

2022 First QUARTER RESULTS

HISTORICAL RESULTS THAT ANCHOR OUR LONG TERM STRATEGY

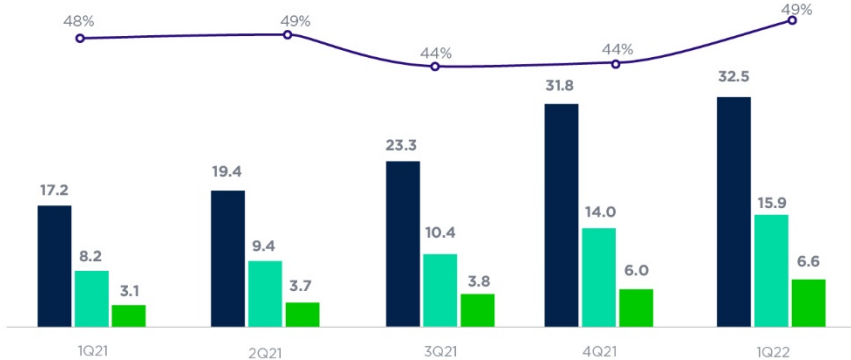


Financial Results

COP Tn

● Revenues ● EBITDA ● Net Income ○ EBITDA Margin

Record Financial Results



	1Q21	2Q21	3Q21	4Q21	1Q22
BRENT USD/BL	61	69	73	80	98
BASKET PRICE USD/BL	58	65	68	74	88

APPROVED DIVIDENDS

(Ordinary + Extraordinary)



\$280

per share
equivalent to COP 11.5 Tn
DIVIDEND YIELD: 10.4%*

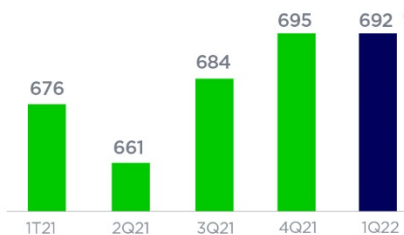
*Dividend= COP 280/per share
Closing 31/12/2021 = COP 2,690

Operational Results

mboed: Thousand barrels of oil equivalent per day
mbd: Thousand barrels per day

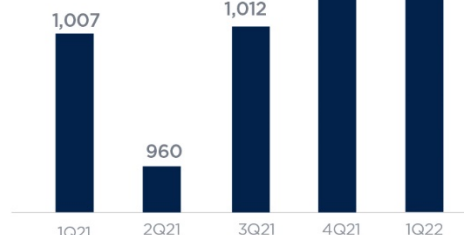
Production

mboed

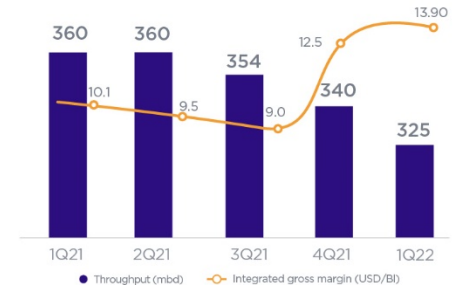


Midstream

(mbd)



Downstream



Contribution to Ecopetrol Group's EBITDA in 1Q22

-COP **2.0** TRILLION



Investments **USD 199 MILLION**



Energy Transmission

15 improvements within Brazil transmission network/grid

TESG

Technology, Environment, Social, Governance

First production pilot of

GREEN HYDROGEN IN COLOMBIA

Cartagena Refinery

50 Kilowatts
270 Solar Panels
7300 Kg/year

Launch of Ecopetrol Group's Hydrogen Strategic Plan
9%-11% contribution to decarbonization target by 2050

COMMITMENT

WATER NEUTRALITY BY 2045

ECOPETROL IN PARTNERSHIP WITH ACCENTURE AND AMAZON



76% Delivery

2022 Target "Sembrar nos Une"
~4.5 million trees planted



Launched

CONEXIÓN PUMA

Program in Chile

Protect 20,878 hectares of forest
Reduction ~223 tonsCO2 by 2030

CONEXIÓN PUMA | isa



Ecopetrol closed the first quarter of 2022 with results that support our efforts aligned with a fair and responsible energy transition, affirming our commitment to provide energy security in Colombia and other countries where we operate, within the framework of our 2040 Strategy “Energy that Transforms”.

The current international crude oil price environment (average 1Q22 Brent price was 98 USD/BI) is being driven primarily by the uncertainty that the Russia-Ukraine conflict has generated on global hydrocarbon supply, and the recent Chinese lockdown implications on demand. The Ecopetrol Group and the countries where we operate are not exempt from the consequences of this situation nor to its impact on economic recovery.

Although the increase in prices has benefitted our revenues, it has also created challenges in terms of inflation, where high energy costs and an international logistics crisis are beginning to pressure our operating costs and project execution timelines. The Ecopetrol Group has been constantly monitoring the direct and indirect impacts of inflation and has implemented actions to mitigate its effects.

During the quarter, in our **Grow with the Energy Transition** strategic pillar, we achieved positive results across all segments. In **exploration**, I would like to highlight the results of the 3rd Permanent Offer Cycle of the ANP in Brazil, where, in conjunction with Shell, we obtained 6 offshore blocks, located in the Santos basin, increasing our presence now to 12 offshore Brazilian blocks, as we continue consolidating our exploration efforts in high potential basins.

In **production** we reached this quarter an average of 692 mboed, an increase of 16.3 mboed as compared to the same quarter of 2021, primarily explained by: i) our outstanding operating performance of unconventional in the Permian (USA); ii) positive results in the Liria YW12 and Flamencos exploratory wells; and, iii) production recovery in the Castilla field. Compared to 4Q21, production decreased due to maintenance and operational activities, and public order circumstances, situations that have been gradually restored. As of March, we achieved an average production of 705 mboed.

During this quarter, the contribution to production of gas was 19.8% (136.7 mboed) and whites was 3.8% (26.2 mboed) for a total increase of natural gas of 6.1% compared to 1Q21 driven by domestic demand recovery.

In **Unconventional Reservoirs**, with 31 new wells in Permian entering into production, we completed a total of 135 producing wells, reaching an average JV production in March of 61.4 mboed (net for JV before royalties), corresponding to 30.1 mboed net for Ecopetrol before royalties. For the quarter, average production was 26.7 mboed (net for Ecopetrol before royalties). On March 25th, the ANLA issued a resolution granting the environmental license for the Kalé Integral Exploratory Pilot Project in Colombia, which we expect will be confirmed as final during the next few months. We are also expecting the public audience for the environmental impact study for the Platero project, which was filed in February of this year. At the Ecopetrol Group we are convinced of the importance that unconventional represent for the country’s energy security; and as such, we will continue pursuing activities related to the pilots, including multiple discussions with local communities and other stakeholders to provide details about the projects progress and clarify their concerns.

The **Midstream** segment reported a strong performance this quarter, with total volumes transported through our multipurpose and oil pipelines increasing by 3.3% as compared to the same period last year, leveraged on an increase in production as a result of the economic recovery.

In the **Downstream** segment, the consolidated throughput reached 325 mbd during a quarter characterized by scheduled maintenance activities in both refineries; as a result of comprehensive planning in the logistics chain, we were able to fully supply the domestic market. In addition, we celebrated the 100-year anniversary of the Barrancabermeja Refinery, a leading force of the country’s development.

On the **commercial front**, we highlight the improvement of the realization price of our crude oil basket, which increased from 57.8 USD/BI in 1Q21 to 88.3 USD/BI in 1Q22 as a consequence of the Brent increase and the ongoing commercial strategy to diversify to other export destinations, which mitigated the effect of a more competitive market. Furthermore, Ecopetrol Trading Asia completed its first sale for 1.09 million barrels of crude which we expect to deliver during the second quarter of this year.

In the **Energy Transmission and Toll Roads segment** we invested USD 199 million during the quarter. We continued the construction of the energy transmission projects awarded to ISA CTEEP in prior bids and with reinforcement and improvement works to its transmission network. We also advanced in Peru in the Coya-Yaná project, and in Colombia in the execution of several UPME (Unidad de Planeación Minero Energética) projects.

In our **Generate Value through TESG** pillar, we can report the following advances:

On the **environmental front**, we defined our emission reduction target for this year (262,761 tCO_{2e}), in line with our decarbonization goals and we set in motion our first green hydrogen production project in the Cartagena Refinery. We expect to pursue a robust plan in order to produce green, blue and white hydrogen, which we hope will contribute between 9% and 11% of our 50% emission reductions goal in Scopes 1, 2 and 3 by 2050. In 2022, we contemplate an investment of USD 6 million for the development of this pilot program in the Cartagena Refinery and to carry out projects and studies on hydrogen's potential.

We achieved a reduction of more than 490 thousand tons of carbon emissions in the Ecopetrol Group over the past two years as a result of a comprehensive campaign that includes fugitive emissions and venting reduction, the decrease of routinary flaring and the incorporation of renewable energies that focus primarily on solar parks, as well as other initiatives to continue our progress in energy efficiency.

On the **social dimension**, resources amounting to COP 68 billion were allocated to social investment across strategic and regulatory projects. Noteworthy in this quarter is the completion of three infrastructure projects in the departments of Casanare, Nariño and the Pajzil-Cartagena road, for a total of 31 projects completed under the "Works in Lieu of Taxes" mechanism.

On the **corporate governance** front, we highlight the following milestones during the quarter: i) we carried out our first in-person General Shareholders' Meeting after two years of virtual mode; and ii) the shareholders' approval of a total dividend of COP 280 per share (ordinary of COP 234 and an extraordinary of COP 37 per share), for a total of COP 11.5 trillion, which results in a dividend yield of 10.4%.

We highlight the release of the first ESG Evaluation made by S&P on Ecopetrol in which we achieved a score above the industry average and in which our Corporate Governance rates are above our peers. In addition, we also published our Comprehensive Sustainable Management Report for 2021 and the second SASB report.

Regarding the **Cutting-edge Knowledge** pillar, we partnered with Accenture and Amazon Web Services (AWS) to foster TESG and operating efficiency in companies in the power industry. Through this project, we seek to build an open data water management platform that will incorporate analytics, AI (Artificial

Intelligence) and cloud storage capabilities to leverage the use and efficient management of water resources in the Oil & Gas industry. This partnership represents a key effort towards our recently announced goal to become water-neutral by 2045. We expect to allocate USD 200 million in investments to water management projects this year.

We joined forces with ANDI, iNNPulsa Colombia, and other organizations to create the first Center for Innovation and Technology of the Caribbean, which will be a part of the C-Emprende national network. This think tank seeks to present solutions for energy transition and petrochemical challenges, with a leading role from hydrogen.

Finally, regarding our **Competitive Returns** strategic pillar, I am pleased to announce that we obtained the highest quarterly results in the history of Ecopetrol. We closed the quarter with consolidated revenue of COP 32.5 trillion, which represents an increase of 89% as compared to 1Q21, a net profit of COP 6.6 trillion, an EBITDA of COP 15.9 trillion (EBITDA margin of 49%), and a Gross Debt/EBITDA leverage indicator of 1.8x. The return on average capital employed (ROACE) was 14.5%. During the period, ISA's contribution to the Ecopetrol Group totaled net income of COP 0.2 trillion and EBITDA of COP 2.0 trillion.

At the end of the quarter, the Ecopetrol Group closed with a cash balance of COP 16.5 trillion, committed CAPEX equivalent to USD 986 million (COP 3.9 trillion), in line with the 2022 investment plan, and an account receivable balance from the Fuel Price Stabilization Fund (FEPC in Spanish) amounting to COP 14.1 trillion. We are actively working with the Ministries of Finance and Mines and Energy to propose structural solutions to these fuel subsidies, and complete the liquidation and payment processes of these accounts.

