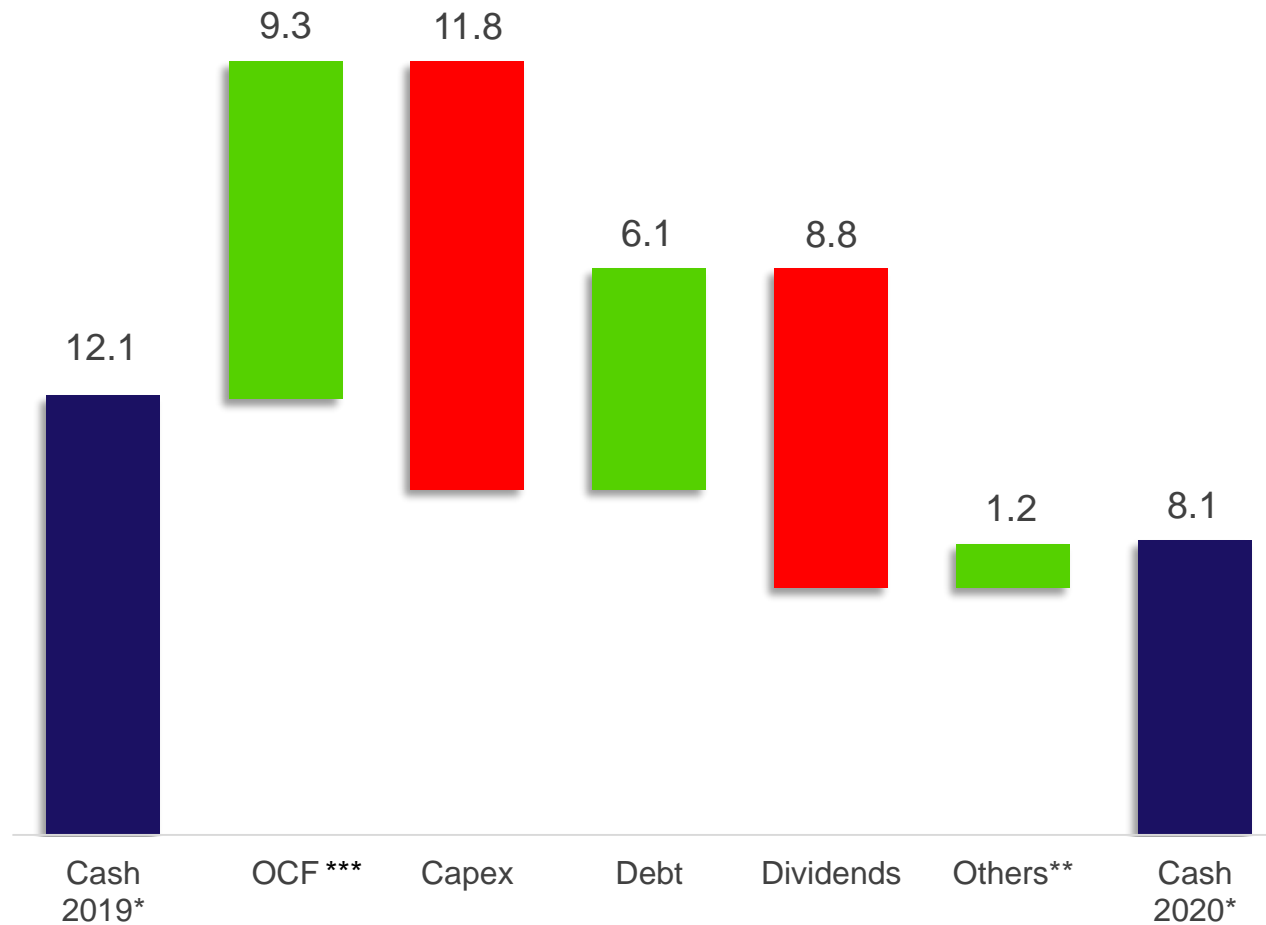
Gross Debt/EBITDA

2.8x

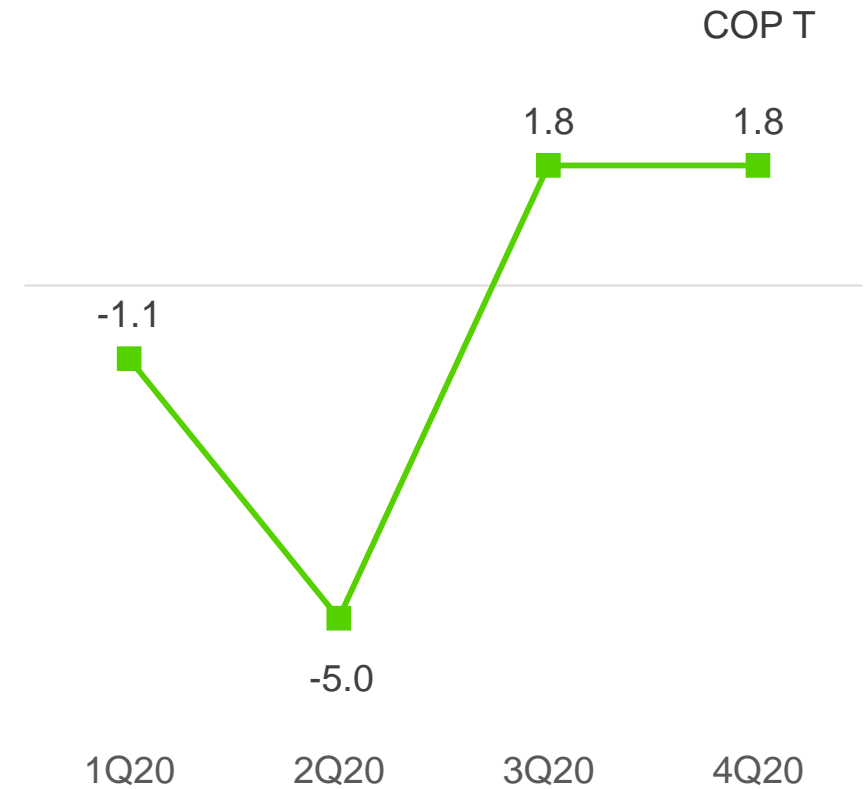


Robust cash position with stable trend

COP T



Changing trend in Free Cash Flow





BUSINESS PLAN UPDATE

2021-2023

Organic plan responds to market conditions and maintains value proposition

1

Restore growth path

2

Increases competitiveness

3

Cement energy transition

4

Progress in T ESG

METRICS	2021	2021- 2023
Organic Investment	US\$ 3,500 – 4,000 M	US\$ 12,000 – 15,000 M
