

2021 SUSTAINABILITY REPORT

Propelling our own energy **TCF**

| | | | | | |
|---|-----------|--|-----------|-------------------------------------|------------|
| MESSAGE FROM THE PRESIDENT | 3 | New renewable energy solutions | 53 | Diversity and inclusion | 99 |
| MESSAGE FROM THE CEO | 5 | Productos based on low-carbon hydrocarbons | 56 | Attraction and retention of talents | 102 |
| 2021 IN FIGURES | 6 | Risks and resilience to climate change | 58 | Development of human capital | 105 |
| COMPANY PROFILE | 8 | Performance indicators | 59 | Performance indicators | 109 |
| ENERGY COMPANY | 9 | SUSTAINABLE PRODUCTION | 61 | SHARED SOCIAL VALUE | 111 |
| Value chain and business segments | 10 | Management systems | 63 | Supply chain | 113 |
| Corporate structure, governance and risk management | 12 | Water management | 64 | Relationship with the communities | 119 |
| Business strategy | 20 | Management of biodiversity | 68 | Social investment | 122 |
| Customers | 23 | Waste management | 71 | ETHICS AND COMPLIANCE | 126 |
| Performance and economic impact | 26 | Site recovery and management | 75 | Ethic business bases | 127 |
| COMMITMENT TO SUSTAINABILITY | 30 | Non-ghg atmospheric emissions | 76 | Legal and regulatory framework | 133 |
| Stakeholders and material topics | 31 | Performance indicators | 77 | Responsible tax compliance | 135 |
| Sustainability strategy and management | 34 | HEALTH AND SAFETY | 79 | Performance indicators | 136 |
| Human rights | 39 | OhS policies and management systems | 80 | NOTES | 137 |
| CLIMATE CHANGE AND ENERGY TRANSITION | 40 | People safety | 82 | LEGAL NOTICE | 139 |
| Energy perspectives | 41 | Health care | 85 | ABOUT THIS REPORT | 140 |
| Road map to climate change | 43 | Emergency preparedness and response | 90 | APPENDICES | 141 |
| Low carbon oil and gas operations | 45 | Performance indicators | 93 | EXTERNAL ASSURANCE REPORT | 185 |
| Energy efficiency | 50 | PEOPLE | 95 | GRI, SASB AND TFC D INDEX | 187 |
| | | Our team | 97 | | |
| | | Adaptation to the pandemic and new ways of working | 98 | | |

I am delighted to present the sustainability report of YPF S.A. in the year of its centenary. A century has passed since, on June 3, 1922, the historic decision to create the National Directorate of Fiscal Oil Deposits was made. Since then, YPF has followed a path linked to Argentine history, which also describes the future of the nation; a path full of shared achievements and learning that today places it as the most important company in the country, a leading player in the region's energy industry and, as last year's results suggest, with a promising future ahead.

Undoubtedly, the current legal nature of the company, which has a 51% shareholding corresponding to the Argentine State and 49% in private hands, has allowed the company today to be a driver of development in the country focused on responding to higher energy demand.

Another great event that has taken place during the last decade is the consolidation of the potential of Vaca Muerta, the world's second unconventional gas reserves and the fourth unconventional oil reserve, just at a time when the country's energy horizon needs to be transformed.

In 2021, we managed to halt the drop in oil and gas production of the last five years that deepened during the pandemic. We were able to recover profitability, with an annual EBITDA almost 7% higher than in the pre-pandemic period, and we also reduced the level of indebtedness. All this will allow us to invest in 2022 more than 40% more than the previous year, a total of US\$ 3.7 billion, the highest figure in the last five years.

Aware of our role in meeting the country's decarbonization goals and the need to strengthen our resilience to climate change, we understand that the energy transition is a key point of corporate strategy. For this reason, part of this investment will be used to continue developing renewable energy projects through YPF Luz and to enhance our participation in the lithium and hydrogen value chains with Y-TEC. To this end, we work together with the national government, the provinces, academia, and other companies that share our purpose of not only producing sustainable energy, but also developing new technologies that can be made available to the entire Argentine industry.

We will, of course, continue to invest in the heart of our business that functions as an engine of Argentine growth: competitive and more efficient carbon-emissions oil and gas production. For 2022, we have set ourselves the goal of increasing the annual production



of hydrocarbon, reaching the highest organic growth of the last 25 years. Once again, the focus will be placed on the unconventional Upstream, where we have already achieved unprecedented production records of more than 570 thousand barrels per day, a result only comparable to the best developments in the United States. We will also deepen the work on conventional production, based on greater efficiency in secondary recovery and the expansion of tertiary.

We also work on offshore exploration that we are starting together with Equinor and Shell to take advantage of the advantages of the resources offered by the continental shelf, complying with the strictest environmental and safety regulations. If activity in Vaca Muerta increases and the potential of offshore discoveries is confirmed, our production could double in the coming years, which would allow us to become hydrocarbon exporters. This is important so that the country can continue to grow, but also to promote the transition towards a lower carbon energy matrix, because both operations are comparatively more efficient in terms

of GHG emissions per barrel produced because they will also make the necessary resources available to boost it.

In the Downstream business, we plan to invest mainly in the retrofitting works that have already started in the refineries in order to be able to produce fuels with a less environmental impact. On the marketing side, we will continue carrying out the plan for stations of the future, to adapt our service stations to the demands of our customers and to new mobility.

There are many opportunities, as well as several challenges: energy challenges around the world, a series of challenging macroeconomic variables and Argentina's needs to urgently increase its production capacity and gas, oil and electric power transportation. The construction of the Presidente Néstor Kirchner gas pipeline by the State is an advance in this sense, as well as the investment we are making to improve the crude oil transportation infrastructure from Neuquén to Buenos Aires.

For this reason, we are confident we will achieve the objectives that we have set for ourselves, and this confidence is reinforced by the work carried out in recent years due to the efforts of all the members of the company, from the worker who works in a drilling well to the station employee who carries out our relationship with the client.



Pablo González
President of YPF S.A.

YPF celebrated its centennial anniversary on June 3, 2022. For a century, the company has been supporting the country and its people by generating the required energy for the economic and social development of Argentina. Today, it promotes the energy transition with a focus on business competitiveness, contributing to national decarbonization commitments.

After a complex 2020 due to the health and economic crisis associated with the global COVID-19 pandemic, 2021 was a year of recovery for YPF. We were able to gradually normalize our activities, capitalize on the efficiency plan implemented and once again show positive results.

We closed the year with an annual adjusted EBITDA of 3.8 billion dollars, 6% higher than in 2019. We stabilized oil and gas production, after five years of a downward trend due to the recovery of the conventional segment and the operational and cost improvements implemented in the unconventional developments of Vaca Muerta.

With an executed investment of 2,700 million dollars in 2021, we were the main investor in Argentina and closed the period with a 24% increase in the company's net oil reserves. YPF today has more than 1.1 billion barrels of proven reserves with a reserve replacement rate of 230%, the highest in two decades.

These results allow us to set ourselves superior objectives from 2022, with investment growth goals, which seek to double crude oil production in five years and increase gas production by 1.5 times. This would be the basis for strengthening the country's energy security and beginning to export hydrocarbons in a sustained manner.

In addition to the high-value and cost-efficient operations, we have as a central objective that they be low in carbon with renewed short- and medium-term goals. Our work plan has as its core: progress in energy efficiency and reduction of methane emissions; promote the role of natural gas as a transition fuel not only for Argentina but also for other countries, strengthen our electricity and renewable energy business, and advance in the development of new energies and lower carbon products, as hydrogen or lithium economy.

These advances are in line with the Paris Agreement and the United Nations Sustainable Development Goals. During 2021, we reinforced our Integrity Program with new compliance policies, we managed to keep the accident frequency rate low, although we need to redouble efforts in this area and we increased the company's social investment.

In the environmental area, we continue to apply a holistic approach to the management of resources, as water, energy and waste management.

We assume our role as the largest company in the country and we work to be responsible with our shareholders, but also with the communities where we operate, with our suppliers, with our clients, with employees, with citizens, to whom we also inform in a transparent manner about our performance.

With this vision, as a flagship, world-class and professional company, we are projecting the future of YPF for the next 100 years.



Pablo Iuliano
CEO of YPF



**FINANCIAL
PERFORMANCE**

**ARS 1,271,330
MILLION**
SALES REVENUE
+90% vs. 2020

**ARS 365,514
MILLION**
EBITDA
+275% vs. 2020

**ARS 256,639
MILLION**
CAPEX
+133% vs. 2020

ARS 848,118 MILLION
TOTAL SHAREHOLDERS' EQUITY
+24% vs. 2020



UPSTREAM

469.7 K BOE/D
TOTAL HYDROCARBON
PRODUCTION
+0.6% vs. 2020

245.3 K BOE/D
PRODUCTION OF LIQUID FUELS
+0.8 vs. 202

139 K BOE/D
NET SHALE PRODUCTION
(YPF AND PARTNERS)
+37.2% vs. 2020

1,143 MILLION BOE
TOTAL PROVEN RESERVES
+79.4% vs. 2020



**DOWNSTREAM /
GAS AND ENERGY**

328 K BBL/D
REFINING CAPACITY
+50% Argentine Market

1,654
GAS STATIONS
+22 vs. 2020

12,577 MILLION M³
NATURAL GAS SALES
+4% vs. 2020

11,444 GWH
ELECTRICITY PRODUCED
+27.8% vs. 2020



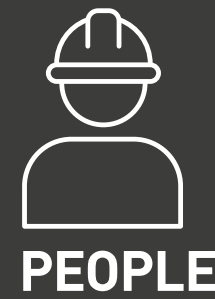
**RENEWABLE
ENERGIES
YPF LUZ**

397 MW
INSTALLED CAPACITY OF
RENEWABLE ENERGY (YPF LUZ)
+78.9% vs. 2020

1.210 GWH
WIND ENERGY PRODUCTION
+78% vs. 202

ARS 7,559 MILLION
SALES GENERATED FROM
RENEWABLE ENERGY SOURCES
+124% vs. 2020

4
WIND FARMS IN ARGENTINA
+2 vs. 2020
397 MW vs. 222 MW



0.34
ACCIDENT FREQUENCY RATE
-23% vs. 2019

14
AVERAGE TRAINING HOUR
LOAD PER EMPLOYEE
+24% vs. 2020

16.6%
LEADERSHIP POSITIONS
HELD BY WOMEN
8% vs. 2020

20,951
DIRECT EMPLOYEES
+5.7% vs. 2020
21.54% WOMEN
-0.8% vs. 2020



ARS 912.5 MILLION
VOLUNTARY SOCIAL INVESTMENT
+81,4% vs. 2020

87%
PERCENTAGE OF LOCAL
PURCHASES
-6% vs. 2020

ARS 11.5 MILLION
AMOUNT ALLOCATED TO
INCLUSIVE PURCHASES
+105% vs. 2020

ARS 230.3 MILLION
DONATION TO FUNDACIÓN YPF
+46% vs. 2020



28.3%
PURCHASE OF RENEWABLE
ENERGIES YPF S.A. /
TOTAL RE PURCHASED AT
WHOLESALE MARKET
+6.8 PP vs. 2020

**0.325 TCO₂E/
PRODUCTION UNIT**
GHG DIRECT EMISSIONS
INTENSITY
-13% vs. 2019

4.56
GJ/PRODUCTION UNIT
Energy intensity
-4% vs. 2019

35,342 KT
CONSUMED WATER (WITHDRAWN-
DISCHARGED WATER)
+8% vs. 2020
-13% vs. 2019

With almost 100 years of history, YPF S.A. is the leading energy company in Argentina. Its activities cover the entire oil and gas value chain in the country, including its production, refining and sale of its derivatives: fuels, petrochemical inputs, lubricants and products for agriculture, among others.

The company is a leader in unconventional oil and gas resources in Latin America and, in addition, has a growing business in electricity generation, including the development of renewable energy. Its headquarters and almost all of its operations are located in Argentina, although it has some activities in other countries of the region.

INVESTORS

YPF S.A. is a public limited company with legal domicile in Argentina, subject to the public offering system and the control of the National Securities Commission (CNV) as well as the United States Securities and Exchange Commission (SEC)¹

→ 51% Argentine State – Ministry of Economy - Secretariat of Energy

→ 49% BCBA and NYSE

VISION

To be a comprehensive energy company, profitable, competitive, and attractive to talent, which generates affordable and sustainable energy, with a focus on customers, leading to the present and future of energy in Argentina.

VALUES

- We act with integrity
- We are committed to sustainability
- We create value
- We focus on the customer
- We prioritize safety
- We value gender equity and respect diversity



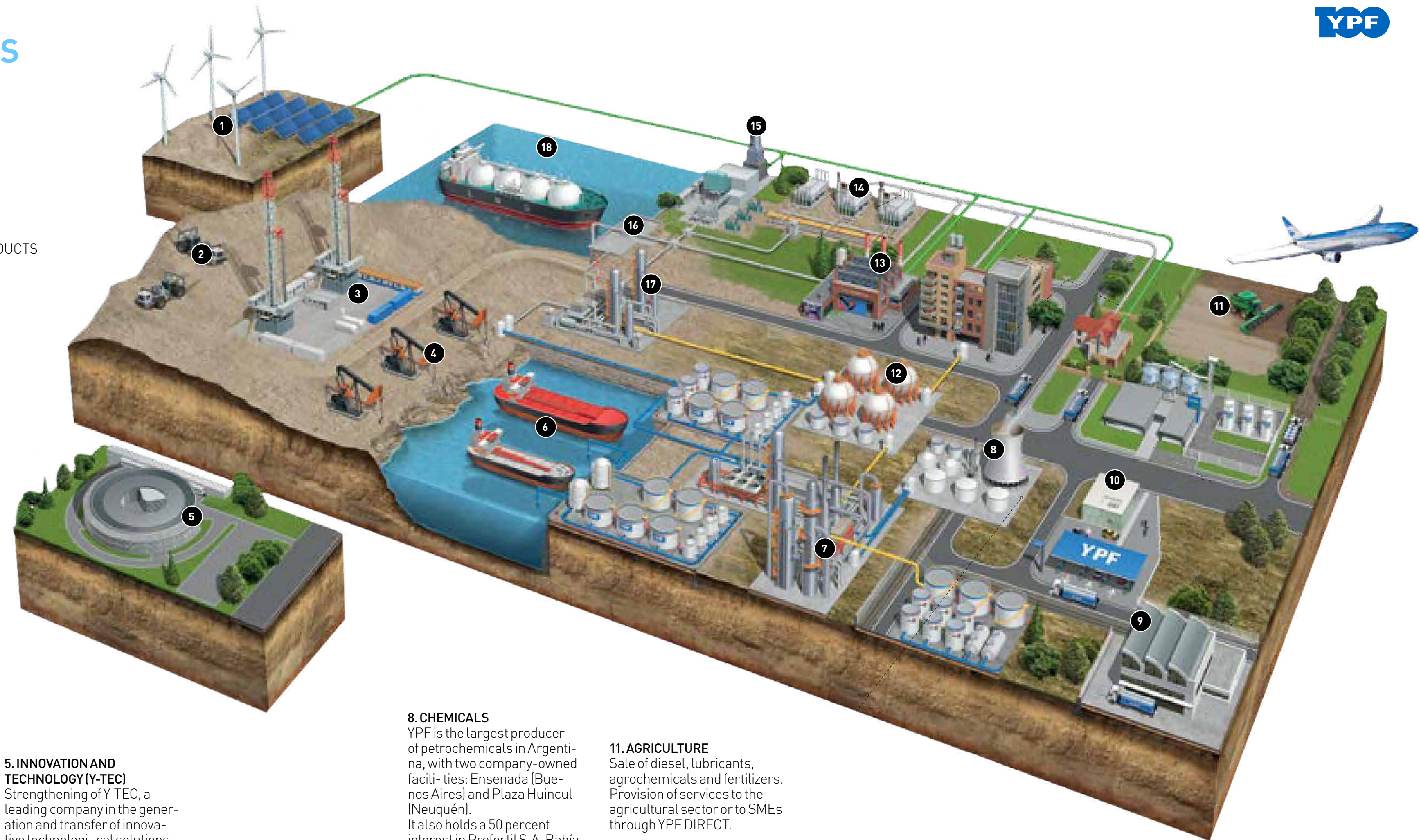


01 ENERGY COMPANY

VALUE CHAIN AND BUSINESS SEGMENTS²

REFERENCES

- OIL AND PETROLEUM PRODUCTS
- LIQUID FUELS
- NATURAL GAS
- ELECTRIC POWER



1. NEW ENERGIES

YPF Energía Eléctrica S.A. Development of wind and solar energy projects and increase in natural gas production to replace fuel oil or diesel power generation.

2. EXPLORATION

Search for and identification of new oil and gas reservoirs.

3. DEVELOPMENT

Preparation for production in areas with oil and gas reservoirs. Includes definition of development type and investment level.

4. PRODUCTION

Recovery of oil and gas resources -either conventional or unconventional- by means of extraction processes. YPF is the leader in oil and gas production in the country.

5. INNOVATION AND TECHNOLOGY (Y-TEC)

Strengthening of Y-TEC, a leading company in the generation and transfer of innovative technological solutions for a sustainable energy industry.

6. STORAGE AND TRANSPORTATION

Use of oil and gas pipelines, vessels and trucks to transport crude oil and condensate, dry and liquefied natural gas. Use of multi-purpose pipelines, tankers and trucks to distribute refined products.

7. REFINING

YPF's refining operations to produce fuels and derivatives (lubricants, plastic and synthetic consumables, agrochemicals and fertilizers) are conducted in three facilities: La Plata (Buenos Aires), Luján de Cuyo (Mendoza) and Plaza Huincul (Neuquén).

8. CHEMICALS

YPF is the largest producer of petrochemicals in Argentina, with two company-owned facilities: Ensenada (Buenos Aires) and Plaza Huincul (Neuquén). It also holds a 50 percent interest in Profertil S.A. Bahía Blanca (Buenos Aires).

9. LUBRICANTS AND SPECIALTIES

Design, production and sale of lubricants and specialties.

10. RETAILERS

A leading company in selling fuels and lubricants, with convenience stores in over 1,500 gas stations nationwide.

11. AGRICULTURE

Sale of diesel, lubricants, agrochemicals and fertilizers. Provision of services to the agricultural sector or to SMEs through YPF DIRECT.

12. LPG

Fractionation and distribution of liquefied gas (both in bulk or packed in cylinders) for electric power generation and for household and industrial use.

13. INDUSTRY

Provision of energy, supplies and services to the domestic industry.

14. GAS DISTRIBUTORS

YPF is engaged in the supply and distribution of household natural gas by holding a majority stake in Metrogas.

15. POWER PLANTS

Provision of natural gas to power plants, including two YPF-owned power plants: Tucumán and Loma Campana.

16. LNG

Regasification and distribution of liquefied natural gas in bulk.

17. MIDSTREAM

Natural gas production -treatment and bulk distribution to wholesalers (industries, power plants and gas distributors) through a pipeline network.

18. INTERNATIONAL AND DOMESTIC TRADE

YPF sells crude oil and condensate, natural gas, LNG, refined products and petrochemicals that are vital for the country's development.

Segments

GRI 2-6

Upstream

This segment is focused on all activities related to the exploration, development and production of oil and natural gas. Its sales revenues are obtained from oil produced for the Downstream segment and, marginally, for third parties, as well as from the sale of gas produced for the Gas and Energy segment.

Upstream's focus is currently on accelerating its shale developments in Vaca Muerta, (Loma Campana, La Amarga Chica and Bandurria Sur blocks).

UPSTREAM IN 2021

101

operating concessions in productive basins in Argentina

18

exploration blocks

138

shale production wells with partners

40%

participation in the country's oil production

31%

participation in the country's gas production (including LNG)

Downstream

It performs activities related to the production and marketing of refined products and petrochemicals. These are developed through Retail, Industry, Aviation, Agro, LPG, Chemicals and Lubricants as well as Specialized businesses. It is also responsible for the transportation of oil and gas to refineries and the distribution of refined products and petrochemicals to the different sales channels.

DOWNSTREAM EN 2021

3

company-owned refineries

328 KBBL/d

refining capacity

270,2 k BEP/d

Oil refining intake

82%

refinery processing level

54%

market share in the Argentine gasoline market

Gas and Energy

It performs activities related to the transportation and marketing of natural gas and LNG to third parties and the downstream segment. Its revenues also come from the operations of LNG Escobar's regasification terminals through the contracting of regasification vessels.

YPF LUZ

YPF takes part in the generation of electricity through this company jointly controlled with GE EFS Power Investments B.V. In its eight years of existence, YPF LUZ has already become a major player in the Argentine electricity market.

GAS AND ENERGY IN 2021

12.577 M m³

natural gas sold

26,5%

Market share in the Argentine gas market

11.444 GWh

Electricity produced through YPF Luz

CORPORATE STRUCTURE, GOVERNANCE AND RISK MANAGEMENT



GRI 3-3, 2-9, 2-10, 2-11, 2-15, 2-17, 2-18, 2-19, 2-20, 2-26

In order to consolidate an economically, environmentally and socially responsible business, it is essential to have a governance system that guides the structure and operation of all company departments towards ethical and transparent performance, being subject to the most rigorous anti-corruption mechanisms. Therefore, our governance system at YPF is based on integrity, transparency, sustainability, diversity and the disclosure of relevant information to all our stakeholders. These pillars are in the Company's Bylaws, the Regulations of both the Board of Directors and the Audit Committee as well as the Company's Ethics and Code of Conduct. Our governance and corporate practices seek to incorporate the highest national and international standards, which are even higher than those set forth in the applicable regulations³.

Board of Directors

It is the highest authority within the company, responsible for leading and laying the foundation to develop its sustainability. Among its other responsibilities are:

- Determining and promoting corporate culture and values, ensuring that the highest ethics and integrity standards are observed in the company's best interest.

- Ensuring a strategy inspired by the company's vision and mission, which is aligned with its values and culture.

- Exercising control of the company's management, ensuring that management takes actions focused on implementing the strategy and business plan approved by the Board of Directors.

In accordance with YPF's bylaws and the General Corporations Law, shareholders elect directors by majority vote at the shareholders' meeting, by share class. As of December 31, 2021, the Company's Board of Directors was made up of the following:

CHAIRPERSON

Pablo Gerardo González

REGULAR DIRECTORS

Roberto Luis Monti
Norberto Alfredo Bruno
Horacio Oscar Forchiassin
Ignacio Perincioli
Pedro Martín Kerchner Tomba
Ramiro Gerardo Manzanal
Héctor Pedro Recalde
Gabriela Alejandra del Valle Lasquera⁴
Celso Alejandro Jaque
Sergio Pablo Antonio Affronti
Demián Tupac Panigo

ALTERNATE DIRECTORS

Gerardo Damián Canseco
Guillermo Rafael Pons
Adrián Felipe Peres
Silvina del Valle Córdoba
Miguel Lisandro Nieri
María Martina Azcurra
Santiago Martínez Tanoira
Silvia Noemí Ayala
Santiago Álvarez

The board of directors is composed of all the 12 regular directors, including the chairperson. 11 are independent and 1 holds an executive position within the company. They have been designated to hold said position for one year. For more information, refer to document 20F.

Board of Directors Committees

The Board of Directors has the number of committees it deems necessary to effectively and efficiently accomplish its mission. These are:

- **Audit Committee:** Provided for by Law 26,831, the rules of the National Securities Commission (CNV) and SEC standards, it is comprised of three directors. In 2021, its members held 18 formal meetings, with an average attendance of 88.89%.
- **Strategy and Transformation Committee:** Comprised of nine directors, who review the company's strategic plan before its consideration by the Board of Directors.
- **Appointments and Remuneration Committee:** Comprised of five directors, four of whom are independent. In 2021, its members held 14 formal meetings, with an average attendance of 91.43%.
- **Risk and Sustainability Committee:** Comprised of seven members of the Board of Directors, who held 10 formal meetings in 2021, with an attendance of 94.05%.

- **Legal and Institutional Affairs Committee:** Comprised of five directors. In 2021, 10 formal meetings were held, with an average attendance of 82%.⁵

Information and training of directors

YPF provides the technological means for the directors, so they can have a secure, symmetrical and timely access to relevant information for decision making. Submissions for their consideration also include a risk analysis performed by the corresponding area.

Furthermore, the Chairperson of the Board of Directors must ensure that the members of the company's highest management body receive continuous training in accordance with YPF's activities. In this regard, periodical trainings concerning their responsibilities and other shared issues are organized, through programs designed by the Corporate Secretary in agreement with the company's chairperson. In 2021, directors were trained in governance, risk, sustainability and compliance.

Evaluation of Directors

Following our continuous improvement plan in corporate governance, in 2021 YPF's Board of Directors underwent a self-assessment process once again. The purpose of this measure is to ensure that the directors perform their

DIMENSIONS EVALUATED

| | | |
|---|---------------------------|-------------------------------|
| Board of Directors as a collegiate body | Each director as a member | Board of Directors Committees |
|---|---------------------------|-------------------------------|

ASPECTS EVALUATED

| | | | |
|--|--|---|---|
| Quality of the monitoring and risk management role | Quality of strategic and business consulting | Dynamics of the Board of Directors and proactive participation of its members | Dynamics of the Board of Directors and proactive participation of its members |
|--|--|---|---|

duties effectively, professionalizing their management and aligning their performance with the principles of the OECD, G20, CNV and international best practices, in addition to being a requirement of ByMA's Corporate Governance Plus Panel, which we are part of.