Continuing with our strategy of improving efficiencies, during the first quarter of the year we incorporated savings for COP 358.2 billion by strengthening the EBITDA margin, with improvements in product and petrochemical margins, dilution strategies, and lifting cost optimization, among others, which have allowed us to partially offset the inflationary effects brought to our operation.

I would like to end by recognizing and highlighting that our results evidence the commitment of the Group's more than 18,000 employees who work towards guaranteeing the country's energy security and our continued contribution to the Country's economic growth.

Felipe Bayón
CEO Ecopetrol S.A.

Bogotá, May 10, 2022. Ecopetrol S.A. (BVC: ECOPEPETROL; NYSE: EC) announced today the Ecopetrol Group's financial results for the first quarter of 2022, prepared under International Finance Reporting Standards applicable in Colombia.

During the first quarter of 2021, the Ecopetrol Group obtained strong financial results from a net income and EBITDA standpoint, reporting COP 6.6 trillion and COP 15.9 trillion, respectively. This result was supported by: i) a favorable price environment; ii) higher refining margins; iii) ISA's solid contribution; and, iv) excellent Permian operating and financial results. The above was achieved in a context of: i) scheduled maintenance in some of the refineries' units that prompted increased purchase levels; ii) pressures due to higher inflation; iii) working capital greater needs, generated by an increase in accounts receivable due from the Fuel Price Stabilization Fund (FEPC); and, iv) an increase in the nominal tax rate in Colombia from 31% to 35%.

Table 1: Financial Summary Income Statement –Ecopetrol Group

Billion (COP)	1Q 2022	1Q 2021	Δ (\$)	Δ (%)
Total sales	32,473	17,206	15,267	88.7%
Depreciation and amortization	2,579	2,237	342	15.3%
Variable cost	12,065	6,238	5,827	93.4%
Fixed cost	3,294	2,037	1,257	61.7%
Cost of sales	17,938	10,512	7,426	70.6%
Gross income	14,535	6,694	7,841	117.1%
Operating and exploratory expenses	2,005	1,181	824	69.8%
Operating income	12,530	5,513	7,017	127.3%
Financial income (loss), net	(1,524)	(651)	(873)	134.1%
Share of profit of companies	202	53	149	281.1%
Income before income tax	11,208	4,915	6,293	128.0%
Income tax	(3,884)	(1,537)	(2,347)	152.7%
Net income consolidated	7,324	3,378	3,946	116.8%
Non-controlling interest	(751)	(292)	(459)	157.2%
Net income attributable to owners of Ecopetrol	6,573	3,086	3,487	113.0%
EBITDA	15,896	8,187	7,709	94.2%
EBITDA Margin	49.0%	47.6%	-	1.4%

The financial information included in this report has not been audited and is expressed in billions or trillions of Colombian pesos (COP), or US dollars (USD), or thousands of barrels of oil equivalent per day (mboed) or tons, as noted. For presentation purposes, certain figures in this report were rounded to the nearest decimal place.

Forward-looking statements: This release contains statements that may be considered forward-looking statements within the meaning of Section 27A of the U.S. Securities Act of 1933 and Section 21E of the U.S. Securities Exchange Act of 1934. All forward-looking statements, whether made in this release or in future filings or press releases or orally, address matters that involve risks and uncertainties, including in respect of Ecopetrol's prospects for growth and its ongoing access to capital to fund Ecopetrol's business plan, among others. Consequently, changes in the following factors, among others, could cause actual results to differ materially from those included in the forward-looking statements: market prices of oil & gas, our exploration and production activities, market conditions, applicable regulations, the exchange rate, Ecopetrol's competitiveness, our ability to successfully integrate our recently acquired subsidiary, ISA, and the performance of Colombia's economy and industry, to mention a few. We do not intend, and do not assume any obligation to update these forward-looking statements.

I. Financial and Operating Results

Sales Revenue

Revenues increased 88.7%, or COP +15.3 trillion in 1Q22 versus 1Q21, for a total of COP 32.5 trillion, primarily as a result of:

- An increase of 31.8 USD/BI, from 58.8 USD/BI in 1Q21 to 90.6 USD/BI in 1Q22 (COP +9.5 trillion) in the weighted average sales price of crude oil, gas and products, primarily due to higher international reference prices and product indicators.
- An increase in service revenues (COP +2.7 trillion) associated with the impact of the consolidation of ISA's financial results.
- A positive impact on revenues (COP +2.1 trillion) due to a higher average exchange rate.
- An increase in sales volume (COP +1.0 trillion, +54.9 mboed) attributed to: i) greater availability of crude oil for export; and, ii) increase in Permian production. These positive results were partially offset by: i) the displacement of crude oil cargoes negotiated under the DAP (Delivery at Place) Incoterms, which took place in April of 2022; and, ii) lower exports of middle distillates, primarily due to scheduled maintenance at the Cartagena Refinery.

Table 2: Sales Volume –Ecopetrol Group

Local Sales Volume - mboed	1Q 2022	1Q 2021	Δ (%)
Medium Distillates	164,5	137,7	19,5%
Gasoline	149,9	124,4	20,5%
Natural Gas	96,8	92,3	4,9%
Industrials and Petrochemicals	22,3	25,1	(11,2%)
LPG and Propane	18,7	19,4	(3,6%)
Crude Oil	2,1	2,4	(12,5%)
Fuel Oil	0,0	0,6	(100,0%)
Total Local Volumes	454,3	401,9	13,0%
Export Sales Volume - mboed	1Q 2022	1Q 2021	Δ (%)
Crude Oil	396,6	358,3	10,7%
Products	58,0	95,4	(39,2%)
Natural Gas*	4,1	2,6	57,7%
Total Export Volumes	458,7	456,3	0,5%
Total Sales Volumes	913,1	858,2	6,4%

*Natural gas exports correspond to local sales of Ecopetrol America LLC and Ecopetrol Permian LLC

Total volume sold during the quarter amounted to 913.1 mboed, a 6.4% increase as compared to the same quarter of the previous year, as a result of an increase in local sales mainly in gasoline and middle distillates.

Sales in Colombia, which account for 50% of the total, showed an increase of 13% or 52.5 mboed as compared to 1Q21, mainly due to the combined net effect of the following:

- Increase in the sale of gasoline (+25.5 mbod), diesel (+16.8 mbod), jet fuel (+11.0 mbod) and gas (+4.5 mboed), primarily explained by the strengthening of domestic fuel demand, as a result of higher economic activity and a decrease in restrictions due to the COVID-19 pandemic.
- Lower sales of LPG and propane due to the use of LPG from the Cusiana and Apiay for the co-

- dilution of crude oil, allowing imported naphtha substitution.
- Lower sales volumes of industrial and petrochemical products (-2.7 mboed) due to lower production of sulfur, solvents and polyethylene in refineries, as a result of lower throughputs.

International sales, which accounted for 50% of the total, increased by 0.5% or 2.5 mboed as compared to 1Q21, mainly due to the combined net effect of:

- An increase in crude oil exports (+38.3 mbod) primarily due to an increase in production and lower refinery throughputs.
- A decrease in product exports (-37.3 mboed), as a result of lower diesel export volumes due to higher demand for local sales and lower refinery supply.
- An increase in export gas volumes from Permian (+2.4 mboed) as a result of increased production, compensating lower gas sales of Ecopetrol America (-0.9 mboed).

Table 3: Average Realization Prices –Ecopetrol Group

USD/BI	1Q 2022	1Q 2021	Δ (%)
Brent	97.9	61.3	59.7%
Natural Gas Basket	27.1	24.4	11.1%
Crude Oil Basket	88.3	57.8	52.8%
Products Basket	108.3	67.8	59.7%

Crudes: Crude oil basket prices for 1Q22 increased 30.5 USD/BI in comparison to 1Q21, from 57.8 USD/BI to 88.3 USD/BI, as a result of the increase in the average Brent price and supported by a market diversification strategy in terms of clients and destinations that mitigated the effect of a more competed market as a result of increased presence of Russian and Iranian crudes. In March of 2022 the commercial subsidiary in Singapore, Ecopetrol Trading Asia, started operations amounting sales for 1.09 mmbbls, of which 90 mbls are expected to take place in April and 1.0 mmbbls in May of 2022.

Refined Products: In 1Q22, the product sales basket increased 40.5 USD/BI as compared to 1Q21, from 67.8 USD/BI to 108.3 USD/BI, as a result of the recovery of international indicators and global demand for gasoline and diesel.

Natural Gas: The price of gas sales increased 2.7 USD/BI, from 24.4 USD/BI in 1Q21 to 27.1 USD/BI in 1Q22, primarily due to US IPP indexation of contracts as of December 2021.

Hedging Program: During 1Q22, Ecopetrol executed tactical price risk hedging strategies associated with the variability of crude oil, refined products and intermediate refining margin prices for a total of 8.9 million barrels of oil equivalent. In addition, we executed hedges on maritime transportation freight prices for approximately 20.8 million barrels of oil equivalent.

Cost of Sales

In 1Q22, cost of sales increased by 70.6%, or COP +7.4 trillion as compared to 1Q21. This increase in the cost of sales is mainly the result of:

Variable Costs:

Variable costs, which account for 67.2% of total cost of sales, increased by 93.4% or COP +5.8 trillion in 1Q22 as compared to 1Q21, primarily due to the net effect of:

- Increased purchases of crude oil, gas and refined products (COP +6.9 trillion); due to: i) an increase in the weighted average price of domestic purchases and imports +37.0 USD/BI (COP +4.3 trillion); in line with international indicators; ii) higher volume purchased of +62.6 mboed (COP +1.4 trillion), mainly due to higher imported fuel requirements due to scheduled refinery maintenance and economic reactivation in the local market; and, iii) an increase in the average exchange rate on purchases (COP +1.2 trillion).
- Inventory fluctuations (COP -1.3 trillion), primarily due to: i) an increase in the level of inventories required to supply next quarter's sales, given the larger number of crude oil sales in transit, maximization of throughputs due to maintenance activities performed in some Cartagena Refinery units, and the response to the domestic demand for products; and, ii) an increase in the price of crude oil and products purchased, which in turn was primarily due to higher international reference prices.
- Other minor variations totaling COP +0.2 trillion.

Fixed Costs:

Fixed costs, which accounted for 18.4% of total cost of sales, increased by 61.7% or COP +1.3 trillion in 1Q22 as compared to 1Q21, from COP 2.0 trillion in 1Q21 to COP 3.3 trillion in 1Q22, primarily due to: i) the consolidation of ISA's results (COP +0.8 trillion); ii) increases in operating activity costs (COP +0.3 trillion), due to the increased execution of operational activities related to the economic reactivation, and increases in contract tariffs; iii) higher labor costs (COP +0.1 trillion), mainly due to salary increases compared to the previous year and increase in health services; and, iv) increased taxes and others (COP +0.1 trillion).

Depreciation and amortization: which account for 14.4% of total cost of sales, increased 15.3%, or COP +0.3 trillion in 1Q22 as compared to 1Q21, from COP 2.3 trillion in 1Q21 to COP 2.6 trillion in 1Q22 as a consequence of: i) the consolidation of ISA's results; ii) increased levels of capital investment; iii) increased production in the Permian basin; and, iv) the effect of the exchange rate in the depreciation of the Group's subsidiaries that use the US dollar as functional currency, given the devaluation of the peso against the dollar; which were partially offset by an increase in the incorporation of reserves in 2021 compared to 2020 translating in a decrease in depreciation.

Operating Expenses, net of other income

Operating expenses for 1Q22 increased 69.8%, or COP +0.8 trillion, as compared to 1Q21, from COP 1.2 trillion in 1Q21 to COP 2.0 trillion in 1Q22, mainly as a result of:

- Asset write-off associated with the exit of the Rydberg project in Ecopetrol America following the technical and economic feasibility analysis (COP +0.3 trillion).
- Increase in operating expenses related to the incorporation of ISA's results, in the amount of COP +0.2 trillion.
- Increase in customs operating expenses amounting to COP +0.1 trillion, mainly due to the increase in sales under the DAP (Delivery At Place) incoterm in 1Q22 as compared to 1Q21.
- Increased expenses due to agreements and social investment projects in the amount of COP +0.1 trillion.