Operating Cash Flow	US\$ 3,500 – 5,000 M	US\$ 14,000 – 16,000 M
EBITDA Margin	35% - 38%	
Gross Debt/Ebitda	<2.5x	
Production (mboed)	~700-710	~700 - 750
Exploratory wells	~9	~40
Transported Volume (mbd)	>1,000	
Throughput (mbd)	~340 - 365	~340 - 420
Decarbonization	Innovation and Technology Investment	Social and environmental Investment
US\$ 600 M	US\$ 100 – 150 M	COP\$ 1.7 B
2021-2023	2021-2023	by 2024

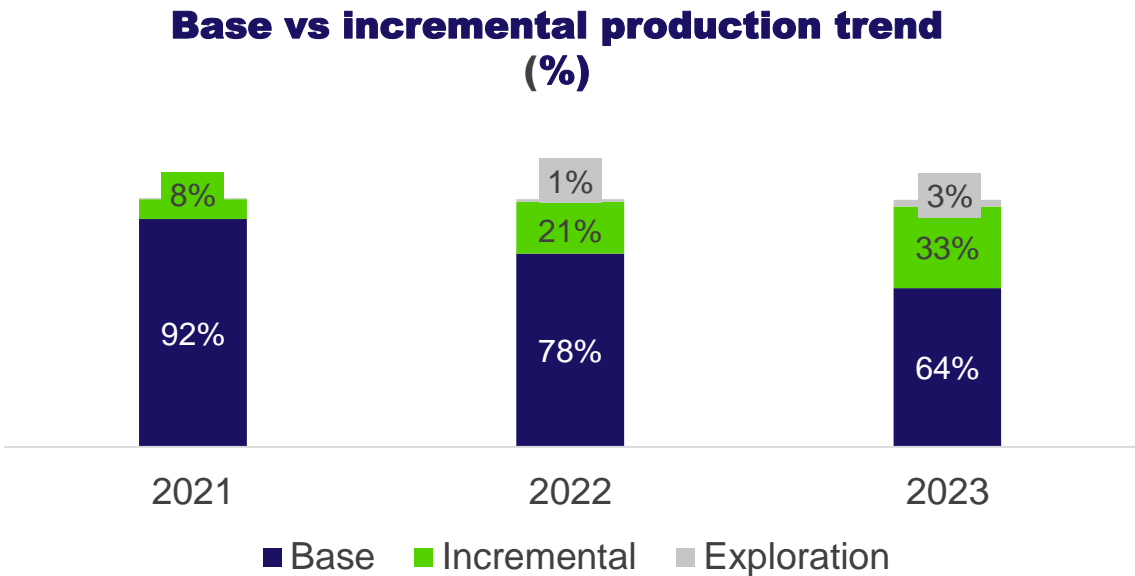
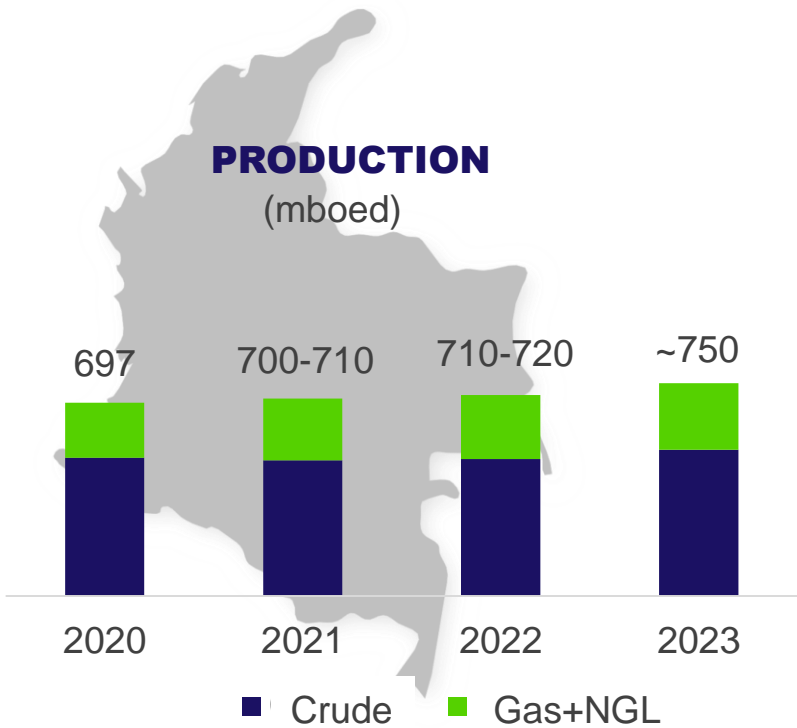
BRENT (US\$/B)	2021	2022	2023
	45	50	54



