

SUSTAINABILITY ACCOUNTING
STANDARDS BOARD
(SASB)
METRICS REPORT

2021



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MESSAGE FROM THE CEO OF ECOPETROL GROUP

Directors approved its 2040 Strategy "Energy that Transforms", which was shared with the market in February of 2022. The new strategy, covers for the first time a period spanning over ten years, integrating the fundamental pillars of the 2020 strategy and incorporating applications of the energy transition roadmap, the six principles of the Cultural Declaration, our higher purposes, and Ecopetrol's expected long-term portfolio.

The strategy is comprised of four (4) strategic pillars which reflect our vision for the next two (2) decades:

- i) Grow with Energy Transition;
- ii) Generate Value through TESG;
- iii) Cutting-edge knowledge;
- iv) Competitive Returns.

Through this strategy, Ecopetrol Group aims to continue to grow and competitively generate value, while considering the requirements and opportunities posed by the current situation and the energy transition scenario. This will be achieved by maximizing oil business value and competitiveness, as well as ensuring portfolio diversification, and maintaining our commitment to TESG and decarbonization.

The 2040 Strategy builds on our 2021 operating, financial and industrial safety results. We continue on the path towards reactivation, thanks to our ability to generate sustainable

value and respond in an agile and timely manner to current conditions. The committed and steadfast labor of the individuals who collaborate with Ecopetrol allows us to report exceptional financial results: we closed the year with a net profit of COP 16.7 trillion, a consolidated income of COP 91.7 trillion and an EBITDA of COP 42 trillion (EBITDA margin of 45.7%). Additionally, we achieved the highest reserves replacement ratio of the past 12 years (200%), and by yearend 2021 our hydrocarbon reserves reached 2,002 million barrels of oil equivalent (mboe). Consequently, these results allowed us to generate value for all of our stakeholders and contribute to the well-being of all Colombians. During the first quarter of 2022 we obtained the best quarterly result in the history of the Company: revenue, net income attributable to Ecopetrol shareholders and EBITDA, amounted to COP 32.5 trillion, COP 6.6 trillion and COP 15.9 trillion, respectively.

In 2021, we took on the challenge of consolidating Ecopetrol as the leading energy company in the Americas, while simultaneously remaining strong in our traditional business and remaining at the forefront of the energy transition to support our efforts to address climate change.

The purchase of 51.4% of the shares of Interconexión Eléctrica

S.A. ESP (ISA) for COP 14.2 trillion represented the most relevant inorganic acquisition by the Ecopetrol Group in its 70-year history. This transaction symbolizes the junction of two (2) successful paths taken by ISA and Ecopetrol to strengthen both companies, as well as to grow and exercise a leading role in the energy market, both in Colombia and the region as a whole, solidifying the path towards electrification with low-emission activities and making significant contributions towards decarbonization.

In line with its interest in moving forward from the perspective of sustainable management, Ecopetrol Group has continued to strengthen its corporate responsibility and ESG reporting processes to address the different needs for information and expectations of its stakeholders. Therefore, for the second consecutive year, it presents its Sustainability Accounting Standards Board (SASB) report following the parameters defined by the aforementioned organization, whereby it can share with its investors its information classified under these metrics.

As a result of the above, the scope of this report is broader than that of 2020, encompassing 26 companies of the Ecopetrol Group and accounting for the sustainable management approach of multiple

Group companies in the Upstream, Midstream, and Downstream segments, as well as in ISA's core business lines which are energy transmission and toll road concessions. The aforementioned is supported by the contents of Ecopetrol S.A.'s Integrated Sustainable Management Report and other disclosure mechanisms for the Ecopetrol Group.

Additionally, this report also covers more of the metrics reported for 2020, including 89% of the SASB metrics for the Mineral Extraction and Processing Sector in the Upstream crude oil and gas segment, 100% in the Midstream and 87% in Downstream segments; 100% of the metrics for the Resource Transformation sector in the Chemical Substances standard; 82% of the metrics for the Renewable Resources and Alternative Energies sector in the Biofuels standard; 100% in the Infrastructure sector in the Gas Distributors, Electric Utilities and Engineering and Construction Services standards; and 100% in the Services sector in the Professional and Commercial Services standard.

The progression in Ecopetrol's information disclosure is evidence of the Group's commitment to transparency, a core element of our corporate responsibility strategy. The expansion of the number of

metrics reported, as well as in the scope of this report, are proof of this commitment. Ecopetrol continues to manage its material issues in line with the proposals set out in the framework of its 2040 Strategy "Energy that Transforms".

Felipe Bayón
Chief Executive Officer

EXTRACTIVES & MINERALS PROCESSING SECTOR

01 OIL AND GAS EXPLORATION AND PRODUCTION








ACTIVITY METRICS

Code	EM-EP-000.A
Accounting Metric	Production of: (1) oil, (2) natural gas, (3) synthetic oil, and (4) synthetic gas
Unit of measure	Thousand barrels per day (Mbbbl/day); Million standard cubic feet per day (MMscf/day)

Accounting Metric	2021			
	(1)	(2)	(3)	(4)
Unit of measure ¹	Mbbbl/day	MMscf/day ²	Mbbbl/day	MMscf/day
Ecopetrol S.A.	485,91	601,14	-	-
Hocol Petroleum Limited	18,1	110,5	-	-
Ecopetrol Permian LLC	13,48	14,52	3,21 ³	-
Ecopetrol America LLC	9,45	8,33	-	-
Ecopetrol Óleo e Gas do Brasil ⁴	Not apply			

¹ Corresponds to the share of production that Ecopetrol and its subsidiaries have in each field, before royalties and/or any discounts.

² Million standard cubic feet per day (MMscf) is based on the energy released from the combustion of a barrel of oil. On average, in Colombia, 1 bbl is taken as energetically equivalent to 5.7Mscf of natural gas.

³ The synthetic oil reported corresponds to liquefied natural gas (LNG).

⁴ Currently, Ecopetrol's subsidiary, Ecopetrol Óleo e Gás do Brasil Ltda., is a non-operating partner in five (5) exploratory assets in Brazil, represented by the following blocks: (i) Ceará - CE- M-715 (Ceará Basin), (ii) Saturno (Santos pre-salt basin) (iii) Pau Brasil (Santos pre-salt basin) and (iv and v): BM-S-54 and Sul de Gato do Mato (Gato do Mato project), assets that are currently in the evaluation stage.

Accounting Metric	2020			
	(1)	(2)	(3)	(4)
Unit of measure ¹	Mbbbl/day	MMscf/day	kbped	kbped
Ecopetrol S.A.	516	694,26	-	-
Hocol Petroleum Limited	20,2	87,78	-	-

¹ For 2020, the figures are reported in thousand barrels oil equivalent as it is the most widely used unit of measurement for the oil and gas sector.

Code	EM-EP-000.B
Accounting Metric	Number of offshore sites
Unit of measure	Number
2021	
Accounting metric	
Unit of measure	Number of offshore sites
Ecopetrol S.A. ¹	2
Hocol Petroleum Limited ¹	2
Ecopetrol Permian LLC	-
Ecopetrol America LLC ²	3
Ecopetrol Óleo e Gas do Brasil ³	-

¹ The fields correspond to Chuchupa and Ballena where Ecopetrol S.A. has 57% stake while Hocol S.A. holds 43%

² Marco Polo platform (GC-608) - operated by Occidental, processing K2 production (Occidental) with 20.8% EA working interest
Petronius platform (VK-786) - operated by Chevron, processing Dalmatian production (Murphy) with 30% EA working interest
Gulfstar-1 platform (MC-724) - operated by Hess, processing Esso production (Hess) with 21.43% EA working interest and Gunflint production (QuarterNorth Energy) with 31.5% EA working interest

³ Ecopetrol Óleo e Gás do Brasil Ltda. ("Ecopetrol Brasil") has currently 4 (four) offshore assets (as Non Operator) located in Santos Basin, Brazil. All assets are under a pre operational/exploration phase, as follows:

Pau Brasil: BP as the Operator. Asset under exploration phase until 2025. Planning and preparing well drilling for 2023;

Saturno: Shell as the Operator. Asset under exploration phase until 2026. Drilled well in 2020 (dry hole); Under review of the remaining prospectivity of the area for future decisions.

Gato do Mato Blocks (BMS- 54 and Sul de Gato do Mato): Shell as the Operator. Both blocks are under a Joint Appraisal Plan (Exploration Phase); Currently, development studies for the Declaration of Commerciality (estimated for oct/2022).

Ceará: PetroRio in the capacity as Operator for the first exploration period, which will take place in June 2022, and internal decision to return the block approved in 2021.

2020	
Accounting metric	
Unit of measure ¹	Number of offshore sites
Ecopetrol S.A.	2
Hocol Petroleum Limited	2

¹ The fields correspond to Chuchupa and Ballena where Ecopetrol S.A. has 57% stake while Hocol S.A. holds 43%

Code	EM-EP-000.C
Accounting Metric	Number of terrestrial sites
Unit of measure	Number
2021	
Accounting metric	
Unit of measure Hocol	Number of terrestrial sites
Ecopetrol S.A. ¹	189 ² fields
Petroleum Limited ¹	52 ³ fields
Ecopetrol Permian LLC	114 wells ⁴
Ecopetrol America LLC	-
Ecopetrol Óleo e Gas do Brasil	-

¹ Types of onshore sites:

• Oil Type: Corresponds to fields with oil or petroleum wells.

• Gas type: Corresponds to fields with gas wells.

• Definition of well: Refers to any ground drilling designed with the goal of finding and extracting combustible fluid, either oil or gaseous hydrocarbons.

• Definition of field: Refers to an area with a given number of wells from which hydrocarbons are extracted from the subsoil.

² 184 sites correspond to development fields and 5 to exploratory fields (RECETOR WEST, FLAMENCOS, BORANDA, EL NIÑO, LORITO).

³ 34 sites correspond to development fields and 18 to exploratory fields.

⁴ Number of terrestrial sites: Active wells: 96; non-productive wells: 8; drilling phase wells: 4; completion phase wells: 6. This report does not include non-operating wells, as they are not considered materially relevant for Ecopetrol

2020	
Accounting metric	
Unidad de medida	Number of terrestrial sites
Ecopetrol S.A.	204 Productive + 21 Exploratory
Hocol Petroleum Limited	39 Productive + 19 Exploratory

ENVIRONMENT

Greenhouse Gas Emissions (GHG)

Code	EM-EP-110a.1
Accounting Metric	(1) Gross global Scope 1 emissions, (2) Percentage methane, (3) percentage covered under emissions-limiting regulations
Unit of measure	Metric tons CO ₂ -e (t), percentage (%)

2021			
Accounting metric	(1)	(2)	(3) ¹
Unit of measure	tonCO ₂ e	%	%
Ecopetrol S.A. ²	10.296.909	4,69	Not apply
Hocol Petroleum Limited	271.213 ³	3,09	Not apply
Ecopetrol Permian LLC	26.531 ⁴	9	100
Ecopetrol America LLC	37.320 ⁵	7	-
Ecopetrol Óleo e Gas do Brasil			Not apply

¹ A percentage covered does not apply under the GHG regulatory emission limit because there is no regulation associated with such emissions (released methane) in Colombia.

² For Ecopetrol S.A. this metric is prepared under the ISO 14064-1 methodology and the GHG Protocol, and the organizational limit of the inventory is established as operational control, under this approach the company accounts for 100% of its Greenhouse Gas (GHG) emissions attributable to the operations over which it exercises control, Ecopetrol S.A.'s GHG inventory includes the refining segment, Barrancabermeja Refinery and the assets operated by the Cartagena Refinery. Additionally for the year 2021, CENIT and ODC, subsidiaries from the midstream segment, are no longer under the operational control of Ecopetrol. For this reason, the historical series corresponding to the period 2018 - 2020 is recalculated in this report.

³ To calculate the emissions, reference is made to the provisions of the World Resources Institute's (WRI) Greenhouse Gas Protocol and the World Business Council for Sustainable Development (WBCSD) and Colombian Technical Standard NTC-ISO 14064-1, Greenhouse Gases in its Part 1: Specification with guidance, at the level of organizations, for the quantification and reporting of GHG emissions and removals. For the last two bimesters of the year, average consumption values were used, therefore emissions may vary for 2021 yearend statistics.

⁴ According to the API Methodology 2009 combustion, flaring, and venting emissions were estimated using mass balance calculations; for the fugitive emissions calculated emission factors were used. Ecopetrol Permian holds a 49% share in the JV Rodeo.

⁵ The total volume of GHG emissions is based on actual reported emissions, but the distribution between CO₂, CH₄ and N₂O is estimated based on the Marco Polo facility, which is processing HCs from K2, the largest producing field for EA. Note that Ecopetrol America is not the Operator for any of the production in the US GoM. Note that the reported emissions represent the sum of Ecopetrol America's equity share / working interest in the respective Joint Ventures.

2020			
Accounting metric	(1)	(2)	(3) ¹
Unit of measure	tonCO ₂ e	%	%
Ecopetrol S.A. ²	10.238.780	4	Not apply
Hocol Petroleum Limited			Information not available for 2020

¹ A percentage covered does not apply under the GHG regulatory emission limit because there is no regulation associated with such emissions (released methane) in Colombia.

² With respect to the data presented for Ecopetrol S.A. it is worth noting that Ecopetrol's atmospheric emissions inventory is structured under the operational control approach, for upstream, midstream and downstream activities. The indicator was recalculated for 2020 due to two (2) operational events, in 2020 Ecopetrol assumed the operation of the Pauto - Floreña asset, which was not reported in the initial figure, and by 2021 Cenit, a midstream subsidiary, was no longer under Ecopetrol's operational control.

Code	EM-EP-110a.2
Accounting Metric	Amount of gross global Scope 1 emissions from: (1) flared hydrocarbons, (2) other combustion, (3) process emissions, (4) other vented emissions, and (5) fugitive emissions
Unit of measure	Metrics tons CO ₂ -e

Accounting metric	2021				
	(1)	(2)	(3)	(4)	(5)
Unit of measure	tonCO ₂ e	tonCO ₂ e	tonCO ₂ e	tonCO ₂ e	tonCO ₂ e
Ecopetrol S.A. ¹	924.991	7.743.355	1.405.285	-	223.278
Hocol Petroleum Limited	52.691	210.171	-	3.137	5.214
Ecopetrol Permian LLC	18.823	6.841	-	82 ²	785
Ecopetrol America LLC	3.478 ³	26.814	-	6.297	731
Ecopetrol Óleo e Gas do Brasil	-	-	-	-	-

¹ For Ecopetrol S.A. this metric is prepared under the ISO 14064-1 methodology and the GHG Protocol, and the organizational limit of the inventory is established as operational control, under this approach the company accounts for 100% of its Greenhouse Gas (GHG) emissions attributable to the operations over which it exercises control, the GHG inventory of Ecopetrol S.A. includes the refining segment, Barrancabermeja Refinery and the assets operated by the Cartagena Refinery.

² In the Permian case, our production circuit is closed and our estimation for vented emissions is related to the crude oil flashing losses in oil storage tanks, we assume a 95% efficiency for the Vapor Recovery Units, that's the reason why our number is low.

³ The numbers are for EA working interest in non-operated JVs.

Accounting metric	2020				
	(1)	(2)	(3)	(4)	(5)
Unit of measure	tonCO ₂ e	tonCO ₂ e	tonCO ₂ e	tonCO ₂ e	tonCO ₂ e
Ecopetrol S.A. ¹	923.432	7.774.397	1.307.403	-	233.548
Hocol Petroleum Limited	Information not available for 2020				

¹ With respect to the data presented for Ecopetrol S.A. it is worth noting that Ecopetrol's atmospheric emissions inventory is structured under the operational control approach, for upstream, midstream and downstream activities, including emissions from the Barrancabermeja Refinery and the assets operated by the Cartagena Refinery. The indicator was recalculated for 2020 due to two (2) operational events, in 2020 Ecopetrol assumed the operation of the Pauto - Floreña asset, which was not reported in the initial figure, and by 2021 Cenit, a midstream subsidiary, was no longer under Ecopetrol's operational control.

Code	EM-EP-110a.3
Accounting Metric	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets
Unit of measure	Discussion and analysis

2021	
Ecopetrol S.A Hocol Petroleum Limited Ecopetrol Permian LLC Ecopetrol America LLC Ecopetrol Óleo e Gas do Brasil	The Ecopetrol Group committed to achieve net-zero carbon emissions by 2025 (Scopes 1 and 2) and to reduce 25% of its CO ₂ emissions by 2030 with respect to 2019 (Scopes 1 and 2). Additionally, it also committed to reduce 50% of total emissions by 2050 (Scope 1, 2 and 3). To achieve this, Ecopetrol and each of its subsidiaries have defined actions to reduce GHG emissions in accordance with their climate ambitions.

Ecopetrol S.A.	<p>Ecopetrol defined its 2040 corporate strategy "Energy that transforms", which comprehensively responds to the current environmental, social and governance challenges, maintaining its focus on generating sustainable value for all stakeholders. The strategy is based on four strategic pillars:</p> <ul style="list-style-type: none"> • Growing with Energy Transition: Growing with the transition involves the gradual incursion into emerging businesses aligned with new global trends to mitigate the effects of climate change, such as the production of low-carbon hydrogen as an energy source, carbon capture, use and storage (CCUS), Natural Climate Solutions (NCS) and the implementation of the CO₂ shadow price, with a price curve that starts at 20 USD/TonCO₂e today and increases to 40 USD/tonCO₂e by 2030. • Generate value with TEGS: This pillar includes a strategic action plan that seeks to accelerate and prioritize decarbonization and energy efficiency through the incorporation of renewable energy sources for self-consumption (wind, solar and geothermal energy). In this context, the EG will increase its self-generation capacity with renewable energies between 400 - 450 MW by 2024. • Cutting-edge knowledge: develop the necessary capabilities to face growth and sustainability challenges, through a comprehensive science, technology and innovation strategy (ST&I), that contributes to diversification, increasing clean energy, decarbonizing operations and empowering human talent. • Competitive returns: ensure the continuity of strict capital discipline, rigor in the efficient use of resources and protection of GE's cash flow. • The decarbonization plan for meeting reduction goals includes short, medium and long term actions in: <ul style="list-style-type: none"> • Permanent updating and continuous verification of the greenhouse gas inventory. • Identification, development and implementation of operational initiatives to reduce emissions. • Continued implementation of emissions reduction initiatives in the operating areas focused on energy efficiency, where the goal is to increase efficiency by 6% by 2028. • Reduce routine flaring to zero by 2030. • Improve processes for detecting and measuring fugitive emissions and venting using state-of-the-art technologies, and reduce methane emissions. • Implement the renewable energy portfolio (solar photovoltaic, wind and geothermal projects) with the goal of achieving between 400 and 450 MW by 2024. • Develop emerging technologies, with the implementation of green hydrogen production pilots and Carbon Capture, Use and Sequestration. Between 2022 and 2030, green hydrogen efforts will focus on the expansion of hydrogen in own operations with industrial-scale projects, and applications in sustainable mobility will begin for cars and buses. • Develop and consolidate an offset portfolio through Natural Climate Solutions, including the development of emission reduction and removal projects, in order to generate at least two million carbon credits by 2030, to offset residual emissions that cannot be mitigated or eliminated.
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Hocol	<p>As a result of the 2020 and 2021 inventory review, the need to improve the process to acquire, monitor and analyze variables was identified, in order to ensure data traceability, standardization of criteria and data automation, and thus avoid the human factor.</p> <p>On the other hand, the Net-zero Carbon Management System was structured to achieve short-, medium- and long-term goals. This system incorporated the necessary elements based on Hocol and the Ecopetrol Business Group's processes, strategies, plans and goals.</p> <p>The elements with the highest priority: i) road maps for each of HOCOL's Net-zero Carbon Plan elements. An additional component has been included, that corresponds to Scope 3 emissions management for 2022; ii) the design of roadmaps for each asset; iii) regulation: HOCOL has been active in consultative phases of regulations that are in the process of being approved; mapping of current legislation and tax benefit opportunities; iv) survey of the energy inventory of all Hocol operations; v) design and implementation of a policy for the management of fugitive emissions and venting; vi) use of gas from tailings and venting; vii) design and implementation of plans for offsetting emissions; and, viii) feasibility of using renewable energy to supply part of the energy demand.</p>
Brasil	<p>Short-term Strategy/Long-term Strategy: The company recognizes the role climate change strategy play and, therefore, aim to manage the greenhouse gases (GHGs) emissions through operational energy efficiency through out the joint venture partners. The Company plans to manage and follow strictly, as a Non Operator in Brazil in Gato do Mato Project, with the joint venture partners, the GHG emissions and assess possible mitigation measures, in line with applicable local requirements and the Company's headquarters strategy. The Company aim to have joint venture partners aligned with the GHG reduction emissions. The partners in Gato do Mato project have agreed to apply six Energy Transition Principles jointly developed with other industry companies. Such principles aim to support collective industry acceleration to contribute to the Paris Agreement goals by delivering progress on reducing GHG emissions, the role of carbon sinks, and transparency and alignment on climate change with trade associations.</p> <p>Emissions reduction target(s): As a Non Operator in Brazil, the Company manages with the joint venture partners the GHG emissions and assess possible mitigation measures, in line with applicable local requirements and the headquarters strategy. For the Projects in Brazil, the Company estimates the Gato do Mato Project, located offshore in Santos Basin, will start production in Q4/2025 or Q1/2026. In this sense, there is a plan to align with Operator the GHG emissions for reduction and mitigation measures.</p> <p>Actions to achieve the target(s): As production begins (Q4/2025 or Q1/2026), the Company plans to follow strictly with Operator and joint venture partners the GHG emissions and mitigation measures, in order to optimize the energy consumption in the project; Seek with partners to minimize flaring, wherever practical and according to regulatory local regulation.</p>

Air Quality

Code	EM-EP-120a.1			
Accounting Metric	Air emissions of the following pollutants: (1) NOx (excluding N2O), (2) SOx, (3) volatile organic compounds (VOCs), and (4) particulate matter (PM10)			
Unit of measure	Metric tons			
2021				
Accounting Metric	(1)	(2)	(3)	(4)
Unit of measure	tonNOx	tonSOx	tonVOCs	tonPM10
Ecopetrol S.A.	23.036,00	3.864,79	99.085,26	770,39
Hocol Petroleum Limited ¹	Information not available for 2021			
Ecopetrol Permian LLC	Information not available for 2021			
Ecopetrol America LLC	Information not available for 2021			
Ecopetrol Óleo e Gas do Brasil	Not apply			

¹ There is no data available for filling out the information on air emissions from mobile and stationary sources. It should be clarified that the existing boilers in the field have not been operating since November 2019 and the electric generators do not require isokinetic studies due to their capacity, given that their capacity is less than 1 MW. However, the source inventory information is being organized in order to quantify air emissions based on emission factors.

2020				
Accounting Metric	(1)	(2)	(3)	(4)
Unit of measure	tonNOx	tonSOx	tonVOCs	tonPM10
Ecopetrol S.A. ¹	23.587,47	3.905,81	105.202,11	808,28
Hocol Petroleum Limited	Information not available for 2020			

¹ With respect to data presented for Ecopetrol S.A., the indicator was recalculated for 2020 excluding atmospheric emissions generated by the Barrancabermeja refinery and the assets operated by Refinería de Cartagena and Cenit, which are included in this report for the downstream and midstream segments, respectively.

Water Management

Code	EM-EP-140a.1			
Accounting Metric	(1) Total fresh water withdrawn, (2) total fresh water consumed, (3) percentage fresh water withdrawn and (4) percentage fresh water consumed in regions with High or Extremely High Baseline Water Stress			
Unit of measure	Thousand cubic meters (m ³), Percentage (%)			
2021				
Accounting metric	(1)	(2)	(3)	(4)
Unit of measure	m3	m3	%	%
Ecopetrol S.A. ¹	11.561	1.987 ²	1	-
Hocol Petroleum Limited	182,20	146,20	-	-
Ecopetrol Permian LLC	Not apply			
Ecopetrol America LLC ³	Not apply			
Ecopetrol Óleo e Gas do Brasil	Not apply			

¹ Corresponds to Ecopetrol S.A.'s water extraction and use, excluding the Barrancabermeja refinery, which is included in this report under the corresponding sector.

² Water consumption is estimated according to the "CDP Water Security 2021 Reporting Guidance" for the Oil & Gas sector.

³ America, as an off-shore company, does not extract water in its production process. The water used is immaterial as it is only used for human consumption on the platform, and for cleaning processes.

2020				
Accounting metric	(1)	(2)	(3)	(4)
Unit of measure	m ³	m ³	%	%
Ecopetrol S.A.	23.467 ¹	1.904	1	-
Hocol Petroleum Limited	189,10	189,10	-	-

¹ For comparative purposes, 2020 data is adjusted to exclude information from the Barrancabermeja Refinery.

Code	EM-EP-140a.2
Accounting Metric	(1) Volume of produced water and flowback generated; (2) percentage discharged, (3) injected, (4) recycled; (5) hydrocarbon content in discharged water
Unit of measure	Thousand cubic meters (m ³), Percentage (%), Metric tons (t)

2021					
Accounting metric	(1)	(2)	(3)	(4)	(5)
Unit of measure	m ³	%	%	%	ton
Ecopetrol S.A.	388.370 ¹	11,80	63,40	24,80	101,80
Hocol Petroleum Limited	19.865	1,42	79,21	19,37	1,67
Ecopetrol Permian LLC	1.510	-	57,20	42,80	-
Ecopetrol America LLC	11	100	-	-	-
Ecopetrol Óleo e Gas do Brasil	-	-	-	-	-

¹ Ecopetrol S.A. and Hocol do not carry out hydraulic fracturing activities and therefore do not generate flowback.