Financial Result (Non-Operating)

The 134.1%, or COP +0.9 trillion increase in net financial expenses for 1Q22, as compared to 1Q21, is primarily a result of:

- An increase of COP +0.6 trillion from the incorporation of ISA's net financial result, which includes interest, FX difference, financial revenues and others.
- An increase of COP +0.2 trillion in the financial cost of debt, primarily due to changes in average debt outstanding as a result of the new debt obtained in 2021 by Ecopetrol to finance the acquisition of ISA and

the foreign exchange rate effect on the interest of the debt in foreign currency as a result of the greater average foreign exchange rate.

- Other minor items for COP +0.1 trillion.

The **Effective Tax Rate** for 1Q22 was 34.7% as compared to 31.3% in 1Q21. The increased rate is due to a higher nominal tax rate in Colombia as of January 2022, which increased from 31% to 35%.

Cash Flow and Debt

Table 4: Cash Position –Ecopetrol Group

Billion (COP)	1Q 2022	1Q 2021
Initial cash and cash equivalents	14,550	5,082
(+) Cash flow from operations	3,786	2,933
(-) CAPEX	(3,355)	(2,437)
(+/-) Investment portfolio movement	400	1,713
(+) Other investment activities	177	32
(+/-) Acquisition, borrowings and interest payments of debt	(1,272)	(611)
(-) Dividend payments	(274)	(168)
(+/-) Exchange difference (cash impact)	(13)	144
Final cash and cash equivalents	13,999	6,688
Investment portfolio	2,550	1,364
Total cash	16,549	8,052

Cash Flow:

At the end of 1Q22, the Ecopetrol Group's cash position was COP 16.5 trillion (44% COP and 56% USD), to which ISA contributed COP 5.8 trillion.

During 1Q22, the main cash movements were generated from operating activities for an amount of COP 3.8 trillion, with an increase in working capital due to: i) a higher receivable account from the Fuel Price Stabilization Fund of COP +6.3 trillion associated with higher international market prices for motor gasoline and diesel, compared to the regulated prices in Colombia; and, ii) increased inventories due to a greater number of crude oil in-transit sales and products due to the maximization of throughputs as a result of maintenance activities performed in some Cartagena Refinery units, and the response to the domestic demand for products.

Main cash outflows in 1Q22 were allocated to CAPEX for COP 3.4 trillion (1Q21 COP 2.4 trillion) and debt service for COP 1.3 trillion (1Q21 COP 0.6 trillion).

Regarding the distribution of dividends approved by the General Shareholders' Meeting held on March 30, 2022, which amount to COP 280 pesos per share (69% payout over 2021 profits) totaling COP 11.5 billion, the following payments were made in April: i) 100% of dividends to minority shareholders for COP 1.32 trillion; and, ii) the first installment to the Nation for COP 1.58 trillion.

Debt:

By the end of 1Q22, debt on the balance sheet was COP 91.6 trillion, or USD 24.4 trillion, a decrease of COP 3.4 trillion in comparison to year-end 2021. This is primarily due to the revaluation of the Colombian peso against the US dollar during the 1Q22 (the official market exchange rate, or TRM for its Spanish acronym, went from 3,981.16 COP/USD at the closing of 2021 to 3,756.03 COP/USD at the closing of 1Q22).

As a result of the strengthening of the Ecopetrol Group's EBITDA, the Gross Debt/EBITDA indicator was 1.8x, decreasing by 0.5x, when compared to 2.3x for December 2021.

Equity

The equity balance of the Ecopetrol Group by the end of 1Q22 amounted to COP 89.1 trillion. The shareholder's equity at the end of 1Q22 reached COP 66.5 trillion, a decrease of COP 5.3 trillion as compared to December 2021. This decrease is primarily due to the net effect between the income generated in 1Q22 and the dividends approved by the General Shareholders' Meeting.

Efficiencies

In 2022, the Ecopetrol Business Group has been working on a comprehensive strategy focused on mitigating the current international market context and the Russia-Ukraine conflict on its operating cost structure and investments, as well as on the complexity of commercial strategies. To this end, the purpose of the 2022 efficiency strategy is to provide the Business Group with tools to improve operations, investments and commercial strategies that will allow mitigating these effects.

By the end of 1Q22, the Business Group has recognized accumulated efficiencies for the quarter amounting to COP 358.2 billion, mainly due to the following actions:

1. Focusing on mitigating impacts that may affect the Group's EBITDA margin, leading to efficiencies of COP 318.4 billion, primarily in:
 - The strategies identified and currently being implemented by the production segment, focusing on optimizing lifting costs, which have contributed COP 66.5 billion to date.
 - Dilution and evacuation strategy for heavy and extra-heavy crudes resulting from the optimization of the crude dilution factor, which decreased from 13.50% to 12.53% as a result of beginning the LPG dilution strategy, which has represented efficiencies for COP 61.3 billion.
 - Operational improvement strategies implemented in the Group's midstream companies, whose efficiencies for the period amounted to COP 17.7 billion.
 - Margin and revenue improvement strategies implemented by the Company's commercial area, the refining and petrochemical operations concentrated in the Barrancabermeja and Cartagena refineries, and in Essentia, as well as revenues from energy surplus sales, among others, whose cumulative efficiencies as of 1Q22 amounted to COP 181.5 billion.
 - Initiatives deployed by our corporate and support areas that have contributed COP 19.7 billion.
 - As of 2022, a negative impact of COP 28.4 billion is expected as a consequence of the cost optimization strategy associated with the change in the gas transportation and supply structure in the Cartagena refinery, which will temporarily affect the refining cash cost. This impact is expected to be partially offset during the rest of the year with the benefits resulting from the change of structure on gas supply costs.
2. CAPEX efficiencies for COP 39.7 billion, which have been focused on improving the operational and technical performance of our investment projects, as a result of:
 - Continuous improvement in drilling and completion of wells has generated a decrease of USD 43 in the drilling cost per foot (USD 211/ft. in 1Q 2022 as compared to USD 254/ft. in 1Q 2021), while the completion cost experienced a decline of 1 KUSD/ well, from 333 KUSD/well in 1Q 2021 to 334 KUSD 334/well in 1Q 2022.
 - The strategies for the use of material inventories from other projects that are being deployed by midstream companies have also contributed efficiencies of COP 3.8 billion observed in the Group's cash flow .

Investments

Table 5: Investments by segments –Ecopetrol Group

Million (USD)	Ecopetrol S.A.	Affiliates and Subsidiaries	Total 2022	% Share
Production	401	202	603	76.7%
Downstream	38	44	82	10.4%
Exploration	20	20	40	5.1%
Midstream*	-	43	43	5.4%
Corporate**	19	-	19	2.4%
Total excluding ISA	478	309	787	100.0%
Energy Transmission	-	175	175	87.9%
Toll Roads	-	18	18	9.0%
Telecommunications	-	6	6	3.1%
Total ISA	-	199	199	100.0%
Total	478	508	986	-

* Includes total amounts of investments in each of the subsidiaries and affiliates of Ecopetrol Group (both controlling and non-controlling interests)
 **Includes investments in energy transition projects

In 1Q22, the Ecopetrol Group's organic investments amounted to USD 986 million, the highest level for the first quarter in the last seven years. CAPEX executed by the oil and gas business amounted USD 787 million, and investments executed by ISA amounted USD 199 million.

Of total investments, 66% were allocated in Colombia, while the remaining 34% were assigned internationally. 76% of total investments in oil and gas were allocated in Colombia, and the remaining 24% were assigned to the United States and Brazil. In the case of ISA, Brazil and Colombia accounted for 39% and 25% of total investments respectively, and the remaining 36% corresponded mainly to investments in Chile and Peru.

During 1Q22, Ecopetrol's investments were mainly allocated as detailed below:

Upstream: This segment accounted for 65% of Ecopetrol Group's organic investments with resources amounting to USD 643 million, allocated mainly to drilling and completion of 131 development wells and 126 workovers, activities that were primarily conducted in the Rubiales, Llanito, Castilla, Chichimene and Casabe fields. In addition, five exploratory wells were drilled, all of them in Colombia, in line with the segment's plan.

Midstream: Investment was mainly focused on operational continuity activities to maintain the integrity and reliability of the oil and multipurpose pipeline systems owned by CENIT and its affiliates.

Downstream: The activities were focused on the mechanical completion phase of the Cartagena refinery expansion project, in operational continuity and the execution of major maintenance at the Barrancabermeja and Cartagena refineries, with the aim of maintaining the efficiency, reliability and integrity of the operation.

TESG: Investments in decarbonization and water management efficiency in operations represented nearly 4% of the period's execution. Most noteworthy for the period is the investment in projects related to reducing flaring and CO2 emissions, energy efficiency and renewable energy (solar and wind parks), hydrogen production, CCUS and initiatives aimed at optimizing water use in our operations.

ISA: During the quarter, total investments amounting to USD 199 million were made, of which USD 175 million was allocated to the energy transmission business, USD 18 million to roads, and USD 6 million to telecommunications.

II. Results by Business Segment

1. UPSTREAM

Exploration

During 1Q22, Ecopetrol and its partners drilled seven exploratory wells in the Colombian onshore:

1. El Niño-2: declared successful following the confirmation of the extension of the El Niño-1 discovery in the Guadalupe Formation, 27 degrees API crude oil was found, and the well is currently undergoing extensive testing.
2. Boranda Sur-3: under evaluation (initial testing).
3. Bololó-1: declared dry.
4. Pilonera-1: plugged and abandoned without reaching the geological objective.
5. SN-15: stratigraphic well drilled by the subsidiary Hocol was plugged and abandoned; this is a study well from which it was possible to obtain data that contributed information on the geology of the SN-15 block.
6. Cayena-2: well operated at sole risk by Parex and is under evaluation.
7. Caño Caranal DT-01: well operated at sole risk by Sierracol and was declared dry.

Cumulative production from exploratory wells undergoing initial and extensive testing reached 220,790 boe by the end of 1Q22 (2,453 boe on average), mainly from the Liria YW12, Ibamaca-1, Arrecife-1 ST, Arrecife-3, Flamencos-2 and El Niño-2 wells – 33% of production corresponds to oil and 67% to gas.

Regarding the strengthening of the gas strategy, the successful drilling of the Liria YW12 well in 2021 is worth noting. This well is currently undergoing extensive testing and as of March 31 had an accumulated production of 468 MMCF of gas and 35,690 barrels of oil. Additionally, in March, Ecopetrol began drilling the Cupiagua XD 45 well, wholly operated by the Company, the second exploratory well in the area, its purpose is to find new accumulations of gas and light hydrocarbons in proximity to the Cupiagua field, a goal in line with the Near Field Exploration strategy.

Regarding offshore gas activities in Colombia, drilling of the Gorgon-2 well began at the end of March to test the extension of the gas sands of the structure discovered by the Gorgon-1 exploratory well in 2017. The appraisal well is operated by Shell, which holds a 50% share, and Ecopetrol the remaining 50%.

On the other hand, the National Hydrocarbons Agency (ANH) approved the partial assignment of rights, interests, and obligations of the contracted area which is part of the ORCA Assessment Program (Programa de Evaluación Orca or PEV ORCA for its Spanish acronym) or the E&E Tayrona contract which, was held by Petrobras, to Ecopetrol S.A. who will become the sole owner and operator of this portion.