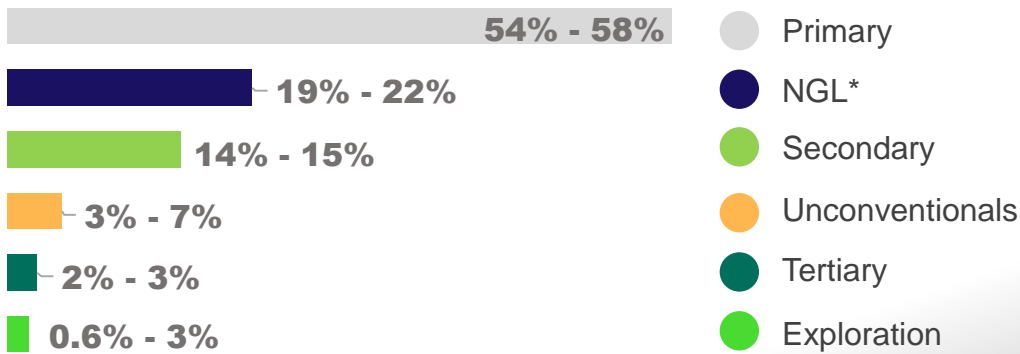
Focus on growth and addition of production and reserves competitive at ≤ US\$ 45 - 50/bl