It was implemented by the Chairperson of the Board of Directors, with assistance and coordination from the Corporate Secretary.

The results are brought to the attention of the Board of Directors, which may ask the Corporate Secretary to make proposals for improvement. Likewise, the general shareholders' meeting has the power to evaluate annually how the Board of Directors is managed.

Remuneration of the Board of Directors

Directors' compensation requires the approval of the general ordinary shareholders' meeting. On April 30, 2021, the shareholders' meeting authorized payments on account of directors' and Audit Committee members' fees of up to \$463,479,265 for the 2021 fiscal year.

Legal regulations establish that the annual compensation paid to directors may not exceed 5% of the net income for the year if YPF does not distribute dividends for that period, and they may be increased up to 25% of the net income when dividends are distributed. This applies to both independent as well as executive company employees and it includes salary and other remuneration for performing permanent functions.

Senior Management

YPF's most senior executive is the Chief Executive Officer (CEO), who, in compliance with the Company's bylaws, may not serve at the same time as chairperson of the Board of Directors. The CEO reports to the Chief Financial Officer (CFO) and the heads of the various vice presidencies:

- Vice President of Conventional Upstream
- Vice President of Unconventional Upstream
- Vice President of Downstream
- Vice President of Gas and Energy
- Vice President of Services
- Vice President of Sustainability, Environment, Health and Safety
- Vice President of Strategy and Business Development
- Vice President of Corporate Affairs, Communications and Marketing
- Corporate Vice President of Legal Services
- Vice President of People and Culture
- Vice President of Digital Technologies

Just like directors, top executives receive permanent training on issues related to their roles. In addition to the salary, set by the Appointments and Remuneration Committee, they receive different compensation depending on the performance of indicators related to the company's annual objectives, which include financial, productivity and sustainability goals.

The company also has two committees comprised of top managers:

- **Transparency Committee:** Comprised of all senior management and vice presidencies heads, as well as internal and reserve auditors.
- **Ethics Committee:** Comprised of the internal auditor, the Corporate Vice President of Legal Services, the Chief Compliance Officer, the Vice President of People and Culture and two other members appointed by the Chairperson of the Board of Directors from among employees in operational or business areas.

Risk Management

GRI 3-3, 2-12, 2-23

YPF has structured a corporate model for timely risk management, including those related to sustainability and climate change, which is continuously executed and shared throughout the organization. Based on the guidelines of ISO 31000, COSO ERM standards and our Corporate Risk Management Policy, this process involves the commitment of senior management and the Board of Directors, which created the Risk and Sustainability committee in 2016.

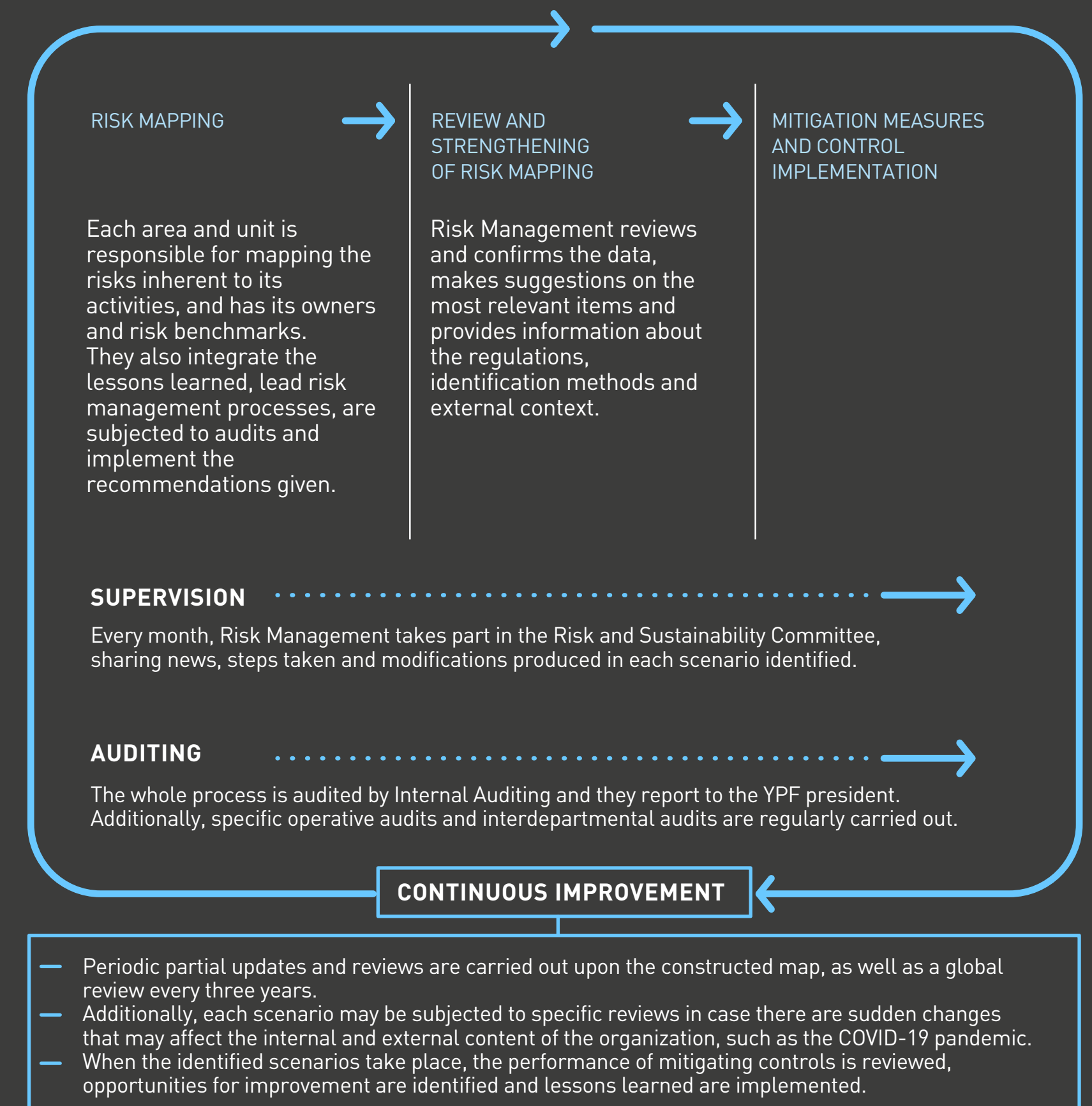
In order to identify, evaluate and address the threats that could impact our goals and strategy, we have consolidated a corporate risk map that is periodically updated with the participation of the business units and areas of YPF S.A., under the coordination of the Risk Management department, which works separately from the rest of the areas, reporting directly to the Vice President of Sustainability, Environment, Health and Safety (SEHS) and the latter, to the CEO.

Following international best practices, risks are classified into environmental, strategic, operations and compliance risks. Within each category, different scenarios are analyzed: financial, operations, climate, fraud, corruption, etc.

In the case of financial risks, we perform sensitivity analyses and stress tests in which we evaluate the impact of factors such as interest rates, exchange rates and inflation. Monte Carlo simulations are also conducted to determine risk metrics on the company's cash flows, introducing variables that allow for the preparation of a probability matrix.

To support the process, we have an IT tool that makes it possible to generate different types of reports, activate alarms and coordinate the interactions of different scenarios.

The projects have a risk assessment conducted using the technique best suited to their nature, scope and purpose.



Activities conducted in 2021

For the first time, we evaluated the maturity level of the corporate risk management model, an activity that was led by an external international consultant. The purpose was to identify opportunities for improvement and to compare ourselves to other similar companies.

In order to promote a preventive culture in the organization, we held three risk management workshops, in which the heads of the businesses and areas participated through their leaders, risk owners and other collaborators responsible for their management.

In addition, workshops were organized to update emerging risks, and risk scenarios with mitigation actions involving more than one area or businesses were reviewed for better coordination and leadership.

Training in risk management

As part of the Board of Directors' annual training program, we have held an Enterprise Risk Management training day since 2020 for its members.

The general training program includes an introductory e-learning course on risk management which is available to all YPF S.A. staff.

In addition, the following trainings were held:

- Training day on industrial risks, in which we addressed fire extinction, work at heights and electrical risk, with virtual reality technology.
- Round table on process safety management in times of crisis.
- Seminar on hazard identification analysis.
- Two training sessions on the use of computer tools.

Emerging risks

Proper risk management includes the identification of those long-term hazards that may have a significant future impact on businesses. These risks have their own map in YPF. In 2021 the main risks were:

1. Climate change

Argentina's greenhouse gas (GHG) emission reduction goals, associated public policies and the Law on Minimum Requirements for Adaptation and Mitigation of Global Climate Change (27,520) could translate into carbon taxes or higher energy efficiency standards with impacts on the markets where we operate. Our results could also be affected by changes in



fuel consumption or restrictions on access to capital due to increased demands from the financial market. Furthermore, extreme weather events could affect our operations continuity.

Faced with this scenario, the company has developed a climate change resilience strategy based on the increasing decarbonization of its

core businesses, oil and gas, and the parallel development of non-polluting energies.⁶ Risk Management and Sustainability departments report regularly to the Risk and Sustainability Committee on our climate change efforts. The committee, in turn, keeps the Board of Directors informed.

2. Reduction of the reinsurance capacities of international markets as a consequence of restrictions imposed by their boards of directors to ensure operations of certain activities or failure to implement the climate change strategy in a timely manner.

In 2020, Lloyd's (London) insurance market published its first environmental, social and governance (ESG) report, outlining the commitments they have made to align with the United Nations Sustainable Development Goals and the Paris Agreement. In this report, they defined that they would stop providing new insurance coverage or investments to coal-fired power plants and coal mines as of 2022, and would cease renewing coverage for these activities as of 2030. In addition to Lloyd's, eight leading insurance and reinsurance companies established the Alliance of Insurers for Net Zero Emissions, pledging to drive the transition of their insurance and reinsurance underwriting portfolios to GHG neutrality by 2050. In this new context, the company could be affected by limitations in reinsurance offers and possible cost increases.

As management measures, Risk Management department has raised the Risk and Sustainability Committee's awareness of this threat, and various reports have been received from the main international brokers. Furthermore, different strategies are analyzed, answering specific questionnaires and organizing road show type meetings to maintain fluid communication with the markets and highlight the initiatives developed by YPF in the field of sustainability.

Information security

Information security and cybersecurity governance

All projects involving information technology have a cybersecurity aspect. Thus, management in charge - the Cybersecurity Department - intervenes in each of them, safeguarding IT assets and maximizing their tolerance to cyber-attacks.

On a broader level, the Board of Directors, through its committees, monitors risks, action plans and the evolution of cybersecurity in the company. In these tasks, the Audit Committee oversees mitigation strategies⁷ and the Risk

and Sustainability Committee monitors the main corporate risks, ensuring that adequate controls are in place. On an executive level, those responsible are the Vice President of Digital Technologies and the Cybersecurity Manager (CISO).

Cybersecurity policies and practices

Our regulatory framework includes policies, standards and procedures to ensure the proper management of critical information for all members of the company and third parties. Highlights include our Corporate Cybersecurity and Security Policy, which is available to all employees and is annually updated. This framework includes consequences for non-compliance, which may result in termination of employment and legal action.

CYBERSECURITY EXECUTIVE RESPONSIBILITIES

CEO

Governs the strategy through the annual publication of the Cybersecurity and Corporate Security Policy.

Vice President of Digital Technologies

Chief executive responsible for cybersecurity. Has extensive experience in the development and execution of global technologies in the research and development, strategic innovation, agri-food and oil and gas sectors.

Chief of the Cybersecurity Department (CISO)

Reporting to the Vice-Presidency of Digital Technologies. participates in meetings with the Board of Directors to provide information on cybersecurity matters when requested and/or deemed necessary.

In this context, the company has implemented a series of control and prevention actions:

- We have a Cyber Risk Management Center and an IT Security Incident Response Team in place to monitor and mitigate cyber threats, to which employees can make inquiries and report incidents at any time.
- IT infrastructure and information security management systems have been audited by Deloitte as part of the Sarbanes-Oxley audit.
- We perform periodic vulnerability tests of IT infrastructure and we are incorporating the discipline of infrastructure assessment before moving to production.
- Internet-exposed sites undergo persistent penetration testing.
- Company-wide awareness campaigns are deployed throughout the company.

Cybersecurity advances in 2021

During the reporting year, we continued to spread campaigns to warn about threats such as phishing and ransomware, which have been on the rise since the start of the pandemic.

We also adjusted the values of the maturity goals for cybersecurity systems in the different industrial processes, after putting them through an evaluation process according to the C2M2 model in the previous two years, and developed plans to achieve them.

In addition, we adopted the cyber risk assessment methodology of the IEC-62443 standard, specifying that risk assessments must be performed on existing infrastructure and on all new engineering projects. During the last year, it was applied to conventional and non-conventional Upstream, refining and logistics processes.

Another milestone was the publication of the new Cybersecurity and Corporate Security Policy, which merged the existing cybersecurity and physical security policies, aligning them with the corporate risk management strategy.

OPERATIONS CONTINUITY

YPF has an Information Systems Continuity Management System (SGC-SI) in place based on the ISO 22301 standard, which establishes plans, procedures and standards to act in the event of a total or partial incident which may affect operations continuity.

Biannual business impact analyses are performed to determine which applications should be included in the SGC-SI. In addition, in-house and cloud-based disaster recovery plans are periodically tested and optimized.

An annual schedule of exercises is defined to verify the continuity of the applications and services included in the SGC-SI. Three fiscal years per year are planned for in-house systems and one fiscal year per instance for those cloud-based systems. Cyber-simulation exercises on production processes are also conducted with the participation of businesses and the company's crisis committee.

Furthermore, cybersecurity controls were optimized and new technologies were deployed for the "securitization" of cloud and in-house environments.

In conjunction, in response to the increase in attacks against critical infrastructure, we worked on simulations of cyber-incidents in the OT environment (intelligent devices such as sensors, probes and controllers).

DATA GOVERNANCE

During 2021, we evaluated the different roles and responsibilities in the organization to align them with world-class practices. In some vice presidencies, such as Supply Chain and People and Culture, we have incorporated data governance cells, with the mission of identifying in their domains the main activities and dimensions related to this matter. Upstream, procedures and standards were defined and published to implement governance frameworks for 14 data families.



WITH 100 YEARS OF HISTORY, YPF IS THE LEADING ENERGY COMPANY IN ARGENTINA. ITS ACTIVITIES COVER THE ENTIRE OIL AND GAS VALUE CHAIN: THE PRODUCTION, REFINING AND SALE OF ITS DERIVATIVES.

Pillars of business strategy

The definition of YPF's strategy is aligned with our goal to be Argentina's leading integrated energy company, low in costs and low in carbon, with a focus on oil and gas production, the marketing of hydrocarbons and derivative products, and incremental and profitable efforts in the identification and execution of projects which allow us to move forward in energy transitions, such as the case of electric power generation and renewables. We aim to generate long-term value for our stakeholders and for the nation as a whole, taking into account our corporate composition and our role as the largest company in Argentina.

In this context, our strategic pillars are:

- Discipline in the allocation of capital, focusing it on the development of our unconventional hydrocarbon resources, in which we enjoy competitive advantages that allow us to generate value with sustainability.
- Cost and process efficiency in all business segments, particularly in Vaca Muerta, in order to ensure its resilience even in low price scenarios.

- Rationalization of the conventional asset portfolio, prioritizing profitability through the incorporation of technology and innovations to gain efficiency.
- Adaptation of refineries to achieve greater shale processing capacity and to ensure that fuel quality evolves in line with customer expectations.
- Reduction of CO₂ emissions in the company's scopes 1 and 2, and the development of renewable energies through our participation in YPF Energía Eléctrica, as part of our commitment to sustainability.

The investment plan set forth in this strategy requires investment of future revenues, collaboration with strategic partners, and entering into debt at levels we consider moderate for a company working in our industry.

Innovation and digital transformation

GRI 3-3

A critical and shared plank lever to achieve YPF's strategic goals is technological innovation. Increased security and efficiency of processes and reduction of operating costs require expanding the use of technology, remote monitoring, automation, and digitalization. This is an effort that has been ongoing at YPF for years, in which several milestones were reached in 2021.

Advances in the digital agenda

The company is undergoing a profound digital transformation, driven by an agenda comprised of a portfolio of projects that addresses various technological themes. In 2021, this agenda was doubly enhanced with the conversion of the Digital Technologies manager into a vice presidency - now reporting directly to the CEO - and the incorporation of new digital and systems maturity indicators that make it easier for businesses to monitor their progress. Some of the progress made during the year in the agenda's main themes include:

• **Decisions informed by data**

In the Upstream, various technology solutions were implemented that compile mass data

generated by the assets and equipment involved in key processes and, through artificial intelligence, develop assessments automatically and in real time that allow for better decision-making. For example:

- A solution was incorporated into all pulling and workover equipment (used in the wells) to monitor compliance with the objectives set forth in the operating contracts online.
- Through video-analytics - software to analyze images, in this case captured by a thermal camera - a battery inlet collector is being monitored in Rincón de los Saucés, to detect production losses that require human intervention.
- A solution was implemented for the intelligent diagnosis of failures in 941 wells with PCP (Progressive Cavity Pumps) and another to monitor the efficiency of the vents in 20 flares in Sierra Barrosa, Estación Fernández Oro and unconventional segment areas.
- 1,800 tanks, 4,500 ducts, and 3,000 machines already have a tool that automatically generates risk matrices, which decreases the probability of events having negative impacts on the environment and production.

→ Geoscience processes were optimized with the implementation of HPC (High Performance Computing) in the cloud environment, which made it possible to deploy an automatic geophysical interpretation tool to accelerate the detection and exploitation of opportunities by up to two years.

→ Progress was made on the design of a solution to evaluate risks related to well integrity and to determine mitigation actions, with a potential scope of more than 14,000 wells.

In Downstream, we continue to incorporate video analytics-based solutions in major industrial complexes to monitor compliance with security measures. Moreover, in order to preserve the physical integrity of ducts, an artificial intelligence-based platform was created that automatically processes, classifies, and labels events, based on images captured by drones that can cover more than 200 kilometers in the Mendoza and Buenos Aires provinces.

• **Connected assets**

In Upstream, 12,761 wells were automated in 2021. Real-time monitoring translates to higher levels of security and efficiency.

In Downstream, the use of glasses with cameras was extended to conduct remote inspections, training, and audits. More than 20 experiences were conducted in the industrial complexes and logistics facilities.

Furthermore, our service station network operations are monitored in real time, to guarantee the availability of key brand-loyalty and payment tools: YPF App, YPF Ruta, and Serviclub.

• **OT/IT technological convergence**

In 2021, we were able to equip the two industrial complexes with industrial Wi-Fi coverage that covers 100% of the facilities. This made it possible to deploy a tool to monitor the use of personal protective equipment that alerts to risky situations early.

• **Streamlined processes**

Data digitalization is a necessary step to achieve more streamlined operations. In 2021, we digitized georeferenced deposit data to be able to view them on GIS interactive maps and progress continued on the digitalization of his-

torical technical information of the Upstream segment, completing the KM4 file on Comodoro Rivadavia. Furthermore, the digitalization of the Contractor Resources System expedited the process of submitting and validating contractor information. The new portal is already being used by more than 1,200 contractors.

Additionally, we incorporated new systems to further streamline various processes:

→ The Digital Point of Entry application expedited the delivery of technical information by contractors once they had completed work or studies, and their availability improved thanks to our internal Unify search engine.

→ We deployed FARO, our new service station management system, which governs the billing, stock, reconciliations and all administrative processes in the stations. The system already covers 68 points on the OPESSA network.

→ We concluded phase one of the transformation of the asset management process, reliability, planning, and maintenance scheduling in our refineries, adapting them to the ISO 14224 Standard.

→ We began phase one of the Cenit project, which will take five years, consisting of the migration of all our systems to the SAP S/4HANA platform. We began with the main commercial, logistics, and legacy systems processes.

• **Point to point supply chain**

We continued with the deployment of Optimística, our secondary logistics planning tool in Fuels, LPG and Chemicals. In this way, more than 39,000 m³ of products are transported daily by land through optimized routes to make the movement of our fleet more efficient.

• **The customer's digital experience**

We improved the YPF App, which reached 2.7 million users by the close of 2021, 75% more than in December 2020. In the last month of the report year, it also broke the record for monthly transactions through the application, with 4.2 million, a year-on-year growth of 400%.

Y-TEC: betting on technology and sustainability

GRI3-3

With a focus on research and development, in 2018, the company and the Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET - National Council on Scientific and Technical Research), an autarchic entity under the scope of the Ministry of Science and Technology, launched Y-TEC, an interim phase between the scientific-technological capacity placed in the country's universities and the energy and industrial sector.

Currently Y-TEC has a sustainability program focused on three main points:

- 1. Environmental fingerprint:** Remediation technologies, effluent treatment, ecological restoration of degraded areas, and CO₂ capture and reuse.
- 2. Agro:** Smart biological and phytosanitary products.
- 3. Biomass valuation:** Transformation of biomass-derived compounds into higher value-added products.

In 2021, two new solutions were launched for

the agricultural sector and a new application of an effluent treatment technology.

- **InteGra Digital Quality Control**

In the framework of YPF Agro's InteGra project, we developed a digital pocket device that allows sampling of phytosanitary products sold in bulk, which immediately processes the samples and sends the results to a mobile app, in a way that guarantees product quality in all parts of the logistics chain.

- **Y-TERRA Foliar**

Development was completed of this new biologically-based liquid stimulant for soy cultivation, which, when applied to the leaves, increases absorption and assimilation of nutrients, tolerance to negative impacts created by chemicals, and other agronomic traits that promote growth.

- **Nano-bubble aquifer treatment**

A new Nano-bubble technology application was launched to remediate underground waters, which was added to the solution developed previously to treat effluent. It is an advanced oxidation technology that uses nano-sized bubbles to degrade hydrocarbons dissolved in water. Unlike conventional remediation, this technology achieves undetectable concentrations of hydrocarbons, making water reuse possible.



Customers are at the center of our activities and are one of the cornerstones of YPF's commercial strategy. Whether they are the millions of users at our service stations, or the more than 250,000 agricultural operations in Argentina, we seek to strengthen long-term relationships with everyone based on positive experiences and a deep knowledge of their needs, to be closer every day to their decisions.

Service stations

The stations are the main point of contact with our customers. In 2021, our network added 21 new establishments, reaching 1,654, which represents nearly one third of all the stations in the country. In total, 160 are proprietary, 50 more than at the close of 2020. Through them, we sold 51% of the gasoline sold during 2021 in the Argentine retail liquid fuels market.

Network transformation

In a highly competitive scenario characterized by profound changes in consumer habits and mobility, new trends in the retail world, accelerated digitalization, and the permanent search for agility when providing services, we have made the transformation of our stations network a priority at YPF. During 2021, a four-year plan was approved that goes beyond a simple image change. With this transformation, there will be four types of stations:

- **Maximum efficiency:** A self-service or assisted service model that provides the customer a speedy purchase, accessibility, and minimal interaction. The user can choose the fuel and payment method as well as include products from the Full Store in their purchase, which are delivered once the fill-up is completed in the pick-up area. All of this through modern self-service stations that interact with the YPF App. An example of this model is the service station inaugurated in December 2020 in Chacras de Coria, Luján de Cuyo, Mendoza.
- **Maximum Experience:** This eminently urban model will include the largest number of service options: there will be a meeting point, for meetings, recreation, product pick-up and energy supply, with unique ar-

chitecture and wide spaces integrated into the environment. The 2022 inauguration of the first station of this kind, located on Calle Echeverría in Buenos Aires, will coincide with the YPF centennial celebration.

- **Core:** The station has high-performance technology equipment that allows it to provide a full digital experience. For example, it has a sign with artificial intelligence to offer each customer personalized communication. The model is designed for high-demand urban contexts. In 2021, the first Core station was inaugurated in the City of La Plata.
- **Maximum Accessibility:** Model adapted to small towns and cities with reduced sales volume but where YPF is often the only service station available. More than 200 of our stations are the only station in their town. In these cases, efficiency in the construction and operation is prioritized for economic sustainability.

One of the goals of this project is to turn our stations of the future into true mobility hubs, where customers can choose from liquid fuels, electricity, CNG, or other types of energy. In addition, we want them to be environmentally friendly, in both material and function, including solar panels, smart lighting, dry urinals, and other similar features.

In 2021, the transformation covered 68 stations, and during 2022, another 300 are scheduled to be transformed. This is a dual effort, in which YPF provides the image, and the operator provides the capital. To facilitate financing, YPF has signed agreements with Banco Nación, Banco Provincia, and other entities that allow our flagship partners to access convenient loans.

VoC Program

The design of the stations of the future would not have been possible without a profound knowledge of our user preferences, which we have achieved thanks to efforts in digitalization and advanced analytics. One of the crucial initiatives in this regard was the VoC (Voice of Customer) program, implemented in 2021 in the Customer Experience area. It consists of a tool that allows the expectations, preferences, and experiences of the customers to be regularly and permanently identified with respect to our products, services, and proposed value. The strategy focuses on four indicators:

- **NPS (Net Promoter Score):** Measures customer loyalty based on the recommendations they make about the product. This survey is sent to all Serviclub members, our loyalty program, after they make a purchase. YPF began its measurements in January 2021 with a result of 64.5%, ending December 2021 at 69.4%.
- **YPF APP:** Through the app, which already includes 18% of our fuel sales, the customer may issue comments after completing a transaction and evaluating their satisfaction.

