





# ENVIRONMENT

Our commitment to the environment is to value our natural resources and make every effort to avoid or reduce the impact of our projects on the environment, as well as give back to nature through using new technologies and operating methods.



**Zero**  
fines and penalties for environmental non-compliance.



**100%**  
of our operated assets in production are included in the corporate GHG inventory, and we redefined 2020 as the reference year for calculating GHG emissions and intensity.



**15.2 kg CO<sub>2</sub>e/boe**  
was the emissions intensity index in the whole operation (Scope 1 and 2). The 13.05kg CO<sub>2</sub>e/boe in 2019 was for Colombia only.



**9.75**  
liters of water withdrawn per boe produced in Colombia.



**ISO 14001:2015**  
Environmental Management System certification renewed through 2023 in Colombia



**Zero**  
direct discharges to surface water sources in our corporate operations.



**In Colombia, we started work on a project with the Institute of Hydrology, Meteorology and Environmental Studies (Ideam) to establish the first hydrometeorological monitoring network in the Orinoquía region, in the Meta river basin, which will help improve water management, comprehensive risk management and climate change adaptation.**



**8.2%**  
reduction in water consumption

**Management of greenhouse gas emissions and energy**

**Protection of biodiversity**

**Responsible use of natural resources**

**Preventive management of socioenvironmental impacts**

**Future challenges**



Contribution to SDGs

# Our commitment to reducing greenhouse gas (GHG) emissions

Reducing greenhouse gas emissions is crucial in meeting the Sustainable Development Goals.



In 2020, our carbon intensity index was **15.2 kg CO<sub>2</sub>e/boe**. This was **28.3%** below the **21.2 kg CO<sub>2</sub>e/boe** industry average calculated in a comparative evaluation by Kearney based on public information from sector companies at a global level.

Our commitment to caring for and protecting the environment requires our utmost efforts to reduce the carbon footprint created by the development of our operations. This led us to make a corporate GHG reduction strategy in 2020, allowing us to create specific goals and initiatives and define a route map for our operated production assets.

After evaluating different proposals and potential partners, we started creating this strategy with consulting firm Kearney, which has advised international oil and gas companies on identifying and defining strategies and projects to reduce their carbon footprint.



Our main objectives in making our corporate GHG reduction strategy are the following:

- » Estimating our present-day corporate GHG inventory by using standardized principles and approaches.
- » Defining a route map for GHG management and reduction targets by country and at a consolidated level.
- » Establishing guidelines to coordinate the strategy with the Business Model and the organizational structure to guarantee that it is implemented and is sustainable. Accordingly, the strategy also aims to coordinate with our corporate governance.

Starting this project will require developing different activities involving all members of GeoPark's Management Team and the leading technical areas of processes related to reducing GHG emissions in our directly operated production assets.

The main activities that will help create this GHG emissions reduction strategy are the following:

- » Develop the corporate baseline and study trends and relevant reporting guidelines in the industry.
- » Define the general activities of the strategy and the key processes for its implementation.
- » Study feasibility and potential impact on profitability, energy consumption and GHG emissions of the prioritized initiatives.
- » Define an action plan for the strategy to be implemented in the near future.

We are committed to continuing to develop our hydrocarbon exploration and production businesses, becoming increasingly efficient and clean, and progressively reducing our carbon footprint.

At GeoPark we firmly believe that we will only have a future in the oil and gas industry if we can be one of the most efficient operators, with the highest social and environmental standards. Our commitment to reducing the impact of our operations on climate change matters.

# OUR ENVIRONMENTAL COMMITMENT

(103-1) At GeoPark we work to preserve and protect nature in the areas we operate in. We value natural resources and implement all necessary preventive measures to reduce the probability of incidents happening and minimize their environmental consequences. In 2020, the new Business Model made managing the Nature and Neighbors area an essential part of growth and value generation. Our future and our success will not be possible without a true commitment to the well-being of our neighbors and the sustainable development of the planet.



## MANAGEMENT OF GREENHOUSE GAS EMISSIONS AND ENERGY

(103-1) At GeoPark we understand and share the global concern about climate change and the importance of contributing to its mitigation. Our challenge is to maintain an efficient operation and commit ourselves to reducing greenhouse gas (GHG) emissions in our operations.



[103-2] We manage GHG emissions in GeoPark by measuring the organizational carbon footprint and identifying and implementing action plans to reduce our emissions, always focusing on opportunities to improve and control our processes.

Oil and gas companies that want to adapt to change and be competitive in the future by reducing their impact must develop GHG emissions management strategies.

With support from international consulting firm Kearney we therefore began to design a corporate strategy to guide us in our implementation of operational and environmental compensation initiatives to reduce the impact of GHG emissions from our activities.

Considering the subsequent recommendations, we decided to expand the scope of our GHG emissions inventory, helping us to update our corporate emissions baseline in 2020 for all operated assets in production. This process allows us to propose strategies that contribute to reducing emissions in the medium and long term.

## Main initiatives to reduce greenhouse gas (GHG) emissions and energy

In 2020 we continued with important projects and promoted new ones to:

- » Continue the conversion of oil-fired steam boilers to natural gas in the Llanos 34 block in Colombia.
- » Build and starting operations of a pumping station in the Tigana field in Llanos 34, reducing tanker transport of hydrocarbons.
- » Start the socioenvironmental feasibility process of a project to connect to Colombia's national power grid and so reduce gas consumption in the Llanos 34 block (Colombia).
- » Complete a project to interconnect the most important fields in Llanos 34 (Colombia) through a 34.5 kV power network. As a result, the Jacana field will be 100% connected to the power grid in this block (Tigana power plant), reducing gas transport and the associated GHG emissions.
- » Participate in the implementation of the Comprehensive Climate Change Management Plan for the mining and energy sector in Colombia, led by the Ministry of Mines and Energy and the Colombian Petroleum Association (ACP).
- » Identify oil & gas industry decarbonization trends and carrying out a global strategy benchmarking.
- » Start the environmental feasibility phase for the construction of a PV solar plant in our Llanos 34 block. This will help us to diversify energy sources and reduce GHG emissions.

In 2021 we will have the chance to share the impact of these activities on reducing GHG emissions.

## GHG emissions and intensity

(103-3) GeoPark has measured, reported and verified GHG emissions and carbon intensity with Scope 1, 2 and 3 since 2017. The GHG emissions inventory covered only the operations of the Llanos 34 block, which represents about 83% of the Company's total production, while Scope 3 included only transportation aspects of the production and the disposal of regular and hazardous waste.