E&P Investment
(2021-2023) | **US\$ 9,000 -11,000 M**

Gas Investment
(2021-2023) | **~US\$1,300 M**



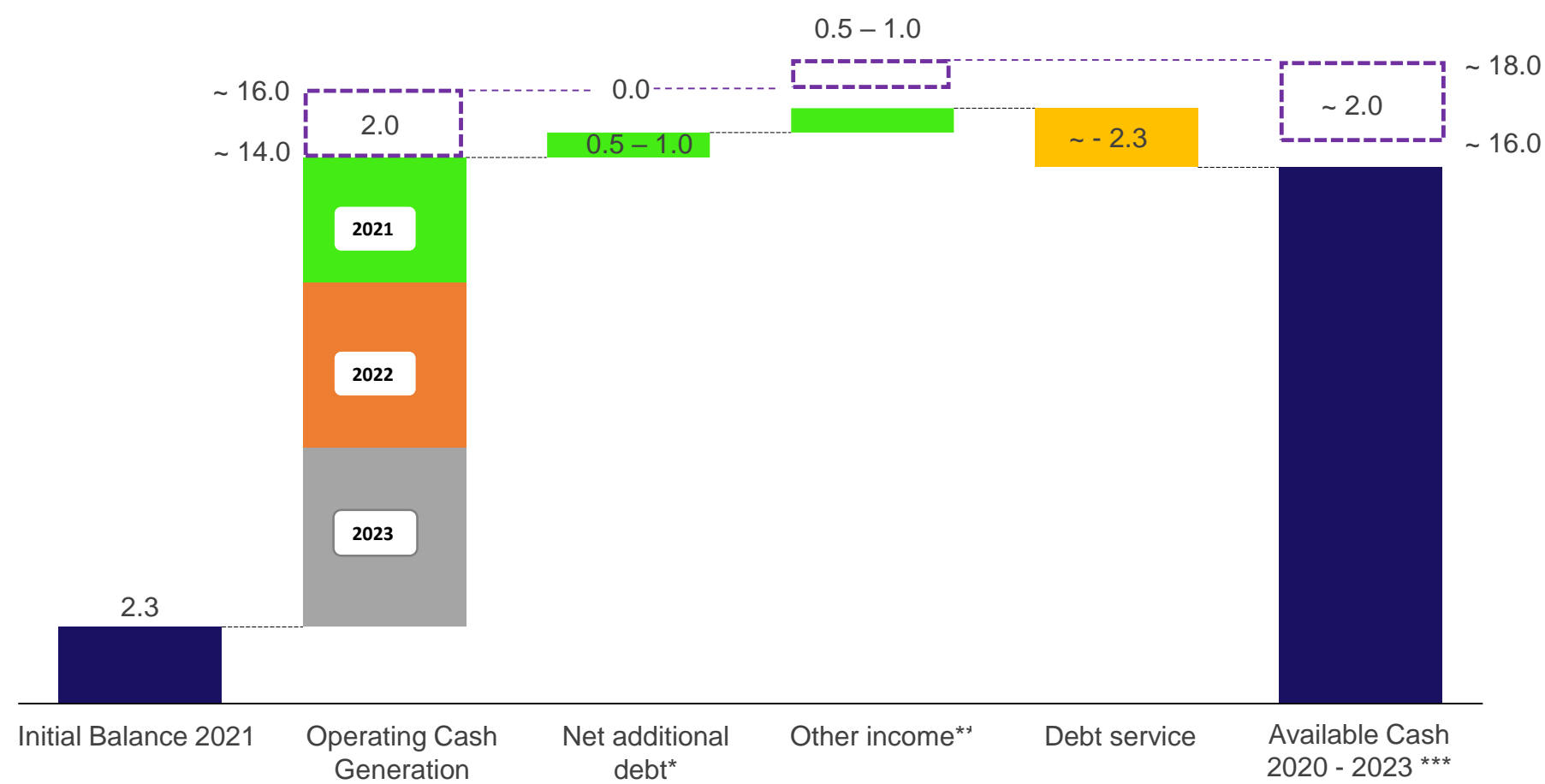
Percentage share in production volumes 2021-2023



*Includes NGL production by secondary recovery

Growing operating cash generation underpins the business plan

2020-2023 Cashflow (US\$ Bn)



Brent sensitivity ~ 55 US\$/BI 2021-2023

Cashflow Sensitivity

US\$ M

+/- 1 US\$/BI

-450

450

+/- 100
COP/USD

-500

500

+/- 5 MBD
Production

-180

180

Assumptions

Brent

FX

2021

45

3,600

2022

50

3,500

2023

54

3,400

*Includes amortization and incremental debt. ** Includes divestments and financial returns. *** Cash available for Capex and dividends.




We increased our T ESG ambitions

2021

6


Award
SOLAR PARKS
45 MW



Adopt
SCM
World Economic Forum


55%

VARIABLE
COMPENSATION
linked to **TESG**
targets

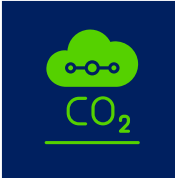


Launch
TESG
STRATEGY

2023



RENEWABLE ENERGY
400 MW portfolio



CUMULATIVE
EMISSION REDUCTION
of 3.0 MtCO2e

20% CO2e reduction
by 2030

Join World Bank initiative of
“Zero Routine Flaring by 2030”