In March 2022, Parex Resources and Ecopetrol signed an addendum to the Farm-Out Agreement for the Capachos asset (50% Ecopetrol – 50% Parex) located in the department of Arauca. The agreement contemplates the drilling of two exploratory wells, targeting the Guadalupe and Gachetá formations, and a workover in the Andina 3 well, to develop additional gas reserves in the Gachetá formation. Investments in this second exploratory phase will allow for the expansion of the oil and gas production horizon and the possibility of incorporating new reserves in this important asset located in the Piedemonte plains basin.

Regarding seismic activity in Colombia, feasibility activities are currently underway for the seismic projects operated by Ecopetrol in the Llanos-121 and Flamencos blocks, operated by the subsidiary Hocol in the SSJN-1 and Llanos-100 blocks. For the Flamencos 3D seismic program, the provider named *Petroseismic* has already been selected to carry out the pre-operational and operational phases of the project.

Internationally, Ecopetrol Brazil participated in the ANP's 3rd Permanent Offer Process, held on April 13, and as a result was awarded six offshore blocks in the southern region of the prolific Santos basin, where it will have a 30% share and Shell a 70% share as operator. This new acquisition completes a total of 12 blocks in Brazil, of

which 10 are exploratory and 2 are in the development phase. In terms of seismic activity, the purchase of 2,595 km² of seismic data in the Santos basin is also relevant.

Production

During 1Q22, the Ecopetrol Group produced 692 mboed, of which Ecopetrol S.A. contributed 620 mboed and the subsidiaries 72 mboed. The contribution of gas was 19.8% (136.7 mboed), and white products was 3.8% (26.2 mboed), for a total increase in natural gas of 9.4 mboed as compared to 1Q21.

In 1Q22, production increased by 16.3 mboed as compared to 1Q21, mainly due to: (i) early operation of wells in the Permian, which allowed for increased production levels at the beginning of the year; (ii) increased gas sales, as a result of the recovery of the thermal and unregulated markets; (iii) the incorporation of six operating fields of the Nare asset, following the termination of the association contract with Mansarovar Energy Colombia Ltda.; iv) the results of the Liria YW12 exploratory well, and the contribution of the Flamencos well; v) increased participation in production of assets such as Llanos Norte, Quifa and La Cira Infantas due to the crude oil price effect and, vi) recovery of production in the Castilla field once the operating restrictions related to water management were lifted.

As compared to 4Q21, production decreased by 0.4% (2.7 mboed) mainly due to: i) blockages in the Yariguí, Capachos and CPI Suroriente fields; and, ii) maintenance and operational activities. The logistical impacts that have been occurring worldwide present several challenges; however, we believe that the estimated annual production range of between 700 and 705 mboed remains achievable.

During the quarter, Ecopetrol Group drilled and completed 131 development wells, 40 more than in the same period of the previous year, with an average occupancy rate of 26 rigs.

Fields with secondary and tertiary recovery technologies continue to contribute 38% of Ecopetrol Group's production. An aspect worth noting is that by year end 2021, the CEOR pilot at Chichimene was completed, and the results are currently under evaluation.

Table 6: Gross Production –Ecopetrol Group

Producción - kbped	1T 2022	1T 2021	Δ (%)
Crudo	487,6	486,2	0,3%
Gas Natural	132,3	130,3	1,5%
Total Ecopetrol S.A.	619,9	616,5	0,6%
Crudo	16,0	20,4	(21,6%)
Gas Natural	20,0	19,1	4,7%
Total Hocol	36,0	39,5	(8,9%)
Crudo	0,0	0,6	(100,0%)
Gas Natural	0,0	0,1	(100,0%)
Total Savia	0,0	0,7	(100,0%)
Crudo	8,4	11,0	(23,6%)
Gas Natural	1,0	1,8	(44,4%)
Total Ecopetrol America	9,4	12,8	(26,6%)
Crudo	17,1	4,0	327,5%
Gas Natural	9,6	2,2	336,4%
Total Ecopetrol Permian	26,7	6,2	330,6%
Crudo	529,1	522,2	1,3%
Gas Natural	163,0	153,5	6,2%
Total Grupo Ecopetrol	692,1	675,7	2,4%

Notes: The gross production includes royalties and is prorated by the interest Ecopetrol holds in each Company. LPG + gas production for 1Q22 was 152.3 mboed versus production in 1Q21 of 146.2 mboed.

Comprehensive Research Pilot Projects in Unconventional Reservoirs (PPII)

Regarding the Comprehensive Research Pilot Projects (PPII for its Spanish acronym), the public hearing on the Kalé project was held in Puerto Wilches on February 22, convened by the National Environmental Licensing Authority (ANLA for its Spanish acronym), and the environmental license for said project was granted by this entity on March 25 through Resolution No.00648.

The next steps for said decision to be binding entail: i) the ANLA must rule on the seven appeals filed by third parties and Ecopetrol on the issued resolution; and, ii) resolution of the three ongoing *tutelas* (writs of protection for constitutional rights), one of which ruled on April 21 recognizing the Afrowilches as a community that needs to be consulted, ordering a moratorium on the environmental licenses assessment of the Kalé and Platero Projects, and accordingly Ecopetrol began the process before the Ministry of the Interior to carry out said consultation, while concurrently appealing the ruling. Consequently, we expect to have the license in place by the third quarter of 2022.

Regarding the PPII Platero, on February 15 of this year, the Environmental Impact Study (EIA for its Spanish acronym) was filed with the ANLA. The next steps include: i) resolving one *tutela* that suspended the assessment process of the Kalé and Platero Environmental License, and, ii) carrying out an Environmental Public Hearing for this project.

In both cases, conversations have progressed regarding matters related to the Community Benefit Program (PBC for its Spanish acronym) and the Community Economic Plan (PEC for its Spanish acronym), while roundtables and breakouts have continued, as well as communication in various spaces for interactions where status reports are conveyed and concerns about the PPIIs are addressed.

Permian

During 1Q22, the Ecopetrol-OXY Joint Venture in Permian Basin achieved results according to the approved activity plan. Noteworthy in this period is the drilling of 23 new wells, 21 wells completed, and 31 new wells put into production. By the end of 1Q22, the joint venture has a total of 135 wells in production, thus achieving an average production for the quarter of 26.7 mboed (net for Ecopetrol before royalties), with an average JV production in March of 61.4 mboed (net for JV before royalties), corresponding to 30.1 mboed net for the Ecopetrol before royalties.

In terms of Financial Performance for 1Q22, Ecopetrol achieved an EBITDA of USD 111 million with an 87% margin and OPEX of 3.5 USD/Bl.

The most significant achievements of this period include:

- Average drilling times per well remain at 13.7 days, in line with the average for 2021.
- The drilling, completion, and start-up of 12 wells with lateral lengths of over 15,000 feet.
- Reduction of around ~9 hrs per well on drilling time by the implementation of cementing offline practices.
- Environmental achievements in our completion operations included the recycling of approximately 2.1 million water barrels and the substitution of up to 35% of the diesel volumes by compressed natural gas (CNG).

The knowledge transfer process continues with 25 Ecopetrol employees assigned as secondees in the joint venture's operations.

Finally, the forecast for 2022 remains in line with the segment's plan, including the drilling of approximately 104 wells and the completion of 100 wells, with an average day-year production between 32 to 34 mboed (net for Ecopetrol before royalties) and investments of between 700 and 800 MUSD (net for Ecopetrol).

Lifting and Dilution Cost

Table 7: Lifting and Dilution Cost – Ecopetrol Group¹

USD/BI	1Q 2022	1Q 2021	Δ (%)
Lifting Cost*	8.66	7.52	15.2%
Dilution Cost**	6.25	3.50	78.6%

* Quantified based on barrels produced without royalties. ** Quantified based on barrels sold

Lifting Cost

In 1Q22, the lifting cost was 8.66 USD/BI, +1.14 USD/BI compared to 1Q21, mainly explained by:

Cost Effect (+2.21 USD/BI): Increase in costs primarily due to:

- Increased economic activities after the lifting of restrictions associated with the COVID-19 pandemic.
- Increase in electricity rates because of higher global fees and increased consumption in the National Interconnection System (SIN for its Spanish acronym).
- Increased well interventions to counteract field declines.
- Increase of subsoil, surface and maintenance activities as a result of the economic reactivation.

Foreign exchange rate effect (-0.88 USD/BI): increase in the COP/USD exchange rate by COP 360.68 per USD.

Volume Effect (-0.19 USD/BI): Increase in production due to the aforementioned explanations.

Dilution Cost

The dilution unit cost in 1Q22 was 6.25 USD/BI, an increase of 2.76 USD/BI sa compared to 1Q21, mainly explained by: i) 38.15 USD/BI increase in the purchase price of naphtha, from 61.26 USD/BI in 1Q21 to 99.41 USD/BI in 1Q22, associated with current market and geopolitical conditions; ii) positive impact of the FX; and, iii) a decrease of 732 barrels in the volume of oil barrels purchased because of lower demand in the chain due to the start-up of the dilution projects in Apiay and Cusiana.

Financial Results for the Segment

Table 8: Income Statement – Upstream

Billion (COP)	1Q 2022	1Q 2021	Δ (\$)	Δ (%)
Total revenue	18,938	13,216	5,722	43.3%
Depreciation, amortization and depletion	1,597	1,616	(19)	(1.2%)
Variable costs	5,552	5,226	326	6.2%
Fixed costs	2,569	2,076	493	23.7%
Total cost of sales	9,718	8,918	800	9.0%
Gross income	9,220	4,298	4,922	114.5%
Operating and exploratory expenses	1,155	703	452	64.3%
Operating income	8,065	3,595	4,470	124.3%
Financial result, net	(406)	(493)	87	(17.6%)
Share of profit of companies	(1)	7	(8)	(114.3%)
Income before income tax	7,658	3,109	4,549	146.3%
Provision for income tax	(2,668)	(977)	(1,691)	173.1%
Consolidated net income	4,990	2,132	2,858	134.1%

¹ Lifting costs calculated for 1Q21, 2Q21 and 3Q21 were modified to eliminate an item that was incorrectly included. Therefore, the lifting cost for 1Q21 increased from 7.51 to 7.52 USD/BI, for 2Q21 from 8.02 to 8.03 USD/BI, and for 3Q21 from 8.45 to 8.46 USD/BI. Additionally, the lifting cost of the first semester of 2021 increased from 7.77 to 7.78 USD/BI, while that of the first 9 months of 2021 from 8.01 to 8.02 USD/BI.

Non-controlling interest	21	21	0	0,0%
Net income attributable to owners of Ecopetrol	5,011	2,153	2,858	132.7%
EBITDA	9,862	5,342	4,520	84.6%
EBITDA Margin	52.1%	40.4%	-	11.7%

Revenues in 1Q22 increased as compared to 1Q21, mainly as a result of: i) higher Brent prices and exchange rate; and, ii) higher crude export sales, resulting from lower deliveries to refineries due to scheduled maintenance.

Cost of sales in 1Q22 increased compared to 1Q21, mainly due to:

- Higher cost of purchases due to higher crude prices, partially offset by lower volumes of purchases from the ANH.
- Higher operating costs due to: i) increased consumption of regulated energy in Cravo Norte accompanying the development of the self-generation source change project to reduce the carbon footprint; ii) increased activity in 1Q22 through a greater number of well interventions, maintenance and reliability work; and, iii) increase in process materials and support areas associated with the restart of operational activities.
- Higher crude inventory levels mainly related to increased shipments in transit.
- Higher transportation cost due to: i) an increase in the COP/USD exchange rate; ii) higher rates compared to 1Q21; and, iii) greater volume of gas transport in Teca-Nare, which transportation costs were partially offset by rates savings with the acquisition of the Morro-Araguaney pipeline.

Operating expenses (net of income) for 1Q22 increased as compared to 1Q21, mainly due to:

- Divestment of assets related to the exit from the Rydberg project in Ecopetrol America.
- Increased attacks and theft of crude in the OTA and Caño Limón pipelines.
- Increase in customs operation expenses, primarily those relating to the Asian market (increase in charter operations and higher rates).
- Greater execution of social and environmental investment covenants and support for the armed forces.