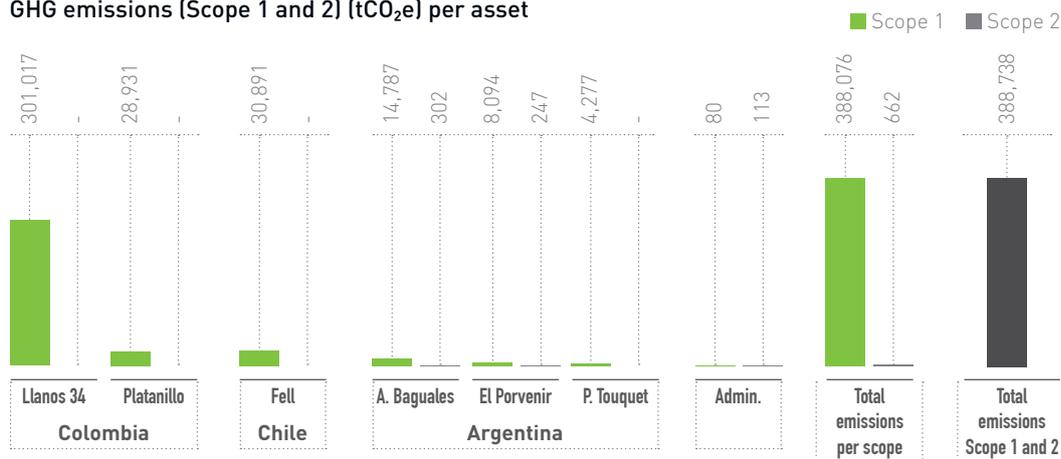


In 2020 we estimated corporate GHG emissions, considering six steps to define the scope of the inventory:

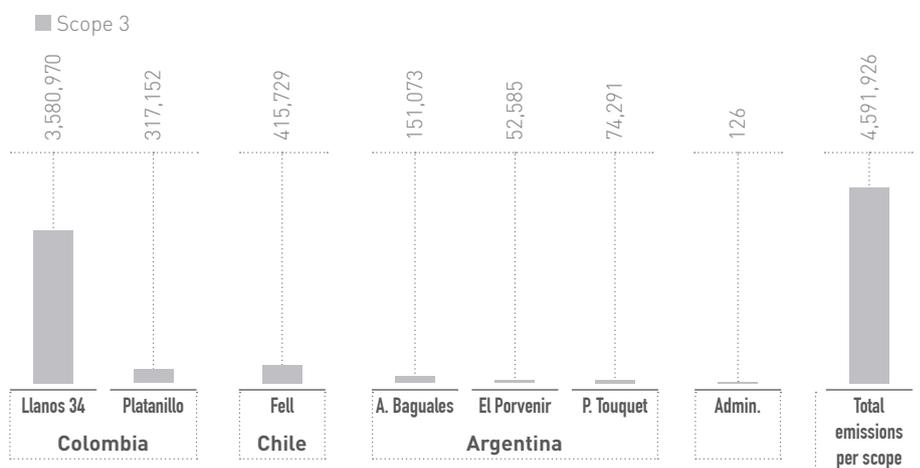
- » Determining which GHG to measure and the equivalence factors.
- » Selecting the consolidation approach and definition of operational limits.
- » Identifying emission sources by type and scope.
- » Defining the method for calculating emissions and data collection.
- » Calculating and consolidating emissions.
- » Presenting relevant indicators.

Through this exercise we estimated the 2020 emissions intensity baseline for all our corporate production assets (Colombia, Argentina and Chile) with Scope 1 and 2, using an operational approach. In addition, we estimated our Scope 3 CO<sub>2</sub>e emissions, including emissions associated with the end use of products, transport activities contracted with third parties and final waste disposal.

**(305-1) (305-2) SASB: EM-EP-110a.2. IPIECA: CCE-4 Direct and indirect GHG emissions (Scope 1 and 2) (tCO<sub>2</sub>e) per asset**



**(305-3) Direct and indirect GHG emissions (Scope 3) (tCO<sub>2</sub>e) per asset**



**To calculate Scope 3 the emissions included were:**  
 Final use of products (99.64%),  
 Transport activities (0.35%)  
 and Waste disposal (0.01%)

At GeoPark we use the GHG Protocol as the standard for calculating the GHG emissions inventory. See historical GHG emissions information in the Environment Appendix.

Corporate Scope 1 and 2 GHG emissions in 2020 were 388,738 tons of CO<sub>2</sub>eq, of which the Llanos 34 block represented 77.4%. Power generation from natural gas accounts for most emissions on this asset.

Although GeoPark has earlier emissions information than 2020, the change in scope through including other assets in measurements means that that year cannot be compared to previous periods. In future reports, the base year and the methodology will therefore be those applied in 2020.

In 2020, our intensity index was 15.2 kg CO<sub>2</sub>e/boe. This was 28.3% below the 21.2 kg CO<sub>2</sub>e/boe industry average calculated in a benchmarking activity by Kearney based on information from annual and sustainability reports from companies analyzed.

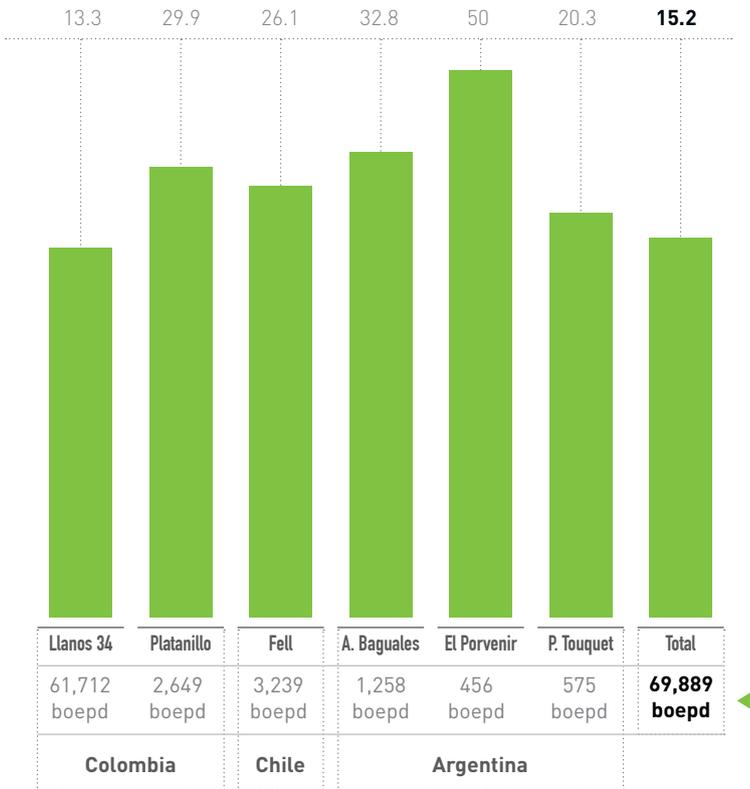
The GHG emissions intensity indicator for Platanillo was 29.9 kg CO<sub>2</sub>e/boe, in this asset more than half of power is generated from fuel oil, and crude oil production corresponds to only 3.8% of the company's total.

The emissions intensity of El Porvenir in Argentina's Neuquen province was 50 kg CO<sub>2</sub>e/boe. In this asset 98% of power is obtained from gas, and the production of crude oil is only 0.7% of the company's total.

In these cases the indicator was high due to the low production levels of the blocks.