2020					
Accounting metric	(1)	(2)	(3)	(4)	(5)
Unit of measure	m ³	%	%	%	ton
Hocol Petroleum Limited	18.515	2,38	94,35	Information not available for 2020	2,57
Ecopetrol S.A.	403,441 ¹	17,75	60,49	21,76	386,60

¹ Ecopetrol S.A. and Hocol do not carry out hydraulic fracturing activities and therefore do not generate flowback.

Code	EM-EP-140a.3
Accounting Metric	Percentage of hydraulically fractured wells for which there is public disclosure of all fracturing fluid chemicals used
Unit of measure	Percentage (%)

2021	
Accounting metric	(1)
Unit of measure	%
Ecopetrol S.A.	Not apply
Hocol Petroleum Limited	Not apply
Ecopetrol Permian LLC ¹	100 ²
Ecopetrol America LLC	Not apply
Ecopetrol Óleo e Gas do Brasil	Not apply

¹ To date, only Permian carries out hydraulic fracturing activities.

² 94 of 94 hydraulic fracturing wells are reported to the public.

2020	
Accounting metric ¹	(1)
Unit of measure	%
Ecopetrol S.A.	Not apply
Hocol Petroleum Limited	Not apply

¹ To date, the companies have not carried out multi-stage hydraulic fracturing of horizontal wells activities for non- conventional reservoirs

Code	EM-EP-140a.4
Accounting Metric	Percentage of hydraulic fracturing sites where ground or surface water quality deteriorated compared to a baseline
Unit of measure	Percentage (%)

2021	
Accounting metric	(1)
Unit of measure	%
Ecopetrol S.A.	Not apply
Hocol Petroleum Limited	Not apply
Ecopetrol Permian LLC	-
Ecopetrol America LLC	Not apply
Ecopetrol Óleo e Gas do Brasil	Not apply

2020	
Accounting metric	(1)
Unit of measure	%
Ecopetrol S.A.	Not apply
Hocol Petroleum Limited	Not Apply

Biodiversity impacts

Code	EM-EP-160.a1
Accounting Metric	Description of environmental management policies and practices for active sites
Unit of measure	Discussion and analysis

2021

Ecopetrol S.A. Ecopetrol S.A. Environmental Strategy is aimed at formulating environmental protection guidelines, and is embedded and articulated in accordance with Ecopetrol S.A.'s Sustainability Strategy and the Corporate Responsibility Strategy. It also seeks to promote compliance with corporate goals within the energy transition framework. This strategy is developed in accordance with the guidelines established in the ISO 14001 standard. It seeks to maintain an operation that is in harmony and balance with the environment, one that progressively reduces potential impacts and risks to ecosystems, and generates environmental value, in harmony with the environment and stakeholders.

Ecopetrol S.A.'s Environmental Strategy is comprised of the following 8 Strategic Pillars:

Environmental planning and compliance: The prior knowledge and diagnosis of environmental aspects and determinants, as well as, the specific regulations of the areas where Ecopetrol S.A. develops its projects and operations allow for identifying potential environmental impacts and essential opportunities for the conception and planning of measures focused mainly, on the application of the mitigation hierarchy, contributing to the successful development of operations, the viability of new projects and the sustainable development of the territories where it operates.

Climate action: Ecopetrol maintains its commitment to reduce its carbon footprint and thus joins efforts to limit the increase in global temperature to below 1.5°C. To this end, it takes actions to reduce carbon emissions both in operations and in the company's value chain, reduce the operation's vulnerability to climate variability and change, as well as adequately manage risks and identify opportunities in relation to climate change.

Towards water neutrality: On a global level, the goals associated with water management are framed in Sustainable Development Goal 6, which seeks to ensure universal access to safe and affordable drinking water for all by 2030, and as a result of this, comprehensive water management in Ecopetrol, must contribute to the equitable provision, economically sound and environmentally sustainable provision of water resources, in coordination with Ecopetrol's Corporate Strategy, the TSEG agenda, the water neutrality roadmap, and the climate action, biodiversity and circular economy strategic pillars.

Biodiversity and ecosystem services: The purpose of the biodiversity strategic pillar is to adequately manage the risks and opportunities associated with biodiversity and ecosystem services, meeting stakeholder expectations and ensuring the continued license to operate. This pillar has four main axes: **i)** Mitigation hierarchy, **ii)** Nature-based solutions, **iii)** Generation of knowledge, and **iv)** Biodiversity culture.

- **Mitigation hierarchy:** Its purpose is to prevent, avoid and mitigate impacts on biodiversity and compensate for residual impacts. Ecopetrol S.A. does not have, nor does it plan to carry out exploration, production or refining activities in areas classified as high biodiversity value categories I to IV by the International Union for Conservation of Nature (IUCN), or in areas declared World Heritage Sites by UNESCO.
- **Nature-based solutions:** Seeks to maintain biodiversity and ecosystem services in strategic areas, identifying synergies between nature, society and the local economy to respond to challenges such as climate change (Natural Climate Solutions), water resource management and biodiversity.

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2021

- **Generation of knowledge:** includes the generation of information on biodiversity and ecosystem services to strengthen the decision-making process.
- **Biodiversity culture:** seeks to strengthen the value of biodiversity and ecosystem services in the Company.

Circular Economy: Circular Economy has been defined as a "Production and consumption system that promotes efficiency in the use of materials, water and energy, taking into account the resilience of ecosystems, the circular use of material flows through the implementation of technological innovation, alliances and collaborations between actors, and the promotion of business models that respond to the fundamentals of sustainable development" (ENEC, Ministry of the Environment and Sustainable Development, Ministry of Commerce, 2019). In this sense, a circular economy is adopted as an enabler that contributes to the energy transition, net zero carbon emissions goal, reduction of the water footprint, closing the cycle of materials and waste, and diversification of new businesses, to ensure the competitiveness and long-term sustainability of the company, while advocating for the conservation of natural resources and the welfare of society.

Clean air for the environment: Estimate the contribution to reducing atmospheric emissions of criteria pollutants and/or improving air quality from decarbonization initiatives, energy transition, clean fuels, strategic environmental investment, and mandatory environmental investment (1% and offsets).

Integrated waste management: This strategic pillar leverages the adoption of operational and organizational measures to reduce (to economically and technically feasible levels) the quantity and hazardous nature of waste generated, based on three (3) fundamental aspects: a) Reduction at the source or origin; b) recovery of materials through the use of waste, through the implementation of the circular economy concept of Multi-R or 9Rs; c) incorporation of disruptive technologies.

Prevention and remediation: This pillar focuses on the prevention of operational incidents affecting the environment, incorporating proactive risk management and analysis of the potential materialization of environmental risks specific to the company's different businesses.

For additional information please visit: <https://www.ecopetrol.com.co/wps/por-tal/Home/sostecibilidad/ambiental/estrategia-ambiental>

Hocol Petroleum Limited	Hocol currently follows an Occupational Health and Safety Management System in accordance with the provisions set forth in Decree 1072 of 2015, which is implemented, evaluated and improved on an ongoing basis.
Ecopetrol Permian	Since Ecopetrol's U.S. companies are purely non-operating, the description of the environmental management policies and practices of the fields and platforms are attributed to the environmental management policies formulated by the respective operator for each facility where business operations are carried out.
Brasil	Information not available for 2021

Code	EM-EP-160a.2				
Accounting Metric	(1) Number and (2) aggregate volume of hydrocarbon spills, (3) volume in Arctic, (4) volume impacting shorelines with ESI rankings 8-10, and (5) volume recovered				
Unit of measure	Number, barrels (bbls)				
2021					
Accounting metric	(1)	(2)	(3)	(4)	(5)
Unit of measure	Number of sites	bbls	bbls	bbls	bbls
Ecopetrol S.A.	5	157,76	Not apply	-	-
Hocol Petroleum Limited	1 ¹	1,20	Not apply	-	1
Ecopetrol Permian LLC	1	4	Not apply	-	4
Ecopetrol America LLC	-	-	Not apply	-	-
Ecopetrol Óleo e Gas do Brasil	Not apply				
¹ Oil spill incident due to sabotage (third party)					
2020					
Accounting metric	(1)	(2)	(3)	(4)	(5)
Unit of measure	Number of sites	bbls	bbls	bbls	bbls
Ecopetrol S.A.	4	125	Not apply	-	12,5
Hocol Petroleum Limited	4	23	Not apply	-	22,7

Code	EM-EP-160a.3	
Accounting Metric	Percentage of (1) proved and (2) probable reserves in or near sites with protected conservation status or endangered species habitat	
Unit of measure	Percentage (%)	
2021		
Accounting metric¹	(1)	(2)
Unit of measure	%	%
Ecopetrol reports no operations in IUCN (International Union for Conservation of Nature) categories I to IV protected areas.		
Ecopetrol S.A.	0,32	0,03
Hocol Petroleum Limited ²	0,94	-
Ecopetrol Permian LLC	-	-
Ecopetrol America LLC	-	-
Ecopetrol Óleo e Gas do Brasil	Not apply	
¹ For the year 2021, the metric was calculated based on the map suggested by SASB "Explore the World's Protected Areas (protectedplanet.net)" which includes the total land and marine protected areas.		
² The Totare field is located within the Armero protected area.		
2020		
Accounting metric¹	(1)	
Ecopetrol S.A. Hocol	Ecopetrol S.A. and Hocol S.A. declare that they do not have – nor do they plan to intervene with – any exploration, production or refining activities in areas of great biodiversity value classified according to the International Union for Conservation of Nature (IUCN) in categories I and IV, nor in World Heritage sites declared by UNESCO.	

SOCIAL CAPITAL

Security, Human Rights & Rights of Indigenous Peoples

Code	EM-EP-210a.1	
Accounting Metric	Percentage of (1) proved and (2) probable reserves in or near areas of conflict	
Unit of measure	percentage (%)	
2021		
Accounting metric¹	(1)	(2)
Unit of measure	%	%
Ecopetrol S.A.	-	-
Hocol Petroleum Limited	-	-
Ecopetrol Permian LLC	-	-
Ecopetrol America LLC	-	-
Ecopetrol Óleo e Gas do Brasil	Not apply	
¹ The calculation was made based on the 2020 (last reported) armed conflict information available on the UPSALA website (https://www.pcr.uu.se/) and the locations where the company has reserves.		
2020		
Accounting metric¹	(1)	(2)
Unit of measure	%	%
Ecopetrol S.A.	2,24	1,58
Hocol Petroleum Limited	-	-

¹ The calculation was made based on the 2019-armed conflict information (last available) reported on the UPSALA page (<https://www.pcr.uu.se/>) and the locations where the company has reserves.

Code	EM-EP-210a.2	
Accounting Metric	Percentage of (1) proved and (2) probable reserves in or near indigenous land	
Unit of measure	Percentage (%)	
2021		
Accounting metric¹	(1)	(2)
Unit of measure	%	%
Ecopetrol S.A.	23,77	26,31
Hocol Petroleum Limited	51	1
Ecopetrol Permian LLC	-	-
Ecopetrol America LLC	-	-
Ecopetrol Óleo e Gas do Brasil	Not apply	
¹ For the year 2021, the metric was calculated based on the National Land Agency's map " https://data-agenciadieterras.opendata.arcgis.com/ " which includes the total number of indigenous reserves.		
2020		
Accounting metric¹	(1)	(2)
Unit of measure	%	%
Ecopetrol S.A.	17,57	14,51
Hocol Petroleum Limited	62,41	-

¹ Reserves in indigenous lands were determined as the proportion of the area overlaid with indigenous territories versus the total area of the field.

Code	EM-EP-210a.3
Accounting Metric	Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict
Unit of measure	Discussion and analysis

2021

Ecopetrol S.A.	<p>Ecopetrol promotes a corporate culture based on respect and promotion of Human Rights (HR). Its commitment, enshrined in the Ecopetrol Human Rights Guide, meets the highest international standards in this area. To this end, the Company adhered to the United Nations Guiding Principles on Business and Human Rights and other international instruments that reflect the highest standards in corporate management of human rights issues. This commitment extends to its employees and suppliers, and must be followed when developing their activities. Additionally, the Company promotes its adoption among its partners, associates and other actors with whom it has a contractual or business relationship, especially in the framework of those activities carried out jointly with Ecopetrol. The Company confirms its commitment to respect human rights as established in the International Bill of Human Rights and in the ILO Declaration on Fundamental Principles and Rights at Work.</p> <p>PRINCIPLES FOR HHRR MANAGEMENT: The Company is guided by six principles in human rights management:</p> <ul style="list-style-type: none"> • Due diligence in HHRR • All encompassing • Complementary • Collaborative work • Differential approach • Monitoring and self-evaluation <p>DUE DILIGENCE: Ecopetrol S.A. follows a Guideline for Risk Management Cycle in HHRR, whose objective is to provide guidelines for risk management in HHRR for the Ecopetrol Group (EG, Ecopetrol, the Company), through the definition of key concepts and considerations for planning, identification, evaluation, treatment and monitoring of HHRR risks. This, in accordance with the provisions of the Guideline for Integrated Risk Management in the Ecopetrol Group and the highest national and international standards on human rights. This cycle takes into consideration different sources of information that provide input into the manner in which the Company's manages due diligence. Within the framework of this cycle, Ecopetrol identifies and manages the risks and negative impacts derived from its business activities, the supply chain or other contractual or business relationships, and establishes action plans for their prevention, mitigation or remediation. This Management Cycle has foreseen the survey of operational risks and provides input to the current Integrated Risk Management System, which identifies risks at the strategic and process levels.</p> <p>This exercise identifies potential risks and impacts caused by the Company, those in which it may contribute or which it may be associated with. It also incorporates those risks and impacts on human rights derived from the environment, especially for the community, employees and contractor employees. In developing this cycle, the Company ensures that it incorporates into its management the perceptions and expectations of its stakeholders, especially those who may be more vulnerable. Given that some of the areas where Ecopetrol operates are affected by conflict, a situation that increases the risk for the Company, its suppliers, partners and other parties with whom it has a relationship, of becoming involved in human rights abuses, Ecopetrol will intensify its due diligence actions and foster their implementation across its value chain.</p>
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2021

Hocol Petroleum Limited	<p>Hocol respects the rights to ethnic and cultural diversity. It recognizes the right of indigenous peoples, Afro-Colombians and ethnic minorities to be consulted on projects, works or activities that may directly affect them, as established in ILO Convention 169. Hocol has mechanisms in place to optimally manage requests, complaints and claims filed in connection with its activities, which results in the prevention of conflict and improved relations with stakeholders.</p> <p>Hocol is committed to the respect of human rights, adopted and followed by its senior level management of the company, and set forth in its Code of Ethics and Conduct. Respecting human rights implies acting with due diligence to avoid negative impacts on human rights and to ensure their respect within the framework of operations and business activities. This includes compliance with regulations on decent work, fair labor practices, prohibition of forced or child labor, and adopting measures to prevent all forms of discrimination. Hocol has voluntarily subscribed to the United Nations Global Compact, and also seeks to make significant contributions to the advancement of the SDGs, and achieve international standards of corporate due diligence based on the United Nations Guiding Principles on Business and Human Rights (UNGPs).</p> <p>The Company identifies security and public order risks for its areas of operation. In following with the fact that security, understood as the keeping of order, peace and the enjoyment of rights, is the responsibility of the State and consequently inherent to its social purpose. Given that the Public Force is in charge of fulfilling this role, security matters are handled through agreements therewith, through physical and electronic security schemes, procedures and protocols.</p>
Ecopetrol Permian	<p>Ecopetrol Permian The Company does not operate, nor does it intend to operate, within or near indigenous communities.</p> <p>The company complies with all local, state, and federal laws, including laws related to human rights. The policies and procedures with respect to human rights can be found in the following Company documents: See Code of Ethics and Conduct pages 6, 14 - 15, 19, 23 in reference to the Company's human rights, labor, and nondiscrimination standards. See Code of Ethics and Conduct pages 15-16 in reference to reporting any violations of the policies and standards therein. See Employee Handbook page 10 in reference to nondiscrimination standards. See Employee Handbook pages 14-20 in reference to the reporting and disciplinary action procedures for violations of policies therein. The Company does not operate within areas of conflict.</p>
Ecopetrol Óleo e Gas do Brasil	<p>Information not available for 2021.</p>

Code	EM-EP-210b.1
Accounting Metric	Discussion of process to manage risks and opportunities associated with community rights and interests
Unit of measure	Discussion and analysis
2021	
Ecopetrol S.A.	<p>Ecopetrol has prioritized exceptional material elements, including Climate Change, Integrated Water Management and Local Development.</p> <p>Local Development is one of the exceptional material elements prioritized within Ecopetrol; that is, it aims to be the best practice and for its management to be recognized worldwide for the generation of proprietary knowledge and technology, which enables such development in its areas of influence. This translates into Ecopetrol's commitment to improve the quality of life in the prioritized areas, consolidating high levels of confidence in territories of influence, by attaining three (3) objectives: i. Closing socio-economic gaps; ii. Reducing social conflict factors; iii. Obtaining social license in terms of trust and identity. In order to increase the Group's operational execution capacity, achieve excellent environmental performance levels across all Company processes and become a positive transformation agent, attracting alliances, resources and generating sustainable development in its areas of influence the adaptation and contribution to the improvement of environmental conditions is essential. It is considered a material element due to the potential to generate value, its relevance to stakeholders and its alignment with Ecopetrol's Culture Declaration.</p>
Hocol Petroleum Limited	<p>References for procedures:</p> <ul style="list-style-type: none"> • Values and Fundamentals: Pioneering, Human and Reliable • Relationship Principles: The Company conducts all its activities within a sustainable development framework that prioritizes the preservation of health, the physical integrity of people and society in general, as well as the protection of assets and the environment. • Good Governance Code. • Social Management Processes: Coordination and Social Strategy, Socioeconomic and Cultural Impacts, Prior Consultation, Operations Support, IPQR (for its acronym in Spanish- concerns, petitions, complaints and claims), Social Investment and Social Incidents. • Regulatory Framework: Environmental License (Environmental Management Plans - ANLA), Community Benefit Programs (ANH), Indigenous Prior Consultation (Ministry of the Interior Law 21/91 - ILO Dec. 169), Environmental Management Measures (Regional Autonomous Corporations). • Social Investment Procedure: The purpose of this Social Investment Procedure is to establish the mechanisms that ensure the criteria and activities required for the adequate management of Hocol S.A.'s social investment: Social Capital, Economic Development, Environmental Sustainability, Infrastructure and Community Equipment and Transversal (Differential Approach). • IPQR Procedure: The purpose of this procedure is to define the ideal mechanism that allows for optimal management of IPQR, whose compliance ensures the timely, clear and thorough response to the concerns, requests, complaints and claims submitted to Hocol. • Hocol Policies: Social Responsibility, Sustainability and Procurement of goods and services.
Ecopetrol Permian	The Company is not an operator, but generally, the Company's community standards can be found in the Code of Ethics and Conduct pages 14-15, 19.
Ecopetrol America LLC	The Company is not an operator and, as an offshore company, does not work near communities.
Ecopetrol Óleo e Gas do Brasil	Information not available for 2021.

Code	EM-EP-210b.2	
Accounting Metric	(1) Number and (2) duration of non-technical delays	
Unit of measure	Number, days	
2021		
Accounting metric	(1)	(2)
Unit of measure	Number	Days
Ecopetrol S.A.	7 ¹	217
Hocol Petroleum Limited	2 ²	84
Ecopetrol Permian LLC	-	-
Ecopetrol America LLC	-	-
Ecopetrol Óleo e Gas do Brasil	Not apply	

¹ During 2021 seven (7) incidents associated with the National Strike were reported that affected operations in the Caño Sur, Churuyaco, La Jagua, Loro, Quriyaná, San Antonio and Acaé San Miguel fields.

² During 2021 two (2) incidents were reported that affected operations in the production fields of Ocelote in the municipality of Puerto Gaitán (Meta) and Ortega Tetuán in the municipalities of Ortega and San Luis (Tolima).

2020		
Accounting metric	(1)	(2)
Unit of measure	Number	Days
Ecopetrol S.A.	Information not available for 2020.	
Hocol Petroleum Limited	2	3

HUMAN CAPITAL

Workforce Health and Safety

Code	EM-EP-320a.1
Accounting Metric	(1) Total recordable incident rate (TRIR), (2) fatality rate, (3) near miss frequency rate (NMFR), and (4) average hours of health, safety, and emergency response training for (a) full-time employees, (b) contract employees and (c) short-service employees
Unit of measure	Rate, hours (h)

2021				
Accounting metric	(1)	(2)	(3)	(4)
Unit of measure	Rate	Rate	Rate	Hours
Ecopetrol S.A. ¹	(a) 0,37	(a) -	(a) Information not available for 2021	(a) Information not available for 2021
	(b) 0,46	(b) -	(b) Information not available for 2021	(b) Information not available for 2021
	(c) Information not available for 2021	(c) Information not available for 2021	(c) Information not available for 2021	(c) Information not available for 2021
	Total: 0,44	Total: -	Total: Information not available for 2021	Total: Information not available for 2021
Hocol Petroleum Limited	(a) -	(a) -	(a) Information not available for 2021	(a) 6,69
	(b) 0,24	(b) -	(b) Information not available for 2021	(b) -
	(c) -	(c) -	(c) Information not available for 2021	(c) -
	Total: 0,19	Total: -	Total: Information not available for 2021	Total: 6,69
Ecopetrol Permian LLC	(a) -	(a) -	(a) -	(a) 2,73
	(b) -	(b) -	(b) -	(b) -
	(c) -	(c) -	(c) -	(c) -
	Total: -	Total: -	Total: -	Total: 2,73
Ecopetrol America LLC ²	(a) -	(a) -	(a) -	(a) 0,26
	(b) -	(b) -	(b) -	(b) -
	(c) -	(c) -	(c) -	(c) -
	Total: -	Total: -	Total: -	Total: 0,26
Ecopetrol Óleo e Gas do Brasil				(a) 0,08
	Not apply	Not apply	Not apply	(b) 0,21
				(c) 0
				Total: 0,12

¹ Ecopetrol S.A. measures TRIF, an indicator for recordable injuries (fatalities, lost time, accidents, medical treatment and restricted work) according to OSHA standard, which is the standard used in the Oil & Gas sector. The rate is calculated by taking one million hours as a constant variable.

² Ecopetrol America utilizes the OSHA definition to classify and identify near misses. Ecopetrol America utilizes a Initial Incident Report form that the HSE Manager reviews and classifies all incidents based on the OSHA incident definitions.

2020				
Accounting metric	(1)	(2)	(3) ²	(4)
Unit of measure	Rate	Rate	Rate	Hours
Ecopetrol S.A. ¹	(a) 0,13	(a) 0,01	(a) 0,21	(a) 7,66
	(b) 0,06	(b) -	(b) 0,01	(b) 32,45 h
	(c) Information not available for 2020	(c) Information not available for 2020	(c) Information not available for 2020	(c) Information not available for 2020
	Total: 0,07	Total: -	Total: 0,05	Total: 26,91 h
Hocol Petroleum Limited	(a) -	(a) -	(a) -	(a) Information not available for 2021
	(b) 0,12	(b) -	(b) -	(b) Information not available for 2021
	(c) Information not available for 2020	(c) Information not available for 2020	(c) Information not available for 2020	(c) Information not available for 2020
	Total: 0,09	Total: -	Total: -	Total: No disponible en 2020

¹ Ecopetrol S.A. measures TRIF, an indicator for recordable injuries (fatalities, lost time, accidents, medical treatment and restricted work) according to OSHA standard, which is the standard used in the Oil & Gas sector.

² The NMFR was calculated by weighting the accident rate and hours worked for employees and contractors.



Code	EM-EP-320a.2
Accounting Metric	Discussion of management systems used to integrate a culture of safety throughout the exploration and production lifecycle
Unit of measure	Discussion and analysis

2021

Ecopetrol S.A.	<p>Ecopetrol S.A. uses the HSE Management System to establish the necessary elements under which the company manages risks.</p> <p>The system consists of the development of a logical and staged process, based on continuous improvement and includes culture, leadership, policy, organization, planning, implementation, evaluation, auditing and improvement actions with the aim of anticipating, recognizing, evaluating and controlling risks that may affect safety, occupational health and the environment.</p> <p>The HSE management system is comprised of 22 sub-elements, each of which defines the principle, the basic requirements for implementation, and in turn, provides guidance on the documents detailing the application of the basic requirements.</p>
Hocol Petroleum Limited	<ul style="list-style-type: none"> • Ensure strict compliance with Colombian regulations. • Continue strengthening operational leadership, associated with clean and safe operations. • Rigorous Operational Discipline on all work fronts. • Ensure early identification of acts, substandard conditions and address them in a timely manner. • Provide follow-up, support, assistance and assurances to operations and work fronts, with visits from the leadership team, management and cross inspections. • The company uses the Balanced Scoreboard (BSC) to evaluate the performance of workers in Occupational Health and Safety (OSH) related issues. • Monitor workers' health conditions. • Monitor workplace conditions. • Collect information to determine whether hazard and risk prevention and control measures are implemented and effective. • Analyze the result of OSH indicators and previous OSH audits. • The OSHMS meets the overall OSH needs of the company.
Ecopetrol Permian LLC	<p>Following management systems are some examples that have been implemented by the operator:</p> <ul style="list-style-type: none"> • Safety Observations • Field personnel are encouraged to provide observations of unsafe work conditions/situations. These are recorded in a system and action/improvements are made. • Safety Orientation for all employees/contractors working/visiting the field (including H2S training etc).
Ecopetrol America LLC	Ecopetrol America's work force is mainly office based personnel and thus a Management System is not required but certain aspects of a HSE management system are utilized to ensure a safe workplace for all employees. For all Joint Venture operations, Ecopetrol ensures that the Operator of Record has in place the required HSE Management System (SEMS), prior to start of operations.
Ecopetrol Óleo e Gas do Brasil	Information not available for 2021.