Net financial results (non-operating) for 1Q22 decreased as compared to 1Q21, mainly due to: i) the effect of the COP/USD exchange rate impact resulting from the revaluation of the Colombian peso against the US dollar given the segment's passive position in USD; and ii) higher investment portfolio yields.

2. MIDSTREAM

Table 9: Transported Volumes – Ecopetrol Group Ecopetrol

mbd	1Q 2022	1Q 2021	Δ (%)
Crude Oil	757.3	732.9	3.3%
Products	283.5	274.5	3.3%
Total	1,040.8	1,007.4	3.3%

Note: Reported volumes are subject to adjustments in volumetric quality compensation (CVC), associated with official volumetric balances

The total volume transported in 1Q22 increased by 33.4 mbd as compared to 1Q21, explained by additional captured barrels of crude and an increase in the transport of refined products resulting from the recovery in economic activity.

Crudes: In 1Q22, transported volumes increased 3.3% compared to 1Q21 due to the acceptance of crude from the Nare Association in the Vasconia System – GRB, and additional captured barrels entering from the Oleoducto de Los Llanos. Approximately 84.4% of the crude volume transported is owned by the Ecopetrol Group. During this quarter, there were 11 attacks on the pipelines caused by third parties, an 8% decrease compared to 1Q21. Meanwhile, the use of illegal valves decreased by 26.5% as compared to 1Q21.

Refined Products: In 1Q22, the volume of refined products increased by 3.3% as compared to 1Q21, mainly attributed to the economic activity recovery. Approximately 28.2% of the volume transported by pipelines corresponds to Ecopetrol products. During the quarter, illegal valve installation increased 45% in contrast to 1Q21.

Storage tank Construction in Pozos Colorados: The construction of a storage tank to increase the operational storage capacity in the Pozos Colorados terminal was completed on March 25, 2022, with a nominal capacity of 260 mbls. From March 25 to 31 the tank was filled with fuel oil with satisfactory results, and on April 1 the first dispatch from the tank to the Pozos Colorados – Galán system was completed. This is a unique infrastructure in Colombia for its capacity and technology, as it is the first fuel storage tank built in the country using an aboveground ring system, with a geodesic dome of 61 meters in diameter and 13 meters high, making it the tank with the largest geodesic dome constructed in the country.

Co-dilution stabilization projects in Apiay and Cusiana: The co-dilution projects in Apiay and Cusiana made possible the use of LPG as a diluent for crude oil by assembling the appropriate facilities in the plants. This service generated significant financial benefits for customers, representing savings in dilution costs during 1Q22 of USD 17.5 million (USD 7.9 million for Apiay and USD 9.6 million for Cusiana).

Transport to the Llano of fuels through the Apiay pipeline: With the transport of refined products through the Oriente pipeline and the development of the Apiay loading system, we exceeded the goal of transporting 3.3 mbd on account of the increase in demand in the area, ensuring reliability in the supply for the department of Meta.

Cost per Barrel Transported

Table 10: Cost per Barrel Transported – Ecopetrol Group

USD/BI	1Q 2022	1Q 2021	Δ (%)
Cost per Transported Barrel	2.77	2.99	(7.4%)

The cumulative cost per barrel transported as of March 31, 2022 was 2.77 USD/BI, a decrease of 0.22 compared to March 31, 2021, mainly due to:

Cost effect (+0.16 USD/BI): Increase in the variable cost, primarily attributed to an increase in energy and materials consumption as a result of the greater volumes transported as well as a fee increase due to market conditions. In addition, the change in the depreciation method used by Oleoducto Bicentenario at the end of 1Q22 resulted in higher depreciation.

Volume effect (-0.10 USD/BI): Lower cost per barrel due to higher transported volumes of crude and products, resulting from additional captures and the national recovery of gasoline and diesel demand.

Foreign exchange rate effect (-0.28 USD/BI): increase in the COP/USD exchange rate previously mentioned.

Financial Results for the Segment

Table 11: Income Statement – Midstream

Billion (COP)	1Q 2022	1Q 2021	Δ (\$)	Δ (%)
Total revenue	3,063	2,808	255	9.1%
Depreciation, amortization and depletion	327	286	41	14.3%
Variable costs	157	132	25	18.9%
Fixed costs	341	360	(19)	(5.3%)
Total cost of sales	825	778	47	6.0%
Gross income	2,238	2,030	208	10.2%
Operating expenses	199	184	15	8.2%
Operating income	2,039	1,846	193	10.5%
Financial result, net	(197)	139	(336)	(241.7%)
Income before income tax	1,842	1,985	(143)	(7.2%)
Provision for income tax	(655)	(593)	(62)	10.5%
Consolidated net income	1,187	1,392	(205)	(14.7%)
Non-controlling interest	(241)	(270)	29	(10.7%)
Net income attributable to owners of Ecopetrol	946	1,122	(176)	(15.7%)
EBITDA	2,419	2,187	232	10.6%
EBITDA Margin	79.0%	77.9%	-	1.1%

Revenues for the upstream segment in 1Q22 increased compared to 1Q21, primarily attributed to: i) higher volumes of third party crude transported; ii) increase in volumes of refined products transported as local demand recovered; iii) higher average COP/USD exchange rate; and, iv) annual update of fees. These effects were partially offset by the decreased revenues from the Continuity Plan Margin that was included in the pricing structure until April 2021.

The **cost of sales** for 1Q22 increased as compared to 1Q21, mainly due to: i) higher depreciation as a result of the change in depreciation method of Oleoducto Bicentenario, implemented as of the first quarter of 2022; and, ii) an increase in the variable costs of electricity and materials, primarily associated with greater transported volumes and increases in fees given market conditions. The foregoing effects were partially offset by a drop in fixed costs largely related to better efficiencies through the application of the new segment operating model.

Operating expenses (net of income) for 1Q22 increased compared to 1Q21 because of higher social investment activities and increases in insurance policy expenses.

Net financial result (non-operating) for 1Q22 decreased as compared to 1Q21 as a result of the COP/USD exchange rate effect on the segment's net asset position.

3. DOWNSTREAM

In 1Q22, the downstream segment scheduled plant shutdowns in both refineries to ensure the operational availability and reliability of the assets, which was rewarded by noteworthy results in HSE performance. The refineries reached a consolidated throughput of 324.9 mbd and an integrated gross margin of 13.9 USD/BI, a quarterly record since 2016, compared to a throughput of 360.2 mbd and an integrated gross margin of 10.1 USD/BI in 1Q21.

These results primarily are a consequence of the net effect of: i) strengthening of the products basket versus Brent; ii) active inventory optimization management in both refineries and an efficient commercial strategy to capture business opportunities; iii) comprehensive logistics chain design that made it possible to meet the demand for

products required by the market during scheduled maintenance plant shutdown activities; iv) use of wide PP²-PGP margins and PGP³-RGP⁴ spreads, as well as high levels level of RGP deliveries by the refineries to Esenttia; v) scheduled major maintenance at both refineries, completing 50% of the 2022 plant scheduled maintenance shutdown plan; and, vi) an increase in the cash cost of the segment compared to 1Q21, primarily because of lower throughput levels associated with the aforementioned maintenance shutdowns.

Cartagena Refinery

**Table 12- Throughput, Utilization Factor, Production and Refining Margin
- Cartagena Refinery**

Cartagena Refinery	1Q 2022	1Q 2021	Δ (%)
Throughput* (mbd)	133.9	143.3	(6.6%)
Utilization Factor (%)	75.1%	74.7%	0.5%
Production (mbd)	128.7	139.2	(7.5%)
Gross Margin (USD/Bl)	18.6	8.1	129.6%

* Refers to effective throughput volumes, not volumes received

In 1Q22, the gross margin of the Cartagena refinery registered a historical quarterly record mainly as a result of: i) better gasoline performance (+6.4%) due to higher throughput in the Cracking unit; and, ii) stronger price of products partially compensating the higher crude prices. The foregoing results were partially offset by lower throughput level resulting from the scheduled shutdown of the Diesel Hydrotreater U-108 and one of the H2 plants, both events now completed. The Crude, Coker, Cracking, Hydrocracking and Industrial Services units performed well and reliably, which provided operational stability to the refinery in achieving the aforementioned higher margins.

Barrancabermeja Refinery

**Table 13- Throughput, Utilization Factor, Production and Refining Margin
- Barrancabermeja Refinery**

Barrancabermeja Refinery	1Q 2022	1Q 2021	Δ (%)
Throughput* (mbd)	190.9	216.9	(12.0%)
Utilization Factor (%)	56.9%	85.0%	(33.1%)
Production (mbd)	193.8	220.9	(12.3%)
Gross Margin (USD/Bl)	10.6	11.5	(7.8%)

* Refers to effective throughput volumes, not volumes received

Throughput and gross margin in 1Q22 were affected by: i) scheduled maintenance of TEA 6 leaving out of service the plants that process residues and the UOP I Cracking unit ; ii) the completion of the scheduled shutdown of the Orthoflow cracking unit which began in 4Q21, successfully executing 60% of scheduled maintenance shutdowns plan for 2022; and, iii) lower availability of light crude.

On February 18, the Barrancabermeja refinery celebrated its first 100 years, attending the demand for clean fuels in the country's central areas and providing petrochemical production for domestic industries. It plans to continue investing in technology and innovation to address the energy transition future challenges regarding

² PP: Polypropylene

³ PGP: Polymer Grade Propylene

⁴ RGP: Refinery Grade Propylene

decarbonization in operations, reliability of its plants, investment in environmental projects and fuel quality improvements to ensure compliance with new regulations.

Esenttia

Table 14. Sales and Margin – Esenttia

Esenttia	1Q 2022	1Q 2021	Δ (%)
Total Sales (KTon)	134.9	139.6	(3.4%)
Total Margin (USD/Ton)	266.4	124.3	114.3%

In 1Q22, total sales decreased by 3.4% as compared to 1Q21, consistent with the behavior of regional demand, although the total margin doubled. The results are explained by: i) favorable price conditions in the market, lower cost of raw material (PGR), and a higher valuation of the final product (PP) versus the intermediate product (PGP); and, ii) high levels of PGR deliveries by the refineries.

Invercolsa

Table 15: Natural Gas Volume and Installations – Invercolsa

Invercolsa	1Q 2022	1Q 2021	Δ (%)
Volume of Natural gas (Mill. m3)	64.1	62.5	2.6%
Installations	15,817	12,962	22.0%

Invercolsa's positive results trend continues, surpassing its 1Q22 result, primarily due to: i) a 2.6% increase in natural gas volume through a promotional campaign to encourage consumption in commercial segments and VNG,⁵ as well as execution of installation strategies for users to increase residential volumes; and ii) a 22% increase in installations resulting from promotional campaigns focusing on reliability. In addition, the start up of operations of the Hobo's new natural gas station, which benefits 83 thousand families in Huila.

In its meeting on April 29, 2022, the Board of Directors of Ecopetrol S.A. authorized the divestment of its entire stake in Invercolsa, equal to 51.8% of its paid-in capital, subject to the requisite government authorizations and completion of the procedures foreseen in Law 226 of 1995. The main goal of this strategic decision is to divest a non-strategic asset to concentrate on the corporate objectives of growth and energy transition and the reallocation of capital to new opportunities aligned with the corporate strategy to 2040.

Refining Cash Cost

Table 16: Refining Cash Cost*

USD/BI	1Q 2022	1Q 2021	Δ (%)
Refining Cash Cost	4.50	4.26	5.6%

* Includes Barrancabermeja and Cartagena Refineries, and Esenttia

The cumulative refining cash cost increased by 0.24 USD/BI in 1Q22 compared to 1Q21, primarily due to:

Cost & Volume Effect (0.70 USD/BI): Lower crude throughputs at the Barrancabermeja Refinery (-26 mbd) and Cartagena Refinery (-9 mbd), primarily because of scheduled maintenance plant shutdowns at both refineries.