**(305-4) Emissions intensity**

■ Emissions intensity GeoPark – Scope 1 and 2 (kg CO<sub>2</sub>e/boe)



■ Llanos 34 represents 77.4% of GeoPark's total Scope 1 and 2 emissions. Power generation from natural gas accounts for most emissions. Fell is next with 7.9%, followed by Platanillo with 7.4%, Aguada Baguales with 3.9%, El Porvenir with 2.1% and finally Puesto Touquet with 1.1%.



## Total emissions by source

Different emissions sources were considered in the exercise to define the 2020 baseline, including those associated with gas flaring, controlled emissions, and fugitive emissions.

### Total emissions by source (t/CO<sub>2</sub>e)

Block	Generators	Boilers	Motors	Flaring	Controlled emissions	Fugitive emissions	Contracted energy	Total by block
Llanos 34	184,562.3	38,919.0	-	4,066.3	-	73,469.1	-	301,016.5
Platanillo	23,886.9	-	-	1,920.9	-	3,123.1	-	28,930.9
Fell	5,639.5	5,432.4	4,803.5	3,032.5	8,816.9	3,166.6	-	30,891.3
Aguada Baguales	12,545.0	780.2	-	-	-	1,461.5	302.4	15,089.1
El Porvenir	7,599.8	-	-	-	-	493.8	246.9	8,340.5
Puesto Touquet	0.4	-	3,728.3	-	-	548.3	-	4,277.0
Administrative	79.7	-	-	-	-	-	112.8	192.5
<b>Total</b>	<b>234,313.6</b>	<b>45,131.6</b>	<b>8,531.8</b>	<b>9,019.6</b>	<b>8,816.9</b>	<b>82,262.3</b>	<b>662.1</b>	<b>388,737.8</b>
<b>% emissions by source</b>	<b>60%</b>	<b>12%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>21%</b>	<b>0,2%</b>	<b>100%</b>

### Participation of GHG emissions source by block

Block	Generators	Boilers	Motors	Flaring	Controlled emissions	Fugitive emissions	Contracted energy	Total by block
Llanos 34	61%	13%	0%	1%	0%	24%	0%	100%
Platanillo	83%	0%	0%	7%	0%	11%	0%	100%
Fell	18%	18%	16%	10%	29%	10%	0%	100%
Aguada Baguales	83%	5%	0%	0%	0%	10%	2%	100%
El Porvenir	91%	0%	0%	0%	0%	6%	3%	100%
Puesto Touquet	0%	0%	87%	0%	0%	13%	0%	100%
Administrative	41%	0%	0%	0%	0%	0%	59%	100%



(302-4) (305-5) SASB: EM-EP-110a.3. As part of the GHG Emissions Reduction Strategy GeoPark is implementing, we studied initiatives to improve energy efficiency and reduce energy consumption.

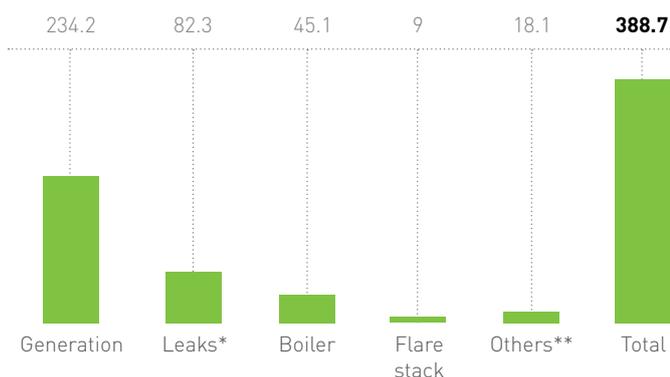
## Fugitive emissions

Fugitive emissions arise from unintentional failures in equipment or systems: methane leaks in gas transport, low efficiency flare stacks, leaks in seals or gaskets, and integrity failures in treatment and pumping systems.

In 2020 fugitive emissions totaled 82,262.3 tCO<sub>2</sub>e; 21% of total emissions.

### Total emissions by source and gas type

GeoPark emissions by source  
(Scope 1-2 kilo tonnes CO<sub>2</sub>e-2020)



\* Methane intensity estimated at 1.7%

\*\* Others: Motors, ventilated emissions, contracted energy

GeoPark emissions by gas type  
(Scope 1-2 kilo tonnes)



### Fugitive emissions by block and type of gas

The following table shows the data on GHG emissions by type of contaminant (CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O), associated with fugitive emissions.

	CO <sub>2</sub> (Ton)	CH <sub>4</sub> (Ton)	N <sub>2</sub> O (Ton)	CO <sub>2</sub> e (Ton)
Llanos 34	343	2,612	-	73,469
Platanillo	14	111	-	3,123
Fell	5	113	-	3,167
Aguada Baguales	6	52	-	1,461
El Porvenir	2	18	-	494
Puesto Touquet	1	20	-	548
Administrative				
<b>Total</b>	<b>371</b>	<b>2,925</b>	<b>-</b>	<b>82,263</b>

As part of our GHG emissions reduction strategy we will manage methane emissions through the implementation of initiatives based on the following actions:

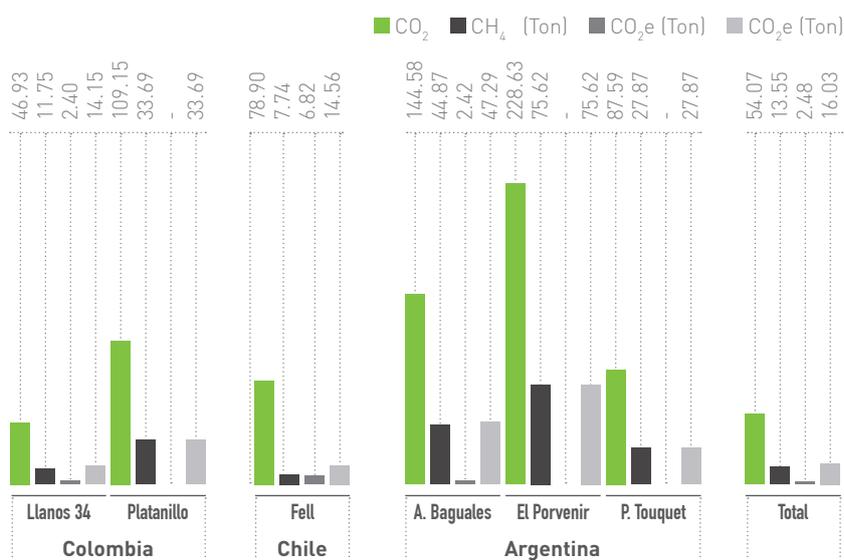
- » Risk assessment and mitigation plans
- » Direct or estimated measurement and monitoring methods
- » Specific indicators of methane emissions by source and activity in terms of total absolute emissions and emission intensity

### Energy consumption

In defining the 2020 GHG emissions baseline, we consolidated total energy use, including energy consumption per application (generators and pumps) and the energy efficiency of applications that require energy (generators, boilers, pumps, transportation).