- **Zoned QR Code:** Linked to a satisfaction survey where the customer leaves their comments about the service, cleanliness, and infrastructure of the point of sale.
- **Google My Business:** We have worked intensely on the geolocation of all of our stations, so they can act as channels of direct contact with the customer.

The information compiled is shared with each station chief, commercial representative, and vendor through gatherings and training sessions.

Transport

In 2021, we implemented a new concept for the sale of YPF Ruta - our fleet management platform - through plans adapted to the needs of our customers: from a simple fuel supply solution to a complete solution that includes telemetry in their vehicles and supply tanks, so the customer can manage all their company's transport needs in a single place. By year end, we had been able to add 1,252 new YPF Ruta customers (6,250 vehicles), 400 with telemetry service installed (4,170 vehicles).



Agro

With more than 100 exclusive distributors throughout the country, YPF Agro recorded billing of more than USD 2 billion in 2021. Grain and byproduct exports grew 53% compared to 2020, reaching USD 623 million, which represents 44% of YPF SA's foreign exchange.

Since the start of the year, we have worked to position three large projects:

- **SUMMA:** Integral precision agriculture service that addresses from configuration to economic analysis of the complete cycle.
- **Integra System:** Bulk phytosanitary product sales service which is very simple to use, with the addition of a technology package that allows the producer to manage consumption more efficiently. We obtained SENASA approval to sell this product in 2022.

- **Semillas Illinois:** We strengthened our alliance with Grupo Don Mario to expand our seed market. We have obtained a robust portfolio, with a variety of materials adaptable to the entire country, which include soy, corn, and wheat.

As a way of building customer loyalty, in 2021, we launched a Serviclub program in the proprietary Insignia YPF Agro network, with a scope of more than 1,000 registered trade names.

Product Safety

416-1, 417-1, 417-2, 417-3

All products YPF sells and uses in its intermediate processes have safety sheets that provide information on the possible hazards of each substance and mixture contained, prepared according to the Globally Harmonized System of Chemical Product Classification and Labeling (Rev. 5). In addition, all significant product and service categories are evaluated from the perspective of their impact on health and safety in order to make improvements.

Protection of customer privacy

418-1

YPF is governed by the Personal Data Protection Act (PDPA) of Argentina, and the provisions of the Ethics and Code of Conduct, which requires that all necessary measures be adopted to protect our customers' information. In addition, our Cybersecurity Regulatory Framework establishes the care, treatment, and responsibilities in this regard, and we are committed to preserving the privacy of personal data. These principles extend to controlled companies, contractors, suppliers, and partners.

In 2021, no violations were recorded in relation to the product and service label information, or with marketing communications.

In 2021, no claims were filed for privacy violations or loss of customer data.

The year 2021 was spent in a context of rapid economic recovery after the collapse caused by the pandemic the previous year, but with a higher level of uncertainty due to the continual challenges caused by new outbreaks of COVID-19, negotiation of the National Government's debt with the IMF, and mid-term elections.

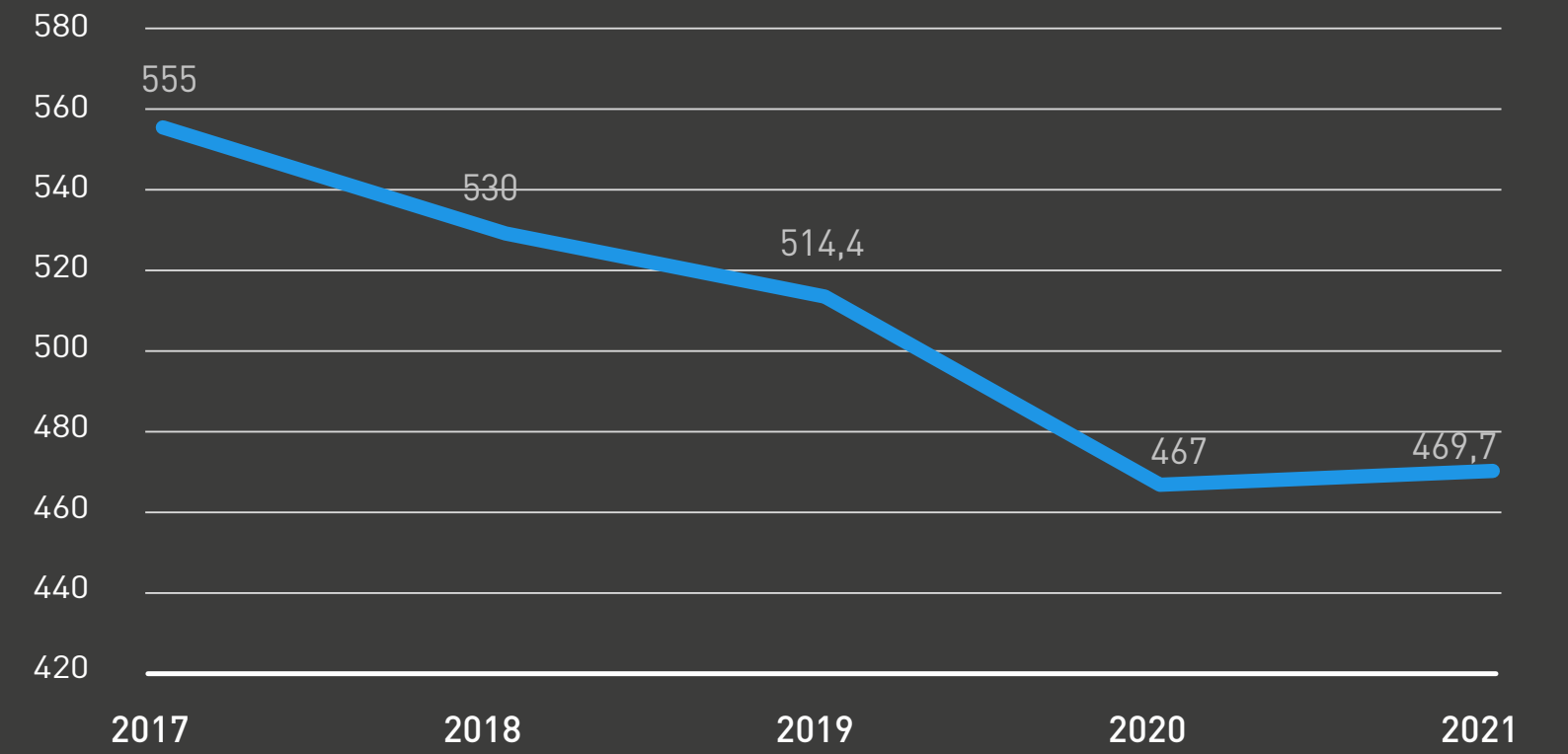
Fiscal Year 2021 Results

GRI 2-2

In this scenario, YPF experienced significant recovery, with remarkable economic-financial performance and the achievement of all proposed operating goals. The latter was key to fulfilling the annual investment plan of approximately USD 2.7 billion, which allowed for a progressive increase in hydrocarbon production throughout the year, setting up the basis for productive growth in the coming years.

In Upstream, investments were concentrated in unconventional fields and active management of the natural decline of conventional fields, thanks to which we were able to stabilize the downward trend in oil production and increase gas production under the framework of the GasAr Plan. In this sense, total audited proven hydrocarbon reserves registered 1.143 billion barrels of oil equivalent, the highest mark in five years, with a 24% increase over the previous year. Meanwhile, the 229% reserve replacement rate was the best in the last two decades, mainly driven by the progressive development of our unconventional operations.

TOTAL HYDROCARBON PRODUCTION
(THOUSANDS OF OIL BARRELS EQUIVALENT PER DAY)



SHALE PRODUCTION - YPF AND PARTNERS
(THOUSANDS OF OIL BARRELS EQUIVALENT PER DAY)



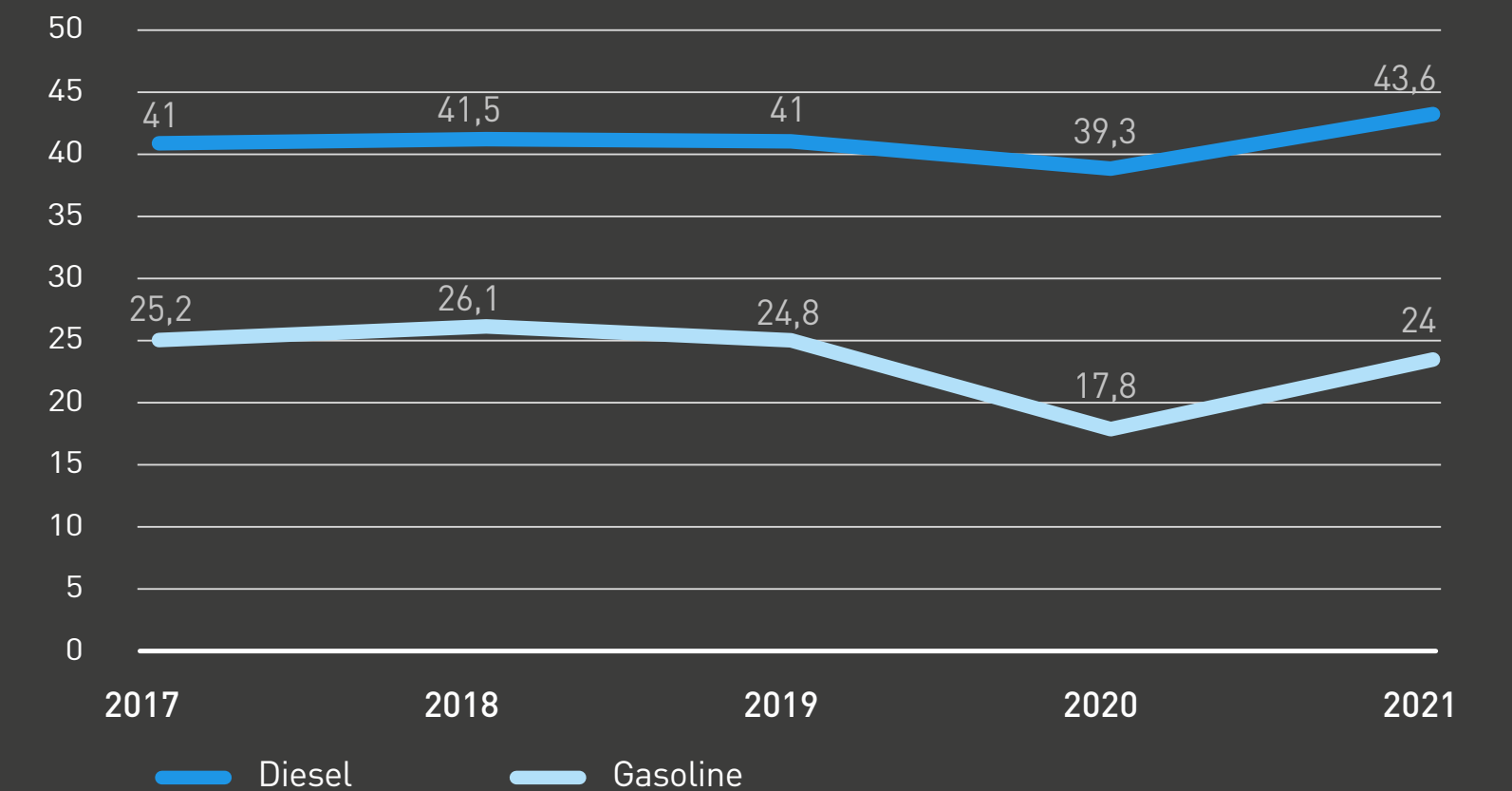
MAIN 2021 FIGURES (IN MILLIONS OF ARS)

| | | |
|---|--|---|
| 1.271.330 Revenues +90% vs. 2020 | 365.514 Ebitda +275% vs. 2020 | -808 Fiscal year profit/loss vs. -71.017 en 2020 |
| 256.639 Capex +133% vs. 2020 | 1.541.950 Total liabilities +24% vs. 2020 | 848.118 Total shareholders' equity +24% vs. 2020 |

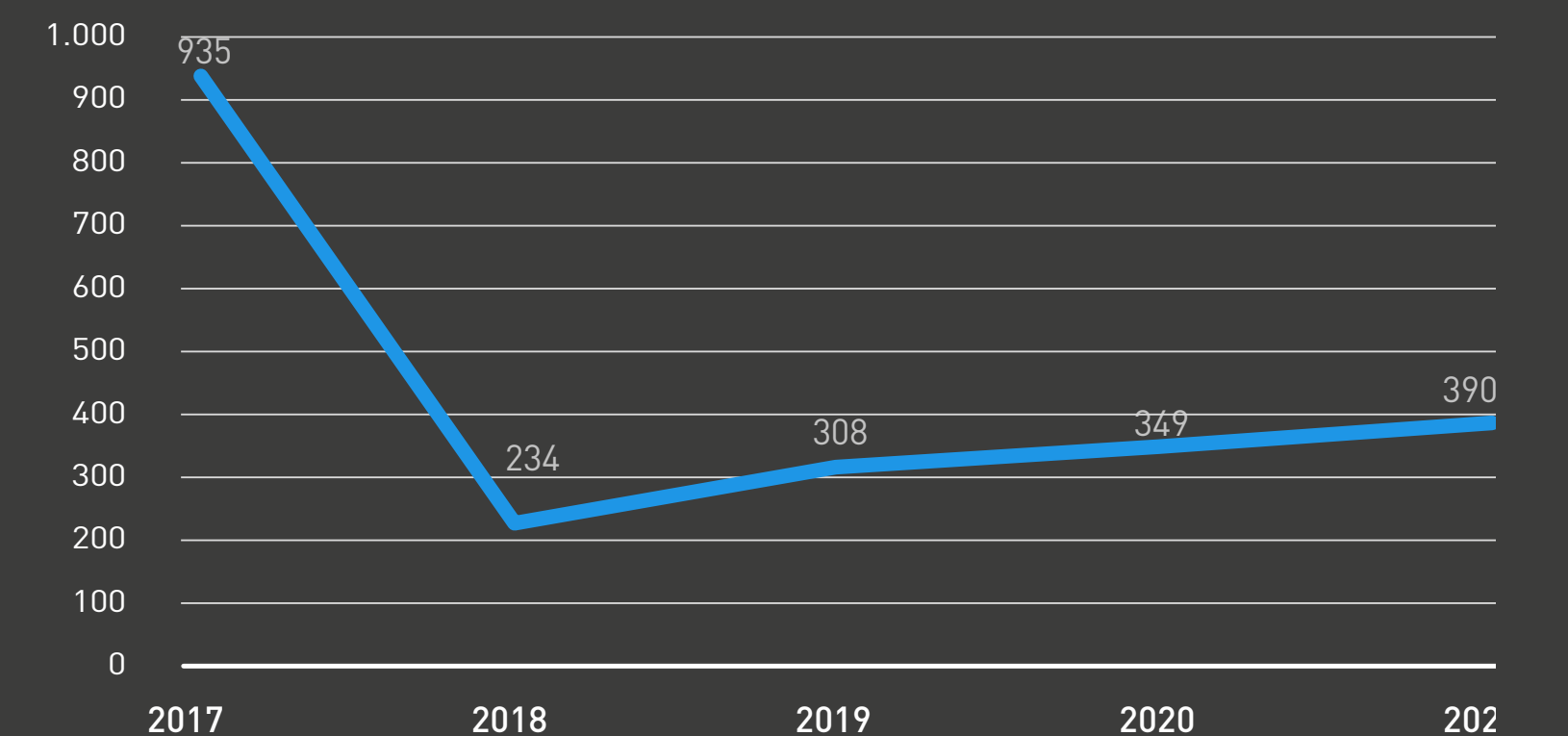
In relation to Downstream, fuel demand recovered gradually throughout the year, until it exceeded pre-pandemic levels in the fourth quarter. This also produced a recomposition of prices measured in dollars, and an improvement in revenues for other products linked to the Brent oil price, which helped improve our profitability.

In financial terms, YPF obtained a net positive cash flow that helped reduce the net debt⁸ to USD 6.271 billion at the close of 2021, an 11.4% drop versus 2020 and nearly 20% in the last 2 years. With this, we attained the lowest level of net debt since the second quarter of 2015.

DIESEL AND GASOLINE PRODUCTION
(MILLIONS OF BARRELS PER YEAR)



FUEL OIL PRODUCTION
(THOUSANDS OF TONS PER YEAR)



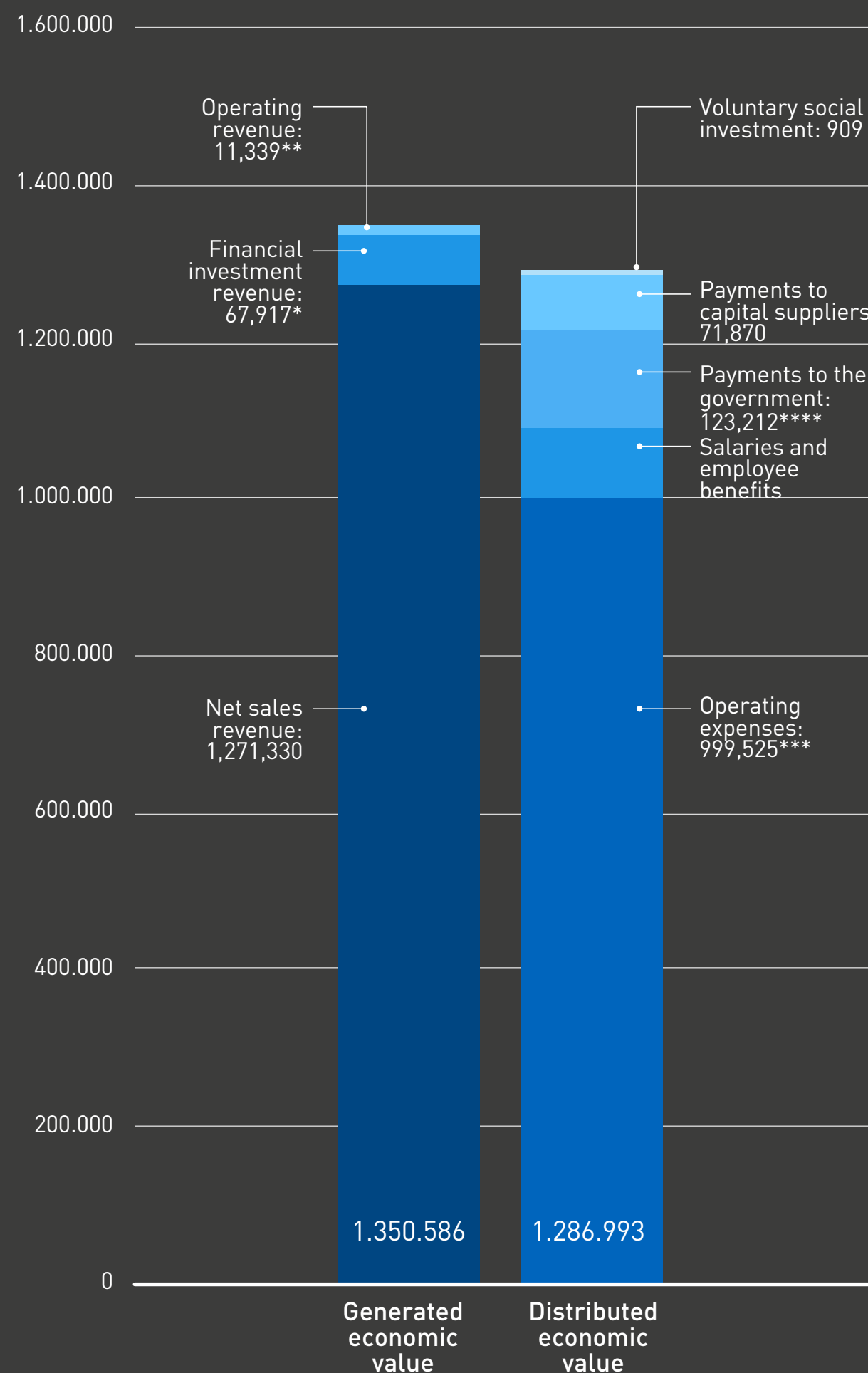
Perspectives

GRI 201-1, 203-1

The positive results allow us to set a higher production goal for 2022, with year-on-year growth of 8%, the largest percentage leap since 1997. The company plans to invest USD 3.7 billion, 42% more than in 2021, and expects a hike of 6% in production of crude oil, and 13% in gas in 2022.

- In Upstream, the 2022 investment plan continues to focus on unconventional fields and management of the natural decline in conventional fields.
- In Downstream, investments are focused on sustainability, including the execution of a multi-year project of new fuel specifications and adaptation of the refineries to process shale oil.
- In Gas and Energy, it targets midstream projects to reduce the bottleneck in unconventional gas processing and evacuation, and works required for the measurement, integrity, and safety of plant processes.

ECONOMIC VALUE GENERATED AND DISTRIBUTED IN 2021 (million AR\$)



Retained
Economic Value
(DEVG - EVD):

**ARS 63.593
millones**

*Corporate shares, interest earned, FV valuation, net monetary position and debt swap.

**Incentives for construction, insurance, sale of participation in areas, sale of assets, etc.

***Cost of sales, marketing expense, administration expense, exploration expense and lawsuits.

****Current Income Tax; taxes, rates, and contributions; royalties, easements, and fees.

THE POTENTIAL OF VACA MUERTA

The main unconventional hydrocarbon formation in Argentina is situated in the Neuquén Basin and occupies an area of 36,000 km². Its resources are placed as the second most significant unconventional gas deposit in the world, and the fourth in oil.⁹ YPF owns 42% of the area and for the last ten years it has conducted productive development in the zone, in alliance with companies such as Chevron, Dow, and Petronas.

The lessons learned over this period have made it possible to rapidly optimize cost and productivity levels, especially in the last two years, as part of the efficiency plan implemented in 2020. During the pandemic, we increased efficiency in well drilling and termination by 24% and 90%, respectively, while billing increased 25%. With this, the cost of well development dropped 28%, reaching levels similar to those of Permian (United States),

and emissions were reduced by 13%. In relation to production, in 2021, crude oil grew 60% year-on-year, while gas increased 100%.

These results, added to the growing efficiency of carbon emissions, predict an increasingly important role for Vaca Muerta in the energy matrix of the country, and of the region. To capture all of its potential, in 2022, our company will invest USD 200 million in oil pipeline to transport the crude oil extracted, and in the next four years, the National State will invest USD 5.5 billion in gas pipelines and treatment plants, to have the necessary infrastructure for the exploitation of natural gas, extracted by industry companies such as YPF.

OFFSHORE EXPLORATION

In December 2021, the National State and the Secretariat of Energy issued the environmental impact statement authorizing YPF, Equinor, and Shell to run a seismic acquisition project in three offshore exploration areas: CAN 100, CAN 108 (both 307 km off the coast of Mar del Plata) and CAN 114 (443 km from the coast). The project has an environmental impact study previously approved by the Nation's Ministry of Environment and Sustainable Development, with the intervention of 14 other public agencies.

Specifically, YPF and its partners may drill the first exploratory well in deep waters of the North Argentine Basin, the Argerich project, specifically in the CAN 100 area, to determine the existence of hydrocarbons with commercial value. The highest international standards must be met, including energy efficiency and emissions. Among other measures, an exclusion radius

was drawn to protect the marine fauna, and the currents in the sector were studied. This latter study concluded that, given the unlikely event of a spill, it would be drawn out into the ocean.

There has been offshore production in the country since the 1970s, and currently, 20% of the natural gas produced in Argentina is extracted from the marine subsoil. Despite this fact, the continental platform has not been extensively explored. If good results are obtained, it is estimated that the project could generate almost the same quantity of barrels of oil that YPF currently produces.

YPF

xpress

02 COMMITMENT TO SUSTAINABILITY



GRI 2-29

YPF understands by interest groups or stakeholders as all those individuals and organizations linked to the company in its separate roles as producer and supplier of energy, employer, or partner. These groups are not only identified, but are also able to count on information regarding their positions on relevant issues and their levels of influence.

Communication channels

To build transparent, long-term, and mutually beneficial relationships with all stakeholders, we have formal communication channels and specific areas in each of the vice presidencies.

→ **Shareholders and financial markets:** The Investor Relations department, in charge of the person responsible for Relations with the Market appointed by the Board of Directors in compliance with CNV policies, is in charge of satisfying the information requirements of shareholders and analysts. Additionally, the company issues result notes every quarter through webcasts open to the public on the www.ypf.com website. The update of the Corporate Governance Code is sent annually to the National Securities Commission.

→ **Employees:** There is internal communication with employees and regular communication of the results at both the company and business unit levels. We have a formal channel to receive complaints of breaches of the law and our Code of Ethics.

→ **Unions:** A specific area handles the relationship with the unions. It ensures that the relevant issues are duly covered in the agreements and formalized in the work conditions, not only keeping in line with current regulations but also with the Internal Labor Relations Policy.

→ **Communities:** There is an area in charge of relations with the communities surrounding our operations, which works within the framework of the Community Relations Policy, the laws, and respect for human rights and the culture of Indigenous communities. To ease communication and grievance mechanisms, a committed team is in permanent contact with the inhabitants of our areas of influence.

In the case of media, government authorities, and industry peers, the Vice Presidency of Institutional Affairs and Communication have managers and teams responsible for permanent engagement.

2.1.2.- Materiality analysis

GRI 3-1, 3-2

Synergistically, each year we conduct a materiality analysis focused on identifying our stakeholders' perceptions, opinions, and expectations. In this way, we update the material issues to report, that is, those that have or may have significant economic, environmental, or social impacts on the company's relationship with its stakeholders.