2021 – 2023 INVESTMENTS

DECARBONIZATION

US\$ M ~600

WATER

US\$ M 120 – 130

DIGITAL STRATEGY

US\$ M 100 – 150

FUELS QUALITY

US\$ M 70 – 80

INNOVATION AND
TECHNOLOGY

Benefits of
US\$ 39 M in
2020

Strategic Alliances:
iNNpulsia, Ecopetrol &
Microsoft
Plug and Play
MinCiencias

REPORTING
AND
DISCLOSURE



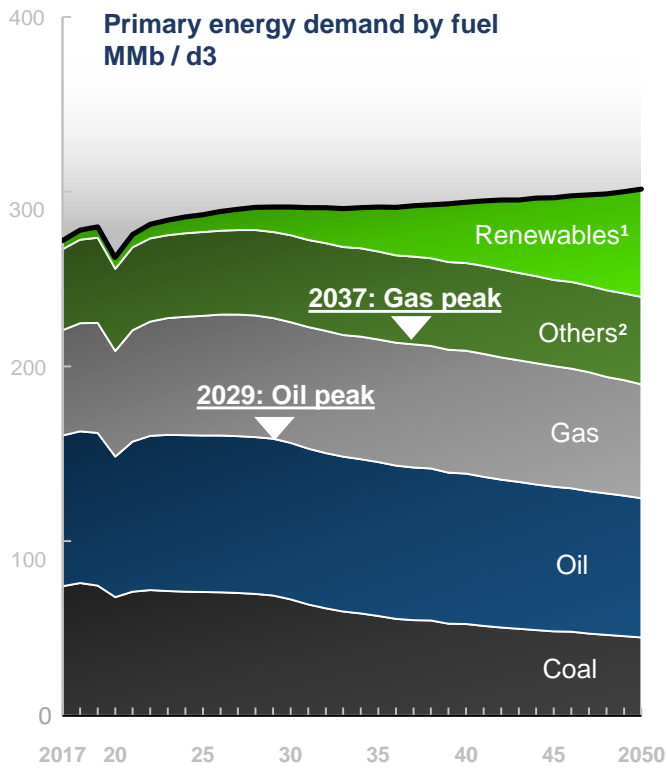
*Stakeholder Capitalism Metrics

POTENTIAL ACQUISITION OF ISA

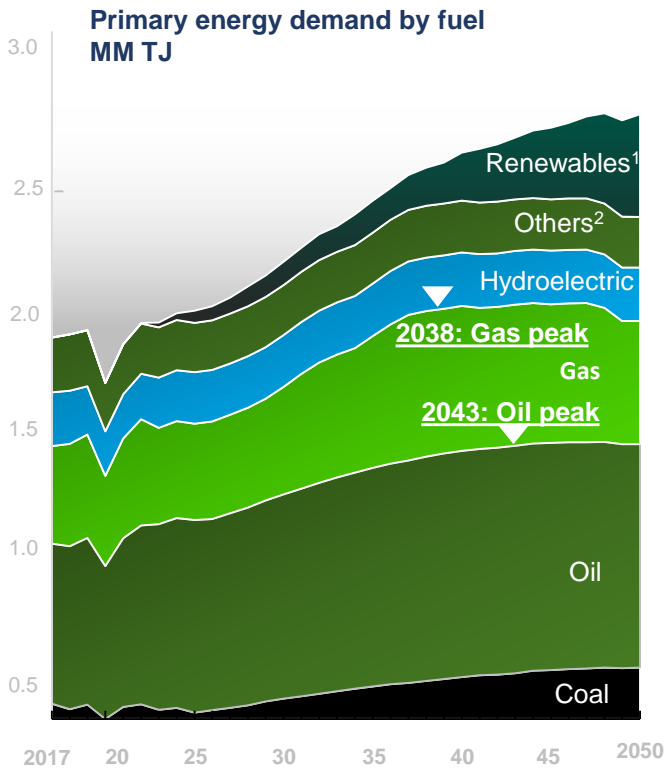


The energy transition comes with challenges and opportunities

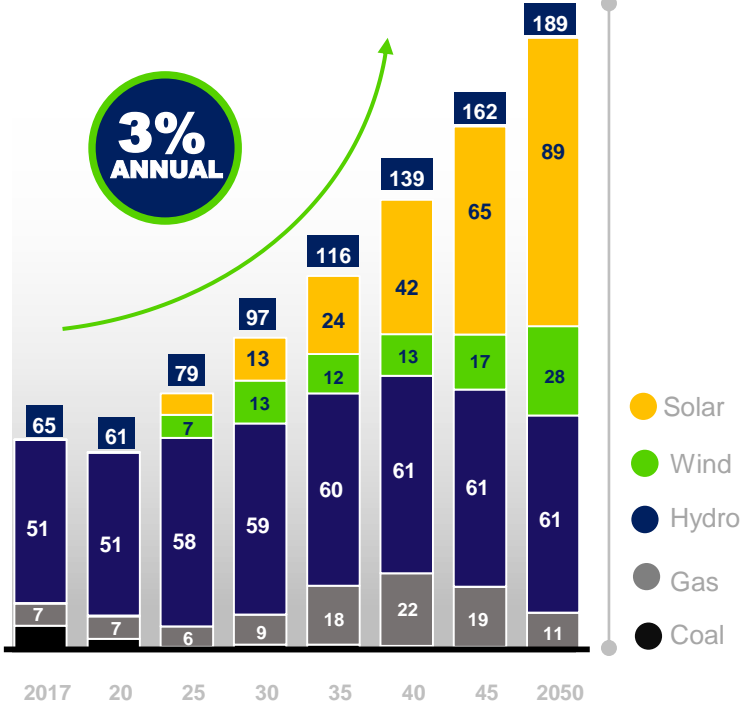
Global View



Colombia View



Energy generation
TWh



1 Renewables includes wind and solar; 2 Others include biomass, hydroelectric and nuclear; 3 Conversion is an approximation: 1 mmTJ is 0.467 MMb / d
Source: Ecopetrol based on Mckinsey Energy Insights, October 2020.