(302-1) IPIECA: CCE-6 and CCE-7 **Energy consumption**

		2020						
Country/Asset		Total energy consumption (MWh)				Usable energy consumption (MWh)		
		Non-renewable	Contracted	Renewable	Total asset	Electricity	Heat	Total asset
 Colombia	Llanos 34	1,059,874	-	-	1,059,874	265,333	54,157	319,490
	Platanillo	105,530	-	-	105,530	32,572	-	32,572
 Chile	Fell	93,530	-	-	93,530	9,171	8,088	17,260
 Argentina	A. Baguales	65,916	652	-	66,568	20,658	1,114	21,772
	El Porvenir	37,594	533	-	38,126	12,610	-	12,610
	P. Touquet	18,444	-	1	18,445	5,869	-	5,869
Administrative		334	-	-	729	334	118	453
<b>Total GeoPark</b>		<b>1,381,282</b>	<b>1,519</b>	<b>1</b>	<b>1,382,803</b>	<b>346,549</b>	<b>63,478</b>	<b>410,027</b>



In 2020 we calculated our consolidated energy intensity for the first time: **54.1 kWh/boe.**

This calculation has helped us improve energy management and efficiency, and reduce our operating and production costs.

(302-3) Energy intensity 2020

**Fuel consumption**

		2020				
Country/Asset		Fuel consumption				
		Gas (mcft)	Fuel Oil (gal)	Diesel generation (gal)	Crude (gal)	Diesel transport (gal)
 Colombia	Llanos 34	2,965,495	17,388	1,332,484	2,691,660	718,647
	Platanillo	145,169	1,430,360	259,147		24,428
 Chile	Fell	308,049	-	-		27,580
 Argentina	Aguada Baguales	217,098	-	-		47,085
	El Porvenir	123,817	-	-		22,584
	Puesto Touquet	60,742	-	43		46,758
<b>Total</b>		<b>3,820,370</b>	<b>1,447,748</b>	<b>1,591,674</b>	<b>2,691,660</b>	<b>887,082</b>

We took several measures to increase energy efficiency in our assets in 2020, including the following:

### Power generation and emissions reduction



Centralized power generation and conversion to natural gas in several fields in Colombia.



Construction of flow lines for transporting crude oil, avoiding emissions from vehicle transport.

### Centralization of energy supply



Signing contracts to connect to Colombia's national power grid, which has almost 70% renewable installed capacity

### Management of renewable sources



Structuring a photovoltaic solar energy project in Colombia to diversify energy sources.



## WE PROTECT BIODIVERSITY

(103-1) Caring for biodiversity is a priority for GeoPark. We understand that a joint effort is needed to ensure that we all work to avoid, mitigate or eliminate any impact that puts the planet's biodiversity at risk.

Our contribution has focused on research and prevention programs with national and international experts that aim to preserve the natural heritage of the different territories we operate in.

(103-2) From the outset of our projects we therefore identify areas of environmental importance and high biodiversity value, and apply prevention criteria that guide our activities during the projects' execution and operation stages while constantly caring for and protecting nature. In addition, we carry out and promote ecosystem restoration and conservation programs that have shown positive impacts on animals and plants and biodiversity in general.

We seek to coordinate all our areas of operations and implement a prevention and mitigation approach, fulfil compensation measures, meet legal obligations and develop biodiversity research and conservation projects, as well as deliver voluntary projects that we plan as a Company.

### Neighboring areas with significant biodiversity importance

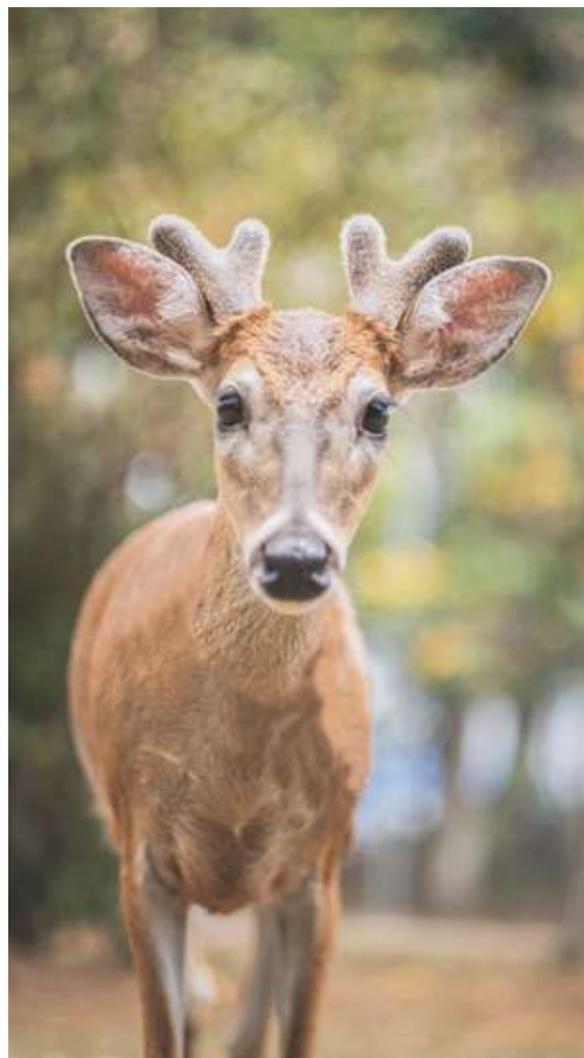
GeoPark works under its Commitment to Nature, People and Neighbors that defines a concept of loving our planet and life in all its forms. The commitment declares the importance of protecting biodiversity and GeoPark's pledge not to disrupt the balance of nature in the areas we operate in.

(304-1) IPIECA: ENV-4 SASB: EM-EP-160a.3. Our assets that are adjacent to or within special environmental management areas and have biodiversity importance are the following:

In Colombia, our Llanos 34 block covers 4,738 hectares of the 33,253-hectare La Mata de La Urama Integrated Natural Resource Management District in Casanare. This type of environmentally important area has a management district with zones dedicated exclusively to environmental restoration, preservation and conservation. It also defines areas as compatible with industrial development, where part of our block is located.

Our Fell block in Chile is in San Gregorio, Magallanes region, covering 148,800 hectares and bordering the 5,030-hectare Pali Aike National Park to the north. GeoPark operations lie adjacent to the Park and does not carry out any activity inside it.

The Isla Norte block in Primavera, Magallanes region covers 395,000 hectares and borders the 58,946-hectare RAMSAR Bahía Lomas wetland to the north. GeoPark operations lie adjacent to the RAMSAR protected area and does not carry out any activity in it.



In our operations in Colombia, Argentina and Chile we identified 25 species that are on the Red List of the International Union for Conservation of Nature (IUCN) and on other national conservation lists. Of these, one species is critically endangered, two are endangered, 14 are vulnerable, five are near threatened and three are of least concern.

See the Environment Appendix for an IUCN list of species in danger of extinction.