BUSINESS MODEL AND INNOVATION**Reserves Valuation & Capital Expenditures**

Code	EM-EP-420a.1
Accounting Metric	Sensitivity of hydrocarbon reserve levels to future price projection scenarios that account for a price on carbon emissions
Unit of measure	Million barrels (MMbbls), Million standard cubic feet (MMscf)

2021

Accounting metric	(1)	(2)	(3)	(4)
Unit of measure	MMbbls	Bscf¹	MMbbls	MMscf
Grupo Empresarial Ecopetrol (Ecopetrol, Hocol, Permian y America) ²	Ecopetrol is working on the analysis of sensitivity scenarios for hydrocarbon reserve levels, aligned with the scenarios presented in the TCFD and 20-F report. This metric will be reported in the next issue of this report.			
Ecopetrol Óleo e Gas do Brasil	Not apply for 2021.			

¹ Reported in Bscf (Billions of cubic feet)² For the year 2021, Ecopetrol conducted a sensitivity analysis on oil and gas reserves as of December 31, 2021, based on Brent crude oil prices. Brent crude oil prices. The sensitivity analysis assumes a constant ICE Brent price of US\$ 76 per barrel in 2022, between US\$ 62 and US\$ 68 per barrel for the 2023-2030 period, and between US\$ 60 and US\$ 63 thereafter, and asset management; the base scenario on which the sensitivity analysis is performed corresponds to 82% of oil, NGL and natural gas reserves, as of December 31, 2021 and other variables such as operating costs, capital costs and asset management remain unchanged for the purposes of the analysis.**2020**

Accounting metric	MMbbls
Ecopetrol S.A.	In 2021, a strategy that considers scenarios and sensitivity analysis is being finalized. It will be reported in the next annual report.
Hocol Petroleum Limited	

Code	EM-EP-420a.2
Accounting Metric	Estimated carbon dioxide emissions embedded in proved hydrocarbon reserves
Unit of measure	Metric tons tonCO ₂ e

2021

Accounting metric	tonCO₂e
Ecopetrol S.A.	686.397.073,28
Hocol Petroleum Limited ¹	Information not available for 2021
Ecopetrol Permian LLC	Information not available for 2021
Ecopetrol America LLC	348.381
Ecopetrol Óleo e Gas do Brasil	Not apply

¹ The information requested for proven reserves in gigagrams, net calorific value in terajoules per gigagram and the effective carbon dioxide emission factor are not parameters estimated by Hocol. Hocol's volumetric calculation methodology for estimating reserves (current SEC regulations) does not consider the estimation of these parameters. Hocol does not have an approved methodology to meet this request.

2020	
Accounting metric	
Unit of measure	tonCO2e
Ecopetrol S.A.	0,72
Hocol Petroleum Limited	Information not available for 2020

Code	EM-EP-420a.3
Accounting Metric	[1] Amount invested in renewable energy, [2] revenue generated by renewable energy sales
Unit of measure	Reporting currency

2021		
Accounting metric	(1)	(2)
Unit of measure	COP \$	COP \$
Ecopetrol S.A.	15.447 millions	-
Hocol Petroleum Limited	742 millions	-
Ecopetrol Permian LLC	-	-
Ecopetrol America LLC ¹	-	-
Ecopetrol Óleo e Gas do Brasil	-	-

¹ Ecopetrol America does not have any investment in renewable energy in the US-GOM

2020		
Accounting metric	(1)	(2)
Unit of measure	COP \$	COP \$
Ecopetrol S.A.	6.749 millions	-
Hocol Petroleum Limited	656 millions	-

Code	EM-EP-420a.4
Accounting Metric	Discussion of how price and demand for hydrocarbons and/or climate regulation influence the capital expenditure strategy for exploration, acquisition, and development of assets
Unit of measure	Discussion and analysis

2021	
Ecopetrol S.A.	In 2022, the Ecopetrol Group presented its 2040 Strategy, which includes four (4) key drivers i) Grow with Energy Transition; ii) Generate Value through TESG; iii) Cutting-edge knowledge; iv) Competitive Returns
Hocol Petroleum Limited	In addition, it updated its business plan for the 2022-2024 period, which focuses on the profitable growth of production within the framework of the strategy and continuity set forth in Interconexión Eléctrica S.A.'s (ISA) 2030 Strategic Plan.
Ecopetrol Permian LLC	The plan calls for organic investments by 2022 in the amount of between USD 4,800 million to USD \$5,800 million. Seventy percent of the investments will be allocated to projects in Colombia, and the remaining 30% to projects in the United States (14%), Brazil (8%), Peru (5%) and Chile (3%).
Ecopetrol America LLC	The plan's objective continues to focus on growing the exploration and production (E&P) business, to which 63% of investments will be allocated, specifically on projects with a greater production and reserve contribution, as well as in enhanced recovery technologies. These projects incorporate the cost of GHG emissions in their economic evaluation, calculated using the CO2 shadow price methodology.
Ecopetrol Óleo e Gas do Brasil	20% of the plan's investments will be allocated to the execution of ISA's projects in Colombia and internationally in the energy transmission, toll roads and telecommunications businesses. In terms of Unconventional Reservoirs, investments of more than USD \$700 million are planned, to continue the growth of production activities in the Permian basin in Texas, USA, while investments in the amount of USD \$20 million will be made in the Kalé and Platero Integral Research Pilot Projects located in the Middle Magdalena Valley. In line with the Group's energy transition and TESG objectives, close to USD \$50 million will be invested in the decarbonization agenda during 2022, including new competitive renewable energy and gas use projects, which are an integral part of the roadmap designed to move towards the goal of reducing CO2 equivalent emissions by 25% by 2030, and be a net zero-emissions company by 2030. In addition, the plan includes investments of more than USD \$200 million in water management projects, close to USD \$30 million in projects to continue improving fuel quality, and investments of USD \$6 million in the development of pilot projects and green and blue hydrogen studies for applications in refineries and mobility, among others.
Hocol Petroleum Limited	In line with the Ecopetrol Group's strategy and capital discipline criteria, efforts focused on the evaluation and execution of businesses that allowed for portfolio rotation and optimization. This effort continued despite the challenges imposed by the environment, especially in relation to the behavior of crude oil prices and the new demand projections impacted by the COVID 19 pandemic, associated with declining economic indicators.

LEADERSHIP AND GOVERNANCE

Business Ethics & Transparency

Code	EM-EP-510a.1
Accounting Metric	Percentage of (1) proved and (2) probable reserves in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index
Unit of measure	Percentage (%)

2021		
Accounting metric	(1)	(2)
Unit of measure	%	%
Ecopetrol S.A.	-	-
Hocol Petroleum Limited	-	-
Ecopetrol Permian LLC	-	-
Ecopetrol America LLC	-	-
Ecopetrol Óleo e Gas do Brasil	-	-

2020		
Accounting metric	(1)	(2)
Unit of measure	%	%
Ecopetrol S.A.	-	-
Hocol Petroleum Limited	-	-

Code	EM-EP-510a.2
Accounting Metric	Description of the management system for prevention of corruption and bribery throughout the value chain
Unit of measure	Discussion and analysis

2021	
Ecopetrol S.A.	<p>Ecopetrol and Ecopetrol Group have a Comprehensive Policy that includes ethics and transparency among its main pillars. Ecopetrol's ethics and compliance strategy is based on a Compliance Program, whose aim is the ethical and integral behavior of senior management, employees, beneficiaries, contractors, suppliers, partners and other related parties, assuming special responsibility for the company's internal control. The Code of Ethics and Conduct is the pillar of the Compliance Program.</p> <p>The Code expressly rejects any acts of money laundering, financing of terrorism, fraud, bribery and corruption in all its forms (FCPA violations, transnational bribery, gifts, entertainment and hospitality, conflicts of interest, facilitation payments), lobbying, political contributions, antitrust and anticompetitive practices, among other statements. Unethical conduct is not tolerated at all.</p> <p>The Code of Ethics and Conduct also contains higher mandatory guidelines that specifically include the rejection of any form of discrimination or sexual harassment in the workplace, and the fostering of social responsibility and respect for human rights.</p> <p>The Compliance Program also meets the laws, regulations, guidelines and best practices for the fight against corruption, fraud, bribery, money laundering and financing of terrorism.</p>

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2021

Hocol Petroleum Limited	<p>Hocol develops all its actions aimed at managing corruption, bribery and ML/FT/FPDAM risks, within the framework of its business ethics program, which defines the following activities, among others:</p> <p>Prevention: training and communications aimed at all levels of the company and related third parties such as customers, partners, allies, suppliers and contractors.</p> <p>Periodic risk management cycles where potential risks and the controls defined to mitigate them are evaluated.</p> <p>Procedures to obtain information on counterparties through due diligence carried out by Hocol's Procurement area.</p> <p>Detection and Response: Hocol's ethical channel for dealing with queries and complaints regarding acts related to fraud, corruption, money laundering, bribery, financing of terrorism, financing the proliferation of weapons of mass destruction and all conduct that goes against the provisions of the company's code of ethics and conduct.</p> <p>Continuous monitoring of all counterparties, operations and processes of the company that have risks associated with corruption, bribery, LAFT/FPADM.</p> <p>Continuous improvement: periodic updates on standards, guidelines, procedures, manuals, instructions, according to national and international standards applicable to companies with respect to risk management of corruption, bribery, ML/FT/FPDAM.</p> <p>Participation in initiatives such as EITI and GLOBAL PACT that generate best practices in relation to business ethics and transparency programs.</p>
Ecopetrol Permian LLC	<p>Code of Ethics & Conduct: adopted by the Board of Directors of Ecopetrol USA, Inc. on February 4th 2021;</p> <p>Policy: Anticorruption Policy, Antifraud Policy, AML/FT Policy</p> <p>Controls: 19 Anticorruption controls, 16 Antibribery controls, 96 Antifraud controls, 19 AML/FT/FPADM controls;</p>
Ecopetrol America LLC	<p>Preventive monitoring: Binding and restrictive lists, relevant news from subsidiaries not included in restrictive lists, politically exposed persons, information on employees, third party intermediaries, potential conflicts of interest, payments to restricted or high-risk jurisdictions, credit card payments, payments not associated with a contract;</p> <p>Ethics Hotline: third-party outsourced reporting system where violations to the Code of Ethics & Conduct, Anti-Corruption Policy & Guidelines, Anti-Fraud or Anti-Money Laundering Policies can be reported</p>
Ecopetrol Óleo e Gas do Brasil	<p>Ecopetrol Brasil is aligned with the principles and procedures of the Ecopetrol Group to operate safely, responsible and reliable; The Company respects and value the staff and contractors; how the Company work with the joint venture partners and suppliers; protecting the value of our projects; and working with governments and communities, including our commitment to human rights.</p> <p>The anti bribery, ethics and compliance codes applies to all employees, officers and members of the board. Ecopetrol Brasil provides contractors with the codes and procedures with regards to anti bribery, ethics and compliance and expects and encourages the contractors and the employees to act in a way that is consistent with the Company's code and take appropriate actions where the Company believes they have not met the expectations or their contractual obligations. Ecopetrol Brasil periodically provides the employees with anti-bribery, ethics and compliance training and communications on how to apply the code's principles, in order to align general principles and seek transparency. Ecopetrol Brasil complies with international and national laws and regulation regarding compliance and ethics in Brazil, as well as is aligned with ethics and compliance business and principles of the Ecopetrol Group.</p> <p>The Company has an specific channel ""Línea Ética"", in order to facilitate and collaborate with compliance matters and to investigate and cure any inappropriate situation not aligned with our codes and principles.</p>

Management of the Legal & Regulatory Environment

Code	EM-EP-530a.1
Accounting Metric	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry
Unit of measure	Discussion and analysis

2021

Ecopetrol S.A.	<p>Ecopetrol articulates its climate change strategy with the National Government's public policy and contributes to the construction of technical and regulatory guidelines to strengthen the country's institutional capacity in terms of climate change.</p> <p>In 2021, Ecopetrol participated in the work groups for the construction of the following documents, regulations and strategies associated with climate change: (i) Colombia's Long Term Climate Strategy E2050, (ii) Updated Comprehensive Climate Change Management Plan for the Mines and Energy sector, (iii) Climate Action Law, (iv) Conpes document: "Public policy to reduce disaster risk conditions and adapt to climate variability phenomena", (v) Energy Transition Law and fostering of non-conventional energy sources, (vi) Hydrogen Roadmap for Colombia, and (vii) Proposed resolution for the regulation of fugitive emissions, venting and gas flaring. Additionally, the Company adhered to the Net-zero Carbon Program led by the Ministry of the Environment and Sustainable Development and signed a Voluntary Agreement with the Ministry of Mines and Energy to promote net-zero carbon and climate resilience in the hydrocarbon sector.</p> <p>Regarding global initiatives, the company is a member of the Climate and Clean Air Coalition (CCAC) led by the United Nations, the International Petroleum Industry Environmental Conservation Association (IPIECA), Zero Routine Flaring by 2030, an initiative led by the World Bank.</p>
Hocol Petroleum Limited	<p>Hocol has designed a net-zero carbon management system based on the Sustainable Development Strategy, which seeks to provide low-emission clean energy through a decarbonization plan that includes efficient management in the detection, handling and use of leaks and venting, reduction of flaring, implementation of energy efficiency strategies across all operations, and the use of renewable energies. To achieve net-zero carbon, emissions offsetting projects will be developed in the regions of influence.</p> <p>Hocol plays an active role in the consultation phases of the regulations developed by the competent entities regarding net-zero carbon and guarantees strict compliance with existing requirements. Additionally, it is a participant in trade association programs such as Naturgas or the National Net-zero Carbon Program of the Ministry of the Environment and Sustainable Development, through which it seeks to strengthen the transfer of knowledge, guarantee compliance with the organization's goals, and contribute to sector and national goals.</p>
Ecopetrol Permian LLC	<p>Ecopetrol Permian (EP) is a Non-Operator in its onshore activities and relies on the Operator to conduct operations in compliance with all existing environmental or social factor rules and regulations affecting the oil and gas industry. In conducting its operations, the Operator must abide by all local, state, and federal rules and regulations and it must adjust to shifts and changes of the legal and regulatory environment. Texas oil and gas activity is regulated primarily by the Texas Railroad Commission and the Texas Commission on Environmental Quality. The Texas legislature creates the laws affecting the Texas oil and gas industry. The courts of Texas interpret those laws and regulations across several counties and districts, which carries the inherent risk of producing ever-changing case law.</p> <p>EP has forged a successful relationship with an experienced and reputable Operator in its venture in order to manage the risks associated with this legal and regulatory environment. The risks and opportunities of any proposed activity are evaluated by diligent professionals before the activity can proceed.</p>

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2021

	<p>The overall strategy by EP, as a Non-Operator, to manage risks and opportunities associated with the legal and regulatory environment is to continue maintaining relationships with knowledgeable operators that are committed to the best industry practices in conjunction with the best legal practices. The venture enjoys the highest level of guidance from its legal counsel, land experts, and other professionals when navigating the legal and regulatory environment</p> <p>Finally, the American legal system guarantees the independence of the judicial branch and therefore protects the rights and guarantees of individuals, companies and governmental entities.</p>
Ecopetrol America LLC	<p>Ecopetrol America (EA) is a Non-Operator in all of its Gulf of Mexico (GOM) operations and relies on the Operator to conduct all operations in compliance with all existing environmental or social factor rules and regulations in effect for the GOM. The primary governmental agency overseeing operations in the GOM is the Bureau of Safety and Environmental Enforcement (BSEE). Operator's duty to its Non-Operators to comply with these rules and regulations is also a requirement contained in the Operating Agreement. On 1/22/22 a Federal Judge issued a ruling that does represent a threat to GOM focused oil companies. The judge ruled with regard to GOM Lease Sale 257 that was held in Nov., 2021, that the federal agency erred in its environmental impact determination of Sale 257. The Court held that it will vacate the Record of Decision for Lease Sale 257, and the action taken based on the Record of Decision, including Lease Sale 257, and remand it to the agency for further proceedings.</p> <p>Operator must design its wells not only to the safety standards as required by BSEE, but also to meet industry acceptable standards to satisfy its Non-Operator co-owners. Well plans and well schematics are part of every well proposal and pre-spud meetings are held with co-owners to discuss operational, safety and environmental aspects of the planned wells. New reporting requirements include Non-Operators reporting their share of Green House Gas emissions.</p> <p>The overall strategy by EA to manage risks and opportunities associated with the legal and regulatory environment is for EA to establish 'best relationships' with the Operator, particularly among the respective company's drilling and operational personnel, as well as its mid-level and upper management. Operator's hold frequent partner meetings to discuss planned operations and best field development strategies.</p>
Ecopetrol Óleo e Gas do Brasil	<p>The way the Company interacts with governments depends on the legal and regulatory framework in each country. Ecopetrol Brasil has a legal and regulatory rules mapping considering the main risks of Brazil. The Company engage across a range of issues relevant to our business, from compliance with regulation to understanding the Brazil's tax framework to collaborating on social initiatives. The Company engages with governments authorities and also with Brazilian Petroleum, Natural Gas and Bio fuels Institute (IBP) in order to mitigate the major industry regulatory, tax and legal risks for the E&P industry.</p> <p>The Company engages with Brazilian Petroleum and Natural Gas and Bio fuels Institute (IBP) in order to mitigate the environmental and social factors affecting the E&P industry, as well as with the Joint venture partners for our projects as Non Operators. Ecopetrol Brasil has a periodically follow up on the rules and legislation regarding the legal and regulatory framework for Brasil E&P activities in order to manage main risks. Furthermore, Ecopetrol Brasil participates in the monthly Committees' meetings regarding relevant matters for the industry, as Local Content, Tax and Accounting regulation and Legal/Regulatory aspects. In addition, the Company has meetings with governmental authorities (such as Ministry of Mines and Energy - MME, National Agency of Petroleum, Natural Gas and Biofuels - ANP and others) in order to discuss relevant topics needed for our activities in Brazil.</p> <p>Ecopetrol Brasil actively participates, through governmental authorities (Ministry of Mines and Energy - MME, National Agency of Petroleum, Natural Gas and Biofuels - ANP and others) of the discussions involving the main topics of the E&P industry, including changing in legislation and regulatory framework, as well as public audiences from ANP. In addition, Ecopetrol is associated with IBP, a major brazilian E&P forum for the industry. In this sense, Ecopetrol Brasil participates in the monthly Committees' meetings regarding relevant matters for the industry, as Local Content, Tax and Accounting regulation and Legal/Regulatory aspects..</p>

Critical Incident Risk Management

Code	EM-EP-540a.1
Accounting Metric	(1) Process Safety Event (PSE) rates for Loss of Primary Containment (LOPC) of greater consequence (Tier 1)
Unit of measure	Rate

2021

Accounting metric	Rate
Unit of measure	Rate
Ecopetrol S.A.	0,03 ¹
Hocol Petroleum Limited	-
Ecopetrol Permian LLC	-
Ecopetrol America LLC	-
Ecopetrol Óleo e Gas do Brasil	Not apply

¹ The multiplying factor of 1,000,000 is used, according to API 754 International Standard

2020

Accounting metric	Rate
Unit of measure	Rate
Ecopetrol S.A.	0,05
Hocol Petroleum Limited	0,23

The multiplying factor of 1,000,000 is used, according to API 754 International Standard

Code	EM-EP-540a.2
Accounting Metric	Description of management systems used to identify and mitigate catastrophic and tail-end risks
Unit of measure	Discussion and analysis

2021

Ecopetrol S.A.	The aim of Process Safety is to achieve the best operational performance possible, by addressing major technological risks, through the application of necessary measures and actions for the prevention and mitigation of the release of hazardous substances or energy. The impact of these measures lies in a reduction of operational and occupational accidents, with the potential occurrence of a major accident or disaster, thus providing an effective management framework for Ecopetrol's operations and demonstrating the commitment to the first principle of the Cultural Declaration, Life First.
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Process Safety is classified as a leading element in Ecopetrol's TSEG 2040 Strategy. Ecopetrol's ambition is to become a global benchmark in industrial safety, adopting best practices and developing operations under tolerable levels of Process Safety risk. To achieve this, the Company works on four [4] fronts:

- Consistency, commitment and visible leadership in process safety.
- Risk-based process safety management.
- Trend analysis and learning from experience.
- Emerging risk management.

Hocol Petroleum Limited	In 2021, Hocol implemented SAHARA, a tool through which it automated its Risk Management System through a solution that allows for the automatic management of the different stages of the risk cycle across all Company's risk fronts (business, project processes, process safety and operational and/or corporate activities) using a single application. This makes it easier for senior management and risk owners at all levels to visualize their risks and establish actions to address the behavior of each of the risk fronts within the organization. SAHARA generates heat maps for both inherent and residual risks. The solution automatically calculates the effectiveness of each of the controls (more than 370 controls) associated with the existing risks across all company processes and facilitates the monitoring of risks by sending automatic alerts to the risk owners when the actions established are close to reaching their expiration date or when they have expired. Automatic alerts are generated when Risk Indicators or KRI's are outside the defined thresholds. This allows Senior Management, process owners, leaders or anyone who is conducting the activity, to take timely actions for avoiding the materialization of the alerted risks. The tool also has a content analytics module where the necessary reports for an adequate risk management can be found. The tool allows for the downloading of a comprehensive report containing all of Hocol's process risks.
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Ecopetrol Permian LLC	Following management systems are some examples that have been implemented by the operator : <ul style="list-style-type: none"> • HAZOPS/What IFs conducted prior to construction. • PSSR/Commissioning prior to facility startup. • MOC process in place for any change. • Daily JSAs (job safety analysis) • RCFA - Root Cause Failure Analysis • Permit to work • Pre JSA • Well control training and certification
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Ecopetrol America LLC	Ecopetrol America's work force is mainly office based personnel and thus a Management System is not required but certain aspects of a HSE management system are utilized to ensure a safe workplace for all employees. For all Joint Venture operations, Ecopetrol ensures that the Operator of Record has in place the required HSE Management System (SEMS), prior to start of operations.
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EXTRACTIVES & MINERALS PROCESSING SECTOR

02 OIL AND GAS MIDSTREAM



OCENSA



Oleoducto
de Colombia

cenit

ODL

ProGasur



ACTIVITY METRICS

Code	EM-MD-000.A
Accounting Metric	Total metric ton-kilometers of: (1) natural gas, (2) crude oil, and (3) refined petroleum products transported, by mode of transport
Unit of measure	Thousands of barrels per day (Mbbls/day), tons per day (ton/day)

Accounting Metric ¹	2021		
	(1)	(2)	(3)
Unit of measure	ton/day	Mbbls/day Pipeline	Mbbls/day Polyduct
Cenit transporte y logística de hidrocarburos S.A.S. (Cenit)	-	268,26	267,55
Oleoducto Central S.A.S (Ocensa) ²	-	537,35	-
Oleoducto Bicentenario de Colombia S.A.S. (OBC)	-	20,80	-
Oleoducto de los Llanos Orientales S. A. (ODL)	-	196,20	-
Oleoducto de Colombia S. A. (ODC)	-	187,23	-
Promotora de Gases del Sur S.A. E.S.P. (Progasur) ³	4.701	-	-

¹ Total metric ton-kilometers of: (1) natural gas, (2) crude oil, and (3) refined petroleum products transported, by mode of transport. The unit SASB recommends is "metric ton-kilometer transported". However, most companies in the subsector use "thousands of barrels transported per day" as the reference unit for the transport of hydrocarbons.

² Total barrels transported through Segment 2 (current segment).

³ Progasur is a natural gas transport company whose primary activity is the operation of gas pipelines related to the transport of gas from production fields to distribution systems. Consequently, in addition to the Midstream metrics (EM-MD), it reports certain metrics in the Gas Utilities and Distributors (IF-GU) category.

Accounting metric ¹	2020		
	(1)	(2)	(3)
Unit of measure	ton/day	Mbbls/day Pipeline	Mbbls/day Polyduct
Cenit	-	268	231
Ocensa	-	561	-
OBC	-	10,50	-
ODL	-	210,80	-
ODC	-	189	-

¹ For 2020, the figures are reported in barrels transported daily as it is the most used unit of measure in the oil and gas industry.

ENVIRONMENT

Greenhouse Gas Emissions

Code	EM-MD-110a.1		
Accounting Metric	(1) Gross global Scope 1 emissions, (2) percentage methane, (3) percentage covered under emissions-limiting regulations		
Unit of measure	Metric tons (tonCO ₂ e) , percentage (%)		
	2021		
Accounting Metric	(1)	(2)	(3) ¹
Unit of measure	tonCO ₂ e	%	%
Cenit	136.757	0,53	Not apply
Ocensa	301.817 ²	1,79	Not apply
OBC	1.484,06 ³	67,58	Not apply
ODL	18.276,70 ^{3,4}	12,90	Not apply
ODC	37.680	0,53	Not apply
Progasur	146 ⁶	-	Not apply

¹ The percentage covered under the regulations limiting GHG emissions is not applicable herein, because there is no regulation in Colombia related to said emissions (or the methane emitted).

² To calculate GHG emissions, the GHG protocol and the ISO 14064-1:2006 standard are used as methodological tools, using the emission factors methodology for the calculation considering the preliminary activity data of the operations area obtained from the direct measurements of consumption made by the area.

The fuel emission factors have been taken from the Mining and Energy Planning Unit using its Emission Factors of Colombian Fuels calculator (FECOC, 2016) and others from the IPCC. The 2020 emission factor for electricity is used considering that the 2021 update of said factor has not been published to date. All global warming potential values (GWP) from the IPCC AR5 Report are used.

Additionally, the Ministry of the Environment and Sustainable Development bestowed the Company recognition for pledging to establish goals and voluntary commitments to reduce GHG emissions within the framework of the National Carbon Neutrality Plan.