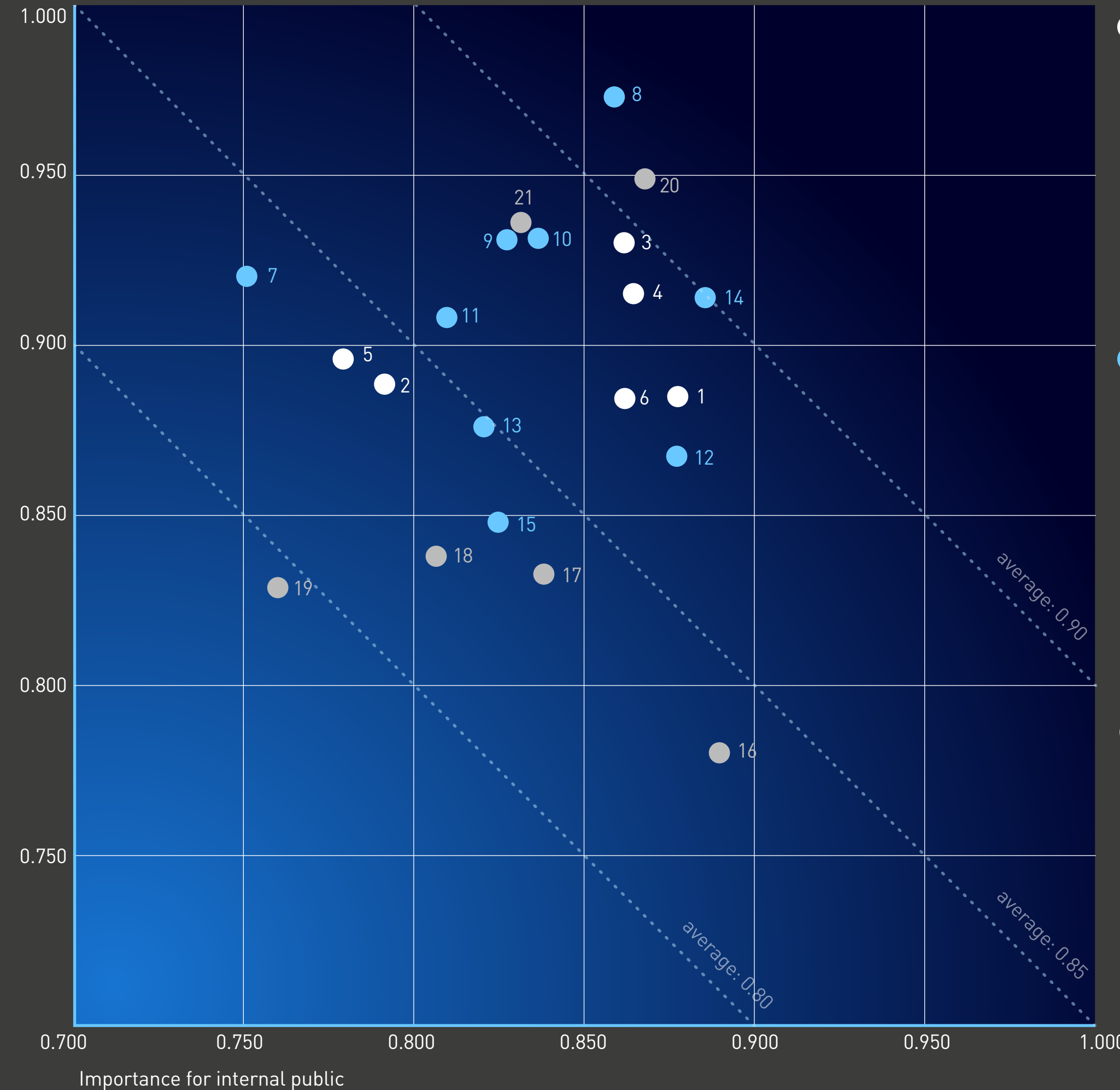
The topics included in this report were selected through a process conducted at the beginning of 2022, in which members of the Board of Directors and the executive staff, employees, and external public participated. To define the list of topics to be consulted, we took into account the global sustainability context, media analyses, presentations to investors' inquiries, relevant ESG standards at a global level, and the company's role in achieving Sustainable Development Goals (SDG). In total, 445 responses were obtained from internal groups (managers and employees) and external groups (customers, suppliers and partners, peers, investors, community leaders, the media, opinion leaders, and government authorities), a similar number to 2020.

Results

Comparing the results to the May 2021 study:

- An increase in the participation of external stakeholders can be seen, with 58 responses more than the previous year.
- The most significant changes in the ranking were increases from *responsible waste management* (+5), *Information security and cybersecurity* (+5) and *Biodiversity* (+4). Meanwhile, they fell in the ranking *Impact and relationship with communities* (-7), *Talent management* (-6) e *Innovation and digital transformation* (-4).
- Four of the five most important themes were kept: *Ethics and integrity*, *Occupational health and safety*, *water and effluents*, and *Business model resilient to climate change*.
- *Ethics and integrity* continue to be the most critical issues for external stakeholders. It also highlights their growing interest in *Water and effluents* and *Responsible waste management*.
- *Diversity and equal opportunities* is one the most important topics for external groups, but it has low importance for employees and managers.

Importance for external public



- ENVIRONMENTAL PERFORMANCE
 1. CO₂ and Methane Emissions Management
 2. Low-carbon, Renewable Energy Production and Development
 3. Water and effluents
 4. Responsible Waste Management
 5. Biodiversity and Impact on Ecosystems
 6. Air quality and environmental pollution near populated areas
- ECONOMIC PERFORMANCE
 7. Corporate Governance
 8. Ethics and integrity
 9. Human Rights
 10. Financial and fiscal transparency
 11. Client Experience
 12. Innovation and digital transformation
 13. Information Security and Cybersecurity
 14. Business Model resilient to climate change and regulations
 15. Cost Competitiveness
- SOCIAL PERFORMANCE
 16. Diversity and Equal Opportunities
 17. Talent Management
 18. Economic Impact and Local Development
 19. Impact and relationship with the communities
 20. Occupational Health and Safety
 21. Incident Readiness and Response

**SUSTAINABILITY, IN ITS
THREE DIMENSIONS
(ECONOMIC,
ENVIRONMENTAL AND
SOCIAL) IS AN INTEGRAL
PART OF OUR IDENTITY,
OUR OBJECTIVES AND THE
WAY OF WORKING.**

SUSTAINABILITY STRATEGY AND MANAGEMENT

Maintaining a solid commitment to a responsible and sustainable business is unavoidable for a comprehensive energy company that has set out to lead the present and future of energy in Argentina, even more so at a time when the industry must harmonize a growing demand for energy with challenges imposed by climate change, decarbonization and new associated regulatory and market demands.

In this context, sustainability in its triple dimension (economic, environmental and social) is key to our identity, objectives, and the way we work. It is included in the company's corporate governance principles, in risk management, the search for new business opportunities, the framework for evaluating the performance of our executives and employees, and in how we relate to stakeholders. In addition, it is a commitment set up in the Ethics and Code of Conduct, which each organization member must make their own.

The corporate focus on this matter is described in our Sustainability Policy¹⁰ and is carried out through a strategy organized around four sustainability priorities:

SUSTAINABILITY PRIORITIES

Sustainable Production
Climate Action
People Care
Shared value creation



**SUSTAINABLE
ENERGY COMPANY**

These priorities are linked to our institutional purpose and help us contribute to the achievement of the SDGs and the goals of the Paris Agreement.

For more information on these four priorities, consult the YPF sustainability website.

Governance of sustainability

GRI 2-12, 2-13, 2-14, 2-24

The senior executive management checks the relevant issues in this area through its members and vice presidencies. The company prepares the Sustainability Index as one of the company's strategic objectives, which considers targets and annual measurement of fatalities, the frequency of accidents, the reduction of emissions equivalent to CO₂, gender equality, and general performance on ESG issues. The Board of Directors, meanwhile, checks it through the Risk and Sustainability Commit-

tee, made up of six regular directors. YPF also has a Sustainability and Energy Transitions Department Management, which is responsible for formulating, proposing, and leading the company's transversal sustainability strategy. This plays out in action plans implemented with the collaboration of the different actors in our business. The management and the vice president of Sustainability, Environment, Health, and Safety (SEHS) periodically report the progress to the Risk and Sustainability Committee.

In 2021, we reaffirmed our Commitment to Climate Change and Energy Efficiency, which provides the framework to work on mitigation and adaptation activities to this crisis. In addition, new climate ambitions were defined in line with the commitments undertaken by the National Government in its second Nationally Determined Contribution to the United Nations Framework Convention on Climate Change.¹³

INCENTIVES

The annual bonus received by the company's top executives and YPF's direct employees is based on holistic evaluations that include meeting collective and even individual goals related to sustainability.

Sustainability risk management

The company's risk management model, described in chapter 1, addresses those linked to sustainability, with corresponding controls and mitigation measures. In addition, since 2018, YPF has been implementing its Operational Excellence Policy and an ad hoc management model designed to guarantee that in each activity that we carry out, we seek to minimize its possible negative impacts and enhance the positive ones, always prioritizing the protection of workers, the environment and communities. This model is based on our culture of prevention, the logic of process safety, and recognized international standards, such as ISO 9001, ISO 14001, ISO 45001, ISO 50001, ISO 31000, the GRI Standards, and the IOGP-IPIECA guidelines.

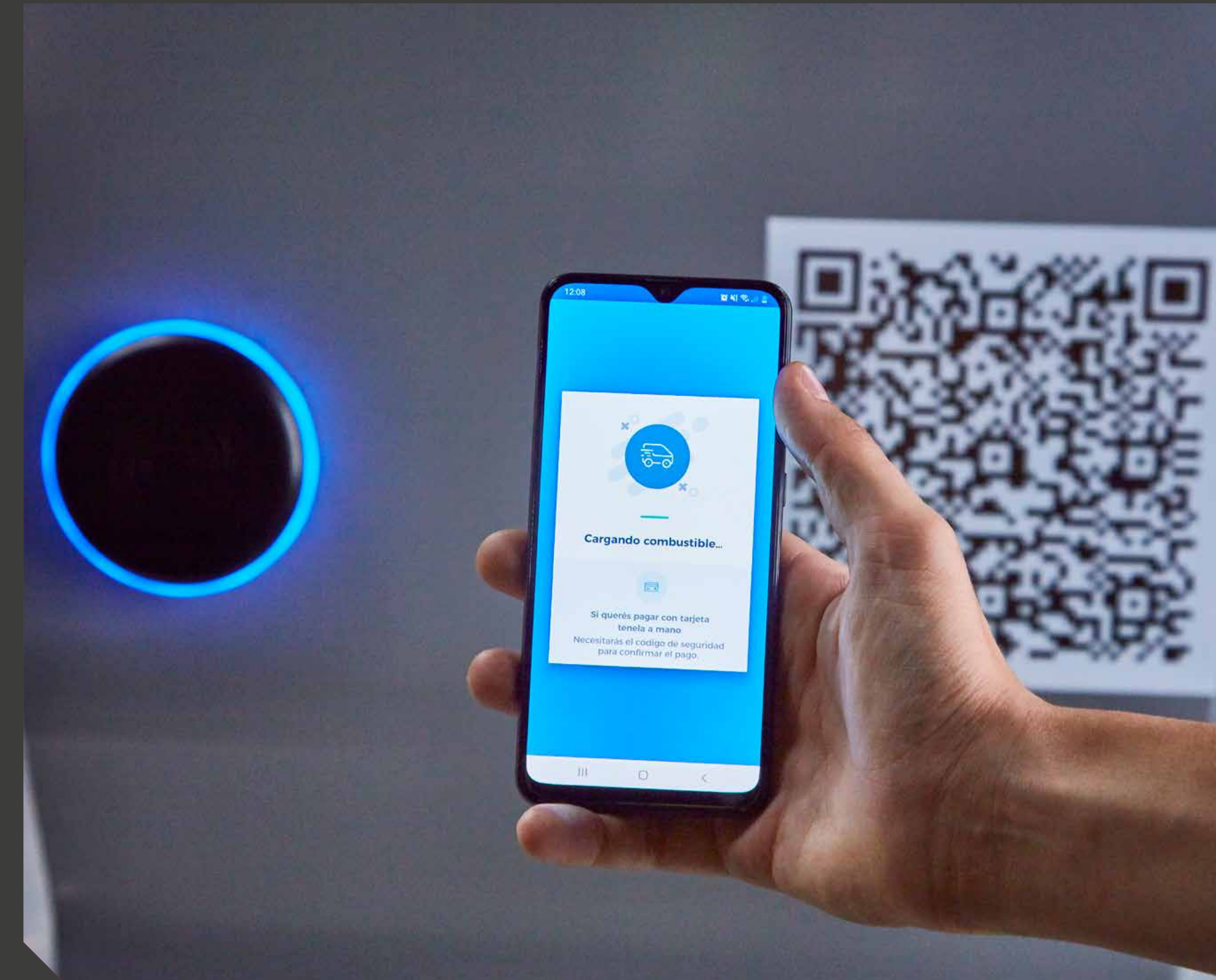
Our Operational Excellence Policy allows all areas to find the scope of their responsibilities and contributions to operational excellence, as well as articulate their guidelines in pursuit of the prevention of unwanted impacts. It also represents our commitment to developing investment plans to face contingencies that may affect people, the environment, the integrity of our assets, and the fulfillment of commitments with stakeholders.

Ambitions and results

We measure our progress in sustainability based on priority issues for the business and stakeholders, with associated annual and multi-year targets, and by how they contribute to achieving the SDGs. In this sense, as a company in the energy sector, our most significant contributions are focused on:

- safe, affordable and sustainable energy production
- creating economic value and decent employment
- reducing emissions
- innovating new energy solutions
- developing safe and responsible operations

Likewise, we are working on fostering diversity and gender equity, building solid, ethical, and transparent institutions and alliances which boost solutions exponentially. From Fundación YPF, we foster local, sustainable development and quality education.



Sustainability priorities and contribution to the SDGs

| STRATEGIC PRIORITIES | MATERIAL TOPICS | KEY INDICATOR | PERFORMANCE | | KEY GOAL | SDGS |
|---------------------------------|--|---|--------------------------------------|--------------------------------------|--|--|
| | | | 2021 | 2020 | | |
| People | Health and safety of own employees and contractors | Accident Frequency Rate (AFR) | 0.34 | 0.20 | 2022: 0.40 | 8: Decent work and economic growth |
| | Talent management | Hours of training per employee | 14 | 11.29 | - | |
| | Diversity and Equal Opportunities | % of leadership positions held by women | 16.3 | 15.4 | 2025: 25 | 5: Gender equality |
| Governance and Alliances | Ethics and integrity | % of direct employees adhering to the Code of Ethics | 100 | 100 | 100 | 16: Peace, justice and strong institutions |
| | Human Rights | % of the security staff belonging to contractors who had training on human rights | 100 | 100 | 100 | 17: Alliance to achieve the goals |
| | Financial and fiscal transparency | Report on payments to governments | Participation in EITI Country report | Participation in EITI Country report | Maintain participation in EITI Country | 17: Alliances to achieve the goals |

*<https://eiti.org/countries/argentina>

Sustainability priorities and contribution to the SDGs (Cont.)

| STRATEGIC PRIORITIES | MATERIAL TOPICS | KEY INDICATOR | PERFORMANCE | | KEY GOAL | SDGS |
|---|--|---|------------------------------------|------------------------------------|--------------------------------------|--|
| | | | 2021 | 2020 | | |
| Business Model resilient to climatic change and regulations | Low-carbon and renewable energy production and development | Natural gas production (million m ³ /d) | 35.7 | 35.6 | 2025: long-term gas supply contracts | 9: Industry, innovation and infrastructure 7: Affordable and clean energy 13: Climate Action 12: Responsible production and consumption |
| | | % biofuels in products | 3.5 in diesel and 10.7 in gasoline | 5.4 in diesel and 11.5 in gasoline | According to new national regulation | |
| | | % of fuels ultra-low in sulfur | 30 | 24 | 70 | |
| | | Electric power installed capacity – YPF Luz (MW) | 2,483 | 2,250 | 2026: 2,624 | |
| | | Renewable electric power installed capacity – YPF Luz (MW) | 397 | 222 | 2026: 564 | |
| | | R&D Investment in Energy (KM AR\$) | 2.4 | 1.8 | - | |
| | CO ₂ and Methane Emissions Management | GHG Direct emissions intensity (tCO ₂ e/unit produced) | 0.325 | 0.366 | 2026: -30% (base year: 2017) | |
| | | Intensity of methane emissions (t CH ₄ /unit produced) | 0.0056 | 0.0068 | 2030: -30% (2021 base year). | |
| | | Energy intensity (GJ/produced unit) | 4.56 | 4.69 | 2023: 4.35 | |
| | | % electricity purchased from renewable sources | 28 | 21 | 2026: 50 | |

Sustainability priorities and contribution to the SDGs (Cont.)

| STRATEGIC PRIORITIES | MATERIAL TOPICS | KEY INDICATOR | PERFORMANCE | | KEY GOAL | SDGS |
|-------------------------------|--------------------------------|---|-------------|------|---------------------------|--|
| | | | 2021 | 2020 | | |
| Sustainable Production | Air quality | Industrial centers close to the population with CDM for local non-GHG atmospheric emissions | 2 | 2 | 2 | 12: Responsible production and consumption |
| | Water and Effluents Management | % of water consumption from water-stressed areas | 12.1 | 11 | - | |
| | | Freshwater withdrawal intensity ¹¹ | 1.5 | 1.58 | 2026: 5% (2019 base year) | |
| | Responsible Waste Management | % Reuse / recovery of waste generated and in stock | 15 | 35 | 2026: 25 | |
| | Land use | Spill Frequency Rate - Upstream ¹² | 12 | 11.5 | 2022: 11.2 | |

Participation in sustainability initiatives

YPF has offered to play a relevant role in global, national, and local organizations and initiatives related to corporate and energy sustainability. Along those lines, during 2021:

- We continue to lead the Argentine Network of the United Nations Global Compact Initiative and take part in the World Business Council for Sustainable Development (WBCSD). On the Argentine platform of the WBCSD, we publish our main initiatives that contribute to achieving the Agenda for Sustainable Development goals in 2030.
- Through our membership in the Argentine Institute for Oil and Gas (IAPG), we

- advanced the second phase of the Oil and Gas Sustainable Development Goals (SDG) Road map. Additionally, our CEO took over as co-chairman of the working group on Energy and Resource Efficiency of the B20 Forum in Italy.
- We continue to integrate the BYMA Sustainability Index prepared by Bolsas y Mercados Argentinos S.A., the Inter-American Development Bank, and Thomson Reu-

- ters. It is made up of 15 companies that have demonstrated outstanding performance in sustainability.
- As part of good corporate governance practice, we again voluntarily measure our sustainability performance through the annual evaluation of SAM, which is now part of S&P Global. The score obtained kept us in tenth place in the oil and gas industry, above the average.

YPF recognizes and respects human rights as an essential corporate ethical value. Beyond complying with current environmental, labor, and health laws and regulations, we are committed to the Universal Declaration of Human Rights of the United Nations and the Declaration on Fundamental Principles and Rights at Work of the International Labor Organization (ILO), both incorporated into Argentine domestic law. This commitment is expressed in our Ethics and Code of Conduct and in the Sustainability, Physical Security, and Operational Excellence policies, with a preventive and protective approach. Each YPF employee must accept the Code of Ethics and be trained on the subject. Company contractors must meet specific qualifications and contractual requirements related to labor relations, quality management systems, safety, health, and environment, which are analyzed in the regular performance assessments.

Due diligence

The company has a due diligence process on fundamental rights that covers the entire company, focusing on activities and areas related to environmental management, health, safety, labor practices, diversity, inclusion, local communities, and the value chain.

These issues are also taken into account in the operations risk management processes. There is a specific human rights risk mapping process, which is periodically reviewed.

The formal complaint and report mechanisms regarding human rights are the same as those defined in the Company's ethics and compliance system.

In 2021, preparatory work was conducted to update and expand the human rights risk mapping that will be conducted in 2022, along with a third-party expert. As well as the development of the new Human Rights and Community Relations Policy that is approved at the time this report is published.

SECURITY STAFF

All the physical security personnel take the postgraduate course "International Corporate Security Standards" from the Securitas Institute. At YPF's request, the course includes a special class on human rights. On the other hand, surveillance and access control contracts require personnel to be trained. 98.92% of the personnel who conduct this task received training in human rights during 2021.

03

CLIMATE CHANGE AND ENERGY TRANSITION



Today, the oil and gas industries face unique challenges driven by the need to harmonize the growing demand for energy with new challenges in terms of costs and profitability, the diversification of the energy matrix and a growing need to respond to climate change and the decarbonization of the economy. Each region or country will need to develop its own transition roadmap based on its specific starting point, availability of resources, capacities and development needs.

Particularly in Argentina, and beyond the regulations on Climate Change approved in 2019, in December 2020, before COP 26 (UN Climate Change Conference, Glasgow, 2021), Argentina presented its second Nationally Determined Contribution (NDC), which reflected an improvement in the fight against climate change. In this sense, Argentina increased its commitment to the mitigation goal presented in 2016 and incorporated an adaptation goal according to Article 7.1 of the Paris Agreement. This new goal is equivalent to a total reduction in emissions of 19% by 2030, compared to the historical peak reached in 2007 and it implies that Argentina would have a 0.9% share of global emissions.

This NDC anticipates that by 2030 the Argentine Republic will be advancing in a process of energy transition, focusing its efforts on promoting efficiency in the use of energy, decarbonization of oil and gas production, using the latter as the fuel of choice for the transition, as well as an increase in the generation of thermal-efficient electric power and renewable energy, also focused on distributed generation and final consumption. In turn, the hydrogen production chain will be developed, while new nuclear and hydroelectricity plants will be commissioned. For the promotion of sustainable transport systems, energy efficiency and the greater use of natural gas, hydrogen, electricity and biofuels would be promoted.

YPF recognizes that global and local energy systems must be transformed to promote decarbonization and, at the same time, guarantee access to affordable and clean energy for all. YPF is working with a vision that encompasses this new scenario, including resilience to climate change in the company's new strategy and innovation model. The Company has a commitment and governance oriented toward a business plan that incorporates low-carbon production and has incorporated consider-

ations related to climate and energy transitions in decision-making, scenarios, portfolio sensitivity tests, executive incentives, and reporting.

The main initiatives focus on reducing operational emissions from oil and gas, while working and exploring new low-carbon businesses, compensation initiatives, and programs to adapt operations to future scenarios and potential risks.

Our decarbonization strategy in this scenario the country's energy resources, its development needs and a hundred years of experience in the energy industry, our role in YPF is crucial.

The unconventional oil produced at our Vaca Muerta operations has proven to be very competitive in terms of CO₂ tons emitted per barrel of crude oil produced, and we are working to further reduce its carbon footprint, an effort that is also replicated in the conventional segment.

Vaca Muerta also has a huge potential for natural gas, transition energy par excellence, since it produces 50% less carbon dioxide than coal during energy production and is a good complement for the intermittency of renewables. We are convinced that the full development of these resources will not only supply the local market – currently more than 50% of our matrix comes from gas –, but also contribute to the decarbonization of other countries in the region that still base their electricity generation on coal or oil and, in the longer term, export it to the rest of the world as liquefied natural gas.

Argentina also has characteristics that position it at the forefront of new energy generation. Through YPF Luz, we take advantage of the wind of Patagonia and the province of Buenos Aires. Now we are venturing into solar energy, hydrogen production and the lithium industry as a storage medium; these latest initiatives, through Y-TEC, our research and development company and the newly-established YPF Lítio.

To articulate all these efforts, we have renewed our energy transition roadmap that sets out short- and medium-term, concrete and measurable goals that are more ambitious than the previous ones, related both to the decarbonization of the oil and gas business and to the promotion of renewable energy and other energy solutions.