Foreign Exchange Rate Effect (-0.46 USD/BI): An increase in the COP/USD exchange rate as mentioned previously.

⁵ VNG: Vehicular Natural Gas

Financial Results for the Segment

Table 17: Income Statement – Downstream

Billion (COP)	1Q 2022	1Q 2021	Δ (\$)	Δ (%)
Total revenue	17,118	9,681	7,437	76.8%
Depreciation, amortization and depletion	406	335	71	21.2%
Variable costs	14,765	8,481	6,284	74.1%
Fixed costs	474	435	39	9.0%
Total cost of sales	15,645	9,251	6,394	69.1%
Gross income	1,473	430	1,043	242.6%
Operating expenses	484	363	121	33.3%
Operating income (loss)	989	67	922	1,376.1%
Financial result, net	(167)	(291)	124	(42.6%)
Share of profit of companies	54	46	8	17.4%
Loss before income tax	876	(178)	1,054	(592.1%)
Provision for income tax	(347)	33	(380)	(1,151.5%)
Consolidated net income	529	(145)	674	(464.8%)
Non-controlling interest	(41)	(42)	1	(2.4%)
Net income attributable to owners of Ecopetrol	488	(187)	675	(361.0%)
EBITDA	1,642	653	989	151.5%
EBITDA Margin	9.6%	6.7%	-	2.9%

The EBITDA result for 1Q22 for the refining segment once again reached a historical record due to the positive market differentials for the refining business and the strong performance of Esenttia and Invercolsa.

Revenues in 1Q22 increased as compared to 1Q21 primarily due to better differential product pricing, primarily in middle distillates, gasoline and petrochemicals due to positive market factors and continued growth demand for domestic fuels. Invercolsa's revenue grew through greater commercialization and transportation of gas. The strong results in Esenttia stand out with helpful polypropylene margins and increased throughput of propylene from the refineries.

The **cost of sales** showed an increase in 1Q22 compared to 1Q21, mainly due to: i) higher crude prices feedstock from refineries and product imports; ii) a higher volume of product imports, mainly diesel and gasoline, as a consequence of the increase in demand and higher activity in scheduled maintenance plant shutdowns, especially in the Barrancabermeja Refinery, partially offset by iii) inventory capitalization, to supply sales in the following month in face of the maintenance shutdowns in the Cartagena Refinery.

Operating expenses (net of income) for 1Q22 increased as compared to 1Q21, mainly explained by higher marketing costs associated with higher sales volumes.

The **financial result (non-operating)** for 1Q22 as compared to 1Q21 reflects lower expense from the exchange rate effect of the peso's revaluation given the net liability position of the segment in USD.

4. ENERGY TRANSMISSION AND TOLL ROADS

On May 4, 2022, ISA announced its financial and operating results for 1Q22 to the market, which can be accessed on the Company's website.

Some relevant operating and financial details thereof are highlighted below:

Energy Transmission

Currently, 33 projects located in the countries where ISA operates are still under construction stage, once they become operational, are estimated to generate annual revenues of USD 335 million. Additionally, 249 infrastructure reinforcements and improvements are under construction in Brazil, which are expected to increase annual revenues by approximately USD 94 million.

In Colombia, the construction of several UPME projects (Mining and Energy Planning Unit for its Spanish acronym) granted to ISA in previous years is progressing. In Peru, mainly in the Coya Yána project, as well as in Chile, the expansion of several substations is being carried out. Progress is underway in Brazil through the construction of transmission projects, awarded in previous years.

It is worth noting the entry into operation of 15 reinforcements and improvements to the transmission network in Brazil, which are expected to increase annual revenues by approximately USD 2.5 million.

Toll Roads

Construction continues in Rutas del Loa, whose length is 136 km, with progress reaching 27%. Additionally, headway was made in the execution of the third Maipo lanes and complementary and regulatory security works in the Maipo, Bosque, Ríos and Araucanía Concessions.

Telecommunications

Progress continues in connectivity projects, fundamental to business dynamics and maintaining the product's availability to continue capturing revenues from services provided. Investments were made to increase the capacity of the transport network and to enable services for customers.

Financial Results

The most notable events in this segment's results include:

- The contribution in 1Q22 to the Ecopetrol Group's EBITDA amounts to COP 2.0 trillion, with a significant 84% share attributed to the electric power transmission business.
- EBITDA for the quarter was leveraged by: i) higher operating revenues mainly due to the positive impact of macroeconomic variables in Brazil and Colombia; ii) power transmission projects starting operations in 1Q21; iii) the consolidation of two months of additional PBTEs⁶ as compared to 1Q21; and, iv) growth in operating costs below operating income.
- ISA's net income was COP 0.4 trillion in 1Q22, a 15.1% decrease as compared to 1Q21 primarily because of higher financial expenses and foreign rate exchange difference generated by higher inflation levels, especially in Chile and Brazil. The contribution to net income attributable to Ecopetrol shareholders in 1Q22 was COP 0.2 trillion, and COP 0.5 trillion year-to-date since the acquisition of ISA. In addition to the results directly from ISA's operations, this segment assumes the financial interests associated with the debt obtained by Ecopetrol to finance the acquisition, net of the associated income tax for COP - 0.1 trillion.

III. Technology, Environment, Social and Governance (TESG)

Renewable Energies

Progress continued during 1Q22 in the development and construction of Llanos Norte (40 MW installed capacity) and the Brisas Solar Parks (26 MW installed capacity) through Power Purchase Agreements (PPAs), in addition

⁶ Piratininga - Bandeirantes Transmissora de Energia S.A.

to the completion and implementation of several solar, wind and geothermal projects, which will contribute by 2022 in approximately 93 MW of additional capacity towards the goal of 400 MW of installed capacity by 2023.

By the end of 1Q22, the Ecopetrol Group had achieved the addition of 112.5 MW of renewable energy into its supply matrix from the Castilla solar parks (21 MW) and San Fernando (61 MW) currently in operation, with the UPMEs 2019 renewable auction (30 MW) and from Cenit small solar farms (0.5 MW), generating savings in energy costs of COP 12.7 billion and the reduction of close to 21,063 tons of CO₂ equivalent in the same period.

Energy Efficiency

Optimizing aggregate energy demand since the program's inception in 2018, the cut-off to 1Q22 provides an equivalent cumulative reduction of 26.7 MW of electrical power (3.3%⁷), totaling savings of COP 72.0 billion and preventing the emission of 85 thousand tons of atmospheric CO₂e. For 2022, the program will focus on process improvement through i) the implementation of technology related to permanent imaging engines, optimizing the central processing facility and water disposal plants in Rubiales along with the extraction and collection processes, ii) the evaluation of implementing processing plants in the Barrancabermeja Refinery and iii) extending coverage to new transport stations in Cenit. During 1Q22, a demand equal to 1.6 MW in electrical energy was optimized, generating COP 3.7 billion in savings and 1.3 thousand tons of CO₂e avoided; these results allowed us an early achievement our goal of increasing energy efficiency by 3% in 2022.

Hydrogen

During 1Q22, the Ecopetrol Group began the production of green hydrogen with the first production pilot project in Colombia, announcing the entry into operation of the 50-kilowatt PEM (Proton Exchange Membrane) electrolyzer and 270 solar panels located in the Cartagena Refinery, which during the next three months will use industrial water from the refinery to produce 20kg of high purity green hydrogen (99.99%) daily. We will execute a robust plan for green, blue and white hydrogen production, which we expect will contribute between 9% and 11% to the 50% reduction of emissions goal (scope 1, 2 and 3) by 2050.

By 2022, the strategy anticipates an investment of USD 6 million towards the development of the pilot at the Cartagena Refinery, mass transportation mobility with a hydrogen cell-powered 50-passenger bus, a project conducted in cooperation with Fanalca; the feasibility study of new green/blue hydrogen plants of between 40 and 60 MW each in the refineries, and the appraisal of white hydrogen concentrations in different regions of the country.

The hydrogen produced will have four applications: use in our operations, sustainable mobility, blending hydrogen with gas for thermal use, and new low-carbon products for the domestic and export markets.

Seeking to develop partnerships in this field, 13 companies participated in the showroom that had been preselected from the RFI (request for information) stage. The information received is currently being evaluated in order to finalize this stage by June.

Integrated Water Management

During 1Q22 Ecopetrol reused 30.3 million cubic meters of water (2.1 million barrels per day), which represents an increase of 10% as compared to 1Q21 and accounts for 76% of the total water required to operate during this period. These results have been achieved through the implementation of water reuse and recirculation best practices, applied in Barrancabermeja and Cartagena Refineries as well as in the production fields.⁸

⁷ Percentage calculated based on a forecast demand for 2022 of 861 MW

⁸ It includes, among others: i) reuse/recirculation of water in refineries, mainly in condensate recovery, and fire-fighting systems; ii) drilling activities reuse domestic and industrial wastewater that, after passing through a tertiary treatment process, is reused in the production of drilling mud, washing of equipment, cooling water for pumps and industrial uses; iii) reuse of production waters mainly in reinjection to maintain the pressure of the reservoirs or increase the production of hydrocarbons.

Likewise, the collection of cubic meters of freshwater decreased by 10% compared to 1Q21 (totaling 9.38 million cubic meters of fresh water, equivalent to 0.66 million barrels per day), primarily due to decreases in injection volumes in oil field production. This volume represents 24% of the total water required to operate at Ecopetrol during this period.

Furthermore, during 1Q22, 1.03 million cubic meters of treated production water from Campo Castilla (72 thousand barrels per day, on average) were reused in agricultural and livestock activities in the Agroenergy Sustainability Area (ASA) in the Municipality of Acacias (Department of Meta), which represents an increase of 61% as compared to 1Q21.

In addition, Ecopetrol, Accenture and Amazon Web Services launched a project for integrated water management, a solution that optimizes through advanced analytics the processes of capturing, using and disposing of water in three assets of the Ecopetrol Group, which is the first major step towards achieving Water Neutrality and Sustainability Goals in the energy industry.

Within the same research trend, a pilot is being carried out in the Rubiales field to deploy a subsoilsurface model based on artificial intelligence, aiming to evolve in the reservoir characterization and using AI to assist in the fields' operation and optimization, in order to improve recovery and minimize water production for this asset.

Climate Change - Decarbonization

Ecopetrol established and approved the emission reduction goal for 2022, which equals 262,761 tCO_{2e}, and will be supported by the implementation of around 45 new mitigation initiatives in operating areas.

In line with the goal of net-zero carbon emissions by 2050, in 1Q22 the international firm Ruby Canyon Environmental certified the reduction of 490,115 tCO₂ through the following projects:

- "Technical-Economic Energy Dispatch – Barrancabermeja Refinery" project, which achieved a reduction of 413,824 tCO_{2e} for the period of October 2019 to May 2021.
- "Electric power supply through on-site generation with associated gas from the Casabe Peñas Blancas field" project, which achieved a reduction of 26,974 tCO_{2e} for the period of October 2019 to August 2021.
- Ecopetrol's associated gas use program, which includes the use of gas in 4 fields (Ecopetrol's Orito and Colon, and Palagua and Cañada Norte operated by UT IJP and Hocol, respectively), which achieved a reduction of 34,912 tCO_{2e} for the period of March to September 2020.
- "Ecopetrol's first photovoltaic solar generation umbrella" project achieved a reduction of 14,405 tCO_{2e} for the period of October 2019 to September 2020.

Biodiversity

Within the framework of the national initiative *Sembrar Nos Une*, as of 1Q22, the Ecopetrol Group has contributed 4,534,416 trees, reaching 76% of the goal established in 2022 (6 million trees). It is noteworthy ISA's contribution with the planting of 330 thousand trees.