FOSSIL FUELS
will remain vital



RENEWABLES
will increase participation as a
primary energy source



ELECTRIFICATION
will grow from 61 TWh to
89 TWh



NO SINGLE ROUTE
Different markets, speed
and technologies

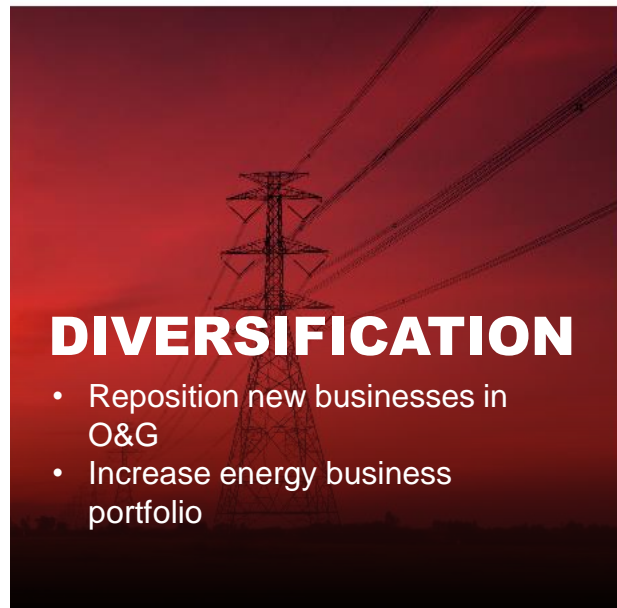


Ecopetrol defined 4 axes to respond to energy transition



COMPETITIVENESS

- Improve costs and production times
- Gas value chain opportunities
- Pursue value in refining and fuel markets



DIVERSIFICATION

- Reposition new businesses in O&G
- Increase energy business portfolio



DECARBONIZATION

Accelerate and prioritize decarbonization and energy efficiency



ESG

Harmonize economic, social and environmental development under a transparent and ethical governance framework

O&G PORTFOLIO COMPETITIVE DEVELOPMENT

1st Horizon

Early 2020s

Increase resilience of core portfolio and diversify to existing businesses resilient to energy transition

- ISA / Transmission
- Gas Strategy
- Renewable self-supply
- Decarbonization agenda

2nd Horizon

Late 2020s

Capture business opportunities in emerging value pools

- Renewable
- Green hydrogen
- Carbon capture
- Nature-based solutions

3rd Horizon

Post 2030

Businesses in emerging technologies

- Energy services
- Advanced materials

ISA is a profitable, unique, regional energy infrastructure platform with attractive growth prospects

ENERGY TRANSITION



Strategic position in the energy value chain



Transmission grid will play a key role in the future: provide system stability, connect with new renewable sources



Low emission business



Scale vs opportunities in renewables in Colombia

GROWTH



Potential growth in EBITDA
CAGR: 15% 2014-2019



Attractive growth prospects in power transmission and road concession businesses



Materiality: ISA EBITDA represents ~27%* of GE EBITDA as of 3Q20



Attractive combined ROACE (ECP + ISA)

IMPROVES RISK PROFILE



Regulated and long term concession revenues provide stable and predictable cash flow



Better resiliency to oil price volatility



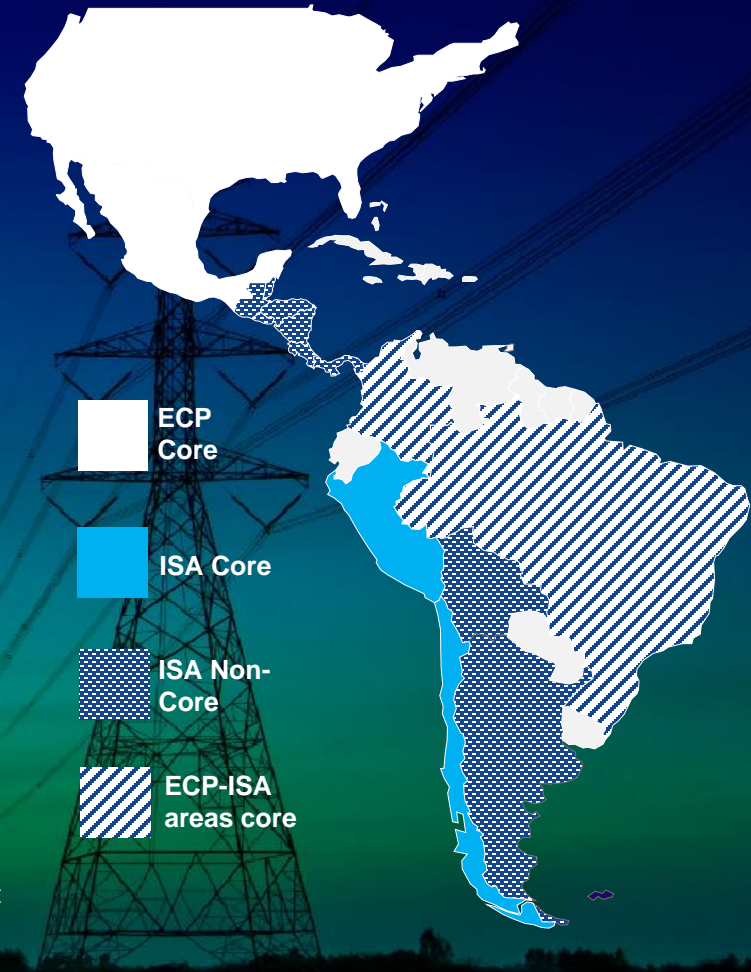
Presence in markets with stable regulatory framework