**(304-4) SASB: EM-EP-160a.3. Species on the IUCN Red List and national conservation lists whose habitats are in areas affected by operations**

Country	In critical danger	In danger	Vulnerable	Almost threatened	Least concern	Total
 Colombia	1	2	13	4	0	20
 Argentina	0	0	1	1	2	4
 Chile	0	0	0	0	1	1
<b>Total</b>	<b>1</b>	<b>2</b>	<b>14</b>	<b>5</b>	<b>3</b>	<b>25</b>



■ At GeoPark we have a real interest in **protecting and respecting the diverse ecosystems of the territories we operate in.** Our genuine commitment to minimize or eliminate the footprint left by our hydrocarbon exploration and production projects requires us to guarantee that operations meet high international standards.

**Partnering for biodiversity and development in Putumayo**

**In coordination with the National Business Association of Colombia (ANDI) we took part in the Biodiversidad y Desarrollo por el Putumayo biodiversity and development initiative.**

Participating in the initiative is a way of fulfilling GeoPark’s Nature and Neighbors higher purpose, “To be our communities’ neighbor of choice and the operator that most respects the natural wealth of the environment.”



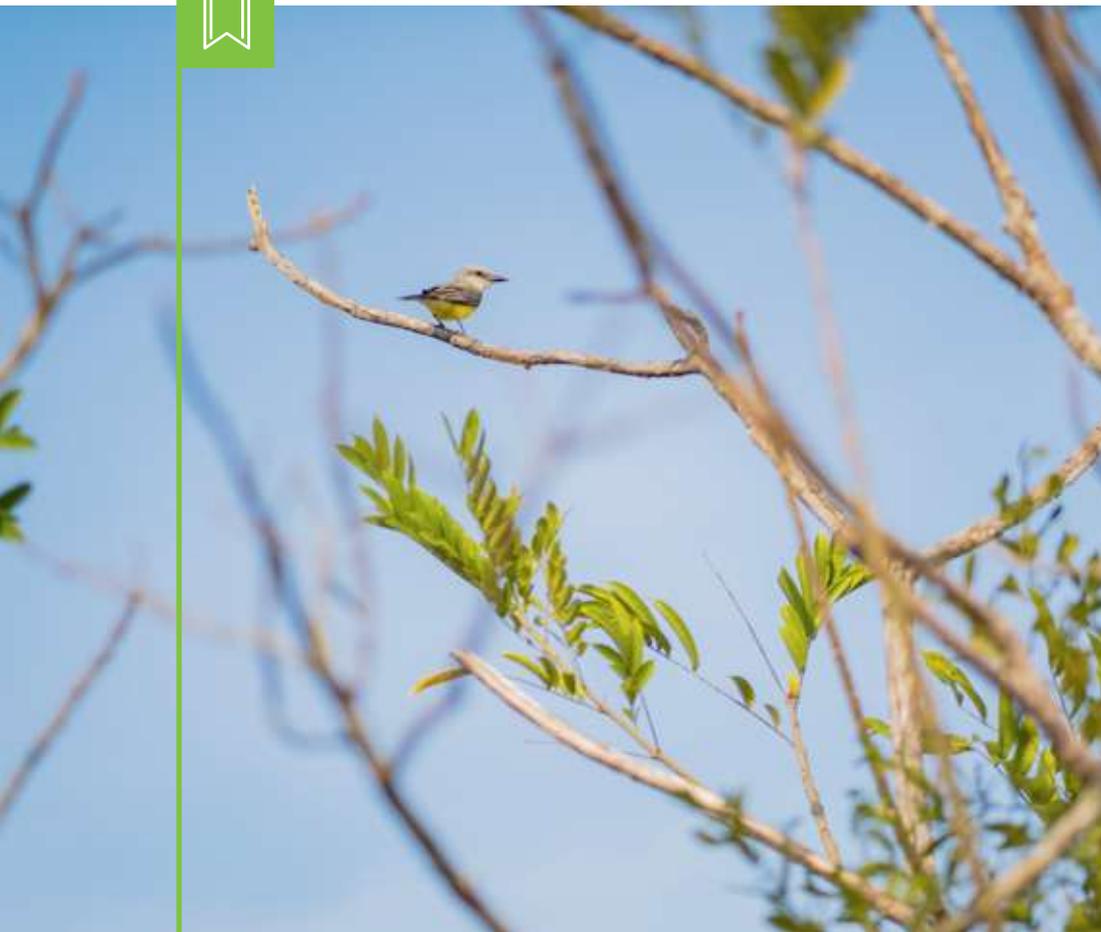
With the acquisition of Amerisur’s assets at the beginning of 2020, we were able to continue the important challenge facing both the public and private sectors of strengthening partnerships and synergies that contribute to the protection and care of biodiversity in the Colombian Amazon in alignment with regional priorities and the conservation of Andean-Amazonian foothills.

Some of the main benefits of participating in this ANDI-led initiative are the following:

- » Working with other hydrocarbons sector companies operating in the region to create synergies and learning lessons under a single vision of protecting the environment.
- » The opportunity to work with nationally and internationally acknowledged institutions such as the Alexander von Humboldt Institute, with which

we have a participative monitoring strategy in blocks operated by GeoPark and Gran Tierra. Through these research efforts we can better understand the biodiversity and the state of animal and plant life in our areas of influence, and develop monitoring methodologies.

- » Creating new animal and plant records in the Colombian Biodiversity Information System (SiB Colombia) and the National Biodiversity Data Network.
- » Continuing the development of programs such as training environmental ambassadors, with an emphasis on ecotourism and birdwatching, and training multipliers in biodiversity protection for the region.



■ IPIECA: ENV-3

**All of our projects, from the planning phase and preparation of environmental impact studies onwards, identify and construct a baseline of protected areas with high biodiversity value that fully respects legal and environmental conservation regulations in each country.**

### Main biodiversity initiatives and studies

(103-3) The main biodiversity management initiatives we implemented in 2020 include the following.

- » Taking part in the Biodiversidad y Desarrollo por el Putumayo biodiversity and development initiative, led by ANDI.
- » Partnering the Southern Amazon Sustainable Development Corporation Corpoamazonia in a sponsorship program in Suruma Park, contributing to the physical and nutritional care of eight animal species, of which five are ranked as vulnerable.
- » Helping 39 community environmental promoters trained by the Company to take part in global and national bird watching events such as Global Big Day and October Big Day.
- » Including special measures for sensitive areas of the Amazon in the Environmental Impact Studies (EIS) being developed and incorporating solid biodiversity criteria in the design and execution of GeoPark projects in the Amazon basin (platforms, access roads, linear projects and management measures) for Colombia and Ecuador.
- » Directly contributing to scientific findings through strategic partnerships with the Smithsonian Institute for the Morona (Peru) Biodiversity Project development and with the Humboldt Institute for the participatory monitoring project in the Platanillo block in Putumayo.
- » Planting trees for timber and fruit in deforested areas of communities in the Espejo block, in Ecuador, to recover vegetation and 15 kilometers of water courses, protect the ecosystem, landscape and basins and improve the balance of nature and biodiversity in Shushufindi.