Within the framework of the implementation of the Natural Climate Solutions portfolio to develop emission reduction/removal projects, a cooperation agreement was signed with ISA to join efforts and contribute within the framework of the *Programa Conexión Jaguar* ("Jaguar Connection Program") and the Forests and Wetlands Conservation and Connectivity Project of the Ciénagas de Barbacoas Integrated Management Regional District, in the Mid-Magdalena Valley.

By initiating these projects, early actions are carried out that enable a potential carbon offer of over 1 MtCO₂/year that will enable offsetting starting in 2030 and that will allow us to move forward towards the reduction emission goal set for 2050.

Additionally, ISA launched *Conexión Puma* ("Puma Connection") program to protect 20,878 hectares of forest in Chile and reduce CO₂ emissions by 222,904 tons by 2030, which would be added to the current projections of more than 7 million tons of CO₂ lessened and more than 828,000 hectares protected.

Social and Environmental Investment

In 1Q22, the Ecopetrol Group allocated resources for social, environmental and relations towards Sustainable Development projects within the framework of the Environment Strategy, amounting to COP 68,130⁹ million that include strategic and regulatory investments. We highlight the massive gas service distribution to families in the Arauca and Boyacá Departments; the infrastructure improvement in Putumayo, Cundinamarca and Santander; and the Completion of the Ecopetrol *Emprende* entrepreneurship program in Meta.

Furthermore, the Ecopetrol Group was allocated COP 402,614 million from the *Obras por Impuestos* ("Works in Lieu of Taxes") mechanism between 2017 and 2020, with 43 projects in 14 departments nationwide. As of 1Q22, 31 projects have been completed amounting COP 285,460 million, highlighting among these the completion of 3 infrastructure works: construction of footprint plate for tertiary roads in Aguazul (Casanare) and Ipiales (Nariño) and the upgrading of the Paujil-Cartagena del Chaira Stage 3 road, for an estimated value of COP 53,155 million, benefiting 260,689 residents of 6 municipalities through 18.8 kilometers of road improvements.

Communities and Environment

Ecopetrol maintains an ongoing relationship with the National Government and other State entities to ensure their support in various conflict situations that adversely affect our activities in the regions in which we operate. Mobilizations in southern Bolívar and Arauca-Catumbo in protest against the eradication of illegal crops and de facto roads to our assets in departments such as Casanare, Huila and Meta, have generated dialogues with the guarantee of institutional support, leading to mutual understandings that contribute toward territorial peace and the subsequent viability of our operation.

The prior consultation carried out for the Chinchiná-Pereira project with the Suratena and Altomira reservations of the Embera ethnic group, located in the municipality of Marsella, Risaralda, was closed. The communities of both reservations signed the closing minutes of the processes, considering that all the agreed-upon administrative measures for the project's development had been fulfilled.

Corporate Responsibility

In 1Q22, Ecopetrol released its 2021 Comprehensive Sustainable Management Report,¹⁰ which was presented and approved by the General Shareholders' Meeting.

In addition, during 1Q22, Ecopetrol presented the results of its annual stakeholder survey that, for the first time, focused on the perceptions and expectations of our stakeholders on sustainability issues, specifically the 28

⁹The investment in 1Q22 is divided into: i) Strategic Investment for COP 65,938 million (includes the execution in 2022 of the Works in Lieu of Taxes projects that corresponds to COP 13,202 million by Ecopetrol S.A.); ii) Mandatory Investment for COP 2,192 million. Figures for CENIT (midstream segment) and Hocol are not included in this report, since the information is currently being consolidated for 2022; therefore, the cumulative figures will be reported in the 2Q22 report.

¹⁰This report has been prepared in accordance with the Global Reporting Initiative (GRI) standards. Likewise, the Report follows the guidelines of the following reporting frameworks: i. Sustainability Accounting Standards Board (SASB); ii. Stakeholder Capitalism Metrics (SCM) from the World Economic Forum (WEF); iii. Task Force on Climate-related Financial Disclosures (TCFD); iv. United Nations Sustainable Development Goals – SDG; v. Principles of the Global Compact.

material elements prioritized by Ecopetrol after its materiality exercise. The results of the survey are available on our website. These results will be used to fine-tune the Company's determinations of material sustainability issues and guide the development of the annual engagement plans with stakeholders.

Human Rights

During 1Q22, awareness training was carried out among approximately 200 contract administrators to highlight the importance of the "Human Rights and Corporate Social Responsibility Supplement" in force since 2016 and which is part of the contractual supplements for suppliers. This supplement extends the commitment to respect human rights to Ecopetrol's supply chain, committing suppliers to implement responsible practices that respect human rights, as well as to identify, prevent and mitigate situations that actually or potentially affect the exercise of these rights.

Corporate Governance and Corporate Bodies

On March 30, 2022, the ordinary meeting of the General Shareholders' Assembly was held with the participation of 2,900 shareholders and 3,670 connections through streaming and social networks. The Assembly was broadcast for the first time both in Spanish and English in order to provide timely information to all our stakeholders nationally and internationally.

In conformity with the decision adopted by the General Shareholders' Assembly of Ecopetrol S.A., the distribution of an ordinary dividend of COP 243 per share and an extraordinary dividend of an exceptional nature of COP 37 per share, for a total dividend of COP 280 per share, totaling COP 11,512,674,513,255 were approved. On April 21, 2022, Ecopetrol S.A. proceeded with the total dividend payout to its minority shareholders, which amounted to COP 1,324,899,648,800 and a payout of COP 1,585,333,200,000 to the majority shareholder. The remaining balance of the dividends declared in favor of the majority shareholder will be paid in installments during the year and, following the CONPES (National Economics and Social Policy Council for its Spanish acronym) recommendations, the maximum payout date has been set as September 30, 2022.

During the meeting, the following agenda items were also approved, among others: i) the Annual Corporate Governance Report and the Integrated Sustainable Management Report 2021; and, ii) the bylaws amendment that included changes regarding duties, terms and professional profiles of the Board of Directors. We believe the foregoing contributes towards strengthening the corporate governance of the Ecopetrol Group, in line with the measures implemented by the company since its national and international democratization process, reinforced as of Colombia's entry into the OECD (Organisation for Economic Co-operation and Development) and constantly updated to comply with the highest international standards. Further information regarding the main points of the bylaws amendment can be consulted in our website.

Moreover, on March 25, 2022, ISA held its General Shareholders' Assembly, ratifying therein the nine members of the Board of Directors who had been elected in the Extraordinary Assembly of October 2021.. Likewise, the profit distribution project for the fiscal year 2021 was approved, decreeing dividends for COP 829,651 million, equal to 50% of net income, which is equivalent to an ordinary dividend of COP 749 per share for the 1,107,677,894 outstanding ordinary shares and the creation of equity reserves.

Technology and Innovation

By the end of 1Q22, the **digital agenda** had provided benefits of USD 17.14 million, an increase of 43% as compared to 1Q21 (USD 12 million). Likewise, eight digital solutions were deployed in operation with a positive

impact on the new normal, project management and supply management, expanding the transformation processes of the business areas.

Concerning **digital factories**, benefits were certified for USD 0.52 million in 1Q22, mainly related to robotics through the automation of administrative processes activities in the Ecopetrol Group companies such as Esenttia and Ecopetrol S.A. Additionally, benefits of USD 0.46 million were captured by implementing robotic productivity and document management systems. Similarly, the project for integrated water management began, which optimizes water use through advanced analytics in the processes of capturing, using and disposing of this resource in three assets of the Ecopetrol Group, which is the first large step to achieving the goal of becoming water neutral by 2045.

On the **innovation front**, in 1Q22 we highlight the execution of the Caribbean Innovation and Technology Center in Cartagena to incorporate regional capabilities with a focus on energy and petrochemical transition. In addition, we made progress towards the creation of the EnergyTech ecosystem with the signing of a Memorandum of Understanding (MoU) with Tecnia, a flagship technological research and development center in Europe, to carry out joint exercises with the European ecosystem that focuses on energy transition, decarbonization, trapped assets and circular economy.

IV. Results presentation

Ecopetrol's management will host two conference calls to review the 2022 first quarter results:

Spanish

May 11, 2022
08:00 a.m. Colombia
09:00 a.m. New York

English

May 11, 2022
10:00 a.m. Colombia
11:00 a.m. New York

To access the webcast, the following links will be available:

Spanish: <https://onlinexperiences.com/scripts/Server.nxp?LASCmd=AI:4;F:QS!10100&ShowUUID=1EEBE6A7-C71D-46A3-B0B7-1CE06C483751&LangLocaleID=1034>

English: <https://onlinexperiences.com/scripts/Server.nxp?LASCmd=AI:4;F:QS!10100&ShowUUID=6B16C0A0-C744-4721-9FB1-F045A6145336&LangLocaleID=1033>

Please check if your browser allows the normal operation of the online presentation. We recommend using the latest versions of Internet Explorer, Google Chrome and Mozilla Firefox.

The results report, presentation, webcast and replay of the conference will be available on the Ecopetrol website www.ecopetrol.com.co

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Ecopetrol Group Appendices

Table 1: Income Statement - Ecopetrol Group

Billion (COP)	1Q 2022	1Q 2021	Δ (%)
Revenue			
Local	16,614	8,615	92.8%
Export	15,859	8,591	84.6%
Total revenue	32,473	17,206	88.7%
Cost of sales			
Depreciation, amortization and depletion	2,579	2,237	15.3%
Variable depreciation, amortization and depletion	1,506	1,569	(4.0%)
Fixed cost depreciation	1,073	668	60.6%
Variable costs	12,065	6,238	93.4%
Imported products	7,685	3,196	140.5%
Local purchases	5,531	3,141	76.1%
Hydrocarbon transportation services	254	229	10.9%
Inventories and others	(1,405)	(328)	328.4%
Fixed costs	3,294	2,037	61.7%
Contracted services	1,332	633	110.4%
Maintenance	706	503	40.4%
Labor costs	782	558	40.1%
Other	474	343	38.2%
Total cost of sales	17,938	10,512	70.6%
Gross income	14,535	6,694	117.1%
Operating expenses	2,005	1,181	69.8%
Administration expenses	1,908	1,015	88.0%
Exploration and projects expenses	93	168	(44.6%)
(Recovery) expense for impairment long-term assets	4	(2)	(300.0%)
Operating income	12,530	5,513	127.3%
Finance result, net	(1,524)	(651)	134.1%
Foreign exchange, net	47	121	(61.2%)
Interest, net	(940)	(535)	75.7%
Financial income/loss	(631)	(237)	166.2%
Share of profit of companies	202	53	281.1%
Income before income tax	11,208	4,915	128.0%
Income tax	(3,884)	(1,537)	152.7%
Net income consolidated	7,324	3,378	116.8%
Non-controlling interest	(751)	(292)	157.2%
Net income attributable to owners of Ecopetrol	6,573	3,086	113.0%
EBITDA	15,896	8,187	94.2%
EBITDA margin	49.0%	47.6%	1.4%