³ The estimate of GHG emissions is done following the standards of the GHG Protocol, the NTC ISO 14064-1:2006 and considering the methodologies suggested in reference documents such as the API Specifications 2006. In general, emissions under Scope 1 are categorized as: combustion in fixed sources, process venting, fugitive emissions, flaring (not applicable) and mobile combustion sources. The emission of the three (3) predominant gases in the Oil and Gas industry is estimated under the guidelines of API Specifications 2006. The emission factors used are mostly referenced in this same document.

⁴ The significant decrease evidenced is because the ODL's 2020 GHG emissions inventory was structured using the financial control approach (inclusion of emissions generated in all the company's assets), and therefore it includes the emissions produced by the three thermal generation units in the EBR which Ecopetrol leases since April 2019. However, during the carbon neutrality certification process carried out by the Colombian Institute of Technical Standards and Certification (ICONTEC for its Spanish acronym), this company recommended the emissions from these units not be included (which are being reported by Ecopetrol).

⁵ For 2021, the data excludes some Ocensa equipment that was being considered in 2020 and is now included only in the Ocensa numbers. In addition, the uploading to the SAP-EC (Environmental Compliance) program continued, providing an estimate of GHG emissions and criteria pollutants based on consumption information. This information is captured by including information from existing tools, thereby improving the reliability of the data and the timeliness for decision-making on atmospheric emissions issues.

⁶ Taking into account the different sources of supply and the molar compositions of the gases that are transported (information from producers and transporters), if a loss of containment should occur, the volumes released into the atmosphere will be determined by the aforementioned molar fraction.

	2020		
Accounting metric	(1)	(2)	(3) ¹
Unit of measure	tonCO ₂ e	%	%
Cenit	105.042,15 ²	11,11	Not apply
Ocensa	330.522	1,52	Not apply
OBC	1,003	97	Not apply
ODL	89.542 ³	3	Not apply
ODC	41.193	0,09	Not apply

¹ A percentage covered under the regulatory GHG emissions limit does not apply. There is no regulation associated with such emissions (or methane emitted) in Colombia.

² The metric EM-EP-110a.1 reported for Ecopetrol S.A. includes Cenit and Refinería de Cartagena's operated assets, in accordance with ISO 14064-1 methodology and the GHG Protocol, which establishes the organizational limit of the inventory as operational control.

³ ODL has three power generation plants, one that is rented, and adds to the emissions inventory due to Financial Control, contributing to 96.9% of Scope 1 emissions

Code	EM-MD-110a.2
Accounting Metric	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets
Unit of measure	Discussion and analysis

	2021
Cenit	<p>CENIT is committed to managing these emissions through reduction projects in operations and the endorsement of sustainable development in the territory through forest carbon projects that grant co-benefits. This commitment has emerged through the Decarbonization Plan, which is the roadmap for:</p> <p>Short term – 2021: obtained the Carbon Neutral certification granted by ICONTEC in 2021.</p> <p>Long Term – 2030: contribute to the 25% reduction goal by:</p> <ul style="list-style-type: none"> Baseline: quantifies the GHG emissions produced by the operation. The emission report for the years 2019 and 2020 was obtained In September 2021 through a verification and corroboration process with Ruby Canyon Environmental Inc. Emissions reduction projects: an emission reduction of around 23,651 tons CO₂e was obtained in 2021, thanks to projects such as the San Fernando Solar Park, with a self-generation projection of 60MW, which contributed with a 1,687 tons CO₂e reduction to the figure above. Emissions offsetting: within the framework of the Carbon Neutral Certification process, 2020 was defined as the base year, which was fully offset. CENIT purchased 260,755 carbon credits in the RED++ Delfines Cupica conservation project located in the department of Chocó. This project is carried out by the Afro-descendant community councils of Los Delfines and Cupica as proposed conservation actions for the tropical rainforest, helping to avoid deforestation and recovering degraded areas.
Ocensa	<p>The Ecopetrol Group has committed to achieving net-zero emissions by 2050 (Scopes 1 and 2), and to reduce CO₂ emissions 25% by 2030 versus 2019 (Scopes 1 and 2), as well as to reduce 50% of total emissions by 2050 (Scopes 1, 2 and 3). To achieve this, Ecopetrol and each of its subsidiaries have defined actions to reduce GHG emissions.</p> <p>Ocensa is committed to continuing with the Scope 1 and 2 emissions quantification and verification processes by an independent third party and hopes to expand the quantification of GHG emissions to include Scope 3. Likewise, it seeks to promote and strengthen the development of GHG emissions mitigation and offset projects that contribute to reducing emissions in the long term, strengthen the climate change adaptation program, and continue with the energy efficiency plan.</p> <p>Goals:</p> <p>Reduce by 51% Scope 1 and 2 emissions by 2030 (base year: 2019), thus bringing emissions into line with the national goal. Reach, in 2030, 12 MW installed capacity from renewable sources. As a decarbonization strategy, Ocensa plans to be a net-zero emissions company by 2050; it began to develop a corporate Energy Program and Decarbonization Plan, which includes projects to reduce fuel use (or replace it with electricity from grids or outposts with fewer emissions, projects for the use of renewable energy in pumping stations and maritime terminal, the certification of the Energy Management System, planting of 100,000 trees, and the evaluation of new renewable energy technologies.</p>

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2021

OBC	<p>In 2021, the Colombian Institute of Technical Standards and Certification (ICONTEC for its Spanish acronym) recognized the company as carbon neutral through offset emissions from transport and pumping activities. This achievement is the result of an offset strategy including 17,242 tons CO₂e tons in ODL and 1,380 in OBC in the Palameku Kuwei Redd+ Project and through the program aimed at reducing GHG emissions by transforming operating processes. In line with the Generate Value through ESG pillar of the Ecopetrol Group's 2040 Strategy to maintain a low carbon emission operation and reduce the vulnerability of infrastructure to climate variability and change, the decarbonization plan and sustainability strategy were established, which demonstrates the senior management's commitment. The GHG emissions management plan is established on these are the pillars and framed within a PDCA cycle (plan, do, verify and act for its Spanish acronym), with which it expects to meet the reduction targets: by 2030, 25% decrease in Scope 1 and 2 emissions according to ISO 14064-1 (2006) versus the baseline of 2019; by 2050, net-zero "0" Scopes 1 and 2 emissions.</p> <p>Reduce net Scopes 1 and 2 emissions, through short, medium and long-term actions through GHG emissions management, nature-based climate solutions and by using innovation and technology, according to the goals of the Ecopetrol Group. Additionally, a 50% reduction in total emissions (Scopes 1, 2 and 3, according to the ISO 14064-1 standard). Within the decarbonization plan and low-carbon operation strategy, ODL has developed energy efficiency activities through the pumping optimization project, continued implementation of solar energy in valve housing, and sustainable mobility with carbon-neutral corporate routes.</p>
ODL	
ODC	<p>Is aligned with the Ecopetrol Group's commitment to achieving net-zero emissions by 2050 (Scopes 1 and 2), and reduce CO₂ emissions 25% by 2030 versus 2019 (Scopes 1 and 2), as well as to reduce 50% of total emissions by 2050 (Scopes 1, 2 and 3). To achieve this, Ecopetrol and each of its subsidiaries have defined actions to reduce GHG emissions per their climate ambition.</p> <p>Short-term strategy: quantify emissions, verify emissions by a third party, and define the pipeline decarbonization strategy. In 2022, the company expects to be certified as carbon neutral with the purchase of bonds, using the 2020 inventory as the base year.</p> <p>Long-term strategy: the pipeline is working on a strategy to meet the goal of reaching net-zero emissions by 2050. In this process, actions aimed at reducing emissions are identified, such as changing combustion engines to electric motors, implementing solar parks to access renewable energy sources and reducing fugitive emissions, among others.</p>
Progasur	<p>The company carries out activities focused on the non-emission of gases with the encouragement of management and framed within the maintenance plans and the optimal operation of the gas pipelines. These plans also aim to preserve the physical integrity of the transportation systems and assess the risks present in the areas of influence. Likewise, the company focuses its efforts on promoting a culture of accident prevention and avoidance.</p>

Air Quality

Code	EM-MD-120a.1
Accounting Metric	Air emissions of the following pollutants: (1) NO _x (excluding N ₂ O), (2) SO _x , (3) volatile organic compounds (VOCs), and (4) particulate matter (PM10)
Unit of measure	Metrics tons (ton)

	2021			
Accounting metric	(1)	(2)	(3)	(4)
Unit of measure	tonNO _x	tonSO _x	tonCOV	tonPM10
Cenit ¹	1,543	122,31	1,338,91	33,53
Ocensa ²	2,457,54	671,57	64,02	79,80
OBC ³	0,69	0,01	28,64	0,05
ODL ⁴	10,96	0,44	556,32	0,34
ODC ⁵	338,45	297,80	97,79	10,60
Progasur ⁶	0,98	0,01	0,42	0,06

¹ Mass balance: is based on applying the law of conservation of matter in the process. Basically, in fixed combustion sources, CO₂ emissions are estimated from the fuel composition report and the volume of fuel burned in each source that generates emissions, as well as for flare burning, considering the burning efficiency in the device for each station.

² To calculate the emissions of each of the air pollutants, the factors provided by Ecopetrol are used, which in turn were obtained from AP-42 issued by the United States Environmental Protection Agency, multiplying these values by the company's fuel consumption. Considering that fuel consumption by type of equipment was not differentiated and that the atmospheric pollutants emissions evaluated are subject to the technology of the equipment that employs the fuel, the most conservative emission factor values are used within those available in order not to underestimate the values.

³ OBC and ODL report the inventory in the SAP EC tool (SAP Environmental Compliance Tool that Ecopetrol, as the leading company of the corporate group, uses to record, quantify and report criteria pollutant emissions, which are categorized into: fixed sources of combustion, process venting (storage of hydrocarbons in tanks, loading and unloading of tank trucks and barges), fugitive sources - circulation of hydrocarbons through accessories (valves, flanges, seals, PRV) and industrial wastewater treatment, flaring (not applicable), mobile combustion sources. For estimating SO_x emissions in combustion processes, the stoichiometric balance methodology is carried out based on the sulfur contained in the fuel. For the remaining pollutants, the emission factors methodology is used derived from Compilation AP42.

⁴ The significant decrease evidenced is because the ODL's 2020 GHG emissions inventory was structured using the financial control approach (inclusion of emissions generated in all the company's assets), and therefore it includes the emissions produced by the three thermal generation units in the EBR which Ecopetrol leases since April 2019. However, during the carbon neutrality certification process carried out by the Colombian Institute of Technical Standards and Certification (ICONTEC for its Spanish acronym), this company recommended the emissions from these units not be included (which are being reported by Ecopetrol).

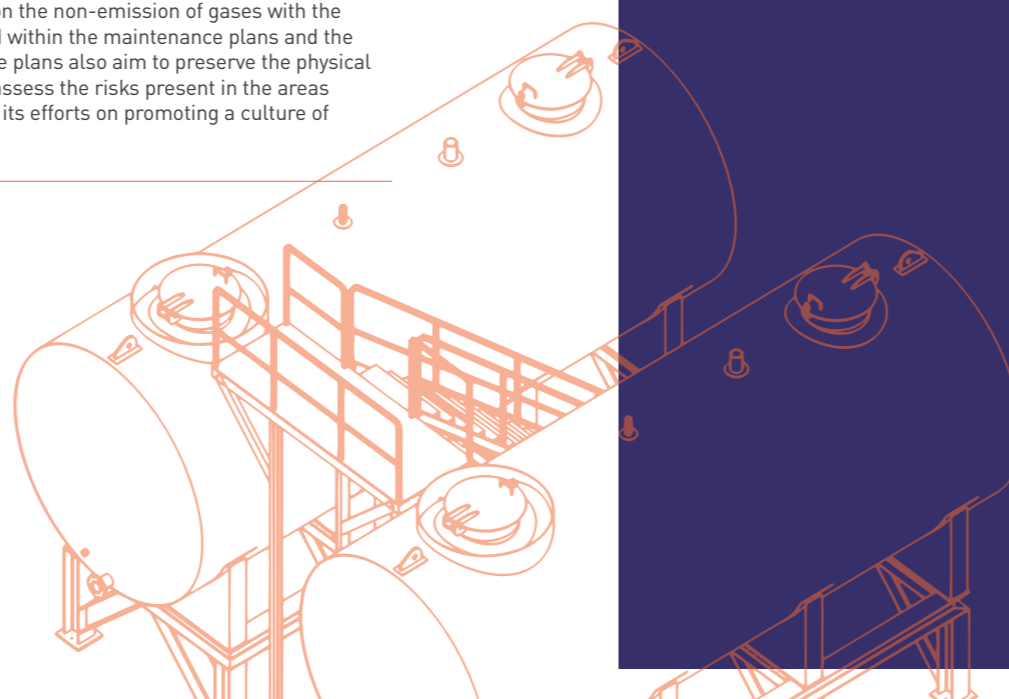
⁵ For 2021, the data excludes some Ocensa equipment that was being considered in 2020 and is now included only in the Ocensa numbers

⁶ The air pollutant emissions estimate is based on a calculation that includes the mileage traveled (annual) of the vehicles rented for the company's operation and the emission factor for each unit.

	2020			
Accounting metric	(1)	(2)	(3)	(4)
Unit of measure ¹	tonNO _x	tonSO _x	tonCOV	tonPM10
Cenit	1,588	125,93	1,496	28
Ocensa	2,774,34	766,27	72,18	89,86
OBC	0,76	0,01	26	0,05
ODL ²	1,578	470	698	49
ODC	549	501	90	17

¹ Metric is reported according to the unit of measure available for each company.

² ODL has three power generation plants, one of which is rented, and adds to the emissions inventory due to financial Control, contributing significantly to atmospheric emission.



Ecological impacts

Code	EM-MD-160a.1
Accounting Metric	Description of environmental management policies and practices for active operations
Unit of measure	Discussion and analysis

2021

Cenit	<p>During 2021, we strived to comply with current environmental regulations, identify and manage the potential impacts and environmental risks of the operation, and encourage sustainable development in the areas of influence. Cenit is consolidated as a Carbon Neutral company, on the path towards an ever more innovative and environmentally responsible business, working on: 1) the environmental feasibility of projects and operations; 2) compliance with environmental regulations; 3) addressing damages arising from to environmental incidents; 4) circular economy; 5) biodiversity; 6) water management; and, 7) decarbonization.</p>
Ocensa	<p>Within the activities of the pipeline's operation, Ocensa has identified risks and opportunities to prevent or reduce the possibility of external conditions that may affect the company, as well as to mitigate its impact on the environment. In the planning of the Environmental Management System (EMS), some of the established processes include:</p> <ul style="list-style-type: none"> • Procedure to identify environmental issues and impacts: to identify, evaluate and asses environmental issues and impacts and determine controls to prevent, minimize or offset the effects that may be caused to people and the environment. • Matrix to identify environmental issues and impacts: the matrix is prepared based on our own methodologies. Some of the elements included in the identification are: work facilities, inventory of substances, potentially exposed natural resources, environmental or other legal requirements. • Life cycle matrix: the significant environmental issues that the company can control and those it can influence have been identified, including changes, new developments, and new or modified products or services. • Environmental Management System Handbook: establishes the elements, guidelines and responsibilities within Ocensa to comply with the EMS. • Environmental performance measurement: internal audits, management meetings and reviews, daily, weekly and monthly controls are carried out to verify compliance with the established parameters. <p>Likewise, guidelines, processes and procedures have been implemented and studied, including:</p> <ul style="list-style-type: none"> • Environmental Management Plan • Sustainability Strategy and Circular Economy • Comprehensive Responsibility Policy • Environmental Control Program • Prevention and Monitoring Program • Company Risk Matrix <p>The company's policies and practices are aligned with the performance standards of the International Finance Corporation</p>
OBC	<p>Within the framework of legal compliance, the Sustainability Policy, the commitment to encourage a responsible governance model, and the strategic pillars of the Ecopetrol Group, the following stand out:</p> <p>Preventive approach for environmental compliance Goals: 25% reduction in emissions by 2030, Scopes 1 and 2, net-zero "0" emissions by 2050, Scope 3 categories I to IV. Has no projects or operations in areas declared World Heritage by UNESCO.</p>

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2021

	<p>Circular Economy. Transition with three (3) supply strategies: (1) Contract product as a service; (2) agree to extended responsibility through reverse logistics service; and, (3) incorporate circular payment methods.</p> <p>Zero environmental incidents and barrels spilled due to operational causes. As a result of environmental monitoring, 85 activities associated with the management of 77 alerts and responses to eight (8) incidents were identified, which were addressed by OBC and its Fundación Oleoducto Vivo. To guarantee an adequate response to the requests, expectations and complaints received from the different stakeholders, the company has the "SER" call line mechanism. In 2021, 154 requests were addressed. In 2021, 2,499 relationship activities were carried out to ensure information was delivered, adequate risk and impact management, encourage community participation, and have accountability. The program for savings and the efficient use of resources with the reuse of treated industrial water, use of rainwater, waste management, and a monitoring plan was implemented. The sustainable management of natural resources is emphasized with voluntary management through the inclusion of ecosystems, biodiversity and people, with the Living Ecosystems Program.</p> <p>Actions to reduce the risk of contagion and spread of COVID-19: tests for early detection, hygiene, disinfection barriers, isolation, identification of close contacts and powerful control measures were carried out.</p>
ODL	<p>Within the framework of legal compliance, the Sustainability Policy, the commitment to encourage a responsible governance model, and the strategic pillars of the Ecopetrol Group, the following stand out:</p> <p>Preventive approach for environmental compliance Goals: 25% reduction in emissions by 2030, Scopes 1 and 2, net-zero "0" emissions by 2050, Scope 3 categories I to IV. Has no projects or operations in areas declared World Heritage by UNESCO.</p> <p>Circular Economy. Transition with three (3) supply strategies: (1) Contract product as a service; (2) agree to extended responsibility through reverse logistics service; and, (3) incorporate circular payment methods.</p> <p>Zero environmental incidents and barrels spilled due to operational cause: As a result of environmental monitoring, 66 activities associated with the management of 64 alerts and responses to two (2) incidents were identified, which were addressed by BIC and its Fundación Oleoducto Vivo. To guarantee an adequate response to the requests, expectations and complaints received from the different stakeholders, ODL has the "SER" call line mechanism. In 2021, 93 requests were addressed. In 2021, 1,583 relationship activities were carried out to ensure information was delivered, adequate risk and impact management, encourage community participation, and have accountability. The program for savings and the efficient use of resources with the reuse of treated industrial water, use of rainwater, waste management, and a monitoring plan was implemented. The sustainable management of natural resources is emphasized with voluntary management through the inclusion of ecosystems, biodiversity and people, with the Living Ecosystems Program.</p> <p>Actions to reduce the risk of contagion and spread of COVID-19: tests for early detection, hygiene, disinfection barriers, isolation, identification of close contacts and powerful control measures were carried out.</p>

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2021

ODC	Oleoducto de Colombia S.A. is committed to the prevention and promotion of the health and safety of all its workers, direct and contractors, as well as to the protection of the environment and the continuous improvement of processes. Comprehensive risk management is carried out both in a strategic and a day-to-day context, identifying hazards/issues, evaluating the risks/impacts of processes and activities, establishing the necessary control measures to prevent incidents and occupational health illnesses, thus ensuring the achievement of business objectives. We implement high-performance standards and strictly comply with the applicable national and international legal requirements the Company endorses within the framework of its corporate governance, respect for human rights and the value promise for all stakeholders
Progasur	The Company, in the performance of its activities and to guarantee synchronization with the environment, carries out an integral HSEQ operational management to minimize environmental impacts and optimize resources, as well as following the guidelines of the comprehensive management system for the entire life cycle of the infrastructure. Progasur has a comprehensive HSEQ management policy that includes: environmental management plans with their corresponding files and disaster risk management plans, environmental programs under the ISO 14001:2015 standard, maintenance plans with a management plan for integrity, environmental programs and the HSEQ Comprehensive Management Policy.

Code	EM-MD-160a.2
Accounting Metric	Percentage of land owned, leased, and/or operated within areas of protected conservation status or endangered species habitat
Unit of measure	Percentage (%)

	2021
Accounting metric	(1)
Unit of measure	%
Cenit	8,47
Ocensa	1,88
OBC ²	-
ODL ²	0,78
ODC	-
Progasur	-

¹ Document to review conservation areas <https://www.protectedplanet.net/country/COL>, National Spatial Reference System (NSRS)

² 45 ha in conservation sites out of a total of 2,379 ha owned, leased and/or operated. The areas were calculated in Unique National Origin CTM12

	2020
Accounting metric	(1)
Unit of measure	%
Cenit	8,50
Ocensa	1,90
OBC	-
ODL	3,90
ODC	-

Code	EM-MD-160a.3
Accounting Metric	(1) Terrestrial acreage disturbed, (2) percentage of impacted area restored
Unit of measure	Hectares (ha), percentage (%)

	2021	
Accounting metric	(1)	(2)
Unit of measure	ha	%
Cenit ¹	0,08	100
Ocensa ²	0,05	100
OBC ³	1,73	100
ODL ³	1,60	100
ODC ⁴	-	-
Progasur ⁵	55,90	100

¹ As in the 2020 report, the number reported only includes the effects of operational environmental events and corresponds to the information officially reported to the environmental authority through the initial environmental incidents reports, which may vary depending on the closure of recovery activities. In 2021, due to third parties actions unrelated to the operation, an alteration of 195.7 ha was identified on which Cenit is carrying out cleaning activities of spilled product following Decree 321 of 1999.

² Restoration: process that seeks to return a damaged, altered, or degraded ecosystem to its original condition, or at least to a state close to what it was before the damage occurred. For the restoration of the area that was affected, Ocensa resorted to the execution of an in situ bioremediation process, which is a technological alternative for the cleaning of contaminated soils and aquifers with the use of microorganisms to mineralize or transform organic pollutants into chemically simpler compounds. In this way, by applying the product directly to the soil using piezometers and the opening of control windows, the molecular decomposition of the hydrocarbon chains into more assimilable compounds was achieved, which provided a restoration of 100% of the altered site.

³ Definition of "Restoration" within the framework of plant recovery activities through revegetation through interventions in areas with geotechnical works in the maintenance phase of the hydrocarbon transport system. Assistance practices are guided by preventive environmental management, complying with its legal commitments via follow-up and monitoring activities to carry out the maintenance and monitor the integrity system plan, including technical visits in the field, socialization with communities, progress reports and the Environmental Compliance Reports (ICA for its Spanish acronym). Damage by third parties is not included.

⁴ During 2021, there were no events due to loss of containment or damage by third parties, nor were there operational spills.

⁵ Restoration is the sum of the actions that are carried out after the intervention on the land to restore it to the previous state before the Company's activities.

Environmental management practices:

Approachment and agreements with the community so the restoration is effective.

Review 100% of the pipeline's right-of-way to assess its condition, the environmental conditions and the stability of the terrain.

Monitoring of alarms generated by the IDEAM (Colombian environmental authority for its Spanish acronym).

Addressing information or situations reported by the community regarding the stability of the land.

	2020	
Accounting metric	(1)	(2)
Unit of measure	ha	%
Cenit	0,01 ¹	100 ²
Ocensa	-	Not apply
OBC	-	Not apply
ODL	-	Not apply
ODC	0,91	63

¹ The figure only includes affectations to the environment from operational events. It corresponds to information officially reported to the Environmental Authority through the initial reports of environmental incidents, this could change based on the closure of the recovery efforts. For the following report we will provide detail on the areas impacted by third parties external to the operation..

² It does not include environmental compensations made due to impacts different from operational spills.

Code	EM-MD-160a.4
Accounting Metric	(1) Number and (2) aggregate volume of hydrocarbon spills, (3) volume in Arctic, (4) volume in Unusually Sensitive Areas (USAs), and (5) volume recovered
Unit of measure	Number, barrels (bbls)

Accounting metric	2021				
	(1)	(2)	(3)	(4)	(5)
Unit of measure	Number of spills	bbls	bbls	bbls	bbls
Cenit ¹	10	0,36	Not apply	Not apply	0,17
Ocensa ²	3	15,90	Not apply	Not apply	-
OBC	-	-	Not apply	Not apply	-
ODL	-	-	Not apply	Not apply	-
ODC	-	-	Not apply	Not apply	-
Progasur	-	-	Not apply	Not apply	-

¹ Operational spills are reported under this metric. In 2021, seven (7) affected the soil and three (3) affected both water and soil. This year there was a decrease of events classified as operational, from 13 (2020) to 10 (2021), which evidences the positive impact of improvements implemented in the operation. To clarify, in 2021 there were 257 containment losses caused by third parties. There were also three (3) events associated with natural causes that had an impact due to containment losses over 195,693.5 m² (195.7 Ha), of which 58,331.5 m² (58.3 Ha) were recovered. Additionally, five (5) oil spills were reported due to an unknown cause which is under investigation. The number of bbls removed in 2018 and 2019 are not available because the system operator did not keep such records.

² One of the events was the spill of oily substances in the PK274+200 section, wherein the in situ bioremediation of 594.14m³ of the terrain was carried out, guaranteeing the recovery of 100% of the affected area (0.0465 Ha). The remaining two events occurred offshore and were dealt with immediately, preventing any negative impact on the marine ecosystem. The event related to PK274+200 is not a primary containment loss, because it is part of an oil release from 2018. Additionally, the 5.3 barrels spill is an IFSP Level 2 event that occurred in 2021, and the second offshore event was not a process safety event because, according to API Standard 754, it does not meet the criteria to be considered level 1 or 2.