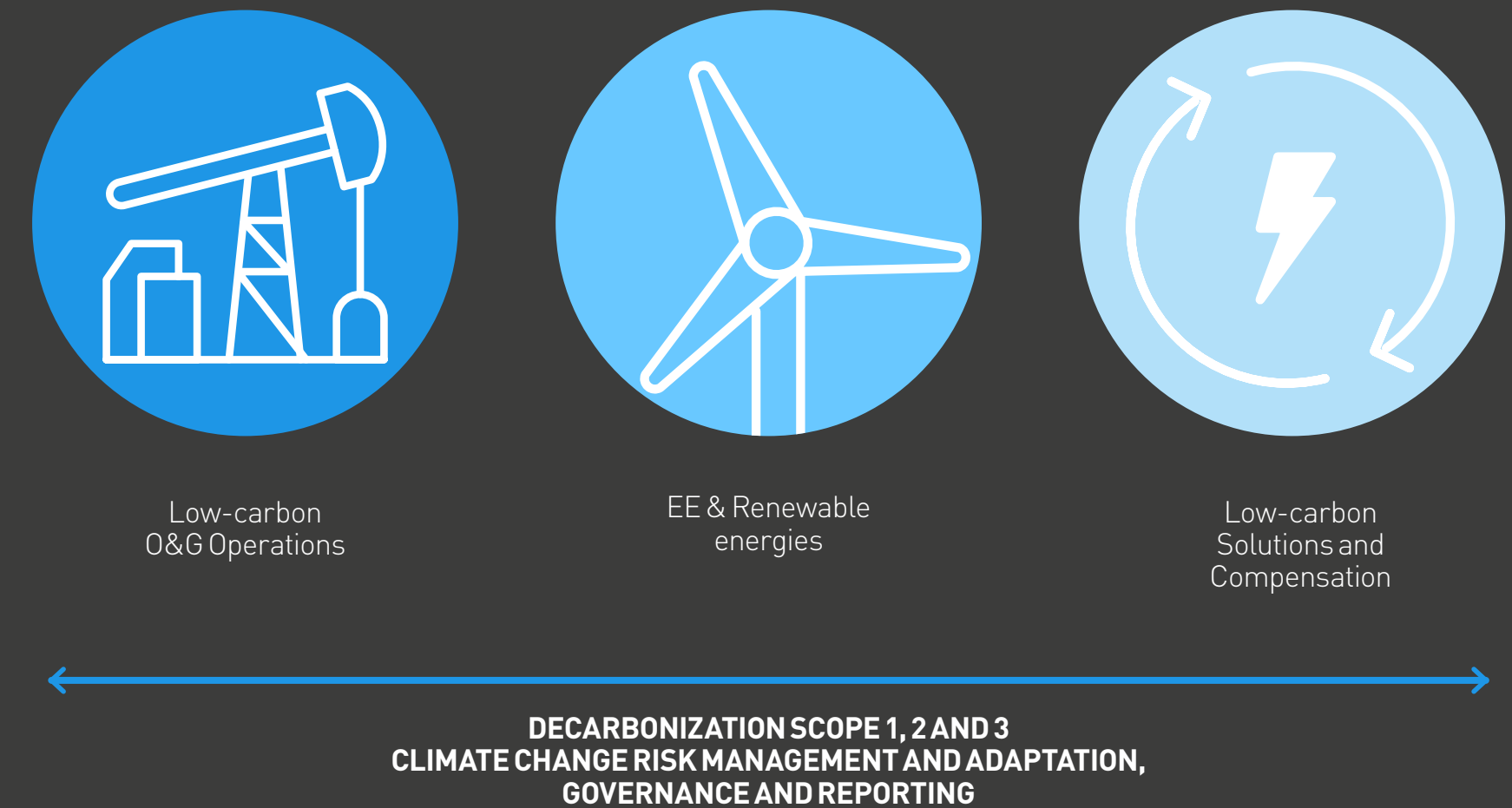
We have set out a new energy strategy in line with the compliance of the Paris Agreement goals, and the Nationally Determined Contributions in order to achieve carbon neutrality by 2050, as well as its role as promoter of the Argentine and regional economy.

These goals are itemized in annual intermediate goals that are part of the business plan for 2022-2026, periodically monitored, and have been added to the performance assessments of a large part of the company resources, including executive leaders, to influence over a percentage of the compensations. Ultimately, they are an integral part of how we view our business.

YPF's energy transition strategy has three main pillars combined with different weighting factors, based on expected time frames that contribute in a specific and collective way with the transition of YPF to a comprehensive energy company, as well as the energy transition of the country and region: high value and low carbon oil and gas operations, profitable growth of electric and renewable energies, country leader in R&D for new energy solutions and compensation initiatives.

The commitment is to invest in the decarbonization of current energy, as well as in the future energy system. In order to accomplish this, we have developed a set of aspirations in the short- and mid-term detailed below:

FOUNDATIONS OF THE ENERGY TRANSITION



GRI 201-2, 305-5, SASB EM-EP-110 A.3

Context

The challenges of climate change promote energetic transition globally. As part of the Paris Agreement, countries commit to decarbonization and reaching Net Zero by 2050. Argentina is committed to reducing its GEI emissions by 2030, to avoid exceeding 350.000 TCO₂e and to being carbon neutral by 2050. The country needs to balance these commitments with its need for development, access to energy and improve the quality of life for its people. 51% of the national carbon footprint comes from the energy sector. We need more energy and more low-carbon energy.

STRATEGIC FOUNDATION

ACTION LINES

2021 PERFORMANCE

2026 AMBITIONS

| | | | |
|--|--|--|--|
| 1 Low-carbon oil and gas | Increase energy efficiency to reduce direct emissions. | 2021 Direct emissions intensity: 0,325 tCO ₂ e/ Production units (-14.5% vs. 2017) | Reduction of emissions intensity by 30% in 2017 |
| | Consumption of renewable energy | 28% of EE purchased from renewable sources/ EE purchase (37% in December) | 50% of electric power purchased from renewable sources |
| | Reducing routine flaring | Total flaring: 560,588 t | -50% routine flaring 2026 Zero routine flaring 2030 |
| | Reduction of methane emissions (leaks and vents) | Methane emissions: 127.615 t (-16,53 vs. 2017) | Reduction of methane emissions: 10% by 2026 and 30% by 2030 (in relation to 2021) |
| 2 EE & Renewable energies | Profitable growth of electric power and renewables-YPF LUZ | Installed capacity for electric power: 2,483 MW Installed capacity for renewable energies: 397 MW | Installed capacity for electric power: 2,624 MW Installed capacity for renewable energies: 564 MW |
| | 3 Low-carbon solutions and compensation | Develop new energetic solutions -YTEC/YPF Litio | Consortium H2ar leadership to find business opportunities in lithium |
| Offer products lower in carbon | | 24.6% ultra-low sulfur fuel, 3.5% diesel biofuels and 10.7% gas | 70% of fuels lower in sulfur by 2025 Percentage of biofuels in unregulated products |
| Develop compensation projects -NBS | | 7,000 ha forested in Neuquén | In making. Evaluation of reduction projects with a carbon price of 50 US\$/tCO ₂ e, up to 70US\$ in 2026 |
| 4 Climate Change Risk Management and Adaptation | Mapping, managing and mitigating transition risks and physical risks, for installations and operations under extreme climate events. | Mapping physical risk for all operation zones Transition risks map | Vulnerable installations with an ongoing adaptation plan |
| | Carbon price for operations | Evaluation of project sensitivity to 30US\$/tCO ₂ e | |



Mid- and long-term commitment

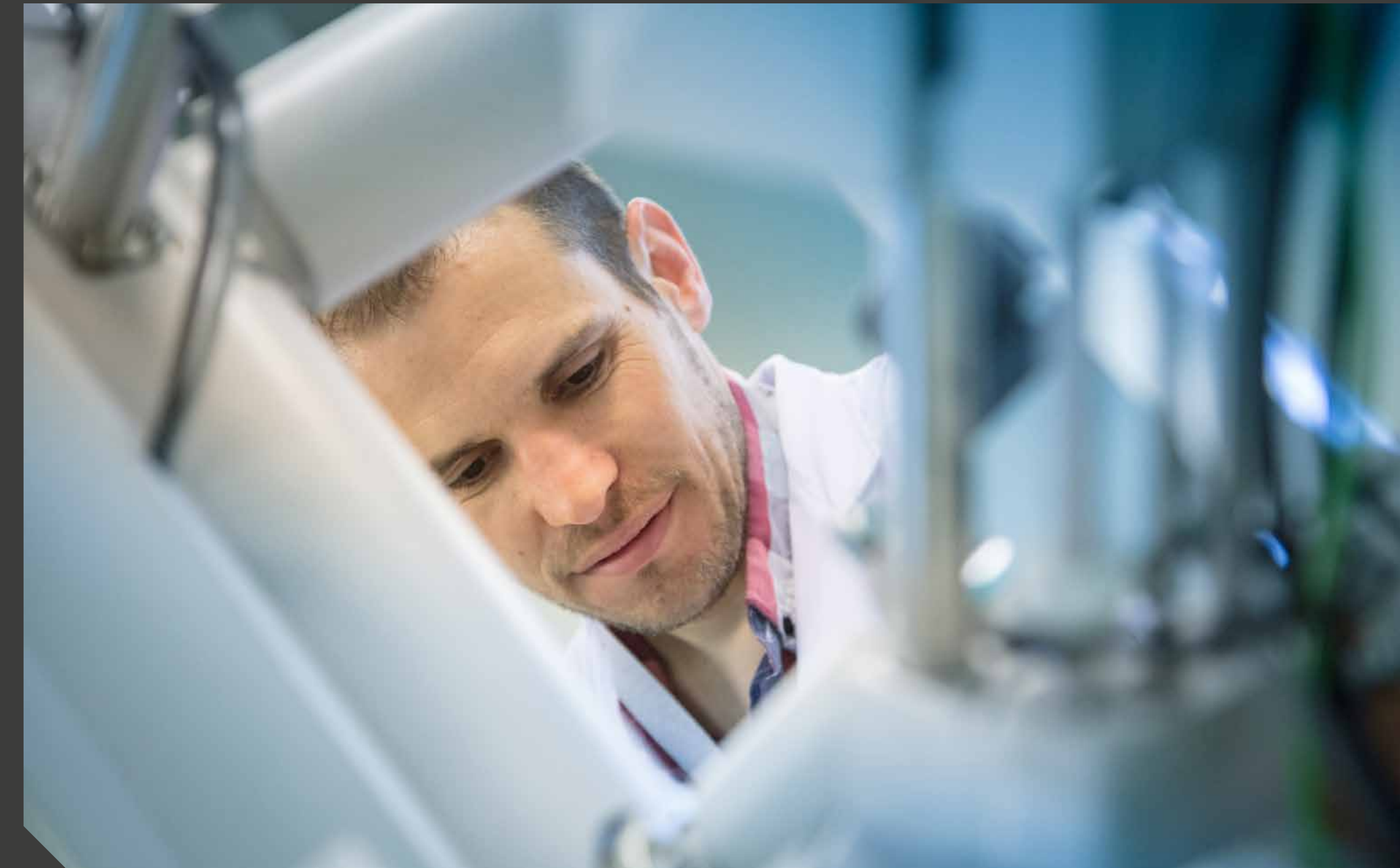
30% reduction on methane emissions by 2030 (baseline 2021).

Zero routine flaring by 2030.

Zero net emissions (scope 1 and 2) by 2050.

COLLABORATION ACTIONS

- We participate in the TASK FORCE of Energy and Resources Efficiency of B20 Italy focused on elaborating recommendations for energy transitions in the different regions of the world.
- We lead the Emissions Commission of the Argentine Institute of Oil and Gas (IAPG), where the creation of the best practices of zero routine flares and update of the best practices for the comprehensive management of methane emissions was started. Within the framework of this commission, a request from the Climate Change, Sustainable Development and Innovation Secretary was received to cooperate in determining fuel emission factors at a national level, in a project led and funded by the UNEP (United Nations Environment Program).
- We cooperate with the project “Diagnostics of regulatory, institutional, and information framework for the reduction of vent, burning (flaring), and gas leak in Argentina and Ecuador”, funded by the IDB. This initiative will continue with the estimation of national emissions in Argentina.
- We are part of three workgroups led by the International Association of Oil and Gas Producers focused on the compendium and analysis of state-of-the-art energy efficiency, venting, flaring, CO2 collection, transport and storage.
- We participate in the work group Climate Action of the Argentine Network for the United Nations Global Compact and the Climate Change Commission of the Regional Association of Companies of the Oil and Natural Gas Companies in Latin America and the Caribbean (ARPEL).



To stay competitive and collaborate with the fulfillment of the climate goals that the Nation has set, a fundamental component of our corporate strategy is the decarbonization of the hydrocarbons business. For this purpose, we are working to reduce greenhouse gas (GHG) emissions in our operations and products through a series of initiatives.

GAS FOR THE BLOCKCHAIN INDUSTRY

In 2021, the company worked on the design of a pilot plan which was launched in 2022 through YPF Luz, to leverage gas and surplus installed capacity of distributed generation, to supply electric power to blockchain mining facilities, an activity that is highly energy-demanding, without using energy from the national power grid. To implement it, YPF Luz signed an agreement with a blockchain mining company that installed a data center near its Loma Campana Este distributed generation plant, located in Neuquén. This initiative will be used to study the feasibility of power generation projects and supply to off-grid data centers, and the possibility of implementing it on a larger scale in sites to reduce venting.

Management of Scope 1 GHG Emissions

GRI 3-3, 305-1, 305-2, 305-3, 305-4, 305-5

SASB EM-EP-110A.3

Due to its contribution to the YPF carbon footprint, the measurement and reduction of flaring, venting and methane leaks are two of the main focal points to reduce direct emissions in our operations linked to the production of energy based on hydrocarbons.

Vent Reduction

During the extraction of oil, significant amounts of associated or surplus natural gas are produced, which is used in production processes, burned in flares (flaring) or, if these two alternatives are not available, is released into the atmosphere (venting). In agreement with applicable¹⁴ regulations, YPF has committed to minimizing flared and vented gas with solid goals that will lead to the total elimination of routine flaring by 2030. There are already several ongoing measures.

• Capturing Gas from Vents and Remote Wells to Obtain LNG

We have been carrying out a natural gas collection project since 2017 that comes from venting and remote wells to convert it to liquefied natural gas (LNG), a volume that is 600 times lower and allows for its more efficient transportation. Modular and mobile liquefaction equipment captures gas from wells and cools it to temperatures lower than -140 °C. The generated LNG is transported in containers and cryogenic tankers to the consumption points, where it is delivered in liquefied form—for example, for trucks—, or regasified for industrial customers. While finalizing this report, there were seven liquefaction devices installed in unconventional oil production pilots of Puntilla del Huicán, Rincón Amarillo (both in the province of Mendoza), and Ribera Sur (Neuquén). Most of the LNG has been used to produce electricity.

→ Maximum volume of collected gas: **77.000 m³/d**

→ Total volume of collected gas during project implementation: **16 million m³**

• Characterization and Isolation Pilot for Areas with Gas

This initiative, in execution since 2019, aims to measure and characterize the flow and compositions of remaining gas in production wells and then mechanically isolate the areas with greater abundance through the “expandable casing patch” technique. At the moment, it has been implemented in the Cerro Fortunoso field. The final goal is to measure a future collection network.

→ Reduction of remaining gas in wells during 2021: **19,321.96 tCO₂e** (652 tCO₂e/d).

→ Total emissions reduction for the three campaigns and 27 workovers that the project considers: **933,392.11 tCO₂e**

• Clean Development Mechanisms (CDM)

YPF has two registered projects under the Clean Development Mechanism (CDM)¹⁵ for the recovery of flared gas in the La Plata and Luján de Cuyo refineries. Residual gases are compressed and injected into the fuel system, in order to feed furnaces and boilers, avoiding the use of natural gas and fuel oil for heating.

→ Reduction of emission with both CDM in 2021: **185,231 tCO₂e**, 63% more than in 2020

Reduction of methane emissions:

Methane (CH₄)—the main component of natural gas— possesses a heating potential 25 times higher than CO₂.¹⁶ Expressed in tons of equivalent CO₂, emissions of this gas account for about 20% of the total of direct emissions from YPF and 98% is produced during Upstream activities through vents or leaks. In this context, the company defined a specific goal to reduce its intensity and has several initiatives in development to achieve it.

• Methane Emissions Detection Pilots

To address greater methane emitting sources in a clear way, we continued to assess technologies for the detection and measurement of CH₄ leaks in 2021, based on satellite and aerial images. A pilot study to identify emissions in an area of 1,300 km² in the provinces of Neuquén and Santa Cruz was carried out. As a preliminary result, there were no large emitters detected, just occasional emissions related to operations and maintenance works. In these activities, we follow the recently-updated estimation methodologies and also Best Practices of Methane Emissions Management from IAPG, developed by the Emission Commission under the administration of YPF.

• LDAR Campaign

Upstream continued to deploy leak detection and repair (LDAR) campaigns on the surface using ultrasound technology. These campaigns are included in an annual plan and follow a specific procedure that is under review to adjust it to experiences and obtained results.

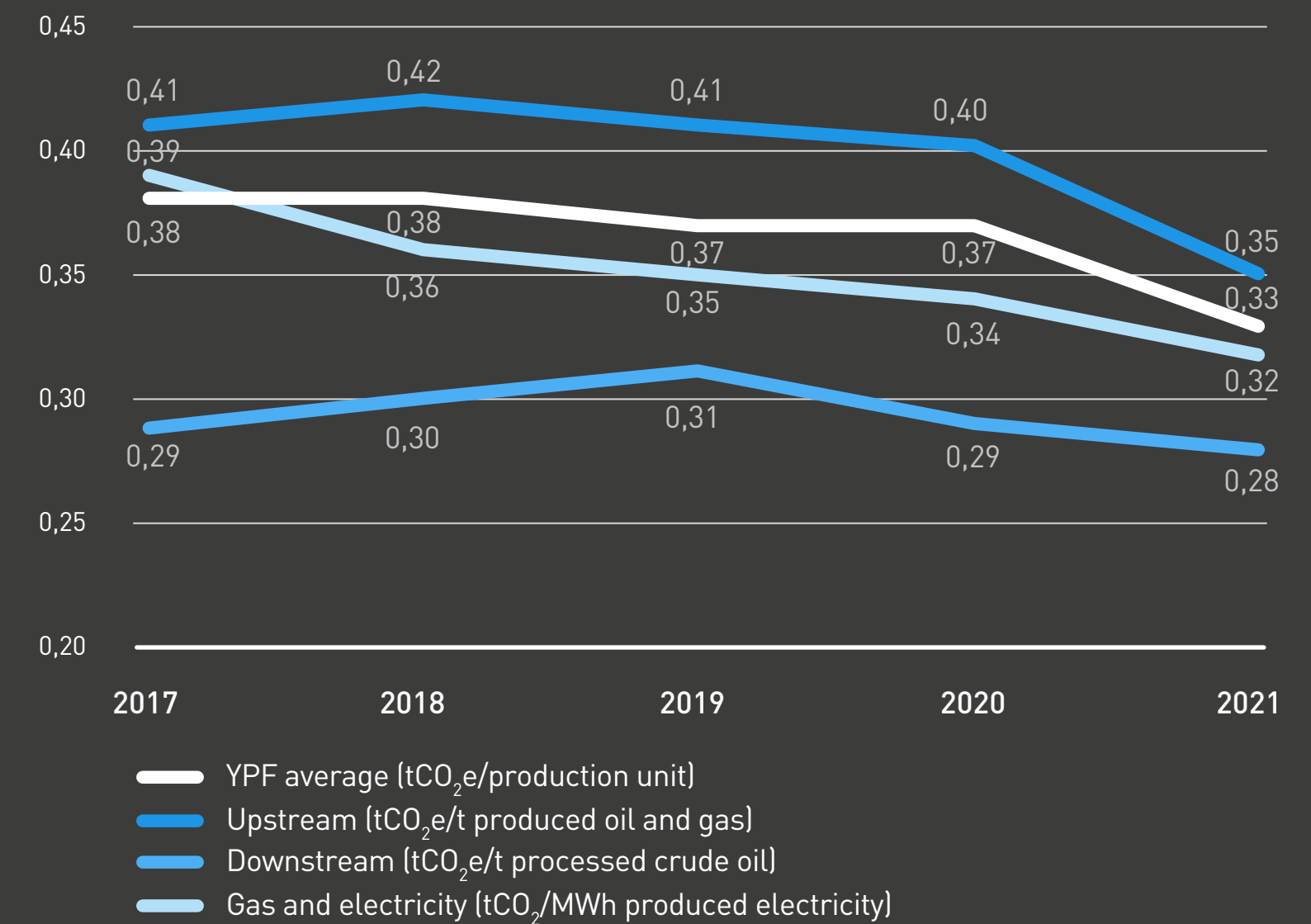
Scope 1 Emissions in 2021

GRI 305-4, OG6
SASB EM-EP-110A.3

The estimate for the creation of GHG inventories in our operations is based on the Environmental Parameters Guidelines of the company and uses internationally-validated information sources¹⁷. Additionally, the corporate management systems for measuring carbon footprint are regularly verified according to the ISO 14064-1 standard on GHG quantification, report and management. In 2021, we performed an in-house inventory verification from last year in each YPF industrial complex.

With an 11% decrease, 2021 was the fourth consecutive year when the direct emissions intensity lowered earlier than our goal to reduce this indicator by 10% for 2023, based on 2017.

INTENSITY OF SCOPE 1 EMISSIONS



→ Percentage of intensity reduction since the baseline year: **14%**

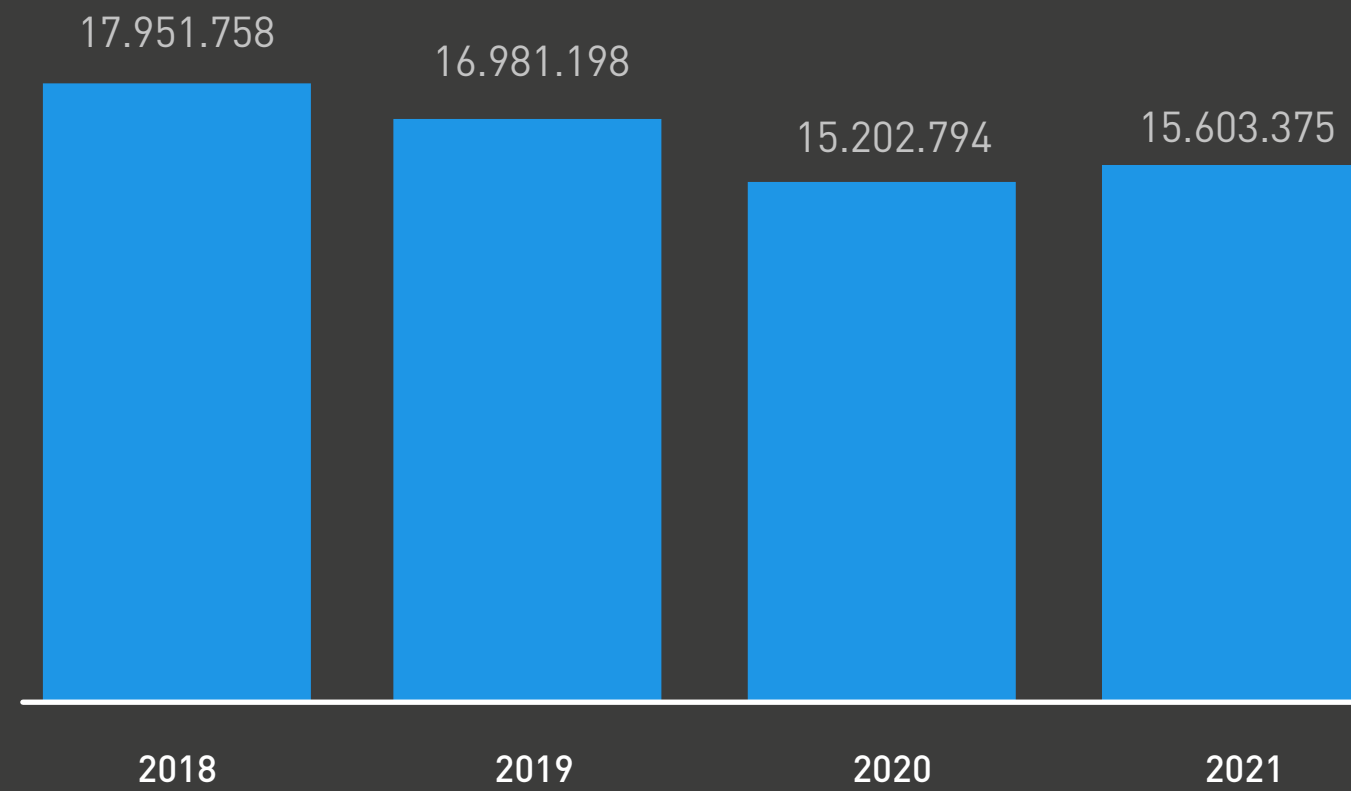
→ Percentage of surpassed goal: **40%**

Production increased to a greater extent in the unconventional segment and YPF Luz —with the implementation of a new wind farm—, which is added to the impact of the progressive restoration of activities that were halted due to the pandemic.