Table 2: Statement of Financial Position - Ecopetrol Group

Billion (COP)	March 31, 2022	December 31, 2021	Δ (%)
Current assets			
Cash and cash equivalents	13,999	14,550	(3.8%)
Trade and other receivables	25,227	18,449	36.7%
Inventories	10,972	8,398	30.7%
Current tax assets	4,840	6,274	(22.9%)
Other financial assets	1,649	1,627	1.4%
Other assets	2,387	2,333	2.3%
	59,074	51,631	14.4%
Non-current assets held for sale	75	65	15.4%
Total current assets	59,149	51,696	14.4%
Non-current assets			
Investments in associates and joint ventures	8,669	8,357	3.7%
Trade and other receivables	26,416	24,160	9.3%
Property, plant and equipment	87,774	90,115	(2.6%)
Natural and environmental resources	36,049	35,910	0.4%
Assets by right of use	496	497	(0.2%)
Intangibles	14,831	14,961	(0.9%)
Deferred tax assets	10,876	11,731	(7.3%)
Other financial assets	1,018	1,308	(22.2%)
Goodwill and Other assets	5,552	5,515	0.7%
Total non-current assets	191,681	192,554	(0.5%)
Total assets	250,830	244,250	2.7%
Current liabilities			
Loans and borrowings	8,739	9,206	(5.1%)
Trade and other payables	26,480	13,568	95.2%
Provision for employees benefits	2,219	2,296	(3.4%)
Current tax liabilities	2,559	2,152	18.9%
Accrued liabilities and provisions	1,464	1,590	(7.9%)
Other liabilities	1,288	1,410	(8.7%)
Liabilities related to non-current assets held for sell	25	27	(7.4%)
Total current liabilities	42,774	30,249	41.4%
Non-current liabilities			
Loans and borrowings	82,879	85,855	(3.5%)
Trade and other payables	88	71	23.9%
Provision for employees benefits	9,797	9,083	7.9%
Non-current taxes	11,744	10,780	8.9%
Accrued liabilities and provisions	12,624	12,642	(0.1%)
Other liabilities	1,780	1,818	(2.1%)
Total non-current liabilities	118,912	120,249	(1.1%)
Total liabilities	161,686	150,498	7.4%
Equity			
Equity attributable to owners of the company	66,455	71,733	(7.4%)
Non-controlling interests	22,689	22,019	3.0%
Total equity	89,144	93,752	(4.9%)
Total liabilities and equity	250,830	244,250	2.7%

Table 3: Cash Flow Statement - Ecopetrol Group

Billion (COP)	1Q 2022	1Q 2021
Cash flow provided by operating activities		
Net income attributable to owners of Ecopetrol S.A.	6,573	3,086
Adjustments to reconcile net income to cash provided by operating activities		
Non-controlling interests	751	292
Income tax	3,884	1,537
Depreciation, depletion and amortization	2,709	2,302
Foreign exchange (gain) los	(47)	241
Gain on other comprehensive Income realized	0	(362)
Finance costs recognized in profit or loss	1,550	792
Dry Wells	61	133
Loss (gain) on disposal of non-current assets	296	(10)
Impairment of current and non-current assets	26	13
Fair value (gain) on financial assets valuation	(41)	22
Gain on financial derivatives	(1)	0
Gain on assets for sale	(2)	0
(Gain) loss on share of profit of associates and joint ventures	(202)	(53)
Exchange difference on export hedges and ineffectiveness	135	66
Others minor items	(23)	8
Net changes in operating assets and liabilities	(10,185)	(3,978)
Income tax paid	(1,698)	(1,156)
Cash provided by operating activities	3,786	2,933
Cash flows from investing activities		
Investment in joint ventures	(32)	0
Investment in property, plant and equipment	(1,227)	(850)
Investment in natural and environmental resources	(1,958)	(1,569)
Payments for intangibles	(170)	(18)
(Purchases) sales of other financial assets	400	1,713
Interest received	159	24
Proceeds from sales of assets	50	8
Net cash used in investing activities	(2,778)	(692)
Cash flows from financing activities		
Proceeds (repayment of) from borrowings	(274)	(63)
Interest paid	(907)	(478)
Lease Payments	(91)	(70)
Dividends paid	(274)	(168)
Net cash used in financing activities	(1,546)	(779)
Exchange difference in cash and cash equivalents	(13)	144
Net (decrease) increase in cash and cash equivalents	(551)	1,606
Cash and cash equivalents at the beginning of the period	14,550	5,082
Cash and cash equivalents at the end of the period	13,999	6,688

Table 4: EBITDA Reconciliation - Ecopetrol Group

Billion (COP)	1Q 2022	1Q 2021
Net income attributable to the owners of Ecopetrol	6,573	3,086
(+) Depreciation, amortization and depletion	2,709	2,302
(+/-) Impairment of long-term assets	4	(2)
(+/-) Financial result, net	1,524	651
(+) Income tax	3,884	1,537
(+) Taxes and others	451	321
(+/-) Non-controlling interest	751	292
Consolidated EBITDA	15,896	8,187

Table 5: Reconciliation of EBITDA by Segment (1Q22)

Billion (COP)	Upstream	Downstream	Midstream	Energy	Eliminations	Consolidated
Net income attributable to the owners of Ecopetrol	5,011	488	946	128	0	6,573
(+) Depreciation, amortization and depletion	1,606	442	331	330	0	2,709
(+/-) Impairment of long-term assets	0	4	0	0	0	4
(+/-) Financial result, net	406	167	197	744	10	1,524
(+) Income tax	2,668	347	655	215	(1)	3,884
(+) Other taxes	192	153	49	57	0	451
(+/-) Non-controlling interest	(21)	41	241	490	0	751
Consolidated EBITDA	9,862	1,642	2,419	1,964	9	15,896

Appendices, Ecopetrol S.A.

Following are the Income Statement and Statement of Financial Position of Ecopetrol S.A.

Table 6: Income Statement

Billion (COP)	1Q 2022	1Q 2021	Δ (%)
Local	15,205	8,365	81.8%
Exports	12,087	6,871	75.9%
Total revenue	27,292	15,236	79.1%
Variable costs	15,268	8,515	79.3%
Fixed costs	3,041	2,540	19.7%
Total cost of sales	18,309	11,055	65.6%
Gross income	8,983	4,181	114.9%
Operating expenses	794	582	36.4%
Operating income	8,189	3,599	127.5%
Financial income/loss	(668)	(1,032)	(35.3%)
Share of profit of companies	1,692	1,305	29.7%
Income before income tax	9,213	3,872	137.9%
Income tax	(2,640)	(786)	235.9%
Net income attributable to owners of Ecopetrol	6,573	3,086	113.0%
EBITDA	9,865	5,369	83.7%
EBITDA margin	36.1%	35.20%	0.9%

Table 7: Statement of Financial Position / Balance Sheet

Billion (COP)	March 31, 2022	December 31, 2021	Δ (%)
Current assets			
Cash and cash equivalents	5,157	5,937	(13.1%)
Trade and other receivables	24,301	15,546	56.3%
Inventories	7,695	5,600	37.4%
Current tax assets	4,000	5,462	(26.8%)
Other financial assets	2,716	1,177	130.8%
Other assets	1,540	1,397	10.2%
	45,409	35,119	29.3%
Non-current assets held for sale	40	42	(4.8%)
Total current assets	45,449	35,161	29.3%
Non-current assets			
Investments in associates and joint ventures	71,497	77,227	(7.4%)
Trade and other receivables	546	564	(3.2%)
Property, plant and equipment	24,832	24,609	0.9%
Natural and environmental resources	23,978	23,667	1.3%
Assets by right of use	3,037	2,963	2.5%
Intangibles	300	268	11.9%
Deferred tax assets	4,860	5,485	(11.4%)
Other financial assets	535	630	(15.1%)
Goodwill and other assets	1,043	1,029	1.4%
Total non-current assets	130,628	136,442	(4.3%)
Total assets	176,077	171,603	2.6%
Current liabilities			
Loans and borrowings	4,316	4,421	(2.4%)
Trade and other payables	23,028	10,744	114.3%
Provision for employees benefits	1,977	2,048	(3.5%)
Current tax liabilities	846	691	22.4%
Accrued liabilities and provisions	1,108	1,213	(8.7%)
Other liabilities	944	891	5.9%
Total current liabilities	32,219	20,008	61.0%
Non-current liabilities			
Loans and borrowings	58,106	61,286	(5.2%)
Provision for employees benefits	8,941	8,282	8.0%
Non-current tax liabilities	270	281	(3.9%)
Accrued liabilities and provisions	10,034	9,959	0.8%
Other liabilities	52	54	(3.7%)
Total non-current liabilities	77,403	79,862	(3.1%)
Total liabilities	109,622	99,870	9.8%
Equity			
Equity attributable to owners of the company	66,455	71,733	(7.4%)
Total equity	66,455	71,733	(7.4%)
Total liabilities and equity	176,077	171,603	2.6%

Table 8: Export Destinations - Ecopetrol Group

Crudes - mboed	1Q 2022	1Q 2021	% Share
U.S. Gulf Coast	158.9	123.4	40.1%
Asia	212.8	213.4	53.6%
Central America / Caribbean	6.1	9.5	1.5%
Others	10.0	0.3	2.5%
Europe	0.0	6.6	0.0%
U.S. West Coast	8.7	3.8	2.2%
South America	0.0	1.3	0.0%
U.S. East Coast	0.0	0.0	0.0%
Total	396.6	358.3	100.0%

Products - mboed	1Q 2022	1Q 2021	% Share
Central America / Caribbean	36.0	26.4	62.0%
U.S. Gulf Coast	8.0	18.1	13.8%
Asia	6.8	10.9	11.8%
South America	6.7	8.3	11.5%
U.S. East Coast	0.0	23.1	0.0%
Europe	0.0	8.1	0.0%
U.S. West Coast	0.0	0.0	0.0%
Others	0.5	0.5	0.9%
Total	58.0	95.4	100.0%

Note: The information is subject to change after the end of the quarter, as some destinations are reclassified according to the final result of exports.

Table 9: Local Purchases and Imports - Ecopetrol Group

Local Purchases - mboed	1Q 2022	1Q 2021	Δ (%)
Crude Oil	177.3	179.9	(1.4%)
Gas	1.7	1.6	6.3%
Products	3.1	2.7	14.8%
Diluent	0.0	0.0	-
Total	182.1	184.2	(1.1%)

Imports - mboed	1Q 2022	1Q 2021	Δ (%)
Crude Oil	28.4	24.3	16.9%
Products	132.5	80.6	64.4%
Diluent	35.1	26.4	33.0%
Total	196.0	131.3	49.3%

Total	378.1	315.5	19.8%
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Table 10: Exploratory Wells Detail - Ecopetrol Group

#	Quarter	Name	Initial Well Classification (Lahee)	Block	Name	Operator/Partner	Status	TD Date
1	First	Bololó-1	A3	VIM-8	Middle Magdalena Valley	Hocol 100% (Operator)	Dry	January 3/2022
2	First	El Niño-2	A1	Boqueron	Middle Magdalena Valley	Perenco 30% (Operator), ECP 50%, CNOOC 20%	Successful	January 13/2022
3	First	EST-SN-15	Stratigraphic	SN-15	Sinú - San Jacinto	Hocol 100% (Operator)	Plugged and abandoned	January 17/2022
4	First	Pilonera-1	A3	SSJN1	Sinú - San Jacinto	Hocol 50 % Lewis Energy 50% (Operator)	Plugged and abandoned	January 20/2022
5	First	Boranda Sur-3	A1	Boranda	Middle Magdalena Valley	Parex 50% (Operator) ECP 50%	Under evaluation	February 23/2022
6	First	Cayena-2*	A1	Fortuna	Middle Magdalena Valley	Parex 80% (Operator) ECP 20% Partner risk-only basis	Under evaluation	January 12/2022
7	First	Caño Caranal DT-1*	A3	Cosecha	Llanos Orientales	Sierracol 50% (Operator) ECP 50 % Partner risk-only basis	Dry	March 14/2022

* In 2022 the activity operated on a partner risk-only basis is included.

Table 11: HSE Performance (Health, Safety and Environment)

HSE Indicators*	1Q 2022	1Q 2021
Frequency of total registrable injuries (No. Recordable cases / Million man hours)	0.23	0.61
Environmental incidents**	1	2

* The results of the indicators are subject to change after the end of the quarter due to the fact that some of the accidents and incidents are reclassified according to the final result of the investigations. ** Environmental incidents are those hydrocarbon spills greater than 1 barrel, with environmental impact.