Accounting metric	2020				
	(1)	(2)	(3)	(4)	(5)
Unit of measure	Number of spills	bbls	bbls	bbls	bbls
Cenit	126 ¹	5.176			3.108 ²
Ocensa	-	-			Not apply
OBC	-	-	No operations in the Arctic or in Unusually Sensitive Areas		Not apply
ODL	-	-			Not apply
ODC	-	-			Not apply

¹ From the 126 spills, 110 were originated by third parties, 13 classified as operational

² The figure can change based on the closing events and the cleaning and mitigation activities, which corresponds to information reported officially on the National Licensing Environmental Authority (ANLA) through the final reports of environment incidents.

LEADERSHIP AND GOVERNANCE

Competitive Behavior

Code	EM-MD-520a.1
Accounting Metric	(1) Total amount of monetary losses as a result of legal proceedings associated with federal pipeline and storage regulations
Unit of measure	Reporting currency

Accounting metric ¹	2021
	(1)
Unit of measure	COP \$
Cenit	-
Ocensa	-
OBC	-
ODL	-
ODC	-
Progasur	-

¹ There were no monetary losses to report.

Accounting metric ¹	2020
	(1)
Unit of measure	COP \$
Cenit	-
Ocensa	-
OBC	-
ODL	-
ODC	-

¹ There were no fines or sanctions. We have no knowledge of losses in 2020 due to legal proceedings associated with federal pipeline and storage regulations.



Operational Safety, Emergency Preparedness & Response

Code	EM-MD-540a.1
Accounting Metric	Number of reportable pipeline incidents, (2) percentage significant
Unit of measure	Number, percentage (%)

Accounting metric ¹	2021	
	(1)	(2)
Unit of measure	Number	%
Cenit	3	100
Ocensa	2	-
OBC ¹	-	-
ODL ¹	-	-
ODC ¹	-	-
Progasur ¹	-	-

Accounting metric ¹	2020	
	(1)	(2)
Unit of measure	Number	%
Cenit	1	100
Ocensa	1	100
OBC	-	Not apply
ODL	-	Not apply
ODC	-	Not apply

¹ There were no reportable pipeline incidents.

Code	EM-MD-540a.2
Accounting Metric	Percentage of (1) natural gas and (2) hazardous liquid pipelines inspected
Unit of measure	Percentage (%)

Accounting metric ¹	2021	
	(1)	(2)
Unit of measure	Número de incidentes	%
Cenit ¹	Not apply	35,83
Ocensa ²	Not apply	64,55
OBC	Not apply	100
ODL	Not apply	100
ODC	Not apply	60,75
Progasur ³	Not apply	Not apply

¹ 2,362 of 6,592 km of hazardous liquids pipelines inspected in 2021. In-line inspection (ILI) with robotic vehicles is used to assess pipeline integrity using the following technologies:

- Magnetic Flux Leakage scan (MFL)
- Straight beam ultrasonic testing
- Ultrasound angle beam testing for axial cracks
- Circumferential defect detection using ultrasonic guided waves
- Geometry
- XYZ mapping with inertial measurement

² 548 of a total of 849 km of hazardous liquid pipelines were inspected. The total length of pipeline Ocensa operates and maintains, including the offshore pipeline, is app. 849 km. In 2021, an inspection was carried out with intelligent pipeline integrity gauges that detect metal loss, cracks and geometric inertial technologies on a total of 548 km of pipeline. It must be noted that the established frequency of these inspections is based on the applicable corporate technical criteria and are carried out in periods greater than one year, ranging from three (3) to five (5) year intervals. Therefore, this indicator does not require a 100% result in each period and is calculated considering the length of the pipeline to be inspected according to the criteria and the technical need established for each period. Ocensa does not operate or maintain pipelines for the transport of gas.

³ The company does not have natural gas distribution pipelines.

Accounting metric	2020	
	(1)	(2)
Unit of measure	%	%
Cenit	Not apply	32
Ocensa	Not apply	31,91 ¹
OBC	Not apply	100
ODL	Not apply	100
ODC	Not apply	100

¹ It must be noted that these inspections have an established frequency based on the applicable corporate technical criteria and are carried out in periods greater than one validity, ranging from 3 to 5 year intervals. Therefore, this indicator does not require a 100% result in each period and is calculated taking into account the length of the planned pipeline according to the criteria and the technical need established for each period..

Code	EM-MD-540a.3
Accounting Metric	Number of (1) accident releases and (2) nonaccident releases (NARs) from rail transportation
Unit of measure	Number
2021	This metric does not apply for reporting companies in this subsector.
2020	This metric does not apply for reporting companies in this subsector.
Code	EM-MD-540a.4
Accounting Metric	Discussion of management systems used to integrate a culture of safety and emergency preparedness throughout the value chain and throughout project lifecycles
Unit of measure	Discussion and analysis
2021	
Cenit	<p>Cenit has a Process Safety Management System to offer confidence about the reasonable precautions with which it undertakes and manages its activities and processes. Said system is currently in progress, taking into consideration therein international standards for the Oil & Gas sector such as API 754, CCPS2 guidelines and OSHA 29 CFR 1910.119 and Decree 1347 of 2021.</p> <p>Regarding emergencies, there is a structure in place to prepare for and respond to operational emergencies based on an assessment of legal requirements, risk analysis, possible outcome evaluations, lessons learned, investigation of incidents and the process implementation outcomes, among others. It includes the definition of the necessary elements to ensure an adequate response to operational emergencies, mitigation of their consequences and compliance with the requirements of the Law, which spans from the design stage of new infrastructure, through its operation, maintenance and even dismantling. The comprehensive management of operational emergencies includes actions to be taken prior, during and after the materialization of an undesired event.</p> <p>Finally, regarding the prevention and management of events that could have catastrophic impacts, in compliance with Law 1523 of 2012 and Decree 2157 of 2017, since 2018 Cenit adopted its Disaster Risk Management Plan (PGRD for its Spanish acronym) that is revised and adjusted yearly. The PGRD defines the activities aimed at identifying, expressing, programming, prioritizing and monitoring the activities of the company with regard to the processes of risk knowledge, risk reduction, disaster management, sectoral implementation & territorial harmonization (includes risk communication), and monitoring and verification.</p>
Ocensa	<p>Safety and emergency preparedness systems in the value chain: Includes constant upkeep and strengthening of initiatives in three (3) areas to prepare for a timely emergency response: company and coordination, training and education, equipment and facilities. This incorporates the interactions between areas and interest groups in order to potentially involve them in the emergency preparedness cycle.</p> <ul style="list-style-type: none"> Standards and guidelines: Ocensa's safety and emergency management system fully complies with national regulations and is aligned with technical guidelines including ISO 22300:2021, ISO 22301:2019, ISO 22320:2013, BS 11200 and NFPA1600. Company and coordination: Planning tools have been developed for emergency response, such as a continuity plan, emergency and contingency plans, specific risk analyses, disaster scenario procedures, mutual aid agreements, local emergency response plans and response protocols. Education and training: Annual workshops cycles are held to promote a culture of safety and emergency preparedness, wherein the strategies of the emergency plans for each risk scenario are practiced.

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2021	
	<ul style="list-style-type: none"> Equipment and facilities: Aimed at safeguarding and improving the availability of elements and infrastructure for emergency response at onshore stations and offshore operations, considering inspection routines, maintenance, and updating of specialized equipment, as well as corroborating records at control points. Publicizing the system: The emergency plans, environmental management plan (PMA for its Spanish acronym) and the Ocensa disaster management plan are shared with the Community Action Boards (JAC) and fishermen's associations in the area of direct influence (AID). Joint oversight between the labor force and management: The response times to handle any eventuality are shared between the support team, the Local Command and the Executive Committee, together with a rotating participation by our collaborators.
OBC	The Oleoducto de los Llanos and the Oleoducto Bicentenario de Colombia pipelines have an Emergency, Crisis and Business Continuity Management System (SGECC for its Spanish acronym) in place that cover all operational areas, the population associated to the processes, operations and maintenance, and the different stakeholders, with an emphasis on workers, inhabitants of the areas of influence, Territorial Councils for disaster risk management, and local municipal, departmental and national authorities. The governing documents of the SGECC are: Disaster Risk Management Plan; Emergency and Contingency Plan; Emergency, Crisis and Continuity Management Policy; SGECC Handbook; Business Impact Analysis; and, Business Continuity Plan for prioritized processes and value chain processes and operations.
ODL	<p>Regarding safety management, the system emphasizes prevention, considering actions in integrity plans; equipment reliability; infrastructure maintenance plans; process safety; geo-threat management; prevention contracts; emergency preparedness and response; systems alerts and alarm systems; knowledge, risk reduction and monitoring systems; inspection, testing and maintenance of fire detection and fire extinguisher systems; training; drills; training of community leaders in emergencies; strengthening of municipal disaster assistance groups; mutual aid plans with companies in the sector (PAM for its Spanish acronym), among others.</p> <p>In terms of emergency and/or disaster response, the internal management areas are those in strategic, tactical and operational levels, characterized by the Crisis Management Team (CMT) and the Emergency Management Team (IMT for its Spanish acronym) that includes groups for tactical and operational response, as well as those responsible for process continuity.</p>
ODC	Through the Occupational Health and Safety management program for contractors, each of the partner companies with which the ODC currently has contracts is monitored through monthly and/or quarterly meetings, field inspections at different work sites and HSE evaluations. In the latter the emergency and contingency plans of each contractor are reviewed along with the interface they have with the Emergency and Contingency Plan of the ODC facilities and their prevention management included their annual planning (e.g. training, drills, inspections, etc.). Throughout the year, 10 HSE campaigns were carried out with contractors and partners, including a response preparedness campaign within the framework of the national drill in October 2021.
Progasur	<p>The Company has a Risk and Disaster Management Plan (PGRD for its Spanish acronym) that includes risk awareness, identification and reduction, as well as a disaster management program (PEC) based on the assessment of potential and/or credible natural, anthropic, socio-natural and operational threats in the infrastructure.</p> <p>The main objective of the PGRD in the company is to define and record the awareness, reduction, and mitigation actions required to manage risks associated with the operation and conditions of the infrastructure. The actions are defined according to the results of the analysis and risk assessment. Consequently, the company has an Incident Command which supports the company's management in handling possible contingencies.</p>

EXTRACTIVES & MINERALS PROCESSING SECTOR

03 OIL AND GAS REFINING



ACTIVITY METRICS

Code	EM-RM-000.A
Accounting Metric	Refining throughput of crude oil and other feedstocks
Unit of measure	Barrels of oil equivalent (bbls-e)

	2021
Accounting Metric	(1)
Unit of measure	bbls-e
Refinería de Barrancabermeja ¹	77.016.503
Refinería de Cartagena S.A.S (Refinería de Cartagena)	54.859.908

¹ For 2021, the Barrancabermeja Refinery reports its metrics separately under the Refining and Marketing standards. In 2020, the Barrancabermeja Refinery reported under the Exploration and Production standard and its numbers were consolidated within the metrics reported by Ecopetrol S.A.

	2020
Accounting Metric	(1)
Unit of measure	bbls-e
Refinería de Cartagena	51.416.090

Code	EM-RM-000.B
Accounting Metric	Refining operating capacity
Unit of measure	Million barrels per calendar day (Mbbls/day)

	2021
Accounting Metric	(1)
Unit of measure	Mbbls/day
Refinería de Barrancabermeja	0,24
Refinería de Cartagena	0,16

	2020
Accounting metric	(1)
Unit of measure	Mbbls/day
Refinería de Cartagena	0,16

ENVIRONMENT

Greenhouse Gas Emissions

Code	EM-RM-110a.1
Accounting Metric	(1) Gross global Scope 1 emissions, (2) percentage covered under emissions-limiting regulations
Unit of measure	Metric tons CO ₂ e (tonCO ₂ e) Percentage (%)

Accounting Metric	2021	
	(1)	(2) ¹
Unit of measure	tonCO ₂ e	%
Refinería de Barrancabermeja	3.106.618	-
Refinería de Cartagena	2.039.682	-

¹ The percentage covered under the regulations limiting GHG emissions is not applicable herein, because there is no regulation in Colombia related to said emissions (or the methane emitted).

Accounting Metric	2020	
	(1)	(2)
Unit of measure	tonCO ₂ e	%
Refinería de Cartagena	2.203.834 ¹	The percentage covered under the regulations limiting GHG emissions is not applicable herein, because there is no regulation in Colombia related to said emissions (or the methane emitted).

¹ The amount reported in the EM-EP-110a.1 metric for Ecopetrol S.A. includes the operated assets of Cenit and the Cartagena Refinery under the ISO 14064-1 methodology and the GHG Protocol, which establishes the inventory organizational limit as the operational control.

Code	EM-RM-110a.2
Accounting Metric	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets
Unit of measure	Discussion and analysis

2021	
Refinería de Barrancabermeja	The Ecopetrol Group committed to reaching net-zero emissions by 2050 (Scopes 1 and 2), and to reduce CO ₂ emissions 25% by 2030 versus 2019 (Scopes 1 and 2), as well as to reduce 50% of total emissions by 2050 (Scopes 1, 2 and 3). To achieve this, Ecopetrol and each of its subsidiaries have defined actions to reduce GHG emissions.

The Barrancabermeja Refinery has joined the Colombian Low Carbon Development Strategy led by the Ministry of Environment and Sustainable Development (MADS for its Spanish acronym) and committed to the GHG reduction goals through a portfolio of decarbonization initiatives.

This portfolio is demarcated into five (5) major areas:

- Energy efficiency (energy integration, improvement of furnace and boiler efficiency, steam distribution)
- Renewable energies (generation and consumption of renewable energy and fuels)
- Venting, fugitive emissions and reduced reduction in flares
- Circular economy
- Nature-based solutions

In 2021, emissions were reduced by 36,245 tons of CO₂e/year, which was a 109% completion of the established goal (33,069 tons of CO₂e/year) through the following measures:

Optimized boilers using the Optimus system, reliability and optimization assurance of boiler, and upholding the non-dispatch of energy to Cira.

Refinería de Cartagena	The Cartagena Refinery has a portfolio of GHG reduction initiatives 2020-2030 with the goal of reducing by 25% its GHG greenhouse gases by 2030, in line with the target set by the Ecopetrol Group.
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This portfolio is demarcated into five (5) major areas:

- Energy efficiency (energy integration, improvement of furnace and boiler efficiency, steam distribution)
- Renewable energies (generation and consumption of renewable energy and fuels)
- Venting, fugitive emissions and reduced reduction in flares
- Circular economy
- Emerging technologies
- Nature-based solutions

A cumulative reduction of 34,822 tons of CO₂e/year was achieved in 2021 with respect to the GHG emission reduction goal, which meant the realization of 146% of the established goal (23,900 tons of CO₂e/year). Based on the foregoing, the Cartagena Refinery has been included in the Colombian Low Carbon Development Strategy (CLCDS) led by MADS and the country's reduction goals.

The initiatives developed in 2020 that permitted this GHG reduction were: 1) operating control of energy variables in eight (8) process units, improvement in the performance of the GTG_HRSG cogeneration set (electric-steam), and the performance of the turboexpander in the Catalytic Cracking Unit.

Air Quality

Code	EM-RM-120a.1
Accounting Metric	Air emissions of the following pollutants: (1) NOx (excluding N2O), (2) SOx, (3) particulate matter (PM10), (4) H2S, and (5) volatile organic compounds (VOCs)
Unit of measure	Metric tons (t)

2021					
Accounting Metric	(1)	(2)	(3)	(4)	(5)
Unit of measure	tonNOx	tonSOx	tonPM10	tonH ² S	tonCOV
Refinería de Barrancabermeja	3.316,80	8.880,20	390,10	-	7.610,10
Refinería de Cartagena	1.947,10	2.067,00	242,50	-	4.940,80

2020					
Accounting metrics	(1)	(2)	(3)	(4)	(5)
Unit of measure	tonNOx	tonSOx	tonPM10	tonH ² S	tonCOV
Refinería de Cartagena	2.061,30	2.811,50	306,40	-	3.509,70

Code	EM-RM-120a.2
Accounting Metric	Number of refineries in or near areas of dense population
Unit of measure	Number

2021	
Accounting Metric	(1)
Unit of measure	Number
Refinería de Barrancabermeja	1
Refinería de Cartagena	1

2020	
Accounting Metric	(1)
Unit of measure	Number
Refinería de Cartagena	1

Water Management

Code	EM-RM-140a.1
Accounting Metric	(1) Total fresh water withdrawn, (2) percentage recycled, (3) percentage extracted and (4) percentage consumed in regions with High or Extremely High Baseline Water Stress
Unit of measure	Thousand cubic meters (m ³), Percentage (%)

2021				
Accounting metric	(1)	(2)	(3)	(4)
Unit of measure	Mil m ³	%	%	%
Refinería de Barrancabermeja	21.506	56	18,50	41,09
Refinería de Cartagena	6.970	69	100	100

2020				
Accounting metric	(1)	(2)	(3)	(4)
Unit of measure	Mil m ³	%	%	%
Refinería de Cartagena ¹	7.190	57	100	100

¹ Cartagena Refinery does not collect water directly from natural sources; instead, the water used in the processes is supplied by a third party.

Code	EM-RM-140a.2
Accounting Metric	Number of incidents of non-compliance associated with water quality permits, standards, and regulations
Unit of measure	Number, percentage (%)

2021	
Accounting Metric	(1)
Unit of measure	Número de incidentes
Refinería de Barrancabermeja	-
Refinería de Cartagena	-

2020	
Accounting Metric	(1)
Unit of measure	Número de incidentes
Refinería de Cartagena	-

Hazardous Materials Management

Code	EM-RM-150a.1	
Accounting Metric	Amount of (1) hazardous waste generated, (2) percentage recycled	
Unit of measure	Metric tons (ton), percentage (%)	

	2021	
Accounting Metric	(1)	(2)
Unit of measure	ton	%
Refinería de Barrancabermeja	12.437	48,7
Refinería de Cartagena	2.418 ¹	26

¹ The decrease is due to less oily sludge (tank bottoms) resulting from the rescheduling of tank maintenance.

	2020	
Accounting Metric	(1)	(2)
Unit of measure	ton	%
Refinería de Cartagena	4.686	4,77

Code	EM-RM-150a.2	
Accounting Metric	(1) Number of underground storage tanks (USTs), (2) number of UST releases requiring cleanup, and (3) percentage in states with UST financial assurance funds	
Unit of measure	Number and percentage	

	2021		
Accounting Metric¹	(1)	(2)	(3)
Unit of measure	UST Number	Number of UST releases	%
Refinería de Barrancabermeja	Not apply	-	-
Refinería de Cartagena	Not apply	-	-

	2020		
Accounting Metric¹	(1)	(2)	(3)
Unit of measure	UST Number	Number of UST releases	%
Refinería de Cartagena	Not apply	-	-

¹ Neither of the two refineries has underground storage tanks.

HUMAN CAPITAL**Workforce Health & Safety**

Code	EM-RM-320a.1	
Accounting Metric	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR) for (a) full-time employees and (b) contract employees	
Unit of measure	Rate	

	2021		
Accounting Metric	(1) ¹	(2)	(3)
Unit of measure	Rate	Rate	Rate
Refinería de Barrancabermeja	(a) 0,75	(a) -	(a) Not available for 2021
	(b) 0,52	(b) -	(b) Not available for 2021
	Total: 0,62	Total: -	Total: Not available for 2021
Refinería de Cartagena	(a) -	(a) -	(a) Not available for 2021
	(b) 1,34	(b) -	(b) Not available for 2021
	Total: 1,29	Total: -	Total: Not available for 2021

¹ TRIR is measured in refineries by measuring recordable incidents (fatalities, accidents with lost work time, medical treatment cases, and restricted work cases) according to the OSHA standard, which is the standard used in the Oil & Gas sector.

	2020		
Accounting Metric	(1)	(2)	(3)
Unit of measure	Rate	Rate	Rate
Refinería de Cartagena	TRIF: 0,19	-	0,04

Code	EM-RM-320a.2	
Accounting Metric	Discussion of management systems used to integrate a culture of safety	
Unit of measure	Discussion y analysis	

	2021	
Refinería de Barrancabermeja	Ecopetrol S.A. has the HSE Management System, which aims to defining the basic mandatory requirements under which the company manages risks in order to protect life and promote care for the environment. The HSE Management System was established based on current national regulations (Decree 1072 of 2015) and international standards (ISO 45001 and ISO14001).	
Refinería de Cartagena	The HSE Management System consists of a logical and staged process based on continuous improvement and that includes culture, leadership, policy, organization, planning, application, evaluation, audit and actions for improvement in order to anticipate, recognize, evaluate and control the risks that may affect safety, occupational health and the environment.	
	The HSE Management System includes 22 sub-elements; each sub-element defines the principle, the basic implementation requirements, and provides direction on the documents that detail the application of the basic requirements.	

BUSINESS MODEL AND INNOVATION

Product Specifications & Clean Fuel Blends

Code	EM-RM-410a.1
Accounting Metric	Percentage of Renewable Volume Obligation (RVO) met through: (1) production of renewable fuels, (2) purchase of "separated" renewable identification numbers (RIN)
Unit of measure	Percentage (%)

2021		
Accounting Metric ¹	(1)	(2)
Unit of measure	%	%
Refinería de Barrancabermeja	Not apply	
Refinería de Cartagena	Not apply	

2020		
Accounting Metric ¹	(1)	(2)
Unit of measure	%	%
Refinería de Cartagena	Not apply	

¹ Neither of the two (2) refineries has a renewable volume obligation

Code	EM-RM-410a.2
Accounting Metric	Total addressable market and share of market for advanced biofuels and associated infrastructure
Unit of measure	Reporting currency, percentage (%)

2021

This metric does not apply to reporting companies in this subsector. The Barrancabermeja Refinery (GRB for its Spanish acronym) does not have infrastructure for biofuel production. GRB acquires third party Ecodiesel for the production of Biodiesel (B2E)

2020		
Accounting Metric ¹	(1)	(2)
Unit of measure	Reporting currency	%
Refinería de Cartagena	Not available for 2020	

LEADERSHIP AND GOVERNANCE

Pricing Integrity & Transparency

Code	EM-RM-520a.1
Accounting Metric	Total amount of monetary losses as a result of legal proceedings associated with price fixing or price manipulation
Unit of measure	Reporting currency

2021	
Accounting Metric	(1)
Unidad de medida	Reporting Currency
Refinería de Barrancabermeja	-
Refinería de Cartagena	-

2020	
Accounting Metric	(1)
Unidad de medida	Reporting Currency
Refinería de Cartagena	-



Management of the Legal & Regulatory Environment

Code	EM-RM-530a.1
Accounting Metric	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry
Unit of measure	Discussion and analysis

2021

Refinería de Barrancabermeja	<p>The Barrancabermeja Refinery oversees the dynamics related with government regulations and policies focused on risk management and monitors the environmental legal compliance.</p> <p>Regarding actions regarding climate change and air quality management, the Refinery considers; (i) the Colombian Low Carbon Development Strategy (CLCDS) led by MADS when implementing mitigation and adaptation actions; (ii) Colombia's Long-term Climate Strategy Term - E2050, proposed as an instrument of State Policy to strengthen the country's resilience and guide the transformation towards a low-carbon economy; (iii) the Alliance for Carbon Neutrality, which involves the participation of the private sector. At the sectoral level, the Refinery employs the Comprehensive Climate Change Management Plan for the Mining and Energy sector (PIGCCme for its Spanish acronym), which defines the specific mitigation, adaptation, governance and knowledge actions to contribute towards national and the corporate GHG reduction goals. Water resources and biodiversity management in the Barrancabermeja Refinery are aligned with government guidelines and the "Program for efficient water use and saving" issued by Law 373 of 1997 of the MADS.</p> <p>The Company's Management System defines the process of hazard identification and assessment and risk assessment in order to control the intrinsic risks in a process, area or activity, establishing the necessary measures to eliminate or mitigate the probability of occurrence of negative events and those that generate losses. Finally, the Refinery has environmental permits for the use of resources with the Regional Autonomous Corporation of Santander - CAS, as well as an Environmental Management Plan wherein the mechanisms to manage the risks and opportunities associated with each legal and regulatory feature thereof are defined.</p>
Refinería de Cartagena	<p>Regulatory projects that are issued by the government and that entail environmental requirements for which there is no installed capacity within Refinery's equipment and operations to comply with said prerequisite are identified as risks.</p> <p>An identified opportunity is the space for dialogue and agreement with the government that occurs prior to the authorization of said administrative acts that occurs within the legislative procedures Cartagena Refinery and Ecopetrol have to undertake.</p> <p>GHG emissions and air quality: There is a portfolio of 2020-2030 decarbonization initiatives aligned with the Ecopetrol Group's 2040 Strategy. Regarding the GHG emission reduction goal, a cumulative reduction of 34,822 tons of CO₂e/year was achieved in 2021, which meant the realization of 146% of the established goal (23,900 tons of CO₂e/year). Based on the foregoing, the Cartagena Refinery has been included in the Colombian Low Carbon Development Strategy (CLCDS) led by MADS and the country's GHG reduction goals.</p> <p>Management of water resources and biodiversity: The Cartagena Refinery has developed initiatives for water saving and the efficient use, reuse and recirculation of water in its operations, as well as initiatives for the management and treatment of wastewater. These types of actions are aligned with government guidelines and the "Program for efficient water use and saving" issued by Law 373 of 1997 of the MADS. Additionally, it is currently involved in implementing the project "Plan for reconversion to clean technologies for wastewater management" to comply with the new regulations for discharges into marine waters, under Resolution 883 of 2018. All these initiatives are also aimed at improving the quality of discharges and the protection of marine biodiversity.</p> <p>Dynamic risk management: through the Management System, the Company anticipates, recognizes, evaluates and controls risks that may affect people, the surroundings, the environment or communities, ensuring the application of controls and dynamic risk management. Additionally, the company contributes in the circular economy and national hazardous waste policy, participating with the MADS to define management policies and the comprehensive management of waste and hazardous waste to implement circular economy projects and initiatives.</p>

Critical Incident Risk Management

Code	EM-RM-540a.1
Accounting Metric	Process Safety Event (PSE) rates for Loss of Primary Containment (LOPC) of (1) greater consequence (Tier 1) and (2) lesser consequence (Tier 2)
Unit of measure	Rate

2021

Accounting Metric	(1)	(2)
Unit of measure	Rate	Rate
Refinería de Barrancabermeja	0,10	0,21
Refinería de Cartagena	-	0,10

2020

Accounting Metric	(1)	(2)
Unit of measure	Rate	Rate
Refinería de Cartagena	-	0,19

Code	EM-RM-540a.2
Accounting Metric	Challenges to Safety Systems indicator rate (Tier 3)
Unit of measure	Rate

2021

Accounting Metric	(1)
Unit of measure	Rate
Refinería de Barrancabermeja	Not available for 2021
Refinería de Cartagena	Not available for 2021

2021

Accounting Metric	(1)
Unit of measure	Rate
Refinería de Cartagena	4,25

Code	EM-RM-540a.3
Accounting Metric	Discussion of measurement of Operating Discipline and Management System Performance through Tier 4 Indicators
Unit of measure	Discussion and analysis

2021

Accounting Metric	(1)
Refinería de Barrancabermeja	The management and monitoring of the performance of the Risk and Critical Incident Management System through Tier 4 indicators is carried out with oversight by the Refinery's senior management through the Asset Management committees (Structured Operation, Static Equipment, Rotating Equipment, Control and Electronics, Electrical Equipment, Maintenance) and in the HSE Committee.
Refinería de Cartagena	<p>At the Cartagena Refinery, operating safety risk management is monitored and managed through the following indicators and scenarios:</p> <p>At Management level: Incident Severity Indicator ASP N1</p> <p>At the Operational level: Incident Severity Indicators ASP N1, ASP N1 Index, VH-H risk reduction index</p>

RESOURCE TRANSFORMATION

04 CHEMICALS



ACTIVITY METRICS

Code	RT-CH-000.A
Accounting Metric	Production by reportable segment
Unit of measure	Metric tons (ton)

	2021
Accounting metric	(1)
Unit of measure	ton
Esenttia	499.759

	2020
Accounting metric	(1)
Unit of measure	ton
Esenttia	487.403

ENVIRONMENT

Greenhouse Gas Emissions

Code	RT-CH-110a.1
Accounting Metric	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations
Unit of measure	Metric tons (t) CO ₂ -e, Percentage (%)

	2021	
Accounting metric	(1)	(2)
Unit of measure	tonCO ₂ e	%
Esenttia	60.983,09	Not apply ¹

	2021	
Accounting metric	(1)	(2)
Unit of measure	tonCO ₂ e	%
Esenttia	62.297,30	Not apply ¹

¹ A percentage covered under the regulatory GHG emissions limit does not apply because there is no regulation associated to such emitted emissions (or methane) in Colombia.