Transmission has similar characteristics to Ecopetrol Group midstream assets



Diversified infrastructure platform by country and asset class



Financial structure creates value and leverages stability

PROFORMA

Accretive*

- **EPS:** Incremental 2021+
- Float: ~US\$ 2.7 B → ~US\$ 5.4 B (improves liquidity and stock support)
- Market liquidity
 - 2020: largest equity issuance on record ~US\$ 530 B**
 - Investors looking for higher returns given low interest rates environment
 - New sources of capital



- Post transaction Gross Debt/EBITDA*** (times)



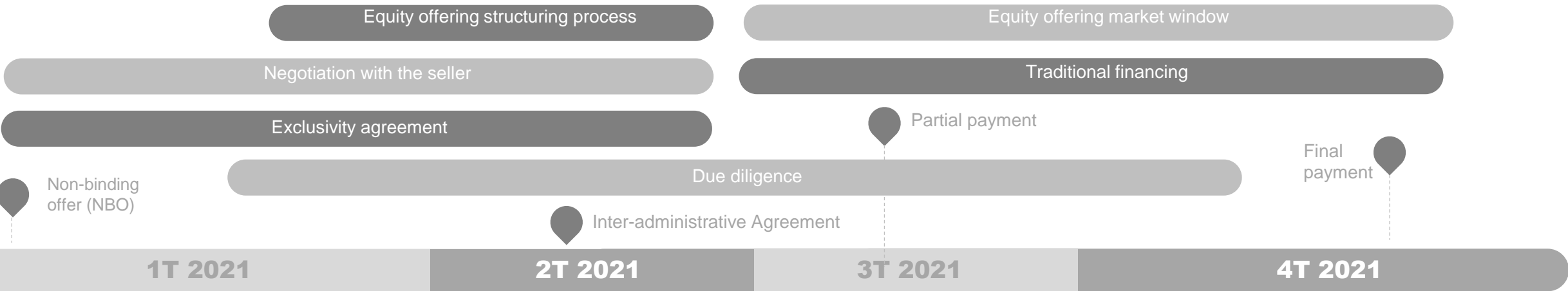
- **Credit Positive/Neutral**
 - Rating agencies
 - ~25 bps spread compression vs Treasures (10Y) since NBO announcement

* Under current market conditions – Projections assume business performance “as is”

** Source: Dealogic.

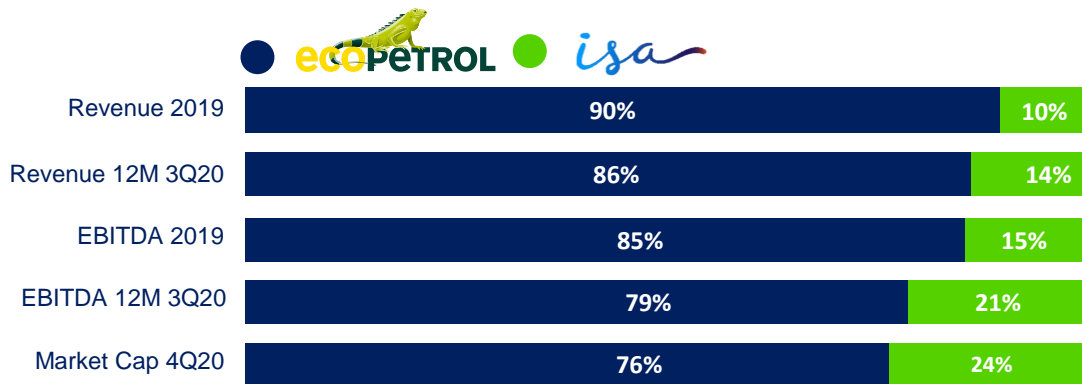
*** Gross Debt /EBITDA assumption: Brent price 50 US\$/Bbl in 2021 and US\$ 1.7 B debt.

ASSUMPTIONS MAY VARY SIGNIFICANTLY VS FINAL CONDITIONS OF THE POTENTIAL TRANSACTION.