## RESPONSIBLE USE OF NATURAL RESOURCES

(103-1) GeoPark focuses its responsible resource use on appropriate water management, especially in operational efficiencies, reducing our environmental impact, and avoiding water-related conflicts and ensuring the water security in our neighboring areas.

(103-2) Our responsible use of natural resources in operations is through efficient water consumption, comprehensive waste management and proper disposal of residual effluents.

We know that water is a strategic and essential resource for sustainable development in the territories we operate in, and so for us it is one of the most important elements to control. We implement different water saving and efficient water consumption initiatives, we do not directly discharge into surface water courses, and we reuse wastewater.

Our Comprehensive Water Management Program gives us up-to-date information to control consumption in our operations, ensure compliance with our permits and take the necessary actions in the different activities that need water.

Rules in Colombia mean that companies such as GeoPark must invest at least 1% of the total cost of projects in the preservation of water resources. In Argentina and Chile, GeoPark fulfils all legal obligations regarding water use.

All wastewater generated from our operations is treated and disposed of in accordance with our environmental license.

We focus our solid waste management on reduction, reuse, recycling and recovery, and in full compliance with regulations we minimize, mitigate and compensate any potential environmental impact.

## Comprehensive water management

(103-3) As water is one of the world's most important natural assets, we work to protect and preserve it. GeoPark is committed to innovation and implementing best practices in efficient water consumption and reuse, and discharges management.

## Interaction with water as a shared resource

(303-1) The water we use in our operations comes mainly from underground sources, surface water bodies, lateral borrow areas, authorized third parties and water that we produced from the oil separation processes in batteries and water treatment plants, which is reinjected into wells for secondary oil recovery.

The volume of water by source withdrawn for our operations is shown below.

(303-3) (303-5) SASB: EM-EP-140a.1. IPIECA: ENV-1 **Water withdrawal and consumption by source in each asset**

Water withdrawal (m <sup>3</sup> )	 Colombia			 Chile			 Argentina		
	2020	2019	2018	2020	2019	2018	2020	2019	2018
Surface water	6,930	0	0	8,414	4,270	4,040	24,951	26,160	12,111
Lateral borrow areas	28,807	22,232	48,333	0	0	0	0	0	0
Underground water sources	193,408	222,811	170,587	2,700	7,200	7,200	7,200	12,242	12,242
Purchase from third parties	0	0	0	0	0	0	36	0	0
<b>Total volume</b>	<b>229,145</b>	<b>245,043</b>	<b>218,920</b>	<b>11,114</b>	<b>11,470</b>	<b>11,240</b>	<b>32,187</b>	<b>38,402</b>	<b>24,353</b>
<b>Water consumption versus previous year</b>	<b>-6%</b>			<b>-3%</b>			<b>-16%</b>		

Water withdrawal (m <sup>3</sup> )	 Brazil			GeoPark Total		
	2020	2019	2018	2020	2019	2018
Surface water	0	0	0	40,295	30,430	16,151
Lateral borrow areas	0	0	0	28,807	22,232	48,333
Underground water sources	0	0	0	203,308	242,253	190,029
Purchase from third parties	384	560	0	420.08	560.23	0
<b>Total volume</b>	<b>384</b>	<b>560</b>	<b>0</b>	<b>272,830.08</b>	<b>295,475.23</b>	<b>254,513</b>
<b>Water consumption versus previous year</b>	<b>-31%</b>			<b>-8.2%</b>		

Water consumption in Argentina and Chile decreased by 16% and 3% respectively in relation to 2019.

In Colombia there was water withdrawal from a surface source in 2020, equivalent to 3% of the total water withdrawn, due to the incorporation of the Platanillo field.



**8.2%**

In 2020 we reduced consolidated water consumption by 8.2% from 2019 through measures taken for more efficient water consumption and because of decreased activities resulting from the pandemic.



At GeoPark we control water consumption in each of our operations to ensure compliance with the maximum flows allowed by our environmental permits and to take appropriate measures for the different activities that need water.

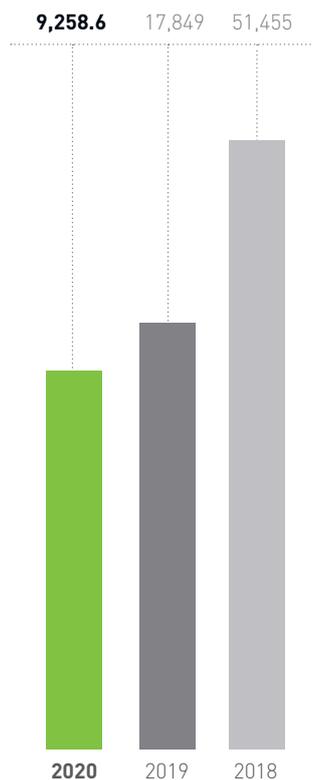
We permanently measure water withdrawal and verify that volumes are below the maximum authorized levels.

### Water reuse

Water reuse is a priority for us in our daily operations. In 2020 we implemented measures to treat drilling waste effluents through a reverse osmosis process that allows us to reuse water in the preparation of drilling muds.

Reverse osmosis was implemented in the drilling of 17 wells, allowing us to reuse 4% of the total fresh water withdrawn in the Colombian operations.

SASB: EM-EP-140a.4  
GeoPark water reuse (m³)



■ We have set ourselves a goal of eliminating all surface water withdrawal in GeoPark's permanent operations by 2025.

## Discharge management

(303-2) Strategies for efficient water consumption as well as initiatives to avoid direct discharges and wastewater reuse show proper environmental management and lower demand for water compared to other economic sectors.

At GeoPark we develop wastewater treatment processes according to the legal standards in each country we operate in. We monitor the water prior to final disposal at the frequencies established in our environmental licenses or any other local provisions.



■ None of our operations directly discharges into surface water.

(303-4)\* SASB: EM-EP-140a.2. IPIECA: ENV-2 **Water Discharge**

Water discharge (m <sup>3</sup> )	Argentina		Chile		Colombia	
	2019	2020	2019	2020	2019	2020
Total water discharge in all areas by type of destination	2,635,609	2,070,767	226,709	108,921	8,115,937	8,574,225
Third-party water	-	40	-	-	51,433	23,535
Injection disposal	2,635,609	2,070,727	226,709	108,921	8,064,504	8,550,690

\* Blocks in Ecuador do not have operations.



## Blue water footprint

In Colombia our blue water footprint for 2020 was 9.75 (l water withdrawn/boe produced), mainly due to the use of fresh water for camps, administrative headquarters, drilling, dust dampening on roads, civil works and other industrial uses.

## Comprehensive solid waste management

(306-2) As part of our Environmental Management System, we have developed a solid waste monitoring system for all our operations, enabling us to monitor waste generation reduction measures.