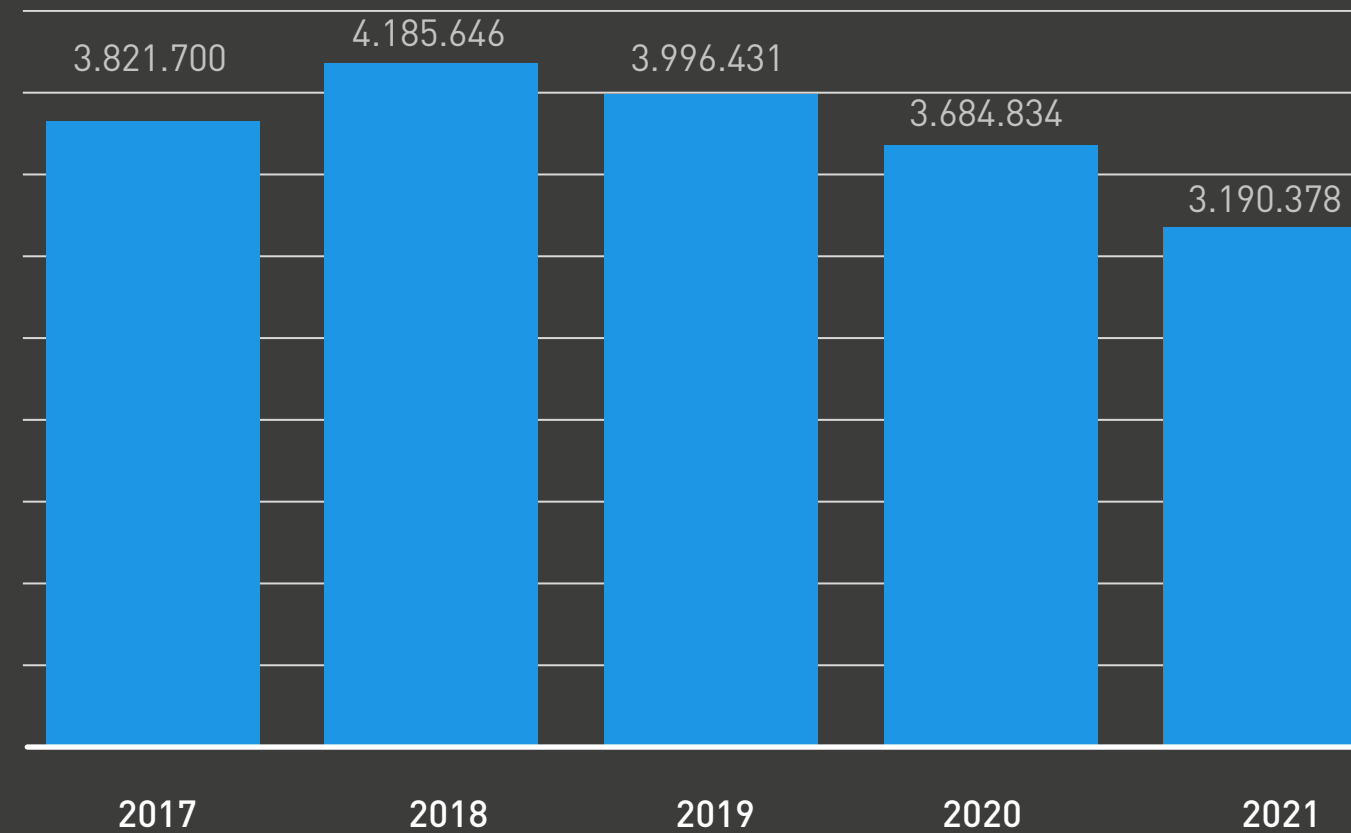
GHG direct emissions in 2021 totaled 15,603,375 tCO₂e, a 2.6% increase compared to 2020. As for composition, these emissions are detailed as follows:

- Carbon dioxide emissions: **12,228,587 tCO₂**, 7.7% more than in 2020
- Methane emissions: **127,615 tCH₄**, 13.4% less than in 2020
- Nitrous oxide emissions: **619 tN₂O**, 9.9% more than in 2020
- Methane intensity in Upstream: **0.1 tCH₄/t** of oil and gas produced, similar to 2020.

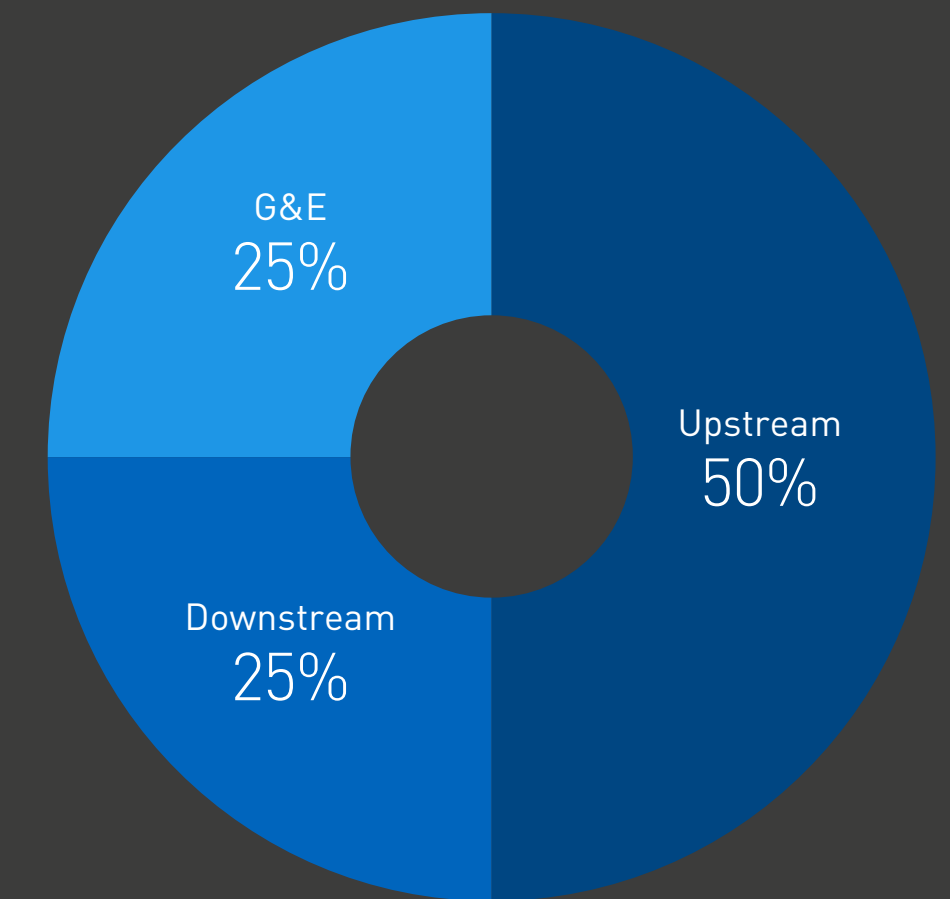
GHG DIRECT EMISSIONS -YPF - SCOPE 1 (TCO₂E)



METHANE EMISSIONS (TCO₂E)



DIRECT CO₂ EMISSIONS BY BUSINESS*



Total emissions 2021:
15,6 millions of tCO₂e

*Scope 1 reach

Upstream

Direct emissions (7,840,651 tCO₂e in 2021 vs. 8,685,379 tCO₂e in 2020) and GHG emissions intensity (0,35 tCO₂e/t produced - 46 kgCO₂e/BEP in 2021 vs. 0,40 tCO₂e/t prod - 53 kgCO₂e/BEP in 2020) decreased regarding previous year by 9.8% and 14%, respectively, due to (i) the increase in unconventional productions in relation to conventional (37% in 2021 vs. 29% in 2020), which implies a total production less intensive in emissions (NOC: 21 kgCO₂e/BEP vs. CONV 60 KgCO₂e/BOE), to the implementation of a new estimation methodology for GHG emissions in the unconventional segment, which considers emission factors adjusted to own chromatographies and local measurements and to the execution of energy efficiency and emission reduction projects, as the installation of vapor recovery units (VRU), the optimization of heating and compression systems and the improvement of relief systems management, among others.

Downstream

Downstream had an inter-annual increase of 12.1% in absolute emissions, driven by the recovery of production compared to 2020 with a 15% increase in the refineries. GHG emissions intensity decreased by 2.3% (0.284 in 2021 vs. 2.291 in 2020, tCO₂/t of processed crude oil).

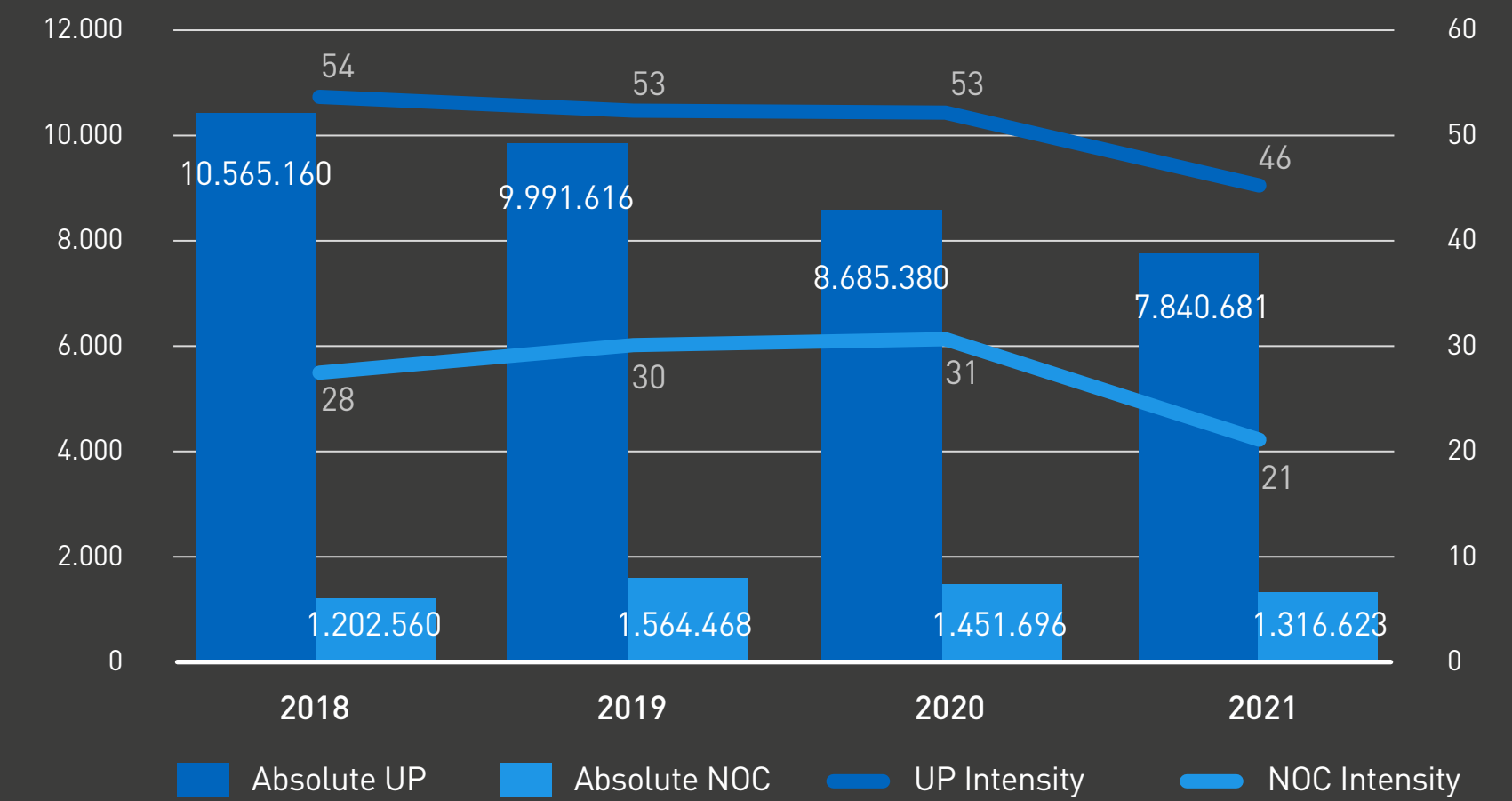
Gas and Energy

G&E had an interannual increase of 27% of direct absolute emissions, due to the increment in the production of thermal plants, but in turn a reduction in 7.4% emission intensity (0.34 tCO₂e/MWH in 2021 vs. 0.32 tCO₂e/MWH in 2020), mainly due to the commissioning of the Los Teros II Wind Farm. The intensity downward trend over the last years is due to the increase of renewable capacity installed (397 MW in 2021 vs. 99 MW in 2019) and the efficiency improvements, as the combined cycle closure of El Bracho and the La Plata I y II Cogeneration Plants¹⁸.

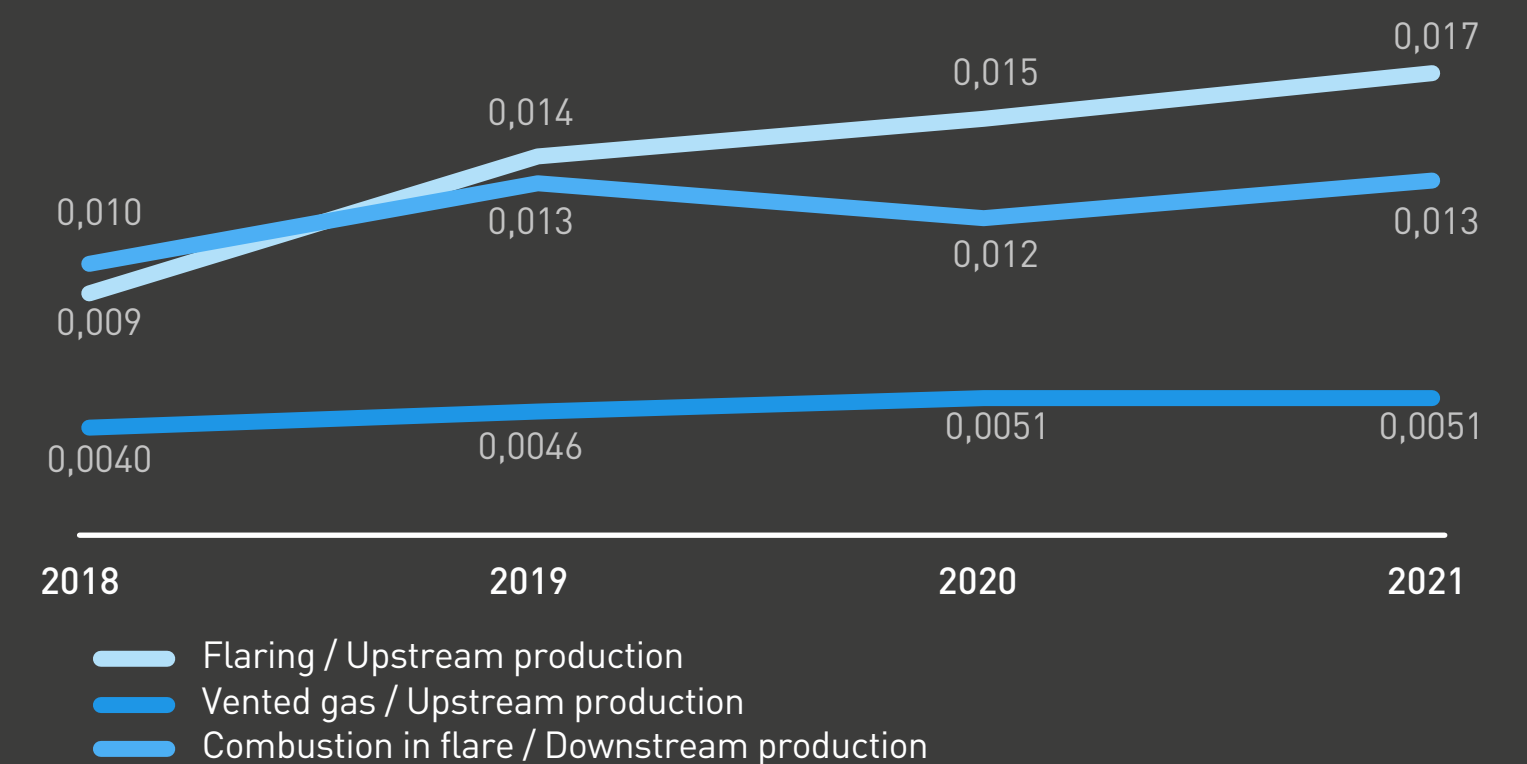
• Volume of flared and vented hydrocarbon

Flaring was increased by 20%, as compared to 2020, reaching 560,588 t, mainly due to a significant increase in the unconventional segment, since the gas pipeline through which gas from La Amarga Chica is discharged was decommissioned due to integrity issues. Consequently, the gas from each battery was sent for flaring. On the other hand, vented gas reached 119,110 t, an interannual increment of 6%.

ABSOLUTE EMISSIONS/DIRECT EMISSIONS INTENSITY UPSTREAM (KGCO₂/BEP)



VOLUME OF FLARED AND VENTED HYDROCARBON BY PRODUCTION (T/T)



COLLECTION, STORAGE AND TRANSFORMATION OF GHG EMISSIONS

Y-TEC is working intensely in the search of new solutions for carbon dioxide and methane emissions management, in order to cooperate in the achievement of the goals set out by YPF. There are two main lines of research in this field.

On the one hand, it is studied to extract the CO₂ from the gas produced and store it instead of emitting it. Through an inter-institutional project in strategic matters from the Ministry of Science, Technology and Innovation, Y-TEC is developing a pilot plan to shape

an atlas of the available sites in the country that have CO₂ storage capabilities from a geological point of view.

The other choice is transforming emissions from combined cycle thermal plants in products with higher economic value, as sodium carbonate —required by the lithium industry— or methanol, which is used as a solvent, an antifreeze agent and a fuel. At Plaza Huincul, YPF is already carrying out this last transformation. YPF Luz and the Ministry of Economy are participating in this line of research.

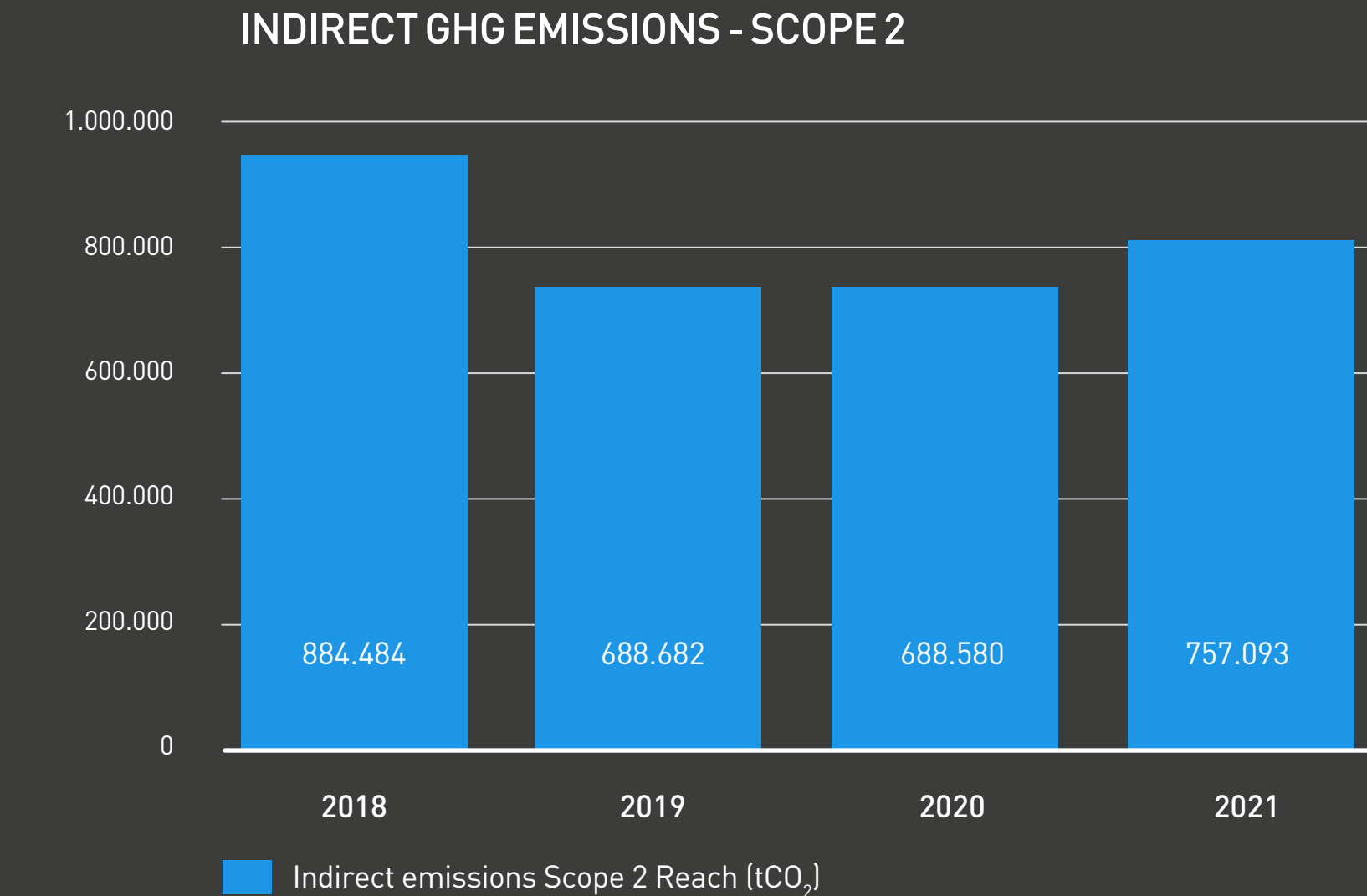
Scope 2 GHG Emissions in 2021

GRI305-2, 305-5

During 2021, the estimation methodology was adjusted. Currently, purchasing electric power from YPF Luz is not considered, since the emissions related to its generation are computed within scope 1 of the company. In addition, quantification included the contribution of CO₂ emissions resulting from the generation of purchased steam to third parties by the Luján de Cuyo Industrial Complex (not included in the

2020 estimate), which account for 49% of the total¹⁹. Regarding the electrical part, the emissions in the purchase of electric power of thermal origin purchased from the electricity grid²⁰ were considered.

The indirect emissions generated by electricity and steam purchased and consumed increased by 10% compared to 2020, due to the increase of electric power purchased from the grid provided by CAMMESA (thermal origin) with an intensity increase of 7% (taking as a



denominator for this indicator the total MWH purchases of steam and electricity). Although the increase of the renewable electric power purchased from YPF Luz increased by 39% compared to 2020, the proportion of most renewable thermal electric energy provided by YPF Luz regarding the total consumption decreased in 2021 (emissions that are not calculated here), implying a higher electric energy consumption of the grid.

ENERGY EFFICIENCY

GRI 302-1, 302-3



For reducing the emissions linked to the consumption and the purchase of energy, we are focusing on the search for higher levels of energy efficiency in every business as well as the progressive use of energies that have a lower carbon footprint, including renewable sources through YPF LUZ.

In the Upstream facilities, during 2021, more than 30 energy revisions were made that included detecting gaps, designing baselines and updating operative controls. Energy efficiency and diagnostics manuals created in 2020 were also updated, more than ten online courses on these subjects were taught, and we continued to increase the implementation of significant processes for energy consumption and development of remote tools for monitoring. Likewise, we moved forward in optimizing our operations, implementing vapor recovery units, improving the relief systems management and optimizing the heating, compression and injection systems.

In Downstream, the refinery of the La Plata Industrial Complex completed the commissioning of the Catalítico A plant, an investment of 30 million dollars that allows for the conversion of low-value hydrocarbon streams that come from other units of the refinery into higher-value and utility products, such as gasoline,

industrial raw materials, oil liquefied gas and diesel oil. In the operation, cleaning, inspection and repair works were performed on 116 devices, and a steam turbine was replaced by a more efficient and safer electric generator, saving 25 tons of steam/hour.

Renewable Sources

YPF has renewable energy agreements for power of over 160 MW, which makes it the company with the greatest supply of this type of sustainable energy in Argentina. This allows for the prevention of emissions of 400,000 tons of CO₂ per year. This electric supply is provided by YPF Luz, which has commissioned two new wind farms in 2021, Los Teros II (Buenos Aires) and Cañadón León (Santa Cruz). The new incorporations, added to the already active farms of Manantiales Behr (Chubut) and Los Teros I, allow for 37% of YPF's electric demand to be covered by renewable energies as of December, 2021, well above the goal set forth by the legislation.



Additionally, as part of the deep transformation that our service stations are undergoing, we are implementing solar panels in these contact points to complement their energy supply. In this area, Downstream works with a Gas and Energy team and our partners from Sustentator.

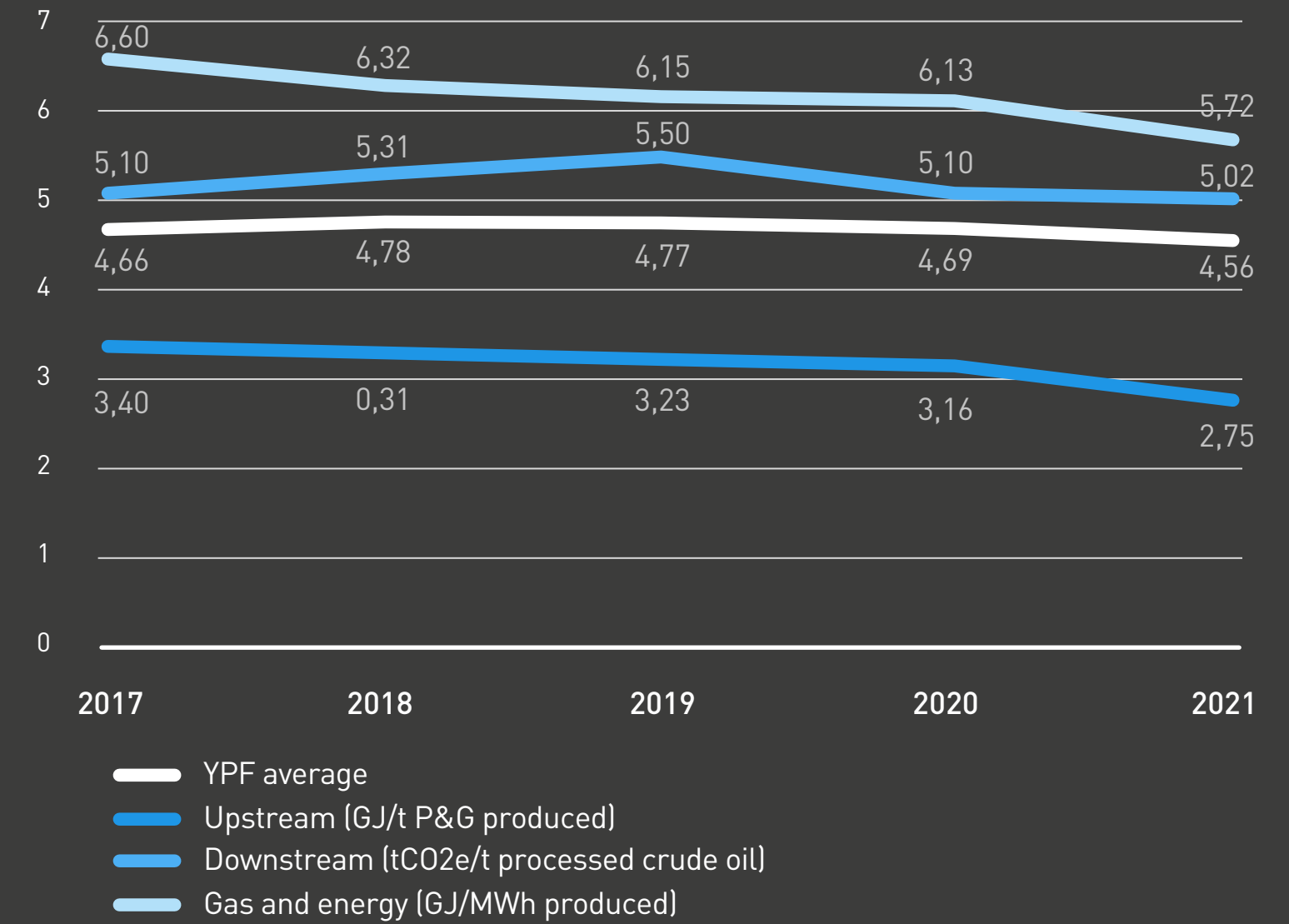
Energy Consumption within the Company

GRI 302-1, 302-3, 302-4

Energy intensity at YPF decreased by 2.7% during 2021. This is due to the increase in processed crude oil in Downstream, to the higher production generated by the incorporation of the Los Teros II wind farm and to energy-efficient actions in the operations in Santa Cruz (Upstream).