Code	RT-CH-110a.2
Accounting Metric	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets
Unit of measure	Discussion and analysis

2021

Esenttia	<p>The Ecopetrol Group committed to reaching net-zero emissions by 2050 (Scopes 1 and 2), and to reduce CO₂ emissions 25% by 2030 versus 2019 (Scopes 1 and 2), as well as to reduce 50% of total emissions by 2050 (Scopes 1, 2 and 3). To achieve this, Ecopetrol and each of its subsidiaries have defined actions to reduce GHG emissions consistent with their climate goals.</p> <p>In the short term:</p> <ul style="list-style-type: none"> • Achieve carbon neutral certification. • Define a budget to carry out their Decarbonization Strategy. • Expand the decarbonization portfolio by searching for leveraging strategies. <p>In the medium term:</p> <ul style="list-style-type: none"> • Execute the corporate Climate Change Strategy in line with the 2030 Agenda and aligned with the parent company. • Implement initiatives focused on reducing GHG emissions from flaring (optimizing the process through technical changes in ethylene and propylene compressors). • Exploring initiatives to recover exhaust gas emissions from cogenerators and improve their efficiency. • Strengthen the Energy Efficiency Program.
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Air Quality

Code	RT-CH-120a.1
Accounting Metric	Air emissions of the following pollutants: (1) NOX (excluding N2O), (2) SOX, (3) volatile organic compounds (VOCs), and (4) hazardous air pollutants (HAPs)
Unit of measure	Micrograms per cubic meter (µg/m ³)

2021

Accounting Metric	(1)	(2)	(3)	(4)
Unit of measure	µg/m³	µg/m³	µg/m³	µg/m³
Esenttia	676,82	-	-	-

2020

Accounting Metric	(1)	(2)	(3)	(4)
Unit of measure	µg/m³	µg/m³	µg/m³	µg/m³
Esenttia	686,37	-	-	-

Energy Management

Code	RT-CH-130a.1
Accounting Metric	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable, (4) total self-generated energy
Unit of measure	Gigajoules (GJ), percentage (%)

2021

Accounting Metric	(1)	(2)	(3)	(4)
Unit of measure	GJ	%	%	GJ
Esenttia	1.442.703	61,18	0,22	606,11

2020

Accounting Metric	(1)	(2)	(3)	(4)
Unit of measure	GJ	%	%	GJ
Esenttia	1.479.042	59,70	0,10	596,05

Water Management

Code	RT-CH-140a.1
Accounting Metric	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress
Unit of measure	Thousand cubic meters (m ³), Percentage (%)

2021				
Accounting Metric	(1) ¹	(2)	(3)	(4)
Unit of measure	Mil m ³	Mil m ³	%	%
Esenttia	1,01	867,50	100	100

2020				
Accounting Metric	(1) ¹	(2)	(3)	(4)
Unit of measure	Mil m ³	Mil m ³	%	%
Esenttia	-	1.030	-	-

¹ The water extracted is provided by a third party and the data reported is for the sum of raw and drinking water.

Code	RT-CH-140a.2
Accounting Metric	Number of incidents of non-compliance associated with water quality permits, standards, and regulations
Unit of measure	Number

2021	
Accounting metric	(1)
Unit of measure	Number
Esenttia	1 ¹

¹ Non-compliance associated with this metric for the period owing to concern due to wastewater from the Industrial and Domestic Wastewater Treatment Plant in the Chemical Oxygen Demand (COD) and Biochemical Oxygen Demand (BOD) assessments for the samples taken in September - within the second semester of 2021. These samples were repeated in December 2021 with a "COMPLIANT" result.

2020	
Accounting metric	(1)
Unit of measure	Number
Esenttia	-

Code	RT-CH-140a.3
Accounting Metric	Description of water management risks and discussion of strategies and practices to mitigate those risks
Unit of measure	Discussion and Analysis

2021	
Esenttia	Description of the risks: The depletion of water resources is considered within the impacts produced by its use, and therefore we conduct day-to-day controls at our points of operation specified in the water reduction and use program. Additionally, water used is treated in a wastewater plant located in the free trade zone facilities, reducing the probability of contaminating the body of water.

Waste management

Code	RT-CH-150a.1
Accounting Metric	(1) Amount of hazardous waste generated, percentage recycled
Unit of measure	Metric tons (ton), percentage (%)

2021		
Accounting metric	(1)	(2)
Unit of measure	ton	%
Esenttia ¹	197,82	36,60

¹ During 2020, due to pandemic restrictions, work was carried out with the minimum workforce and all execution of large infrastructure projects was halted. During 2021, there was a progressive reactivation of activities, thus increasing the generation of hazardous waste among these unrecyclable hazardous materials.

2020		
Accounting metric	(1)	(2)
Unit of measure	ton	%
Esenttia	146	39

SOCIAL CAPITAL

Community Relations

Code	RT-CH-210a.1
Accounting Metric	Discussion of engagement processes to manage risks and opportunities associated with community interests
Unit of measure	Discussion and analysis

2021

Esenttia	<p>In 2021, the Company strengthened the citizen services office, prioritizing the relationship with the communities and the national authorities in order to guarantee the ability to address their expectations, requests and complaints, in order to guarantee that the Company could fulfill their expectations, and to uphold and strength these mutually beneficial trust-based relationships.</p> <p>The Company's Social Value Generation process coordinates with the communities the Environment and Social Development Strategy. Likewise, it is responsible for directing the Strategic Social Investment, which is based on four subject pillars that are Economic Development, Education and Culture, Housing and Environment, and Health, which aim towards:</p> <ul style="list-style-type: none"> • The economic development of communities, giving priority to social entrepreneurship models. • Strengthening the public's culture towards recycling and the proper disposal of plastic waste. • Generating innovative solutions for urban furniture and other uses of recycled plastic. • Improving the quality of education to encourage the development of Cartagena and contribute towards education regarding the circular economy. • Positioning plastic as an element of social transformation. • Contributing to the improvement of health and well-being in the areas of influence of Esenttia and the Ecopetrol Group. • Providing health, social and disaster relief assistance in the areas of influence of Esenttia, of the Ecopetrol Group, and in the areas of the country that require it. • Encouraging inclusion of the vulnerable population in the aforementioned initiatives. <p>One of the basic principles our relationship with our stakeholders is respect for human rights: "Respect the rights of stakeholders, in accordance with Esenttia's guidelines thereon".</p> <p>Esenttia, as a Group company, applies the Ecopetrol Group's Guidelines on Human Rights and implements it in its operations.</p>
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HUMAN CAPITAL

Workforce Health & Safety

Code	RT-CH-320a.1
Accounting Metric	(1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees
Unit of measure	Rate

2021

Accounting metric	(1)	(2)
Unit of measure	Rate	Rate
Esenttia	-	-

2020

Accounting metric	(1)	(2)
Unit of measure	Rate	Rate
Esenttia	-	-

Code	RT-CH-320a.2
Accounting Metric	Description of efforts to assess, monitor, and reduce exposure of employees and contract workers to long-term (chronic) health risks
Unit of measure	Discussion and analysis

2021

Esenttia	<p>In order to evaluate, monitor and reduce employees' and contractors' exposure to long-term (chronic) health risks, Esenttia maintains an updated GHS (Globally Harmonized System) in each production stage. In addition, it implements the Occupational Hygiene Program to measure and characterize hygienic agents based on the documentation for Threshold Limit Values and Biological Exposure Indices for chemical substances and physical agents of the American Conference of Governmental Industrial Hygienists (ACGIH). In 2021, the hygiene measurement results continue below the permissible limits; that is, without an occupational exposure with the potential to generate occupational diseases.</p>
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BUSINESS MODEL AND INNOVATION

Product design for use-phase efficiency

Code	RT-CH-410a.1
Accounting Metric	Revenue from products designed for usephase resource efficiency
Unit of measure	Reporting currency

	2021
Accounting metric	(1)
Unit of measure	COP \$
Esenttia	4.313 millones

	2020
Accounting metric	(1)
Unit of measure	COP \$
Esenttia	10.201 millones

Code	RT-CH-410b.1
Accounting Metric	(1) Percentage of products that contain Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Category 1 and 2 Health and Environmental Hazardous Substances, (2) percentage of such products that have undergone a hazard assessment
Unit of measure	Percentage (%) by revenue, Percentage (%)

	2021	
Accounting metric	(1)	(2)
Unit of measure	%	%
Esenttia ¹	-	-

¹ The chemicals produced in Esenttia are not considered Category 1 and 2 Health and Environmental Hazardous Substances.

	2020	
Accounting metric	(1)	(2)
Unit of measure	%	%
Esenttia ¹	Information not available for 2020.	

Code	RT-CH-410b.2
Accounting Metric	Discussion of strategy to (1) manage chemicals of concern and (2) develop alternatives with reduced human and/or environmental impact
Unit of measure	Discussion and analysis

	2021
Esenttia	The chemicals produced in Esenttia are not considered Category 1 and 2 Health and Environmental Hazardous Substances, so it is not necessary that they undergo a hazard assessment. Regarding the chemicals used as raw material for production, such as catalysts and selectivity control agents, etc., their hazard potential is identified through the Globally Harmonized System of Classification and Labeling of Chemicals (GHS) and the respective Material Safety Data Sheets (MSDS) of the product. For their risk assessment, the type of hazard (physical, health or environmental), the effect (occupational accident, occupational disease due to exposure) is identified. Based thereon, the respective methodology is used to assess the risk. Risk management is carried out through the guidelines established by Esenttia's OSH management system, implementing control systems at the source, during the process and, finally, at the worker level.

Code	RT-CH-410c.1
Accounting Metric	Percentage of products by revenue that contain genetically modified organisms (GMOs)
Unit of measure	Percentage (%) by revenue

2021	This metric does not apply to reporting companies in this subsector, since the company does not use genetically modified organisms.
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LEADERSHIP AND GOVERNANCE

Management of the Legal & Regulatory Environment

Code	RT-CH-530a.1
Accounting Metric	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry
Unit of measure	Discussion and analysis

2021

Esenttia	<p>For now, Esenttia and its clients have not been greatly affected by regulations restricting the use of plastic. Regulations that apply to purchases of single-use plastic products by public institutions are being closely watched.</p> <p>Esenttia monitors the progress of the Single-Use Plastics legislation throughout its different deliberations in the House of Representatives and public hearings in the Senate and actively participates with observations.</p> <p>Internationally, Esenttia monitors the progress of single-use plastic standards that have come into force, such as those of Mexico City, Buenos Aires, and San José de Costa Rica, as well as the regulations in Peru and Ecuador. To address this issue with customers, the Company is seeking alternatives to substitute biopolymers, focusing on those that are compostable to comply with ASTM D6400 and EN 13432 standards.</p> <p>Additionally, Esenttia has carried out work to close the loop of the plastics cycle, which includes extending the PlastiTON recycling program to companies, schools, universities and other allies. Additionally, progress has been made in the ReCircular project, which in 2021 was able to purchase over 200 tons of post-consumer plastic and began transforming 25 tons in order to start the transformation and commercialization process with customers. This whole process seeks - with real actions and proven numbers - to support the conversation on the recyclability of polypropylene and polyethylene.</p> <p>As part of the company's preparations for the Law on the Prohibition of Plastics (this regulation still lacks a final determination by the Ministry of Environment and Sustainable Development), Esenttia is working jointly with the recyclers of the island of San Andres to collect disposable cups, providing additional support for the use of this product, which its client sells there from its raw material.</p>
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Operational Safety, Emergency Preparedness & Response

Code	RT-CH-540a.1
Accounting Metric	(1) Process Safety Incidents Count (PSIC), (2) Process Safety Total Incident Rate (PSTIR), and (3) Process Safety Incident Severity Rate (PSISR)
Unit of measure	Number, rate

2021

Accounting metric	(1)	(2)	(3)
Unit of measure	Number	Rate	Rate
Esenttia	-	-	-

2020

Accounting metric	(1)	(2)	(3)
Unit of measure	Number	Rate	Rate
Esenttia	-	-	-

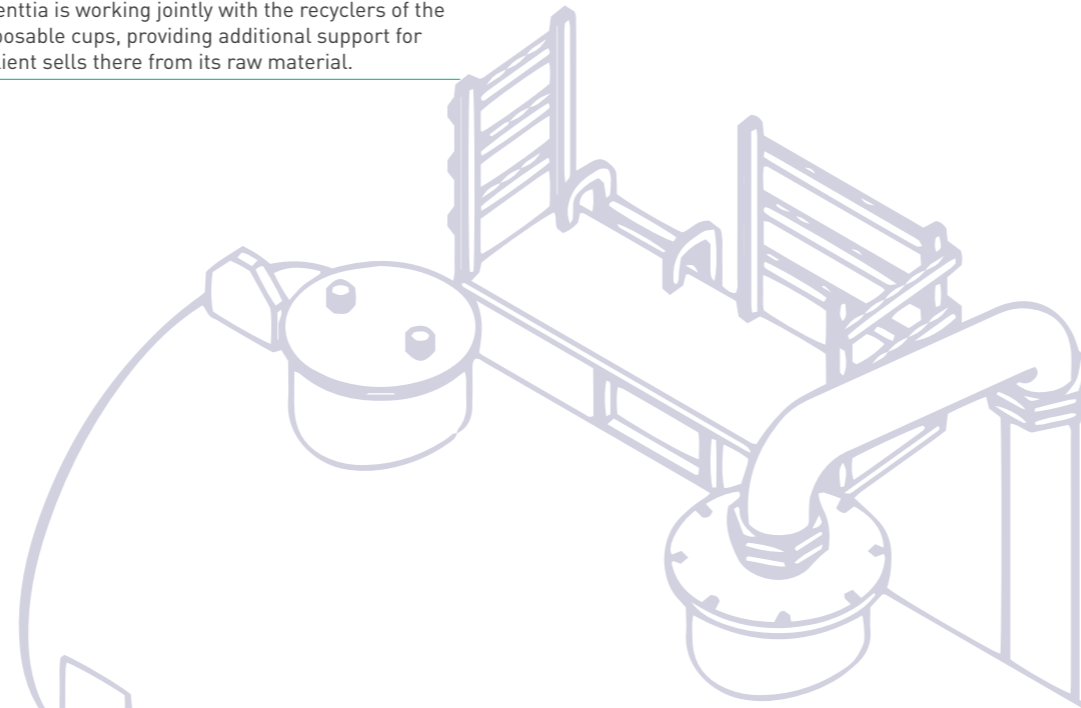
Code	RT-CH-540a.2
Accounting Metric	Number of transport incidents
Unit of measure	Number

2021

Accounting metric	(1)
Unit of measure	Number
Esenttia	-

2020

Accounting metric	(1)
Unit of measure	Number
Esenttia	-



RENEWABLE RESOURCES & ALTERNATIVE ENERGY

05 BIOFUELS



ACTIVITY METRICS

Code	RR-BI-000.A
Accounting Metric	Biofuel production capacity
Unit of measure	Millions of gallons (Mgal)
	2021
Accounting metric	(1)
Unit of measure	Mgal
Ecodiesel Colombia S.A. (Ecodiesel)	40,22

Code	RR-BI-000.B
Accounting Metric	Production of: (1) renewable fuel, (2) advanced biofuel, (3) biomass-based diesel, and (4) cellulosic biofuel
Unit of measure	Millions of gallons (Mgal)
	2021
Accounting Metric	(1) (2) (3) (4)
Unit of measure	Mgal Mgal Mgal Mgal
Ecodiesel	- 40,22 - -

Code	RR-BI-000.C
Accounting Metric	Amount of feedstock consumed in production
Unit of measure	Metric tons (ton)
	2021
Accounting metric	(1)
Unit of measure	ton
Ecodiesel	133.127 ¹

¹ Crude palm oil (CPO) and palm fatty acids (PFAD)

ENVIRONMENT

Air Quality

Code	RR-BI-120a.1
Accounting Metric	Air emissions of the following pollutants: (1) NOx (excluding N2O), (2) SOx, (3) volatile organic compounds (VOCs), (4) particulate matter (PM10), and (5) hazardous air pollutants (HAPs)
Unit of measure	Metric ton (ton)

	2021				
Accounting Metric	(1)	(2)	(3)	(4)	(5)
Unit of measure¹	mg/m ³	mg/m ³	mg/m ³	mg/m ³	mg/m ³
Ecodiesel	64,70	1,10	Not available for 2021	6,70	Not available for 2021

¹ Data is only available in mg/m³ concentration units of measurement. Additionally, the comparison of the concentrations of pollutants corrected to a reference oxygen content is provided based on the standards recognized in Resolution 909 of 2008 of the Ministry of Environment, Housing and Territorial Development (MAVDT for its Spanish acronym).

Code	RR-BI-120a.2
Accounting Metric	Number of incidents of non-compliance associated with air quality permits, standards, and regulations
Unit of measure	Number

	2021
Accounting metric	(1)
Unit of measure	Number
Ecodiesel ¹	-

¹ To date, the company has not had any non-compliance incidents associated with air and environmental quality.

Water Management

Code	RR-BI-140a.1
Accounting Metric	(1) Total water withdrawn, (2) total water consumed, (3) percentage water withdrawn y (4) percentage water consumed in regions with High or Extremely High Baseline Water Stress M
Unit of measure	Thousand cubic meters (m ³), Percentage (%)

	2021			
Accounting Metric	(1)	(2)	(3)	(4)
Unit of measure	Mil m ³	Mil m ³	%	%
Ecodiesel	73.187 ¹	65.714	-	-

¹ This data provided is for water consumption in operations. Ecodiesel does not withdraw/extract water, but rather uses water from the public utility (aqueduct) for its operations.

Code	RR-BI-140a.2
Accounting Metric	Description of water management risks and discussion of strategies and practices to mitigate those risks
Unit of measure	Discussion and analysis

	2021
Ecodiesel	<p>Description of the risks associated with water or wastewater withdraw/extraction, consumption and release:</p> <ul style="list-style-type: none"> • Non-compliance with legislation and regulation due to industrial wastewater treatment. • Harm to the company's reputation because of environmental impact to affected parties. • Occurrence of major environmental events in our influential bodies of water. • Increased consumption of water resources due to failures in production process controls. • Description of the possible effects of operational risks: • Contamination of water sources. • Detriment to the endemic fauna and flora of the area exposed to the impact. • Clogging and sedimentation. • Contamination during distribution (product containment losses). • Depletion of water resources. • Changes in water treatment processes (industrial waste). • Description of short and long-term mitigation strategies or plans, management objectives, best practices, and/or offsets: • Optimized industrial wastewater treatment processes.

Code	RR-BI-140a.3
Accounting Metric	Number of incidents of non-compliance associated with water quality permits, standards, and regulations
Unit of measure	Number

	2021
Accounting metric	(1)
Unit of measure	Number
Ecodiesel	-

BUSINESS MODEL AND INNOVATION

Lifecycle Emissions Balance

Code	RR-BI-410a.1
Accounting Metric	Lifecycle greenhouse gas (GHG) emissions, by biofuel type
Unit of measure	Grams of CO ₂ -e per megajoule (MJ)

	2021
Accounting metric	(1)
Unit of measure	2gCO₂ e/MJ
Ecodiesel	26,88 ¹

¹ Emissions from advanced biofuel produced calculated according to the ISO 14040 product life cycle assessment methodology throughout the supply chain.

Sourcing & Environmental Impacts of Feedstock Production

Code	RR-BI-430a.1
Accounting Metric	Discussion of strategy to manage risks associated with environmental impacts of feedstock production
Unit of measure	Discussion and analysis

	2021
Accounting metric	(1)
Ecodiesel	Information not available for 2021

Code	RR-BI-430a.2
Accounting Metric	Percentage of biofuel production third-party certified to an environmental sustainability standard
Unit of measure	Percentage (%) of gallons

	2021
Accounting metric	(1)
Unit of measure	%
Ecodiesel	61,82 ¹

¹ International Sustainability and Carbon Certification (ISCC) following the Renewable Energy Directive (RED)

LEADERSHIP AND GOVERNANCE

Management of the Legal & Regulatory Environment

Code	RR-BI-530a.1
Accounting Metric	Amount of subsidies received through government programs
Unit of measure	Reporting currency

	2021
Accounting metric	(1)
Unit of measure	Reporting currency
Ecodiesel	-

Code	RR-BI-530a.2
Accounting Metric	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry
Unit of measure	Discussion and analysis

	2021
Ecodiesel	<p>Regulatory risk - pricing:</p> <ul style="list-style-type: none"> Value added tax (VAT) on imports VAT exemption on biofuel (tax risk) Loss of tax benefits (Fuel Price Stabilization Fund) <p>Market risks:</p> <ul style="list-style-type: none"> Search for other renewable fuels can lead to lost market share <p>Opportunities:</p> <ul style="list-style-type: none"> Diversify into new markets (oleochemical, bio-fractions, phytosanitary) Export Biodiesel Cold Soak Filtration Test (CSFT) and moisture removal for higher quality biofuels; increase blend percentage New technologies <p>Strategies:</p> <ul style="list-style-type: none"> Optimize processes, improving quality and reducing costs Increase client base

Operational Safety, Emergency Preparedness & Response

Code	RR-BI-540a.1
Accounting Metric	(1) Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR)
Unit of measure	Number, rate

2021	Information not available for 2021.
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INFRASTRUCTURE

06 GAS DISTRIBUTORS

ACTIVITY METRICS

Code	IF-GU-000.A
Accounting Metric	Number of: (1) residential, (2) commercial, and (3) industrial customers served
Unit of measure	Number

Accounting Metric	2021			
	(1)	(2)	(3)	(4) ²
Unit of measure	Number	Number	Number	Number
Alcanos de Colombia S.A. E.S.P. (Alcanos)	945.922	11.490	220	509
Gases del Oriente S.A. E.S.P. (Gases de Oriente)	203.470	1.553	9	Not apply
Metrogas de Colombia S.A E.S.P. (Metrogas)	145.947	1.819	19	34
Combustibles Líquidos ¹ de Colombia S.A E.S.P. (CLC)	5.410	498	257	Not apply

¹ CLC reports data in \$COP/Kg. CLC customers are classified into: (1) cylinders; (2) bulk; (3) forklift

² Official customers

Code	IF-GU-000.B
Accounting Metric	Amount of natural gas delivered to: (1) residential customers, (2) commercial customers, (3) industrial customers, (4) transferred to a third party and (5) others
Unit of measure	Million British Thermal Units (MMBtu)

Accounting Metric	2021				
	(1)	(2)	(3)	(4)	(5)
Unit of measure	MMBtu	MMBtu	MMBtu	MMBtu	MMBtu
Alcanos	5.058.227	711.105	401.521	574.718 ²	38.605 ³
Gases de Oriente	1.245.351	110.020	330.825	-	Not apply
Metrogas	900.843,78	172.620,34	66.510,36	48.948,86 ²	12.026,11 ⁴
CLC ¹	17.902.425	4.560.848	918.698	-	Not apply

¹ CLC reports data in \$COP/Kg. CLC customers are classified into: (1) cylinders; (2) bulk; (3) forklift

² Vehicular natural gas (VNG)

³ Official customers

⁴ Other vendors



Code	IF-GU-000.C	
Accounting Metric	Length of gas (1) transmission and (2) distribution pipelines Kilometers(km)	
Unit of measure	Million British Thermal Units (MMBtu)	
2021		
Accounting Metric¹	(1)	(2)
Unit of Measure	Km	Km
Alcanos	-	14.521
Gases de Oriente	-	3.084
Metrogas	-	1.834,80
CLC ¹	Not apply	Not apply
Progasur ²	375	-

¹ CLC sells LPG cylinders. It does not have gas transmission or distribution pipelines.