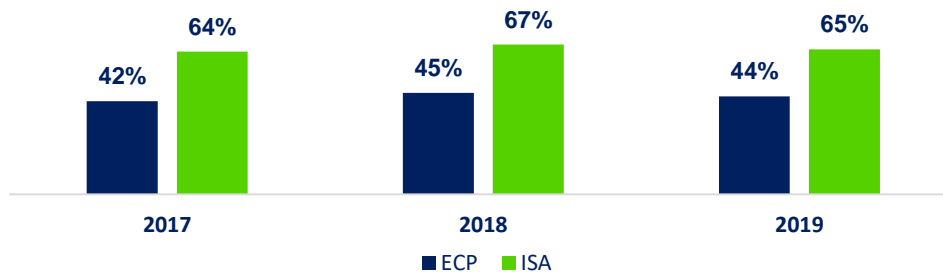


A more robust GE with greater capacity to generate value

SCALE AND MATERIALITY CONTRIBUTION ANALYSIS



COMPETITIVE PROFITS EBITDA MARGIN



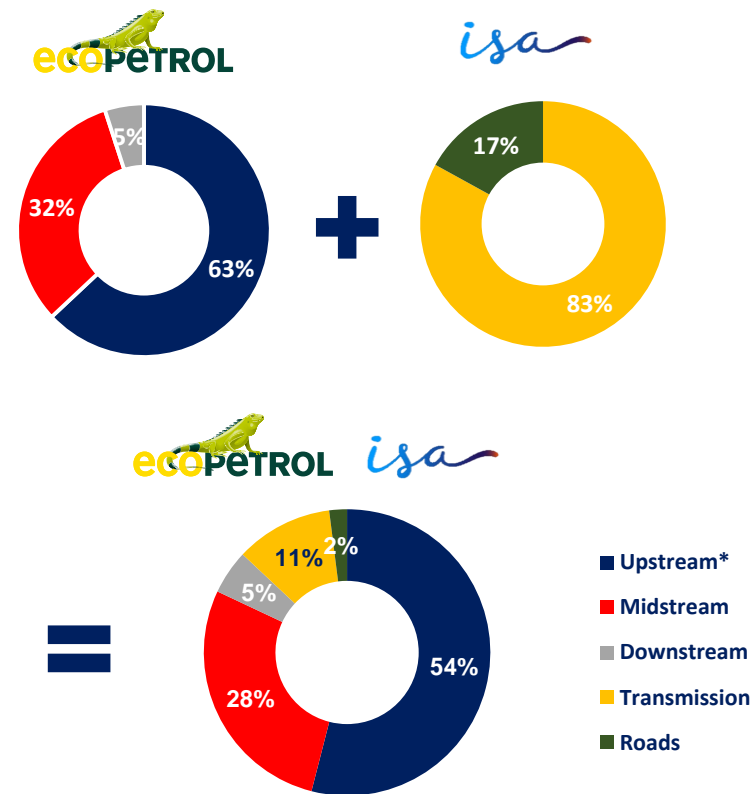
LOW CARBON REVENUE EMISSIONS / EBITDA (MtCO2/Sbn.)



The infographic shows the addition of EcoPetrol and isa to reach the 1.37 target. It features the EcoPetrol logo (a green lizard) and the isa logo (the word 'isa' in blue script). The calculation is displayed as: **1.61 + 0.02 = 1.37**. The numbers are in a large, bold, dark blue font.

STABLE CASH FLOWS ARE INCORPORATED WITHOUT REDUCING EXPOSURE TO BRENT

EBITDA per Line of Business



*In 2019 ~9% of EBITDA is attributable to gas. In 2020 this percentage rises to ~31%.
Source: Ecopetrol calculations based on public information as of Dec/2019.

In summary

- **2020 Results** demonstrate resiliency and competitiveness
- **21-23 ORGANIC PLAN:**
 - EBITDA, production and reserves growth
 - ~US\$ 4-5 B/Year investments, self-funded
 - Higher prices provide upside vs US\$ 45-50 /BI Plan
- **ISA: TRANSFORMATIONAL OPPORTUNITY**
Energy transition, growth, improved risk profile



Q&A



DE
TODOS,
PARA
TODOS

Q&A PARTICIPANTS



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VP of Corporate Strategy
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Jaime Caballero Uribe
CFO



Jorge Calvache
VP of Exploration



Milena López
Strategy and Finance VP-
Cenit



Pedro Manrique
Commercial and Marketing VP



Fernan Bejarano
Legal VP





DE TODOS, PARA TODOS

ecopetrol

GLOSSARY

Acronym	Definition
Bl	Barrel
Bn	Thousand of million
bped	Barrels of oil equivalent per day
COP	Colombian pesos
ESG	Environmental, Social and Governance
GEE	Business Group
JV	Joint Venture
kbd	Thousand of barrels per day
kbped	Thousand of barrels of oil equivalent per day
KTON	Thousand of tons
Mbtu	Million de BTU
mmbd	Million barrels per day
mmbbl	Million barrels
MtCO ₂ e	Million Metric tons of Carbon Dioxide equivalent
ROACE	Return on Average Capital Employed: Operating income after tax / Capital Employed. Calculated in pesos
Tn	Million of million
USD	US dollar
USD Bn	Billion US dollar
USD M	Million US dollar