On the other hand, energy consumption increased 9% compared to 2020 and reached 199,813,405 GJ, mainly due to the gradual recovery of the activities that had been restricted during the pandemic. Of the total, 1.2% (2,317,000 GJ) pertains to renewable energy, a percentage that surpasses the 0.9% reached in 2020. On average, 28%²¹ of purchased electricity from the grid²² came from renewable sources, seven percentage points more than the previous year. With this, we fully comply with the goal set for 2025 early.

ENERGY INTENSITY (GT/PRODUCTION UNIT)



ENERGY MEASUREMENT IN STATIONS

During the year, we started measuring and monitoring energy consumption of Opessa Azurduy and Opessa ACA Autódromo stations, together with the Telemetry and Energy area.



**WE ARE COMMITTED
TO DRIVING A JUST
AND INCLUSIVE
ENERGY TRANSITION
WITH INNOVATIVE
SOLUTIONS AND
ACHIEVABLE
STRATEGIES.**

NEW RENEWABLE ENERGY SOLUTIONS



GRI2-6

The expansion of the renewable energy offer is a key piece of the company's business plan, and YPF Luz plays an important role in its achievement. In 2021, the electricity company had the greatest production in the Finished Renewable Energy Market (MATER)²³ and reached fourth place as the producer of this type of energy in the country. With the projects it currently executes and those still pending, their importance in the production of clean energy will continue to grow.

→ Investments in renewable energy generation made by YPF Luz in 2021: **US\$ 70.3 million, 50.7%** of the total CAPEX of YPF Luz of the year

Likewise, Y-TEC also contributes to YPF Group with energy solutions that are suitable for climate change with which it also seeks to boost socio-economic development of the country.

Wind Energy

YPF Luz has managed to take advantage of the huge potential for wind power generation that Argentina has in Patagonia and Buenos Aires. In 2021, the second stage of the Los Teros II wind farm in the province of Buenos Aires ended, with 52 MW of installed capacity. Then, in December, its third wind farm, Cañadón León, in Santa Cruz, opened (123 MW capacity). Added to the

farms that were already active —Los Teros I and Manantiales Behr—, the renewable installed capacity of YPF Luz increased to 397 MW.

→ Wind power production in 2021: 1,209.8 GWh, +78% vs. 2020.

→ Generated sales from renewable energy sources (wind power): **AR\$7,559 million**, 124% more than in 2020

It is worth mentioning that, in order to connect Cañadón León to the national grid, YPF Luz built the high-power line Santa Cruz Norte, which improves the quality of electric power supply for residents and supplies energy for the water-treatment plant for Caleta Olivia.

FIRST HYBRID COMPOUND OF POWER GENERATION

Another 2021 milestone for YPF Luz was the commissioning of the Manantiales Behr (Chubut) thermal plant with 58 MW of installed power to complement the electric generation of the homonym wind farm (99 MW) when there is no wind. Thus, a more stable, constant and efficient supply is guaranteed in the area. The new plant required an investment of 100 million dollars.

Solar energy

Future El Zonda Park

In 2021, YPF Luz obtained approval to begin work in EL Zonda park, the company's first solar energy project. Construction began in 2022 in the town of Bella Vista (province of San Juan), one of the highest radiation spots in the world. With a surface of 300 hectares and an investment of more than 90 million dollars, will generate photovoltaic energy by transforming solar radiation. It will have a high level of efficiency due to bidirectional panels that absorb direct radiation and radiation bouncing off the ground.

The project includes three stages of 100 MW each, with which the park will have an installed capacity of 300 MW when complete and will expand the renewable generation capacity of San Juan by 25%. In addition, it will generate 360,000 tCO₂ less in emissions per year, compared to a thermoelectric plant of similar capacity.

To fund the first stage —which will take 14 months to build—, the company issued a green bond for 63.9 million dollars at a 5% rate, reaching final maturity in ten years.

A participation in Sustentator/YPF SOLAR

In October 2021, YPF increased its share capital in the Sustentator company in order to promote this type of alternative energy in residential and commercial sectors.

Sustentator is an Argentine capital company that provides engineering and development services of solar packages so that customers may generate and manage their own energy. Among the technologies it uses, the photovoltaic stands out, which produces electricity from solar panels. Then, this can be supplied with lithium batteries in areas without electricity or can be installed into homes and commercial premises connected to the grid. In addition, Sustentator markets solar water heaters for access to clean hot water, solar pumps for ex-

tracting water from wells and heat pumps for air conditioning.

Hydrogen

In agreement with global decarbonization trends, hydrogen is expected to be a very good energy vector capable of linking primary sources with consumption spots, which is why YPF is strongly supporting its development.

H2ar Consortium

For the purpose of creating a strategy for the hydrogen economy in Argentina to take off, the H2ar Consortium was launched in 2020, a collaboration among 50 companies that are part of the energy value chain. It has eight working cells coordinated by Y-TEC, the leader of the consortium. In addition, the YPF gas and energy area collaborate and also two other group companies: YPF LUZ and Profertil, dedicated to the production and marketing of ammonia²⁴.

During 2021, the consortium participated in two public-private dialogs called by the Economic and Social Council in the framework of developing the National Hydrogen Strategy 2030 and the group submitted its first report in December, disclosing important findings. Among others:

- The country has the potential for developing a dual clean hydrogen production strategy by combining generation from technologies of natural gas reforming with CO₂ collection (blue hydrogen) and water electrolysis by using renewable energy (green hydrogen). Argentina has highly competitive costs for the production of the first. In the meantime, it is expected that green hydrogen will reach economic parity in 2030.
- Argentina also has the scientific resources and capabilities to play a prominent role in global technology and industrial goods chains required by the hydrogen economy.
- In the second half of this decade, attractive opportunities for adopting and extending hydrogen technologies will come up, especially in the industry—in the ammonia, methanol, refiner and steel sectors, currently using 400,000 t per year as raw material—and in mobility: regional trains and high tonnage trucks that run on hydrogen might reach cost parity with current internal combustion technologies.



→ These scenarios may be further improved by the implementation of a hydrogen advertising regime in Argentina, an initiative in which the companies of the H2ar Consortium participate in the Economic and Social Council area.

For YPF, green hydrogen is a big opportunity to transform surplus production from its wind farms and solar parks into an energy vector that facilitates its marketing. Through an Argentine Fund Sector, it is developing a pilot project in cooperation with the iron company Tenaris in order to build the first national electrolyzers²⁵.

Likewise, with the support of the Ministry of Science, Technology and Innovation, it will seek to recommission the Pico Truncado Hydrogen Plant (Santa Cruz) to develop technologies linked to hydrogen and perform the first trials with the nationally manufactured electrolyzers. Opened in 2005, Pico Truncado was the first plant of its kind in all of Latin America.

Lithium

Lithium is the metal with the highest energy storage capacity by weight unit. Argentina shares one of the largest lithium reservoirs in the world with Bolivia and Chile and it is estimated to have the potential to increase its production from the current 37,000 tons per year to more than 370,000²⁶. This is the reason it has a privileged spot in current and future energy strategies, especially due to its usefulness for manufacturing batteries to store intermittent renewable energy.

Y-TEC has been breaking into the lithium industry for years. It has developed R&D projects with different groups from Conicet. Moreover, it has laboratories in its Berisso plant, where active materials based on lithium for manufacturing batteries are developed. It also acquired a pilot plant with Chinese technology to perform industrial escalation trials. It also cooperates with the Research and Development Center in Advanced Materials and Storage (CIDMEJU), located in the province of Jujuy, in developing a process to extract lithium from brines through more efficient and sustainable electrochemical methods than the current ones. In 2021 it took another step, promising to place YPF at the cutting edge of this rising industry.

YPF Litio

To integrate the whole value chain of this mineral, YPF built the new company YPF Litio S.A., which will operate under the scope of Y-TEC and will cooperate closely with the Federal State and the provinces that produce lithium, as Jujuy, Salta and Catamarca.

The new company has already begun its first project, in which the Ministry of Science and the National University of La Plata are also associated: the construction of a low-scale factory that will produce lithium cells and batteries. Located on the university campus, the plant will be operational in 2022 and will have a production capacity of between 5 and 9 MWh/year. Its first customers will be the Ministry of Defense and the government of the province of Buenos Aires, which have solar panels installed in places where the inter-connected electric grid is not available and they need batteries to store energy. As a final goal, the project is expected to help acquire technological experience and knowledge needed for future development of similar plants throughout the country.

PRODUCTOS BASED ON LOW-CARBON HYDROCARBONS

YPF not only seeks to decrease its carbon footprint in the production of hydrocarbons, but also to offer finished oil and gas products that generate less CO₂e emissions to its customers. The strategy to achieve this goal is focused on adapting the refineries to new low-sulfur fuels and lighter hydrocarbons specifications. Therefore, we also seek to answer changes in demand and customer expectations. Every time we update our maximum quality fuels, we incorporate improvements in the balance between energy consumption and the capacity provided by the product.

Low Sulfur Fuels

In 2019, Resolution 558 of the SGE established readjustments for specifications on the sulfur content in grade 2 diesel fuel and gasoline, which must be complied with as of 2024. As a response, we have been investing in infrastructure since 2018, as the installation of a new coke gasoline hydrotreatment unit and optimizations in catalytic cracking fluid (CCF) magnaforming and hydrotreatment units in the La Plata Industrial Complex. Engineering studies for a new desulphurizing unit in the Luján de Cuyo refinery also began. These units are expected to progressively start their operations as of 2024.

Biofuels

YPF is the main purchaser and mixer of biofuels in Argentina with more than 10 million cubic meters purchased since mandatory cuts became effective. In 2021, the new federal law that regulates the sector (law number 27640) was published, which demands the incorporation of 12% of ethanol into gasoline and 5% of biodiesel to diesel fuel, half of the required cut from the previous year.

Within this framework, our total purchase of biofuels through the supply of production services was of 86,624 m³ in 2021, 20% less than in 2020. Whereas, purchases reached 733.097 m³, a drop of 5%. Recovery in demand made purchases of ethanol grow to 535,529 m³, 33% more than in the previous year. Whereas, biodiesel (FAME) purchases decreased by 40%, to 197,568 m³, in line with the reduction of the cut.

In addition, 160 thousand tons of additional CO₂e were minimized by contracting already existing capacity from other producers in order to manufacture biofuels from methanol and soybean oil.

NEW ETBE PLANT IN LUJÁN DE CUYO

The refinery located in the Luján de Cuyo Industrial Complex (CILC) completed the commissioning of the new unit for the production of ETBE (ethyl tert-butyl ether), which is manufactured through the etherification of bioethanol. With this 21 million dollar investment, the complex complies with the requirements of the Secretary of Energy of Argentina on aggregation of bioethanol to fuels that are marketed inside the territory. In addition, it expands our offer with a product that, when incorporated into the naphtha mixture, increases its octane and decreases the emission of polluting gases to the atmosphere. In fact, it is considered a renewable energy.

ELECTRO-MOBILITY

During 2021, the commissioning of electric car chargers in our service stations located in the Buenos Aires-La Plata expressway was finished. Now, each one has two fast chargers having 50 KW of power with which a vehicle can be recharged in 35 minutes. Thus, YPF ended the year with six fast chargers installed in its stations.

Moreover, the company announced an electric mobility project that encompasses 700 km supplied with semi-fast and fast chargers, that will also be connected to the YPF mobile app. The authorization of two electric corridors is being considered: one between Buenos Aires and Córdoba, where we will deploy a series of chargers separated by no more than 150 km and another one in the South of the province of Buenos Aires, which will favor connectivity with the Atlantic Coast. A working cell to develop the project is already formed and the installation of tree semi-fast charging equipment in the Atlantic Corridor, Castelli, Pinamar and Mar del Plata has already begun.

Scope 3 Emissions in 2021

GRI 305-3

In 2020, we started estimating the scope 3 emissions, those related to the company activities, but that are not under its direct control. It is a work in progress that, in the future, will be strengthened by even more accurate data.

One of the conclusions of this exercise is that products sold are the category that has the greatest incidence in estimating YPF's carbon footprint, with an involvement that exceeds 80% of the sum of the three types of emissions (scopes 1, 2 and 3). In this case, they were estimated based on products sold in Argentina and in international markets, presuming that all were flared. The list included gasoline, diesel fuel, jet fuel, gas diesel oil, oil liquefied gas, bunker oil, natural gas, lubricants and asphalts. We also developed a partial estimate for the primary purchased materials, and we included the emissions associated with waste management generated in operations.

| SCOPE 3 | 2021 | | 2020 | |
|--|--------------------|-------------|--------------------|-------------|
| | tCO ₂ e | % | tCO ₂ e | % |
| Category 11 - Use of the products sold | 59.216.913 | 95% | 52.715.838* | 96% |
| Category 1 - Purchase of goods and services | 1.282.941 | 2% | 825.361** | 2% |
| Category 5 - Waste generated in operations | 1.066.559 | 2% | 485.987 | 1% |
| Category 12 - End-of-life treatment of the products sold | 599.239 | 1% | 512.178*** | 1% |
| Category 14 - Franchises | 194.080 | 0% | 176.565**** | 0% |
| Total GHG emissions in Scope 3 (other indirect emissions) | 62.359.732 | 100% | 54.715.930 | 100% |

Categories defined according to GHG Protocol

* In 2020, 76,306,816 tCO₂e related to this category were reported. In 2021, the estimation was adjusted, data sources were analyzed and identified and duplicated values were subtracted, which explains the difference.

** In 2020, 866,474 tCO₂e related to this category were reported. Quantities and emission factors of refined fuels purchased from third parties were adjusted.

*** In 2020, 1,112,856 tCO₂e related to this category were reported. It was adjusted taking into account only oils and lubricants. Currently residual carbon is not considered in this category.

**** In 2020, 276,022 tCO₂e related to this category were reported. Service Stations not counted in Scope 1 were adjusted.

Resilience to Climate Change Impact

GRI 3-3, 201-2

Risk management regarding the weather is integrated to the business risk matrix, including potential physical impact and their impact on business. For the approval of investments, scenario and sensitivity analyses are used, by applying an internal price for carbon. In addition, we monitor trends, technological developments and regulatory changes related to this global emergency.

Climate Impact Assessment in Assets and Operations

In 2021, we continue working towards improving our understanding of potential climate vulnerabilities in our operations, as well as establishing adaption measures at the strategies and assets level. To do this, we have been applying BACLIAT, a climate impact assessment tool for business areas. We have analyzed past, current and future climate trends, and we detected the primary risks and identified mitigation actions in order to reduce vulnerability and encourage early action.

APPLICATION OF BACLIAT IN YPF FACILITIES

| | |
|------|--|
| 2016 | La Plata Station |
| 2017 | Concepción del Uruguay Station |
| 2018 | Pipeline Between Puesto Hernández (Neuquén) and Luján de Cuyo (Mendoza) |
| 2019 | Barranqueras Station and Km 9 Dehydrating Plant (Chubut) |
| 2021 | Crude Oil Treatment Plant in Las Heras and Gas Treatment Plant in Cañadón Seco |

Weather Maps

Through the Web platform of the Geographic Information System (GIS), every company has access to the layers of the climate risks map, which allow for identifying the most vulnerable facilities in that field. They were created between 2019 and 2020, with information from the country's government agencies, shaping climate threats in two greenhouse gases concentration scenarios (RCP4.5 and RCP8.5) for two periods (2015-2039 and 2079-2100). In 2021, we continue to announce the map and perform detailed analyses of the high-risk sites in order to make progress in adaptation measures.

Domestic Price of Carbon

Since 2019, we have included environmental criteria in the analysis of the projects subject to review by the Critical Investments Committee²⁷, including carbon emissions. For that purpose, we determined a price of 50 dollars per ton of CO₂e, a shadow price that was updated in 2022 after a review of the trends in pricing carbon as well as the best practices of the industry. In 2021, the impact of this price was analyzed in conventional, unconventional, and midstream Upstream projects, regarding productive activities.

| STANDARD | METRICS | UNIT OR FORMULA | 2021 | 2020 | 2019 | 2018 |
|-----------|--|---------------------|------------|------------|------------|------------|
| GRI 302-1 | Energy consumption | | | | | |
| | Total energy consumption YPF | TJ | 199.813 | 183.063 | 203.011 | 212.538 |
| | Energy consumption sources | | | | | |
| | Non-renewable fuel consumption | 10 ⁶ t | 3,82 | 3,49 | 3,84 | 3,87 |
| | Purchased electricity | 10 ⁶ MWh | 2,46 | 2,24 | 2,37 | 2,31 |
| | Purchased steam | 10 ⁶ TJ | 11.076 | 7.673 | 7.406 | 7.645 |
| | Renewable energy consumption | | | | | |
| | Percentage of purchased and consumed electricity that comes from renewable sources | % | 28% | 21% | 18% | S/D |
| GRI 302-3 | Energy intensity | | | | | |
| | YPF energy intensity (weighted) | GJ/production unit | 4.560 | 4.688 | 4.767 | 4.780 |
| GRI 305-1 | GHG direct emissions (Scope 1) | | | | | |
| | Total GHG direct emissions (Scope 1) YPF | tCO ₂ e | 15.603.375 | 15.204.794 | 16.981.198 | 17.951.758 |
| | Total methane emissions YPF | tCH ₄ | 127.615 | 147.393 | 159.857 | 167.426 |

| STANDARD | METRICS | UNIT OR FORMULA | 2021 | 2020 | 2019 | 2018 |
|-----------|--|--|------------|------------|---------|---------|
| GRI 305-2 | GHG indirect emissions (Scope 2) (location-based method) | | | | | |
| | Total GHG indirect emissions (Scope 2) YPF | tCO ₂ e | 757.093 | 688.580 | 688.682 | 884.484 |
| GRI 305-3 | GHG indirect emissions (Scope 3) | | | | | |
| | Acquired goods and services | tCO ₂ e | 1.282.941 | 825.361 | - | - |
| | Waste generated in operations | tCO ₂ e | 1.066.559 | 485.987 | | |
| | Use of products sold | tCO ₂ e | 59.216.913 | 52.715.838 | - | - |
| | End-of-Life treatment of the products sold | tCO ₂ e | 599.239 | 512.178 | - | - |
| | Franchises | tCO ₂ e | 194.080 | 176.575 | - | - |
| GRI 305-4 | GHG indirect emissions intensity (Scope 1 + 2) (location-based method) | | | | | |
| | Intensity of direct GHG emissions (Scope 1) YPF (weighed) | tCO ₂ e/production unit | 0,325 | 0,366 | 0,374 | 0,380 |
| | Methane emissions intensity UPSTREAM | tCH ₄ /t Oil & Gas produced | 0,0056 | 0,0068 | 0,0065 | 0,0066 |



04

SUSTAINABLE PRODUCTION

YPF values the importance of natural surroundings and we strive to work with high standards and responsibility regarding environmental management. Work connected to the environment is governed by a precautionary principle, complying with current regulations and our commitments as expressed in the Sustainability and Operational Excellence policies.

As a leading oil and gas operator, taking care of the biodiversity as well as an efficient use of resources are particularly important. In this regard, the significant environmental aspects that must be managed in the upstream segment are related to the sturdy design of the wells, the operative procedures to minimize impacts and waste management, especially the drill cuttings, the water produced and return flows as byproducts of the oil drilling. Water used for hydraulic fracturing in unconventional activities also requires the best practices in environmental care. As for the processing plants and refineries, the focus is on the sulfur oxide emissions and the treated water discharges.

Our focus for environmental management implies evaluating the risks and potential impacts at the planning stages of activities or operations. Included in this framework are specific environmental studies, permanent monitoring and research projects, and working jointly with expert or academic institutions in order to continue developing our knowledge. Our focus also includes establishing measures adapted to the local context where the company's activities develop in order to avoid, minimize, mitigate or compensate for any negative impacts if it becomes necessary. Additionally, the performance is periodically evaluated by reports and revisions; thus, actions are established for any necessary improvements.

As well as the above, a series of internal regulations are added to establish minimum performance criteria, which complement the requirements in the local regulatory framework in each venue. YPF has internal regulations which cover how to manage emissions, waste, water use and the preservation of biodiversity. The Operational Excellence System also in-

cludes environmental management focused on identifying the significant risks and impacts as well as their correct control throughout the value chain.

Regarding taking care of the environment and ensuring the trustworthiness and integrity of our assets and operations. In this sense, the 2021 investments and expenses in integrity and environment totaled M US\$ 467 (capital investments 78% and operational expenses 22%), doubling the previous year's level of investment. The Upstream business had the highest investment, increasing 170% compared to 2020, while the Downstream achieved the pre-pandemic levels.

In this context, our management system is focused on identifying the significant risks and impacts and their appropriate control throughout the full value chain. For each operation and project, environmental impact evaluations are carried out following the laws and internal regulations. As a result, management plans are developed with measures to prevent or minimize possible negative impacts, as well as continuous monitoring programs and actions in case of eventual contingencies. The studies and plans are presented to the authorities in each jurisdiction, and they become public information.

The application of this model is headed by the Sustentabilidad, Ambiente, Salud y Seguridad (SEHS - Sustainability, Environment, Health and Safety) Vice Presidency, and has the following certifications: OHSAS 18001 (Safety), ISO 14001 (Environment) and ISO 9001 (Quality) in the company's main industrial centers.

Monitoring and Reportability

According to the provisions in the corporate procedure of Environmental Parameters, the businesses deliver a quarterly report of this data through a specific application. The calculation methodologies are established in a specific guide, which is updated periodically. Once a year, these parameters are verified by Deloitte & Co., an external consultant, according to what is included in the Limited Assurance Report incorporated to the Sustainability Report.

The group's businesses issue reports quarterly with this data through a specific application. With this information we can evaluate our performance and implement the necessary improvements.



We have a comprehensive approach in water management, focused on the sustainability of the resource, taking into account that this is shared with the surrounding communities, consumption efficiency and appropriately managing the wastewater generated. Through the Aqueduct Water Risk Atlas tool, we have identified the water inlet and spillway points which are located in the water stress basins.

Additionally, in 2021 we participated in the presentation of the Water Security Report (CDP) to formalize and disclose our water management, and we were graded with a B.

This criterion is focused on three strategic lines:

WATER MANAGEMENT FOUNDATIONS

Identification of water risks

At national and local levels

Optimization of water use

Ensuring an appropriate treatment process that allows for reuse

Assessment of resources

Following a baseline for intake and management (2015) and a map with extraction and disposal locations, updated in 2021.

Water Use Impact Assessment

Since 2016 we use the Local Water Tool (LWT2) from the Global Environmental Management Initiative, implemented in complexes and facilities in the Mendoza, Tucumán, Río Negro, Buenos Aires and Tierra del Fuego provinces.

Water Use Efficiency Assessment

This parameter is assessed with our methodology developed in 2019. Over the two first years we covered the Río Colorado installations, the Señal Picada and Punta Barda fields, unconventional Upstream operations and the Luján de Cuyo Industrial Complex (refinery). In 2021, we deepened our assessment of the three Downstream industrial complexes. The goal is to cover the installations with the largest freshwater consumption of YPF by 2023 (representing almost 80% of total consumption).

Study of Hydrogeological Resources

With an investigation model that uses information obtained from the drilling of oil wells, we mapped the aquifers that need to be protected. We first covered Neuquén, Río Negro and Santa Cruz. In 2021, we completed the research of the Cuyana basin in the province of Mendoza. Research in the province of Tierra del Fuego and Neuquén basin in Mendoza is also in full swing. This research has direct application in drilling and hydraulic stimulation activities and well abandonment and reparation.

Global Assessment of Water Risk Associated with Operations

In 2019 and 2020, we used the Aqueduct Water Risk Atlas tool from the World Resources Institute (WRI) to identify any water risk associated with our 27 operations with water inlet points.

In search of a more granular tool, we began outlining a pilot project in 2021 to test the Waterplan platform on the basin of the San Jorge gulf during 2022. Its outcome will depend on whether it is copied in the rest of the operations.