² Progasur is a natural gas transport company whose commercial activity is the operation of gas pipelines.

SOCIAL CAPITAL

Energy Affordability

Code	IF-GU-240a.1				
Accounting Metric	Average retail gas rate for (1) residential, (2) commercial, (3) industrial customers, and (4) transportation services only (5) others				
Unit of measure	Reporting currency				
2021					
Accounting Metric	(1)	(2)	(3)	(4)	(5)
Unit of measure	COP \$	COP \$	COP \$	COP \$	COP \$
Alcanos	66.667,31	57.264,39	42.326,50	43.736,83	54.912,53 ²
Gases de Oriente	71.078	53.010	30.729	-	Not apply
Metrogas	52.140	42.284	40.549	-	Not apply
CLC ¹	3.369,02	3.133,31	3.363,65	Not apply	Not apply

¹ CLC reports data in \$COP/Kg. CLC customers are classified into: (1) cylinders; (2) bulk; (3) forklift

² Official customers

Code	IF-GU-240a.2	
Accounting Metric	Typical monthly gas bill for residential customers for (1) 50 MMBtu and (2) 100 MMBtu of gas delivered per year	
Unit of measure	Reporting currency	
2021		
Accounting Metric¹	(1)	(2)
Unit of measure	COP \$	COP \$
Alcanos	29.708	Not apply
Gases de Oriente	3.132	Not apply
Metrogas	26.101,60	Not apply
CLC ¹	Not apply	Not apply

¹ CLC does not have typical monthly billing because it sells LPG gas cylinders.

Code	IF-GU-240a.3		
Accounting Metric	(1) Number of residential customer gas disconnections for non-payment, (2) percentage reconnected within 30 days, (3) analysis of the effect of policies, programs, and regulations on the number and duration of residential customer outages.		
Unit of measure	Number, percentage (%) and discussion and analysis		

2021			
Accounting Metric	(1)	(2)	(3)
Unit of measure	Number	%	Discussion and analysis
Alcanos	13.917	73	Law 142 of 1994, specifically Articles 130, 140, 141 and 142, establishes the general guidelines for the disconnection, contract termination of and reconnection of public services. Additionally, its Article 39 establishes the requirements for contracts regarding the provision of public services for the distribution and/or sale of gas through network in the regulated market. <ul style="list-style-type: none"> Suspension of service (disconnection): The company may suspend the public service of gas distributed through network in the following cases, without thereby generating any liability: Suspension for breach of contract: The company may suspend the service for breach or violation of the contract by the SUBSCRIBER and/or USER, among others, in the following cases: "For non-payment of at least one (1) billing cycle, without exceeding two (2) billing cycles or any of the items charged in the invoice for services previously authorized by the SUBSCRIBER and/or USER, which are directly related to the service, unless there is a claim or appeal filed, in which case the suspension will proceed due to the non-payment of the amounts that are not included in the claim. There will be no suspension of service for any debts the SUBSCRIBER and/or USER has with third parties other than THE COMPANY". Payment plans: The company has payment plans that allow the user to avoid service suspension or, in the event that have already been disconnected, reconnect them without the user having to pay the full amount past due. These policies are recorded and the information dully stored
Gases de Oriente	2.682	77	<ul style="list-style-type: none"> The service disconnection policy is executed after one (1) month's payment is past due, which complies with Law 142 of 1994. The Past-Due Accounts Policy allows users with financial difficulties to reach a payment plan and avoid the suspension of their service. The service will be reconnected once the pays the full amount due, and they must be then reconnected within the following 24 hours.

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2021			
Accounting Metric	(1)	(2)	(3)
Unit of measure	Number	%	Discussion and analysis
Metrogas	1.085	93	<p>According to the Payment Policy, in order for service to be reconnected or to avoid suspension, the user must pay at least 50% of the outstanding invoice in the case of residential use, or 60% in the case of commercial and industrial use. When there are more than five (5) past due invoices, the client must pay the full amount or reach a payment plan with the company. Metrogas also has the Uniform Conditions Contract, which indicates in Chapter IX, Suspensions and Reconnections, the conditions and causes for suspending and restoring services.</p> <p>The Payment Policy complies with the provisions of Law 142 of 1994 on Residential Public Services.</p>
CLC			Not apply

Code	IF-GU-240a.4
Accounting Metric	Discussion of impact of external factors on customer affordability of gas, including the economic conditions of the service territory
Unit of measure	Discussion and analysis

2021	
Alcanos	<p>Among the external factors that may generate rate increases are: lengthy and intense national strikes, with a frequency of three (3) strikes per year lasting between one (1) and two (2) months; the effects on the road infrastructure, which are directly related to the transport of compressed natural gas (CNG), caused by winter weather, with a frequency of between one (1) and two (2) times per year lasting approximately three (3) months; interruptions in the National Natural Gas Transport System may also affect rates, which to date have only occurred due to preventive maintenance with a frequency of one (1) interruption per year lasting five (5) days. Another factor is the effects of macroeconomic variables such as adverse fluctuations in the official market exchange market rate (TRM for its Spanish acronym), the Producer Price Index (PPI) and the Consumer Price Index (CPI). Finally, there may be changes in the supply sources due to the productivity decline of wells and that might result in the need to import gas.</p> <p>Regarding the inability of users to pay their bills, there are influential factors such as the pandemic and the resulting economic crisis, which have slowed down the economic reactivation of all sectors, including the commercial sector and that for vehicular natural gas (VNG). The tax reform creates recovery risks for the product portfolio, which at the peak of the pandemic in 2020 reached 17.3%, which year-to-date 2021 has recovered to 8.6%.</p>
Gases de Oriente	<p>In the major area of influence, wherein about 70% of the users connected to the Gases del Oriente S.A. E.S.P. Distribution System are located, namely Cúcuta and its metropolitan area, the greatest impacts are seen in:</p> <p>In the major area of influence, wherein about 70% of the users connected to the Gases del Oriente S.A. E.S.P. Distribution System are located, namely Cúcuta and its metropolitan area, the greatest impacts are seen in:</p>

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2021	
Metrogas	<ul style="list-style-type: none"> • Disconnection to the national transport system or alternative supply sources that provide stability to the operation in order to provide uninterrupted service delivery to regulated users. • Informal employment is the main economic activity in the area. • The area has high unemployment levels, ranking Cúcuta among the highest on the unemployment scale nationwide. • The low number of manufacturing companies that generate high employment in the region. • Expansion zones are limited by the existence of illegal neighborhoods or sectors to which the service cannot be supplied. <p>However, there are growth opportunities in new housing construction projects in the region resulting from the economic reactivation of the construction sector and stimulated by the National Government through Projector Social Interest Housing (VIS for its Spanish acronym) and non-VIS subsidies.</p> <p>Additionally, agreements can be reached with official entities such as the Fondo Especial Cuota de Fomento para Gas Natural national endowment fund for natural gas to encourage connection to the service of potential users in the lower socio-economic levels in the municipalities serviced and in the rural areas of the markets of influence.</p>
CLC ¹	Not apply

¹ Not applicable since CLC's business is the distribution & sale of LPG gas in cylinders.

BUSINESS MODEL AND INNOVATION

End-Use Efficiency

Code	IF-GU-420a.1
Accounting Metric	Percentage of gas utility revenues from rate structures that (1) are decoupled or (2) contain a lost revenue adjustment mechanism (LRAM)
Unit of measure	Percentage (%)

	2021	
	(1)	(2)
Accounting Metric¹	(1)	(2)
Unit of measure	%	%
Alcanos	Not apply	Not apply
Gases de Oriente	Not apply	Not apply
Metrogas	Not apply	Not apply
CLC	Not apply	Not apply

¹ Not applicable since Colombia does not have decoupled rate structures or lost revenue adjustment mechanism (LRAM) for gas services.

Code	IF-GU-420a.2
Accounting Metric	Customer gas savings from efficiency measures by market
Unit of measure	Million British Thermal Units (MMBtu)

	2021
	(1)
Accounting Metric¹	(1)
Unit of measure	MMBtu
Alcanos	-
Gases de Oriente	-
Metrogas	-
CLC	-

¹ The gas distribution companies do not have specific incentives to encourage customer gas savings and efficiency measures.

LEADERSHIP AND GOVERNANCE

Integrity of Gas Delivery Infrastructure

Code	IF-GU-540a.1
Accounting Metric	Number of (1) reportable pipeline incidents, (2) Corrective Action Orders (CAO), and (3) Notices of Probable Violation (NOPV)
Unit of measure	Number

	2021		
	(1)	(2)	(3)
Accounting Metric	(1)	(2)	(3)
Unit of Measure	Number	Number	Number
Alcanos	-	-	-
Gases de Oriente	-	-	-
Metrogas	-	-	-
CLC ¹	Not apply	Not apply	Not apply

¹ Not applicable since CLC's infrastructure does not include gas pipelines.

Code	IF-GU-540a.2
Accounting Metric	Percentage of distribution pipeline that is (1) cast and/or wrought iron and (2) unprotected steel
Unit of measure	Percentage (%) by length

	2021	
	(1)	(2)
Accounting Metric	(1)	(2)
Unit of measure	% by length	% by length
Alcanos	100	-
Gases de Oriente ¹	-	-
Metrogas	100	-
CLC ²	Not apply	Not apply

¹ All steel pipes in the Gases del Oriente distribution system are coated with coal tar enamel in some sections, regular or dual-layer fusion bonded epoxy (FBE) in others, and, additionally, the system has an impressed current cathodic protection (ICCP) system. Gases de Oriente does not have wrought or cast iron or unprotected steel piping.

² CLC does not have a distribution pipeline network.

Code	IF-GU-540a.3
Accounting Metric	Percentage of gas (1) transmission and (2) distribution pipelines inspected
Unit of measure	Percentage (%) by length

	2021	
	(1)	(2)
Accounting Metric¹	(1)	(2)
Unit of measure	% by length	% by length
Alcanos	Not apply	70
Gases de Oriente	Not apply	100
Metrogas	Not apply	28
CLC	Not apply	Not apply
Progasur ²	100	Not apply

¹ This metric does not apply where noted because the respective companies do not have this sort of transmission pipeline.

² Progasur's activity is related to the transport of gas from the production fields to the distribution systems and therefore does not reports certain IF-GU metrics.

Code	IF-GU-540a.4	2021
Accounting Metric	Description of efforts to manage the integrity of gas delivery infrastructure, including risks related to safety and emissions	To control deliberate emissions, controlled flaring is carried out at the venting points. In sites with higher levels of risk, the location of the pipe and other facilities is identified with signage that includes the emergency line contact number and the name of the company.
Unit of measure	Discussion and analysis	There is an existing O&M program focused on preserving the integrity of the assets, which has an approved budget with all stakeholder parties.
2021		
Alcanos	<p>Alcanos de Colombia has a preventive and corrective maintenance program to maintain the integrity of its gas delivery network and performs recurrence activities to detect and correct infrastructure failures.</p> <p>The Company has an Occupational Health and Safety (OHS) Management System, an HSEQ team with nationwide coverage, an environmental management program, a risk management plan, and a Risk Committee to immediately address any emergency.</p> <p>A preventive approach to safeguarding the various assets, updates and deliverables includes:</p> <p>The Company has identified the location of its assets which are connected through an operations center. Additionally, it has designed emergency and contingency plans for any operational contingency that affects its assets. Likewise, it has an emergency plan in place with an emergency brigade. The occupational health and safety management plan includes job profiles, medical exams, training plans, epidemiological surveillance systems and hygiene assessments.</p> <p>All emergency contact lines are directed to the operations center (CDO for its Spanish acronym) that provides 24/7 attention. It also has emergency response crews equipped with vehicles and equipment for emergency care. Additionally, staff is trained in emergency care and all new developments are addressed in less than one (1) hour.</p> <p>All emergency contact lines are directed to the operations center (CDO for its Spanish acronym) that provides 24/7 attention. It also has emergency response crews equipped with vehicles and equipment for emergency care. Additionally, staff is trained in emergency care and all new developments are addressed in less than one (1) hour.</p>	<p>Metrogas</p> <p>Asset integrity management of the gas pipelines consists of the execution of Close-interval Potential Surveys (CIPS), Pipeline Current Mapper (PCM), corrosion coupons, internal cleaning and monitoring studies. A culture of safety and readiness in case of an emergency is applied through communication with risk organizations, planimetry, and a contingency plan for emergencies.</p> <p>Personnel is trained on the integrity of gas pipelines and on different techniques for maintaining asset security. In order to mitigate emergencies and encourage readiness should they happen, there is a relationship with the various public service companies (water/aqueduct, electricity and media/communication networks) as well as with third-party companies that provide information on the location and integrity of the assets. To manage health and human safety risks, safety drills are carried out every year involving the community and risk management agencies.</p> <p>There are emergency service helplines and a call center that address any emergency that may arise 24 hours a day, with timely attention provided within the established time frames. Regarding the direct or indirect financial outlays related to managing the integrity of the gas supply infrastructure, predictive maintenance studies are carried out, the necessary corrective measures are taken in order to mitigate the possible damages caused to the infrastructure and the integrity of networks in order to increase the useful life of the asset.</p> <p>CLC</p> <ul style="list-style-type: none"> • A certified supplier carries out a yearly partial review of the transfer piping and all its components in compliance with Resolution 40247 of 2016 of the Ministry of Mines and Energy (IMM&E for its Spanish acronym) and the Colombian Technical Standard NTC 3853-1. • The workers are qualified under the NSCL 280202083 V1 ISO labor competencies sector norms, and the LPG transfer systems are operated according to regulations and NSCL 280202097 V1. • There are risk and disaster management plans, and the plants are equipped with safety systems to identify leaks and temperature sensors. • A COPASST Committee (Joint Committee on Occupational Health and Safety Management) has been created as a mechanism to oversee and communicate security issues. • The company has classified its high-risk activities, which are carried out by certified contractors and are documented and have protocols required for each activity. • The emergency brigades receive ongoing training, with monthly inspections and drills carried out. There are risk and disaster management plans that include the Normalization Operational Plans (PON). In addition, there are maintenance programs and a fire prevention network (RCI) at key points. • The Occupational Health and Safety Management System is managed under Decree 1072, with the updating of the hazard and risk matrices for each plant. • There is a national emergency helpline. • The LPG Safety Data Sheet is disclosed and made available to all workers. • There are Risk and Disaster Management Plans with the support of the occupational health insurance agencies (ARL for its Spanish acronym) regarding the activities of the Security and Emergency Management System. • The Maintenance Program for the transfer and packaging systems is executed and certifications are updated according to technical regulations 40246 and 40247 of the MM&E, for the packaging plants. • The company is involved in trade associations and guilds focused towards improving the safety of the hydrocarbon sector (Colombian Safety Council).
Gases de Oriente	<p>To manage the integrity of the gas supply infrastructure, Gases de Oriente implements the following measures:</p> <ul style="list-style-type: none"> • Ongoing training for the Head of Operation and Maintenance (O&M) and its operational staff through the national training service (SENA for its Spanish acronym) and training provided by suppliers. • Participation in the Sustainable Gas task force that includes all the national distribution companies in order to share best practices in the execution of O&M processes. Active involvement in the process safety task force led by Ecopetrol and with the participation of the group of IGC technology heads. • Implementation of network monitoring activities, indirect integrity evaluations. • Training of emergency brigade by firefighters; practice drills of fuel gas leakage scenarios; annual earthquake drill. • Certification and recertification of operators, including CNG operators, in gas technology, labor competencies in internal installations, and thermal fusion for polyethylene pipes. <p>Additionally, patrol activities are carried out on the whole network to inspect the right of way as well as network monitoring to locate and repair leaks, training is provided with public utility companies to prevent and mitigate network interventions, and with security agencies on safety and security issues.</p>	

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INFRASTRUCTURE

07 ELECTRIC COMPANIES

ACTIVITY METRICS

Code	IF-EU-000.A
Accounting Metric	Number of: (1) residential, (2) commercial, and (3) industrial customers served
Unit of measure	Number

2021

This metric does not apply to the companies reporting in this subsector, since their operations are in the transmission segment of the value chain and they do not have generation or distribution activities.

Code	IF-EU-000.B
Accounting Metric	Total electricity delivered to: (1) residential, (2) commercial, (3) industrial, (4) all other retail customers, and (5) wholesale customers
Unit of measure	Megawatt hours (MWh)

2021

This metric does not apply to the companies reporting in this subsector, since their operations are in the transmission segment of the value chain and they do not have generation or distribution activities.

Code	IF-EU-000.C
Accounting Metric	Length of transmission and distribution lines
Unit of measure	Kilometers (km)

2021

Accounting metric	(1)
Unit of measure¹	Km
INTERCONEXIÓN ELECTRICA S.A. E.S.P (ISA)	-
ISA CTEEP	20.704
ISA REP	11.836
ISA INTERCOLOMBIA	11.640
ISA INTERCHILE	5.850
ISA TRANSELCA	1.588

¹ Unlike its subsidiary companies, ISA does not operate any infrastructure, therefore this metric it only applies to the operations of its transmission subsidiaries.

isa
CONEXIONES QUE INSPIRAN

isa
TRANSELCA

isa
REP

isa
INTERCOLOMBIA

isa
INTERCHILE

isa
CTEEP



Code	IF-EU-000.D
Accounting Metric	Total electricity generated, percentage by major energy source, percentage in regulated markets
Unit of measure	Megawatt hours (MWh), percentage [%]

2021

This metric does not apply to the companies reporting in this subsector, since their operations are in the transmission segment of the value chain and they do not have generation or distribution activities.

Code	IF-EU-000.E
Accounting Metric	Total wholesale electricity purchased
Unit of measure	Megawatt hours (MWh)

2021

This metric does not apply to the companies reporting in this subsector, since their operations are in the transmission segment of the value chain and they do not have generation or distribution activities.

ENVIRONMENT**Greenhouse Gas Emissions & Energy Resource Planning**

Code	IF-EU-110a.1
Accounting Metric	{1} Gross global Scope 1 emissions, percentage covered under {2} emissions-limiting regulations, and {3} emissions-reporting regulations
Unit of measure	Metric tons (tonCO ₂ e), percentage [%]

Accounting Metric	2020		
	(1)¹	(2)²	(3)
Unit of measure	tonCO₂e	%	%
ISA	Not apply	Not apply	Not apply
ISA CTEEP	21.903	Not apply	Not apply
ISA REP	3.198	Not apply	Not apply
ISA Intercolombia	2.548	Not apply	Not apply
ISA Interchile	916	Not apply	Not apply
ISA Transelca	1.992	Not apply	Not apply

¹ At the reporting date, the real figures for November and December were not available, and therefore a linear projection was made for these last two months.

² There is no regulation in Brazil and Colombia limiting GHG emissions for the electric power transmission business. In Chile, after the updated tax reform (Law 21,210 of 2020), there is a threshold of affectation coming into force as of 2023, hence it does not apply to this report.

Code	IF-EU-110a.2
Accounting Metric	Greenhouse gas (GHG) emissions associated with power deliveries
Unit of measure	Metric tons (tonCO ₂ e)

2021

This metric does not apply to the companies reporting in this subsector, since their operations are in the transmission segment of the value chain and they do not have generation or distribution activities.

Code	IF-EU-110a.3
Accounting Metric	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets
Unit of measure	Discussion and analysis

2021

ISA
ISA Intercolombia

The Ecopetrol Group committed to reaching net-zero emissions by 2050 (Scopes 1 and 2), and to reduce CO₂ emissions 25% by 2030 versus 2019 (Scopes 1 and 2), as well as to reduce 50% of total emissions by 2050 (Scopes 1, 2 and 3). To achieve this, Ecopetrol and each of its subsidiaries have defined actions to reduce GHG emissions.

The objective of ISA's 2030 Strategy is to reduce emissions by 11 million tons before 2030 with a climate strategy that includes multiparty actions between the Nation-society-company-academia-NGOs based on the measurement, reduction, and offsetting of GHG emitted by operations. In 2017, the "Jaguar Connection" sustainability program was created that is expected to contribute towards reducing nine (9) million tons of CO₂e by 2030 through forest conservation.

Concerning the energy transition, through new energy businesses such as distribution network operations, storage, and connections to renewable energies, among others, it seeks to contribute to the reduction of 1.9 million tons of CO₂ from the energy matrices of the countries where the company operates. Likewise, there is an impact reduction program whose global objective is to reduce CO₂e by 102,500 tons by reducing the water and energy consumption, waste generation, sulfur hexafluoride gas (SF₆) leaks, and promoting sustainable mobility programs.

Scope 1 of the GHG inventory of ISA and its companies comprises 80% generated by fugitive SF₆ emissions; therefore, ISA companies will continue to meet the international standard (0.5% of leaks over the total installed inventory) although a goal has been established of an additional 15% reduction beyond the standard by 2030 for all energy transport companies.

ISA CTEEP

Grupo ISA's strategic objective: reduce CO₂ emissions by 11 million tons by 2030. ISA CTEEP's contribution to the emissions reduction strategic objective: regarding its own impacts, reduce CO₂e by 2,800,000 tons by 2030 through the Jaguar Connection Program, new energy businesses, and eco-efficiency actions. Emission reduction target for 2021: reduce SF₆ leaks by 72.37 kg in 2021, which is equal to a reduction target of 1,700.69 tons of CO₂e versus the previous year.

Short-term strategy: mapping, quantifying, monitoring, and reducing Scope 1 GHG emissions, especially of SF₆ gas used in subsidiary companies. Long-term strategy: employ best practices in operation and maintenances, new technologies, processes innovations in compliance with the IEC 62271-203 standard, and implement eco-efficient practices.

Actions to fulfill the objectives:

Primary eco-efficient actions implemented:

- Preventive actions to eliminate possible SF₆ leaks in the medium and long term.
- Reduced risks of leaks through maintenance for the decontamination of SF₆ gas via equipment that does not require removing the gas during the process.
- During the next few years, updating the GIS and AIS equipment using SF₆ gas following the Comprehensive Asset Renewal Plan (PIRA for its Spanish acronym).
- Developed an application to assist in the management of SF₆ gas emissions recordkeeping that can standardize and evaluate the data recorded in the monitoring system.
- Implemented a process to contain SF₆ leaks.
- Acquired a thermographic camera that accurately detects gas leaks, reducing the response time for interventions.
- Implemented a pilot project to replace internal combustion vehicles in the managerial fleet with electric vehicles.
- Implemented pilot projects to install solar panels in substations.

Continúa en la página siguiente

2021

ISA REP	<p>Grupo ISA's strategic objective: reduce CO₂ emissions by 11 million tons by 2030. ISA REP's contribution to the emissions reduction strategic objective: regarding its own impacts, reduce CO₂e by 2,200,000 tons by 2030 through the Jaguar Connection Program, new energy businesses, and eco-efficiency actions.</p> <p>Short-term strategy: real-time measurement systems for SF₆ leaks in facilities that are over 20 years old, prioritizing GIS cells.</p> <p>Long-term strategy: projects to change lighting systems to LED systems in 100% of the facilities, change septic tank systems to biodigesters, and connect to municipal networks.</p> <p>Actions to fulfill the objectives:</p> <ul style="list-style-type: none"> SF₆ Leakage Management Program at older facilities. Digitize carbon footprint information through Robotic Process Automation (RPA). Verify the carbon footprint of ISA CTM and ISAP for the years through 2023. Continue implementing good eco-efficiency practices that have been applied to date.
ISA Interchile	<p>Grupo ISA's strategic objective: reduce CO₂ emissions by 11 million tons by 2030. ISA Interchile's contribution to the emissions reduction strategic objective: regarding its own impacts, reduce CO₂e by 1,200,000 tons by 2030 through the Jaguar Connection Program, new energy businesses, and eco-efficiency actions.</p> <p>Short-term strategy: quantify emissions: 1) standardize and digitize data of the environmental variables used to quantify emissions. Define empirical records, responsible parties, and record storage; 2) verify reported data; and 3) data quality improvement strategy for the most significant data.</p> <p>Long-term strategy: energy efficiency and eco-efficiency actions.</p> <p>Actions to fulfill the objectives:</p> <p>1) Establish an activity data monitoring system; 2) approaches to update emission factors; 3) submit the system for reporting and verification (internal or external - HuellaChile); 4) inspection of main emission sources; 5) technology renewal plan; and, 6) operational management plan for fuel and energy consumption.</p>
ISA Transelca	<p>Grupo ISA's strategic objective: reduce CO₂ emissions by 11 million tons by 2030. ISA Transelca's contribution to the emissions reduction strategic objective: regarding its own impacts, reduce CO₂e by 500,000 tons by 2030 through the Jaguar Connection Program, new energy businesses, and eco-efficiency actions</p> <p>Short-term strategy: quantify emissions and improve the emissions monitoring system.</p> <p>Long-term strategy: energy efficiency and eco-efficiency actions</p> <p>Actions to fulfill the objectives:</p> <ul style="list-style-type: none"> Update and certify the GHG emissions inventory. Optimize energy and water consumption through saving plans, and the installation of a photovoltaic system and a rainwater collection system (pilot) at the NBC substation. Continue implementing best practices developed to date.