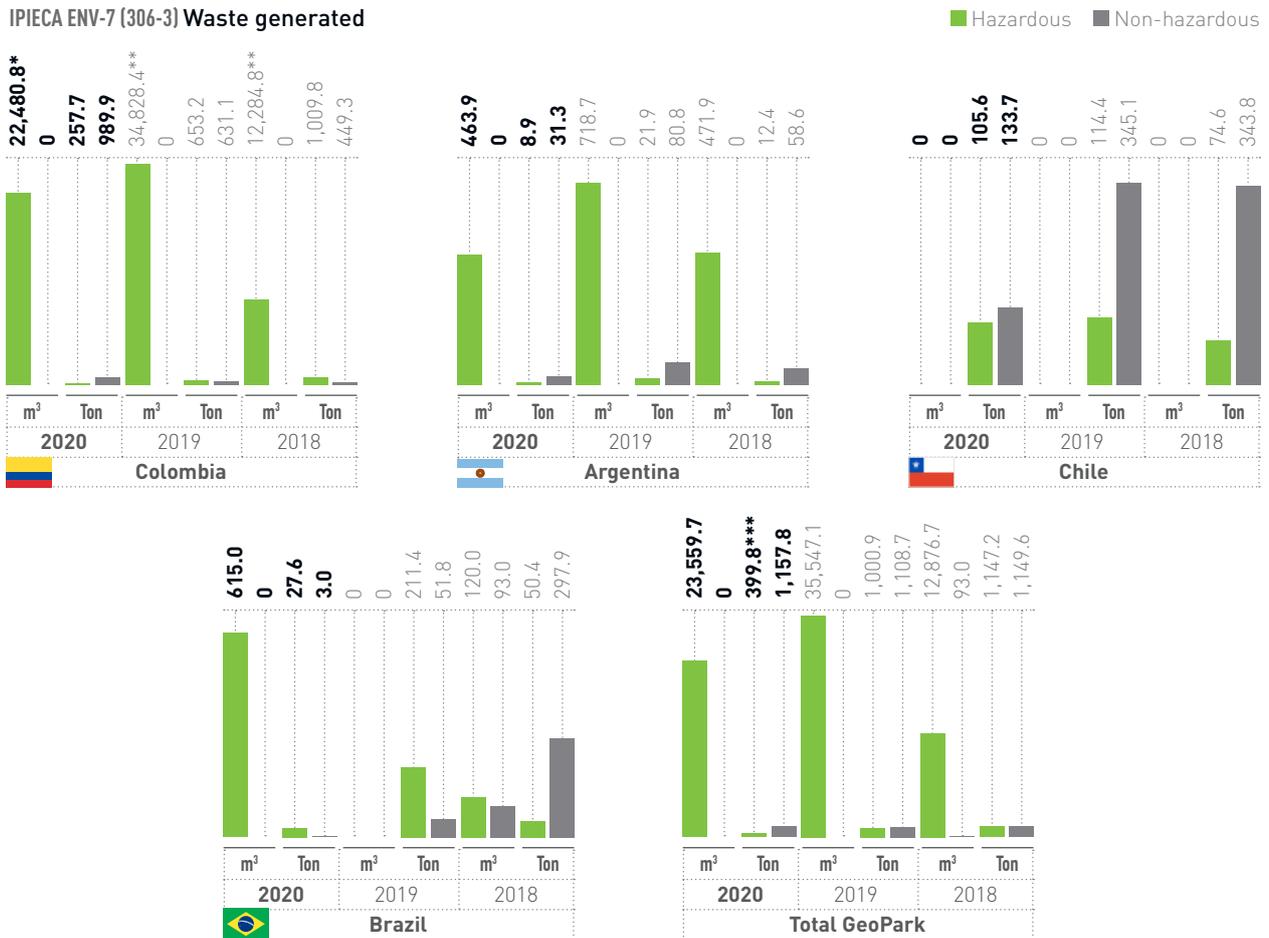
We implemented a Comprehensive Waste Management Plan to ensure compliance with environmental legislation in the handling and final disposal of each type of waste generated. We also work with specialized waste recyclers.

In Colombia, along with our contractors, we carry out audits on all types of waste disposal and the proper way to file reports, which are used to inform the environmental authorities of the actions we have taken.



The decrease in hazardous waste by weight from 2019 is mainly due to lower operations because of the pandemic.

### IPIECA ENV-7 (306-3) Waste generated



\*The volume of hazardous waste reported corresponds to drilling muds and includes what was treated internally by dehydration and what was handled by third parties for final disposal.

\*\* Drilling mud data that was not previously reported in 2018 and 2019 is included.

\*\*\* The decrease in hazardous waste by weight and volume from 2019 is mainly due to lower operations because of the pandemic.



In 2020 there was a 60% reduction in the generation of hazardous waste reported by weight and a 34% reduction by volume from 2019, mainly due to the decrease in activities during the pandemic.

Of the total non-hazardous waste generated in 2020 (1,157.8 tonnes), 48% was organic, 27% was recyclable and 25% was non-recyclable solids sent to final disposal in sanitary landfills authorized by environmental authorities.

Of the total hazardous waste reported by weight (399.8 tonnes), 99% were solids and most were contaminated with hydrocarbons. 67% was incinerated and 33% was sent to sanitary landfill facilities authorized by environmental authorities. The remaining 1% was post-consumer waste.

Regarding the waste reported by volume (23,559.7 m<sup>3</sup>), most was drilling cuts and contaminated soils, 46% was internally treated by dehydration and 54% was handled by authorized third parties.



Our operations in Chile and Argentina saw respective

**67% and 65%**

decreases in hazardous and non-hazardous waste generation compared to 2019.

In Colombia the increase in the amount of non-hazardous waste in 2020 is mainly due to the disposal of ferrous material that was disposed of by a licensed third party that held the required environmental permits.

In Chile and Argentina, we measure waste generated in weight and volume controls at the final disposal sites, which are managed by third parties licensed by authorities. We tracked the final disposal of hazardous waste through the Chilean government's SIDREP contaminants emissions and transfer platform.

In Argentina, hazardous waste from hydrocarbon-contaminated soil was treated by bioremediation and physical, chemical and biological controls.

Waste generated in Brazil came from the extensive production testing activities in the Praia dos Castelhanos well in Block REC-T-128 between January and May 2020.

For more details of our waste indicators, see the Environment Appendix.

## PREVENTIVE MANAGEMENT OF SOCIOENVIRONMENTAL IMPACTS

(103-1) At GeoPark we focus all our efforts on preventing, managing and responsibly reducing environmental impacts. We have important voluntary programs whose main purpose is to incorporate best practices at the early stages of our operational projects.

The adequate identification, evaluation and early management of the socioenvironmental impacts of our operations enables us to be accepted by local residents and authorities and secure a social license, as well as the legal environmental permits and the high standards we need for the socioenvironmental feasibility of our hydrocarbons exploration and production activities.

In line with our mission, our SPEED Integrated Value System and the new Business Model, we continue to strengthen our Environmental Management and Feasibility team and the internal coordination processes that impact our neighbors and nature. Only if we have the best socioenvironmental practices in the sector will we be able to satisfactorily and responsibly address the global challenge of climate change and other challenges in closing sustainable development gaps.

Our Commitment to Nature, People and Neighbors outlines our relationship with environmental protection, pollution prevention, compliance with environmental requirements and our commitment to continuous improvement of the EMS (Environmental Management System).