Code	IF-EU-110a.4
Accounting Metric	{1} Number of customers served in markets subject to renewable portfolio standards (RPS) and {2} percentage fulfillment of RPS target by market
Unit of measure	Number, percentage (%)

2021

This metric does not apply to the companies reporting in this subsector, since their operations are in the transmission segment of the value chain and they do not have generation or distribution activities.

Air Quality

Code	IF-EU-120a.1				
Accounting Metric	Air emissions of the following pollutants: (1) NO _x (excluding N ₂ O), (2) SO _x , (3) particulate matter (PM ₁₀), (4) lead (Pb), and (5) mercury (Hg); percentage of each in or near areas of dense population				
Unit of measure	Metric tons (ton), percentage (%)				
	2021				
Accounting Metric ¹	(1)	(2)	(3)	(4)	(5)
Unit of measure	ton NO _x	ton SO _x	ton PM ₁₀	ton Pb	ton Hg
ISA ²	Not apply	Not apply	Not apply	Not apply	Not apply
ISA CTEEP	18,23	1,37	0,55	Not available in 2021	Not available in 2021
ISA REP	2,54	0,19	0,08	Not apply ³	Not apply ³
ISA Intercolombia	0,91	0,07	0,03	Not apply ⁴	Not apply ⁴
ISA Interchile	0,25	0,0046	0,00018	0,0000000081	0,0000000022
ISA Transelca	0,45	0,03	0,05	Not apply ⁴	Not apply ⁴

¹ The methodology used is referenced in the ISA GHG NO_x SO_x and PM₁₀ inventory, calculated as: Calorific value x fuel density x fuel quantity x the EPA emission factor.
² Since ISA does not have its own vehicles, the power plant located at its headquarters is under the operational control of ISA Intercolombia.
³ The fuel quality in Peru results in very low Pb and Hg emissions, and thus they are not calculated.
⁴ No Lead (Pb) or Mercury (Hg) is generated because the fuel marketed in Colombia and reported in the GHG inventory is Diesel B10 wherein no compounds with said elements are reported in its specs documentation; consequently, no Pb and Hg emissions are produced in the combustion process.

Water Management

Code	IF-EU-140a.1
Accounting Metric	{1} Total water withdrawn, {2} total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress
Code	IF-EU-140a.2
Accounting Metric	Number of incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations
Code	IF-EU-140a.3
Accounting Metric	Description of water management risks and discussion of strategies and practices to mitigate those risks

2021

These metrics are not reported because they have no material significance in the energy transmission business (See "materiality" in ISA's Integrated Management Report).

Coal Ash Management

Code	IF-EU-150a.1
Accounting Metric	Amount of coal combustion residuals (CCR) generated, percentage recycled
Code	IF-EU-150a.2
Accounting Metric	Total number of coal combustion residual (CCR) impoundments, broken down by hazard potential classification and structural integrity assessment

2021

These metrics do not apply to the companies reporting in this subsector, since their operations are in the transmission segment of the value chain and they do not have generation or distribution activities.

SOCIAL CAPITAL**Energy Affordability**

Code	IF-EU-240a.1
Accounting Metric	Average retail electric rate for (1) residential, (2) commercial, and (3) industrial customers
Code	IF-EU-240a.2
Accounting Metric	Typical monthly electric bill for residential customers for (1) 500 kWh and (2) 1,000 kWh of electricity delivered per month
Code	IF-EU-240a.3
Accounting Metric	Number of residential customer electric disconnections for non-payment, percentage reconnected within 30 days
Code	IF-EU-240a.4
Accounting Metric	Discussion of impact of external factors on customer affordability of electricity, including the economic conditions of the service territory

2021

These metrics do not apply to the companies reporting in this subsector, since their operations are in the transmission segment of the value chain and they do not have generation or distribution activities.

HUMAN CAPITAL**Workforce Health & Safety**

Code	IF-EU-320a.1
Accounting Metric	Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR)
Unit of measure	Rate

Accounting metric¹	2021		
	(1)²	(2)	(3)³
Unit of measure	Rate	Rate	Rate
ISA	-	-	-
ISA CTEEP	0,78	0,09	1,81
ISA REP	1,26	-	1,23
ISA Intercolombia	3,76	-	0,04
ISA Interchile	2,55	-	Not available in 2021
ISA Transelca	3,43	-	0,57

In addition to preventive actions undertaken to avoid accident recurrence, ISA and its companies are working on standardizing the scope and measurement methodologies of the occupational health and safety-related statistics.
² TRIR is measured in electric power companies by measuring recordable incidents (fatalities, accidents with lost work time, medical treatment cases, and restricted work cases).
³ The reporting companies of this subsector will endeavor to obtain the information not available for this report, in order to report it in the next period.

BUSINESS MODEL AND INNOVATION**End-Use Efficiency & Demand**

Code	IF-EU-420a.1
Accounting Metric	Percentage of electric utility revenues from rate structures that (1) are decoupled and (2) contain a lost revenue adjustment mechanism (LRAM)
Unit of measure	Percentage (%)

2021

This metric does not apply to the companies reporting in this subsector since the rate is set by the National Government.

Code	IF-EU-420a.2
Accounting Metric	Percentage of electric load served by smart grid technology
Code	IF-EU-420a.3
Accounting Metric	Customer electricity savings from efficiency measures, by market

2021

These metrics do not apply to the companies reporting in this subsector, since their operations are in the transmission segment of the value chain and they do not have generation or distribution activities.

LEADERSHIP AND GOVERNANCE

Nuclear Safety & Emergency Management

Code	IF-EU-540a.1
Accounting Metric	Total number of nuclear power units, broken down by U.S. Nuclear Regulatory Commission (NRC) Action Matrix Column
Code	IF-EU-540a.2
Accounting Metric	Description of efforts to manage nuclear safety and emergency preparedness

2021

These metrics do not apply to the companies reporting in this subsector, since their operations are in the transmission segment of the value chain and they do not have generation or distribution activities.

Grid Resiliency

Code	IF-EU-550a.1
Accounting Metric	Number of incidents of non-compliance with physical and/or cybersecurity standards or regulations
Unit of measure	Number

	2021
Accounting Metric	(1)
Unit of measure	Number
ISA	-
ISA CTEEP	-
ISA REP	-
ISA Intercolombia	-
ISA Interchile	-
ISA Transelca	-

Code	IF-EU-550a.2
Accounting Metric	(1) System Average Interruption Duration Index (SAIDI), (2) System Average Interruption Frequency Index (SAIFI), and (3) Customer Average Interruption Duration Index (CAIDI), inclusive of major event days
Unit of measure	Minutes, Number

2021

These metrics do not apply to the companies reporting in this subsector, since their operations are in the transmission segment of the value chain and they do not have generation or distribution activities.¹

¹ Trunk transmission systems are not representative for reporting interruptions caused to users. Said situations predominantly occur in distribution systems, a segment wherein ISA does not operate. Since ISA has no users, SAIDI, SAIFI, and CAIDI instances do not apply to this transmission system. Consequently, it is not common to record metrics for System Average Interruption Duration Index (SAIDI) or System Average Interruption Frequency Index (SAIFI) for transmission systems as it is done for distribution systems under standards such as IEEE 1366 of 2012- IEEE Guide for Electric Power Distribution Reliability Indices, meant for distribution systems.

INFRASTRUCTURE

08 ENGINEERING & CONSTRUCTION SERVICES

ACTIVITY METRICS

Code	IF-EN-000.A
Accounting Metric	Number of active projects
Unit of measure	Number

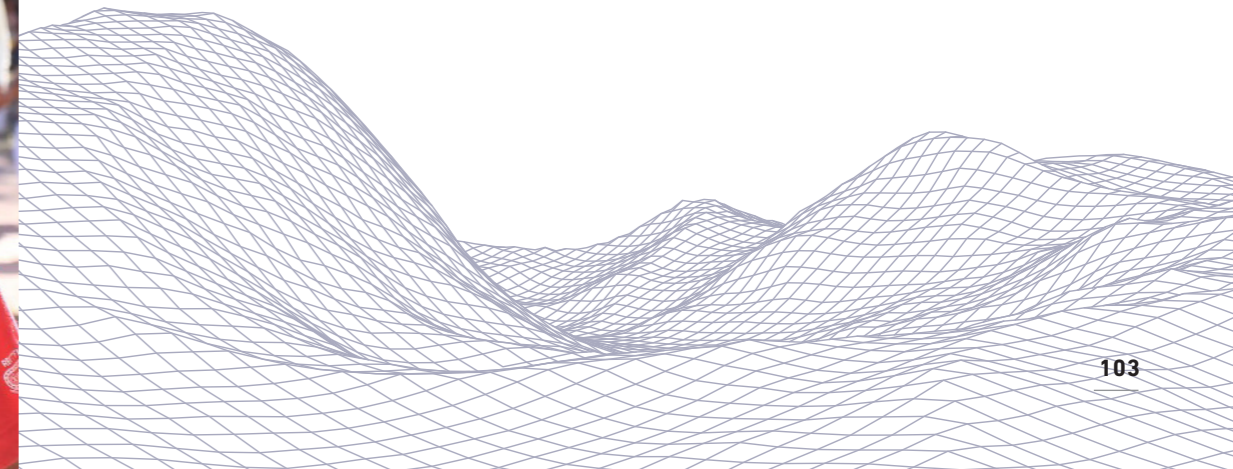
	2021
Accounting Metric	(1)
Unit of measure	Number of active projects
ISA Interval	11

Code	IF-EN-000.B
Accounting Metric	Number of commissioned projects
Unit of measure	Number

	2021
Accounting Metric	(1)
Unit of measure	Number of active projects
ISA Interval	4

Code	IF-EN-000.C
Accounting Metric	Total revenue contractually expected
Unit of measure	Reporting currency

	2021
Accounting Metric	(1)
Unit of measure	COP \$
ISA Interval	\$918.913,14 millones



ENVIRONMENT

Environmental Impacts of Project Development

Code	IF-EN-160a.1
Accounting Metric	Number of incidents of non-compliance with environmental permits, standards, and regulations
Unit of measure	Number

	2021
Accounting Metric	(1)
Unit of measure	Number of incidents of non-compliance
ISA Interval	1 ¹

¹ A non-compliance was identified in the external audit process concerning substandard storage and waste management. Immediate corrective actions, source analysis, and an action plan were implemented. The deviation was corrected and verified by the auditor who provided a favorable opinion thereof.

Code	IF-EN-160a.2
Accounting Metric	Discussion of processes to assess and manage environmental risks associated with project design, siting, and construction
Unit of measure	Discussion and analysis

	2021
ISA Interval	<p>ISA Interval ensures all processes and operations are aligned with the pursuit of sustainable development, complying with ISA's commitments and guidelines and the applicable regulations in this matter.</p> <ul style="list-style-type: none"> • Among the areas considered when evaluating projects are: • Possibility to include it within the Environmental Impact Assessment System • Sectoral environmental permits, such as riverbed modifications • Associated costs and timelines of the environmental assessment • Preparation of the relevant consults • Establish a project baseline, both at the environmental and territorial levels • Current regulatory analysis <p>Through risk management models, wherein environmental risks and climate change elements are analyzed and evaluated, associated risks are introduced during the tender process and are maintained while the project is under construction.</p> <p>All roadways, including corporate buildings, comply with the ISO 14001 standard, obtaining the applicable certifications after the audits have been carried out.</p> <p>All legal environmental responsibilities are included in a compliance matrix that follows the ISO 14001 standard.</p>

SOCIAL CAPITAL

Structural Integrity & Safety

Code	IF-EN-250a.1
Accounting Metric	Amount of defect- and safety-related rework costs
Unit of measure	Reporting currency

	2021
Accounting Metric	(1)
Unit of measure	COP \$
ISA Interval	-

Code	IF-EN-250a.2
Accounting Metric	Total amount of monetary losses as a result of legal proceedings associated with defect- and safety-related incidents
Unit of measure	Reporting currency

	2021
Accounting Metric	(1)
Unit of measure	COP \$
ISA Interval	-

HUMAN CAPITAL

Workforce Health & Safety

Code	IF-EN-320a.1
Accounting Metric	(1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees
Unit of measure	Rate

	2020	
Accounting metric	(1)	(2)
Unit of measure	Rate	Rate
ISA Interval	(a) 0,82 (b) 0,99	(a) - (b) -

BUSINESS AND MODEL INNOVATION

Lifecycle Impacts of Buildings & Infrastructure

Code	IF-EN-410a.1	
Accounting Metric	Number of (1) commissioned projects certified to a third-party multi-attribute sustainability standard and (2) active projects seeking such certification	
Unit of measure	Number	
2021		
Accounting Metric	(1)	(2)
Unit of measure	Number of projects	Number of projects
ISA Interval	-	-

Code	IF-EN-410a.2	
Accounting Metric	Discussion of process to incorporate operational-phase energy and water efficiency considerations into project planning and design	
Unit of measure	Discussion y analysis	

2021		
Accounting Metric	(1)	
ISA Interval	<p>In the project design phase, the new business area is devoted to studying the bids with the information provided by the Ministry of Public Works of Chile, which determines and includes the engineering the company must apply and over which the company has no decisive power. Additionally, any project awarded must be reviewed by the Environmental Impact Evaluation System (SEIA for its Spanish acronym) to determine if an Environmental Qualification Resolution (RCA) is required, which may indicate responsibilities for monitoring neighboring water and fauna. Regarding energy efficiency, the bids include recommendations on the use of clean energy.</p> <p>In the operational phase, campaigns to encourage the conscious use of water resources are implemented. Concerning energy efficiency, currently, there are pilot projects that aim to generate clean energy using the kinetic energy of vehicles (Vehicle Energy Generation) and through the reuse of old solar panels as sound insulators by generating solar energy with the correct connectivity and equipment; both projects seeking to provide power to the same route and thus reduce consumption from the network.</p>	

Climate Impacts of Business Mix

Code	IF-EN-410b.1	
Accounting Metric	Amount of backlog for (1) hydrocarbonrelated projects and (2) renewable energy projects	
Unit of measure	energy projects	
Code	IF-EN-410b.2	
Accounting Metric	Amount of backlog cancellations associated with hydrocarbon-related projects	
Unit of measure	projects	
Code	IF-EN-410b.3	
Accounting Metric	Amount of backlog for non-energy projects associated with climate change mitigation	
Unit of measure	projects	

2021

These metrics do not apply to reporting companies in this subsector.

LEADERSHIP AND GOVERNANCE

Business Ethics

Code	IF-EN-510a.1	
Accounting Metric	(1) Number of active projects and (2) backlog in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	
Unit of measure	Number, reporting currency	
2021		
Accounting Metric	(1)	(2)
Unit of measure	Number of projects	COP \$
ISA Interval	-	-

Code	IF-EN-510a.2	
Accounting Metric	Total amount of monetary losses as a result of legal proceedings associated with charges of (1) bribery or corruption and (2) anticompetitive practices	
Unit of measure	Reporting currency	

2021		
Accounting Metric	(1)	(2)
Unit of measure	COP \$	COP \$
ISA Interval	-	-

Code	IF-EN-510a.3	
Accounting Metric	Description of policies and practices for prevention of (1) bribery and corruption, and (2) anti-competitive behavior in the project bidding processes	
Unit of measure	Discussion and analysis	

2021		
ISA Interval	<p>The Company has established ethics as its central axis and has therefore established the Corporate Integrity & Ethics Model - Law 20,393 - Compliance to manage risks concerning any bribery, corruption, and anti-competitive behavior instances, among others, encouraging the ethical behavior of its administrators, workers, and stakeholders as a principal administrative measure.</p> <p>ISA's Anti-Corruption and Anti-Bribery Management Guidelines, and the appendices which specifically apply to ISA Interval, include the ethics criteria administrators and workers must follow for handling:</p> <ul style="list-style-type: none"> Conflicts of interest, sponsorships, invitation and participation in events, gifts and hospitality, social contributions and donations, improper payments to expedite transactions, government relations, and anti-corruption due diligence regarding suppliers and new businesses. <p>Continuous diagnostic monitoring to ensure compliance due diligence has been developed and implemented, which allows identifying and managing local and international compliance risks by monitoring third parties in more than 1,500 sanction lists and negative news and linking it with information from SAP, purchase orders, contracts and sanction lists issued by the Government of Chile. The above allows the Corporate Integrity & Ethics Committee to make informed decisions.</p> <p>Training was provided to ISA Interval's Sustainability teams in social contributions and donations, gifts and hospitalities, to increase employee awareness of the obligations, prohibitions and sanctions concerning Law 20,393 and the clauses included in their employment contracts.</p> <p>Training is provided in order for ISA Interval's administrators and collaborators to complete annually a declaration of conflicts of interest. The Compliance Officer, together with their immediate superior, analyzes the applicable measures when a conflict of interest exists.</p>	

SERVICES

09 PROFESSIONAL & COMMERCIAL SERVICES

ACTIVITY METRICS

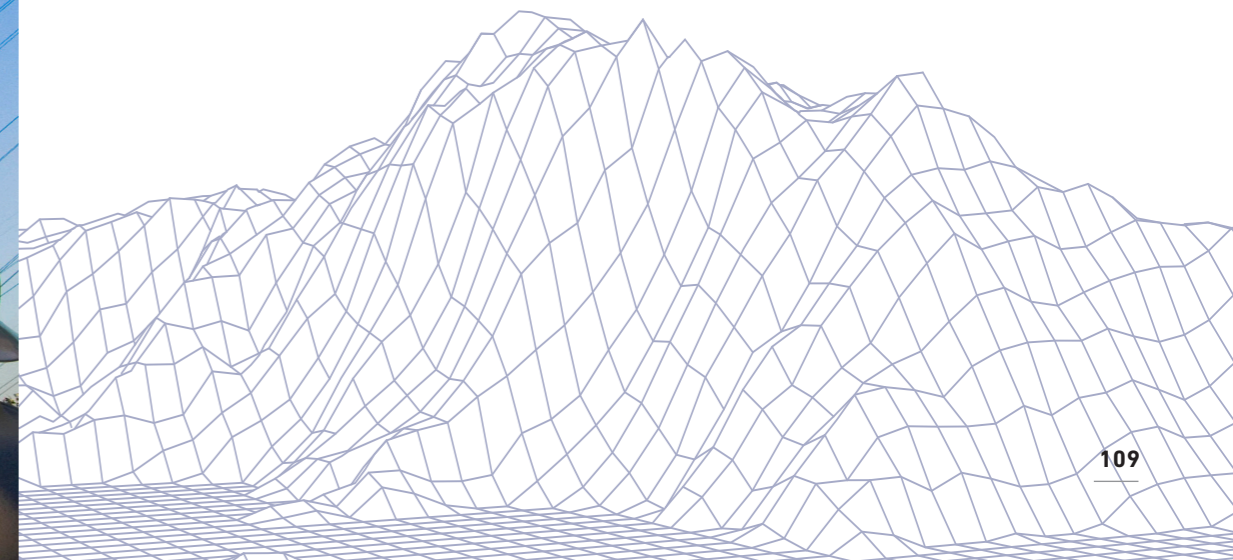
Code	SV-PS-000.A
Accounting Metric	Number of employees by: (1) full-time and part-time, (2) temporary, and (3) contract
Unit of measure	Number

Accounting Metric	2021		
	(1)	(2)	(3)
Unit of measure	Number of employees	Number of employees	Number of employees
XM	267	28	295

Code	SV-PS-000.B
Accounting Metric	(1) Employee hours worked, (2) percentage billable (2) Hours, percentage (%)
Unit of measure	

Accounting Metric	2021	
	(1)	(2)
Unit of measure	Hours	%
XM	761,69	No aplica ¹

¹ XM does not bill on an hourly basis.



SOCIAL CAPITAL

Data Security

Code	SV-PS-230a.1
Accounting Metric	Description of approach to identifying and addressing data security risks
Unit of measure	Discussion and Analysis

2021	
XM	<p>XM has an data security management system (ISMS for its Spanish acronym) based on the international standard ISO 27001:2013 and certified by the Colombian Institute of Technical Standards and Certification (ICONTEC) since 2015. The ISMS covers business processes to provide power system operations and administration services for interconnected electrical systems.</p> <p>Cyber risk management at XM is directed by the adoption of the NERC CIP standards for industrial cybersecurity and the implementation of the defense framework based on NIST (National Institute of Standards and Technology) that determine mechanisms to handle a cyber-attack before it happens, during and after it happens.</p> <p>A self-assessment is carried out based on the above benchmarks, making it easier to establish the objectives of XM's Comprehensive Cybersecurity Program aimed at developing organizational capacities in cyber risk management based on continuous monitoring, detection, response and recovery from security events, instilling a corporate security culture and continuity management for business operations.</p> <p>The handling of risks associated with data security is done through ongoing actions within the PTP triad: People-Technologies-Processes to ensure we have resilient processes and people with safe behaviors administering the data managed by XM. Likewise, tactical plans are developed for both passive and active cybersecurity lines of defense, with the Digital Security Operations Center (SOC) as the central pillar to actively monitor and manage technical vulnerabilities, as well as to respond to incidents and provide cyber risk management.</p> <p>In the people area, the expansion of a data security culture is emphasized through awareness and training programs, technical tests and a yearly culture assessments to identify gaps and establish risk management plans.</p>

Code	SV-PS-230a.2
Accounting Metric	Description of policies and practices relating to collection, usage, and retention of customer information
Unit of measure	Discussion and Analysis

2021	
XM	<p>To address this issue, it is important to highlight that XM is not an end-user company, and therefore its personal databases mainly include only data from employees, suppliers and energy market agents.</p> <p>As an indication of Senior Management's commitment to fostering an organizational culture of respect for the protection of personal data, the applicable guidelines are adopted for all personal information registered in the databases of those responsible for processing personal data. Therefore, the guidelines described in the Institutional Handbook #139 - ADOPTION OF THE PERSONAL DATA PROCESSING POLICY HANDBOOK are mandatory, and strict compliance is required of those responsible for the processing of personal data, which includes administrators and employees.</p> <p>Additionally, XM has a personal data protection program that focuses on topics such as:</p> <ul style="list-style-type: none"> • Action framework and guidelines • Defined roles and responsibilities • Ratification of a business culture of personal data protection, with the commitment of senior management and all XM staff • Training and awareness • Service channels for addressing requests, questions and complaints or for any matter related to personal data; the corporate website has a call button for personal data requests, questions and complaints (PQR for its Spanish acronym) • CO (Compliance) risk management that includes the Personal Data Protection issues • Contractual clauses concerning Personal Data Protection, for example with employees and suppliers • Authorization for the processing of personal data with agents, applicants and suppliers <p>The guidelines are published on the XM website under Policies and handbooks (xm.com.co) and included in the corporate handbooks.</p>

Code	SV-PS-230a.3
Accounting Metric	(1) Number of data breaches, (2) percentage involving customers' confidential business information (CBI) or personally identifiable information (PII), (3) number of customers affected
Unit of measure	(2) Number, Percentage (%)

Accounting Metric	2021		
	(1)	(2)	(3)
Unit of measure	Number of data breaches	%	Number of customers affected
XM	-	-	-

HUMAN CAPITAL

Workforce Diversity & Engagement

Code	SV-PS-330a.1
Accounting Metric	Percentage of gender and racial/ethnic group representation for (1) executive management and (2) all other employees
Unit of measure	Percentage (%)

		2021	
Accounting Metric		(1)	(2)
Unit of measure		%	%
XM	Women	57,14	33,33
	Men	42,86	66,67

		2021	
Accounting Metric		(1)	(2)
Unit of measure		%	%
XM	Asian	-	-
	Black	-	-
	Hispanic/ Latino	100	100
	White	-	-
	N/A	-	-
	Others	-	-

Code	SV-PS-330a.2
Accounting Metric	(1) Voluntary and (2) involuntary turnover rate for employees
Unit of measure	Percentage (%)

		2021	
Accounting Metric		(1)	(2)
Unit of measure		%	%
XM		7,46	2,37

Code	SV-PS-330a.3
Accounting Metric	Employee engagement as a percentage
Unit of measure	Percentage (%)

		2021
Accounting metric		(1)
Unit of measure		%
XM		89

LEADERSHIP & GOVERNANCE

Professional Integrity

Code	SV-PS-510a.1
Accounting Metric	Description of approach to ensuring professional integrity
Unit of measure	Discussion and analysis

		2021
XM	Conflict of interest: The conflict that workers or close relatives have with suppliers, competitors or third parties must be reported. The boss leads the analysis, with the support of the compliance and legal officer, and measures are guaranteed to handle the situation and the results of the analysis of conflict cases are presented to the Ethics Committee.	
	Corruption: Automated tools are implemented to strengthen monitoring and report compliance with some aspects established in the Business Ethics and Compliance Program. On the other hand, XM has an external ethics hotline for its stakeholders, as a means to consult, inform or report particular situations and possible breaches of the code of ethics or the integrity of the company. There is an Ethical Issues Management Guide, seeking to establish protection mechanisms for whistleblowers and regulate other aspects of reports to the ethics line.	
	Data Accuracy: XM has a data governance and quality program, which establishes requirements, standards and practices that apply to information management, in order to have accurate, reliable and managed information in a safe and efficient manner, in accordance with regulations.	
	Protection of confidential information: XM has an information security management system-ISMS based on the international standard ISO 27001:2013 and certified by ICONTEC since 2015. The ISMS provides guidelines for the classification of business information and technological controls. Annual internal and external audits are carried out on this system.	

Code	SV-PS-510a.2
Accounting Metric	Total amount of monetary losses as a result of legal proceedings associated with professional integrity
Unit of measure	Reporting currency

		2021
Accounting metric		(1)
Unit of measure		COP \$
XM		-