(103-3) We take a comprehensive and preventive approach to managing our socioenvironmental impact. We first assess the territory and diagnose its physical, biotic and social characteristics, to ensure that when designing and planning our operational projects we consider the environmental and social aspects of the areas that will be affected. We also account for the concerns of neighbors and authorities regarding the impacts that our operations may have.

Our environmental management goes beyond regulatory compliance and are directly related to our very essence as a company and our desire to establish good long-term relationships with the communities



Scan this code to see our Commitment to Nature, People and Neighbors

in the territories we operate in. Our ongoing research into new processes and technologies that contribute to environmental protection reflects our concern and interest in neighbors' wellbeing and our desire to be recognized as a responsible operator.

We understand that the only way to grow, and keep and enhance the acceptance and social license these communities and other stakeholders give us is to continue to be the best operators and neighbors. This requires more than strictly complying with legislation in the countries we operate in, and also involves a voluntary effort to help accelerate the work of countries and organizations to meet the United Nations' 2030 Sustainable Development Goals.



■ In 2020 we integrated the Amerisur and GeoPark environmental management systems and homologated the environmental practices and standards in the two basins (Llanos and Putumayo).



■ We renewed our Environmental Management System certification through 2023 for all our oil and gas exploration and production operations in Colombia, according to the ISO 14001: 2015 Standard.

#### SASB: EM-EP-160a.1. **Our Environmental Management System**

Our Environmental Management System encompasses programs for integrated water resource management, solid and liquid waste management, atmospheric and energy emissions, biodiversity and ecosystem services, and raising awareness (training and raising awareness of employees and suppliers). It also describes managerial-level roles and responsibilities for our environmental management.

Other company assets in countries such as Chile and Argentina do not have a certified Environmental Management System but have nonetheless implemented environmental management programs aligned with the same principles as those of the Colombian system, including integrated water, solid and liquid waste, energy and emissions management.

We have implemented permanent, cross-sector programs throughout the Company and its assets to raise awareness, train and educate our employees on the efficient use of natural resources and compliance with environmental regulations.

We know how important it is to balance the Company's management and sound environmental practices with the need for training and raising awareness in neighboring communities so that neighbors can play a more decisive role in protecting their natural resources and become more aware of the importance and benefits of recycling, the proper use of water and other practices.





■  
**(307-1)**  
We did not receive any fines or penalties in 2020 for non-compliance with environmental licenses and permits issued by governments in the countries we operate in.



■  
At GeoPark our Environmental Management System has been 14001:2015-certified since 2017, covering all exploration and development activities in Colombia, where 85% of our company's total production comes from.

### Environmental compliance

All our operations have the required environmental licenses and operations permits. These requirements are the framework on which we base our environmental management plans and, in turn, set down the necessary measures we need to take to guarantee optimal management of natural resources.

Through environmental auditing mechanisms we constantly follow up and monitor what is required in our licenses. Additionally, we report our performance transparently to the respective environmental authorities in all the countries we operate in.

### SASB: EM-EP-160a.2. IPECA: ENV-6 Spill prevention

It is essential that we avoid any type of impact, even minimal, on the environment. Oil spills are one of the main risks associated with hydrocarbon exploration and production activities, so we pay special attention to doing everything possible to prevent them from happening. An operational excellence approach is vital in being able to reduce as much as possible the probability of such events happening.

We have prevention plans in place that include activities to avoid spills. We also have structured procedures ranging from risk identification to the activation of contingency plans, in which we work with partners specialized in emergency response.

As a differential value in oil spill management, we involve our neighbors to supervise and guarantee processes to ensure the comprehensive management of spill responses. This citizen participation ensures a permanent flow of information and the involvement of the affected communities in decision-making about response measures and progress. In addition, the Company has action plans for institutional coordination and immediate responses to incidents to guarantee that water supply to neighbors is not interrupted.

Spills are classified as disruptive emergency events meaning that as well as impacting operations or having the potential to do so, they can endanger lives, the environment and infrastructure.

Accordingly, we have created a Business Continuity Master Plan to protect our facilities and resources (people, environment, infrastructure, equipment); our strategic, mission-critical, and support and control processes; and our business environment and its relationship with the Company. The plan aims to ensure that each of its components, depending on circumstances, can act independently or simultaneously and in a coordinated manner.

Spills in 2020 were handled quickly by activating the contingency or risk management plans and implementing recovery and cleaning processes in the affected areas. In addition, we informed environmental authorities of the response to each event.



In 2020 our Total Corporate Spill Indicator was

**0.7**

barrels of hydrocarbons spilled for every million barrels produced.



The Total Corporate Spill Indicator was

**35%**

lower than 2019 (1.08) and was also lower than the established annual reference index of 1.34.

### Corporate Indicator of Hydrocarbons Spills

Spills	GeoPark		
	2018	2019	2020
Volume spilled (bls)	3	29	17
Barrels of hydrocarbon spilled per million barrels produced (osb)*	<b>0.13</b>	<b>1.08</b>	<b>0.7</b>
Reference value	3	2	13.4

\*Considers uncontained hydrocarbons spills with a volume greater than one barrel of oil.

### Oil spills by country 2020

Country	Barrels spilled	Date	Cause	Environmental Impact	Measures*
Colombia	8	2/07/20	Valve leak from a constant level tank containing fuel oil.	Reversible	We verified the integrity plans of the facilities. We activated contingency and prevention plans.
Argentina	9	8/10/20	Flow line failure		

\*Measures implemented to control the event.

## FUTURE CHALLENGES

### Management of greenhouse gas emissions and energy

- Define a corporate GHG emissions reduction strategy to 2050, the definition of a leadership structure for its implementation and the involvement of Senior Management for its approval and implementation.

### Biodiversity

- Associate with a strategic partner to define a corporate protocol to care for and protect biodiversity in planning and operations in the Amazon.

- Carry out baseline studies of biodiversity and natural protected areas for blocks in the Sur Asset.

### Comprehensive water management

- Develop the project to strengthen Ideam's hydrometeorological monitoring in the hydrographic area of the Meta River in Colombia. This initiative involves a mandatory 1% investment agreed upon with the environmental authority. It will allow us to strengthen the Ideam hydrometeorological monitoring network, adapt to climate change in Colombia and improve knowledge of extreme weather events and their consequences.

- Guarantee the commitment of zero withdrawal of surface water for permanent operations.

- Continue to ensure zero direct discharges to surface water sources or courses.

### Comprehensive waste management

- Start the implementation of a circular economy model in our operations.

- Develop a sustainable camp project in the Llanos 34 block:

#### PHASE I

Use 100% of the organic waste generated in the initial stages of operation, using it as compost for soil improvement and geotechnical works.

### Preventive management of socio-environmental impacts

- Align the environmental management system with our 2021-2025 sustainability objectives (environmental programs, objectives, and indicators).

- Spilled barrels per million barrels produced (osb)  $\leq$  1.1.

- Identify how other countries are performing relative to the environmental management system and define the actions required so that by 2022 the system is aligned and can be certified in our other assets.