Water valorization

With the Water Risk Monetizer Tool, we set internal prices for water, which must be used in the sensitivity analyses of all critical investment projects (those assessed by the Investment Committee). In 2021, we updated these prices for each province and activity, as well as for Upstream and Downstream operations.

Plant Surface Runoff Studies

In order to define passive defense actions against possible tank spills caused by a combination of climate and geomorphological effects, from 2018 to 2020 we assessed 41 Upstream plants located in sensitive areas. In 2021, we began to apply the management measures indicated in the reports and in 2022 we are looking at auditing its implementation.

2021 Water Capture

GRI 303-3 065

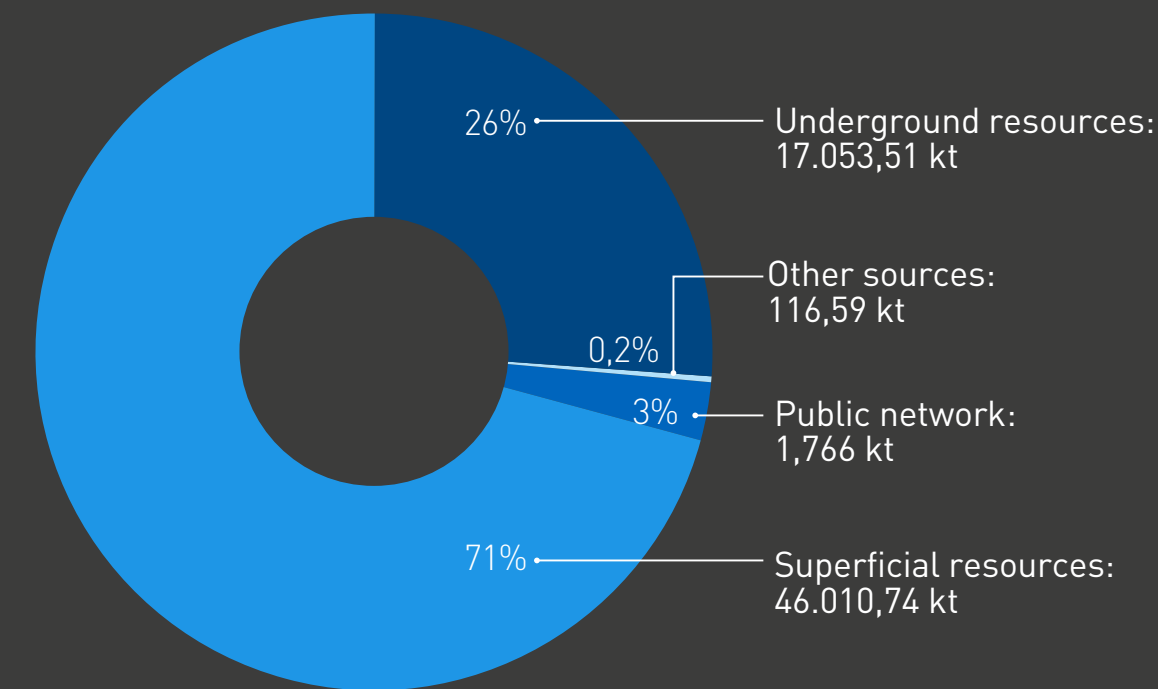
The extracted water²⁸ in 2021 totaled 216,011 kt, 1.7% less than the previous year. The decrease was greater in the water produced²⁹ (-3.6%), which reached 151,000 kt. The external water capture³⁰ increased to 65,000 kt, an inter-annual increase of 2.9%.

The increase in the external capture was due to the full operation of El Bracho³¹ thermal power plant, and to a lesser extent, to methodological adjustments in the volumetric estimates of the businesses. Capture of the public water supply increased by 19.5%, due to the Complejo Industria Plaza Huinca's methanol plant normalizing its service after having been interrupted for four months in 2020. The volume of water capture from surface stream beds diminished by 1.3% compared to the previous year.

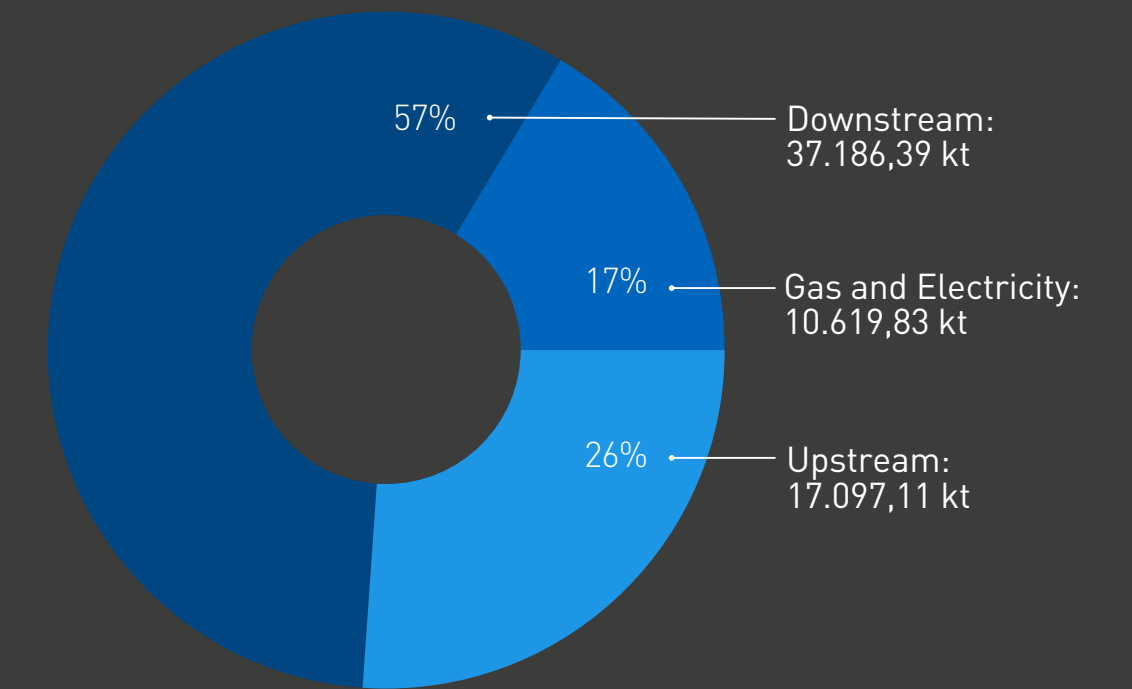
Broken down by businesses, Upstream increased water capture by 38%, and the unconventional operation achieved pre-pandemic values in response to the increase in production.

The volume captured Downstream decreased 16% at the Complejo Industrial Luján de Cuyo, which added to a sustained fall at the Complejo

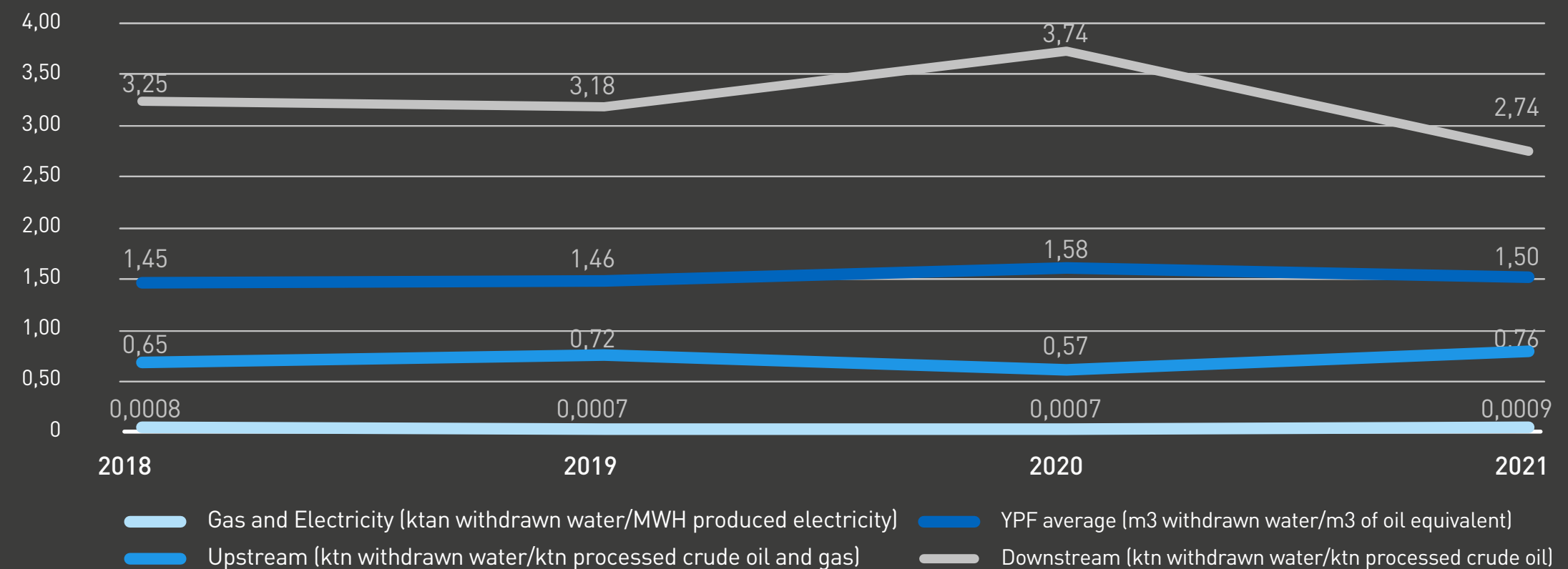
DISTRIBUTION OF WATER WITHDRAWN EXTERNALLY BY SOURCE - 2021



DISTRIBUTION OF WATER WITHDRAWN EXTERNALLY BY BUSINESS - 2021



INTENSITY OF EXTERNAL WITHDRAWAL OF WATER



Industrial La Plata (La Plata Industrial Complex) due to repairs in the water lines and an improvement in the efficiency of the water desalination process. Mention should be made that in this segment, 22% of the external water capture is re-used. In turn, Gas and Energy increased their extraction by 60% due to the higher operation of YGEN II's new combined cycle.

Taking everything into account, the intensity of the extraction considered by YPF was lower than in 2020. It should be pointed out that the descent registered in Downstream, together with decreasing water capture, the process of crude oil increased —specifically in the La Plata and Luján de Cuyo refineries— thanks to fewer restrictions during the pandemic.

The company's new environment plan for the 2022-2026 period establishes a new objective linked to water use efficiency. The associated target is a 5% reduction in the intensity of fresh water capture.

Water Capture for Hydraulic Fracturing in the Unconventional Operations

The water consumed in the unconventional operation comes from the Neuquén River and is captured according to the permits granted by the authorities in charge. In 2021, 7,924 mega liters were extracted, which is 0.1% of the riv-

er's average yearly flow rate. In response to the increase in the unconventional activity, this total volume was 233% higher than in 2020, although the average water volume per phase was stable (approximately 1400m³ per phase).

Having the objective of achieving efficiency and in virtue of the water emergency situation in the province of Neuquén in 2021, we also moved forward along with the contracting companies with some activities tending to minimize the consumption of river.

With that same objective, the company is working with Y-TEC, which uses a nanobubble technology to degrade hydrocarbons dissolved in water, obtaining undetectable concentrations that allow it to be re-used in productive processes.³²

Water Consumption³³

GRI 303-5

Water incorporated to any product, in production or evaporated, totaled 35,342 kt in 2021, an 8.2% higher than in 2020. The increase was due to the Complejo Generación Tucumán (Tucuman Generation Complex) being more operational and an increase in the use of unconventional Upstream, which includes the temporary phase shift between the hydraulic

SAFE HYDRAULIC FRACTURING

The chemical products used in the process of hydraulic stimulation are detailed in the reports and environmental impact studies required for each of the wells, which include the respective safety files. These documents are reported to the authorities and are accessible to the public.

These chemicals make up less than 1% of the hydraulic fracturing fluids. Furthermore, to avoid potentially affecting the fresh water aquifers, the wells possess a triple steel casing and cement cover 700 m deep and have two protection barriers until a 3,000 m. depth.

During the reported year, no sites have registered any deterioration in the quality of underground or surface water compared to the baseline.

stimulation of the wells and the recycled water flow into the sinkholes. This does not allow the yearly statistics to reflect an accurate consumption. A longer time period is necessary to evaluate the correct tendency.

Wastewater Effluents and Discharged Water Management

GRI 303-2, 303-4

YPF always seeks to reduce, re-use and recycle production water as well as the generated wastewater effluents. If this is not possible, the company treats and discharges them according to the requirements by the authorities responsible for the discharge site. The current industry standards are applied where no regulations exist.

Discharged Water

In 2021, the water discharged by YPF had a 2.8% inter-annual decrease, driven especially by a 12.5% descent in downstream as a consequence of less surface water capture in the Luján de Cuyo and La Plata industrial complexes. Meanwhile, the increase in the unconventional segment captures caused upstream discharges to increase by 64%. In Gas and Energy there was also a major increase (275%) due to higher water extraction at the Complejo Generación Tucumán (Tucuman Generation Complex).

Regarding the destination, the lower downstream water capture allowed water discharged to surface bodies to diminish by 6.4% compared to 2020, while that which was discharged to underground bodies grew 42% due to the increase in well sinkholes in the unconventional business.

In 2021, 82% of discharged water was labeled as fresh water. Other waters were only 18% of the total which was discharged in well sinkholes.

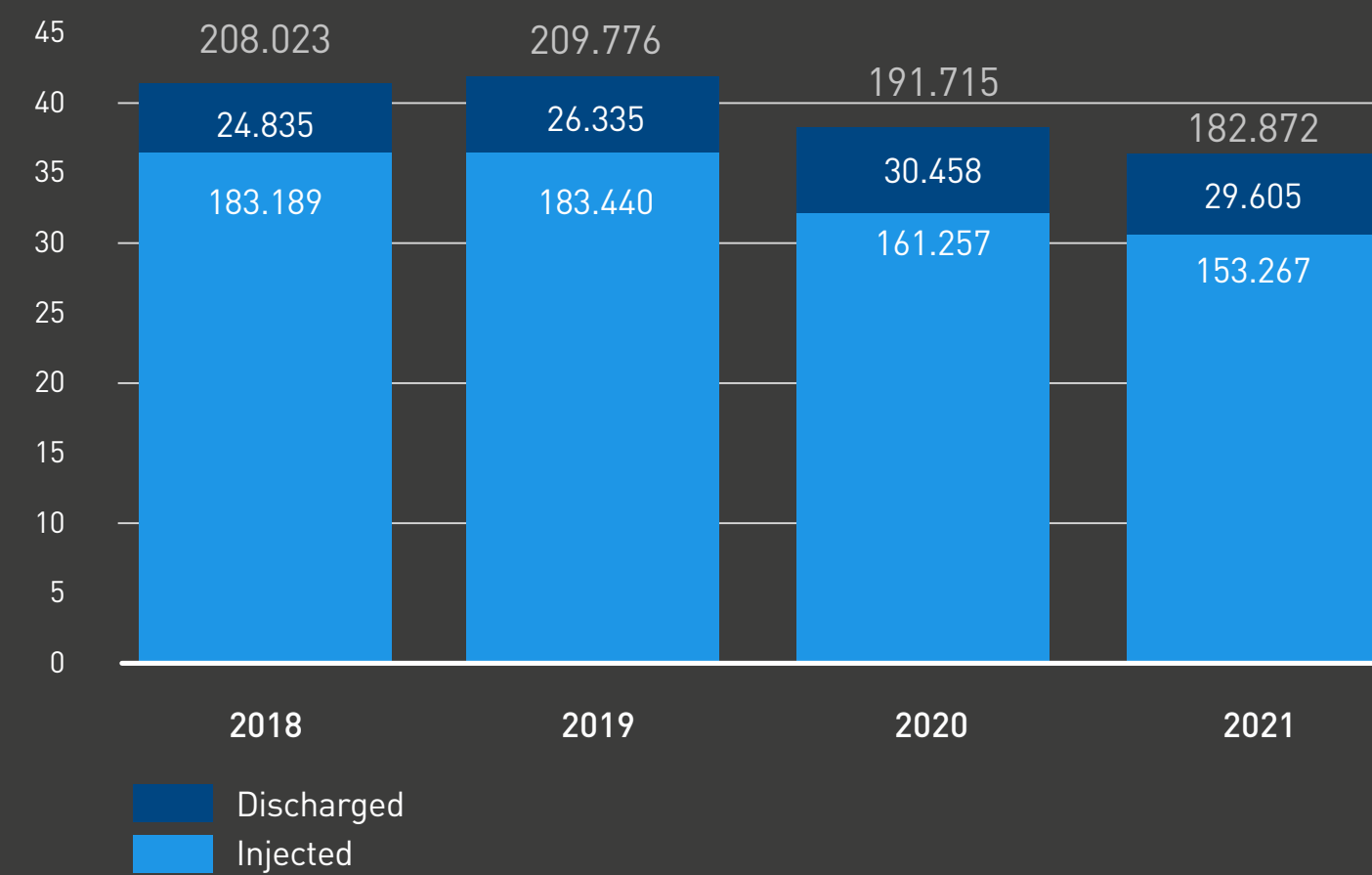
The re-used water³⁴ for the period was 156,165 kt less than in 2020 due to the closure of injection wells that accompany the production wells.

Additionally, in 2021 we began dividing the record-keeping of the fresh and non-fresh water discharges for a subsequent analysis.

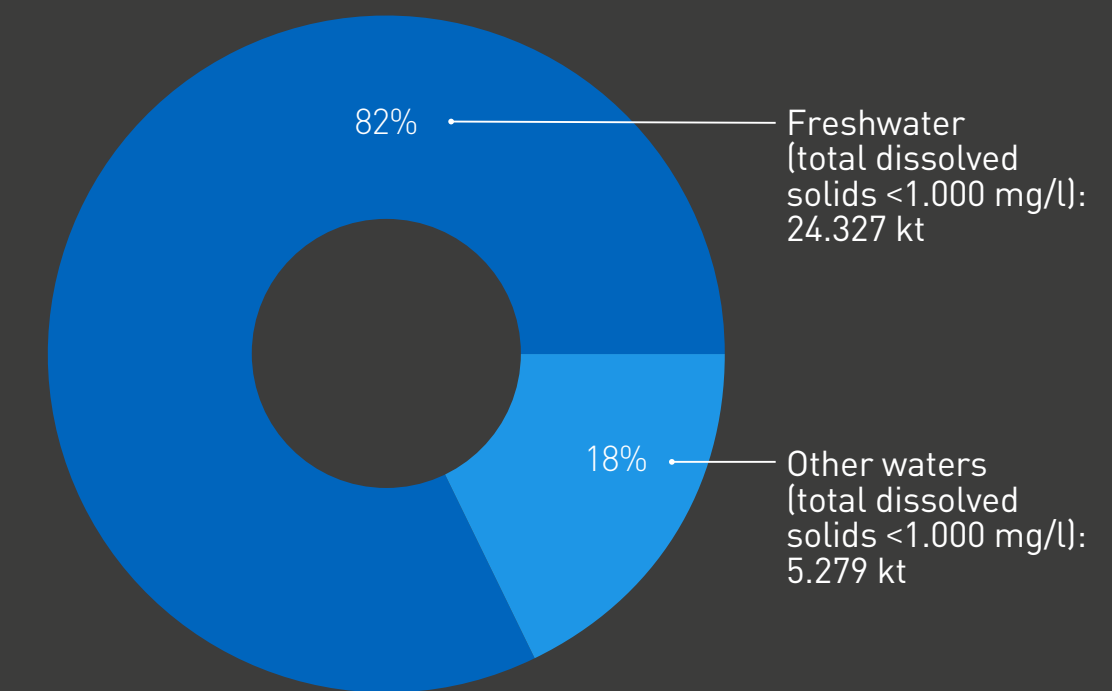
Injected Water

In 2021 injected water decreased a 5%³⁵ compared to the previous year, totaling 153,267 kilo tons, and re-used production water accounted for 96%. The decrease was due to the closure of some 300 injector wells in Rincón de los Sauces for integrity and profitability reasons. The closure of 22 injector wells at Las Heras-Cañadón Escondido are added to the above.

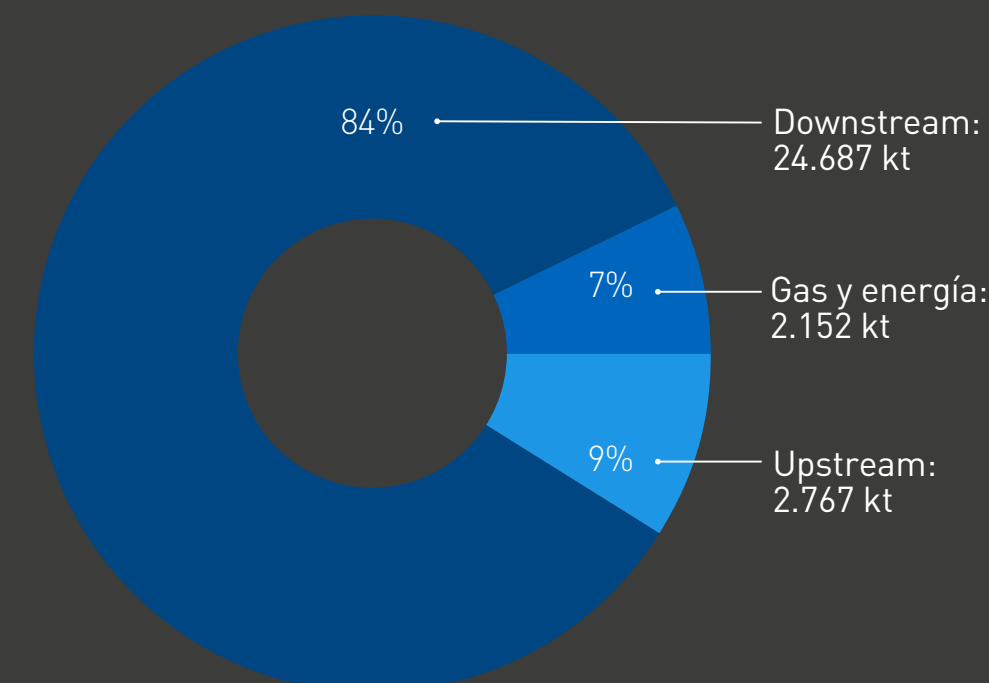
DISCHARGED WATER AND INJECTED WATER (KT)



DISTRIBUTION OF WATER DISCHARGED BY TYPE OF WATER - 2021



DISTRIBUTION OF WATER DISCHARGED BY BUSINESS - 2021



One hundred percent of the company's discharges are treated.

- The volume of discharged water produced: 2,767.05 kt
- Concentration of hydrocarbons discharged in water produced: 48.90 mg/l⁴²
- Concentration of hydrocarbons discharged in residual waters in process: 5.28 mg/l

Operations and Sensitive Areas

GRI 304-1, 304-2, 304-3, 304-4, SASB EM-EP-160A.3

All sites where YPF was involved in hydrocarbon extraction and production activities have environment impact studies that include a biodiversity analysis, mitigation plans and annual environment monitoring reports, which are in line with the applicable legal requirements and the purpose of the company to care for the ecosystems and their diversity during the whole life cycle of their operations and products, particularly in sensitive ecological areas. Their actions in this field are focused on analyzing the risks, preventing impacts, restoring the landscape and adopting compensatory measures where these are required — these activities are documented in environment management plans.

Within the totality of licensed hectares, there is only 2% (163,796 Has³⁶) overlapping with a significant area of biodiversity. There are a total of 29 overlaps (in 24 licensed areas) but only 11

are in operation. Overlaps are considered protected areas within the mining dominions, as well as those located at a distance of less than 1 Km. One single facility is understood to be part of an operation.

Additionally, the company has set a new objective towards 2026 to be counted as 90% of highly sensitive environment zones with a specific Biodiversity Plan of Action to strengthen the existing environmental management plan.

THE PERCENTAGE OF RESERVES LOCATED IN SITES WITH A PROTECTED CONSERVATION STATE OR IN THREATENED SPECIES' HABITATS.

| Proven net reserves | Probable net reserves |
|---------------------|-----------------------|
| 0,03 % | 0,05 % |



Biodiversity Plans in Natural Reserves

YPF currently runs upstream operations that overlap with the RAMSAR³⁷ (Convention on Wetlands) Laguna Llancañel site and Auca Mahuida, the multiple use reserve, a total of 56,098 hectares. The action plans for both gather the characteristics described in the following table:

| | GEOGRAPHIC LOCATION | YPF PRODUCTION ZONE | SPECIES PRESENT IN THE AREA ³⁸ | IDENTIFIED RISKS | PREVENTION AND MITIGATION MEASURES | | | | |
|--------------------------|--|---|---|--|--|-------------------------------|----------------------------|--|---|
| Laguna Llancañel | A 65,000 Ha wetland, located in the south of the province of Mendoza. Declared a RAMSAR (Convention on Wetlands) site | Licensed Production Block located west of the lake. A 24,500 Ha surface and represents 25% of the protected area. | 105 bird life: | Opening of locations and new roads | Multiple locations and mimicking facilities | | | | |
| | | | 98 non-threatened species | | | | | | |
| | | | 7 vulnerable | | | | | | |
| | | | | Loss of fuel and chemical products in the ground and water | Waterproofing of tanks and trucks | | | | |
| | | | | Sound emissions due to the use of generators | Installing equipment protection to lower sound emissions | | | | |
| Auca Mahuida | A 76,213 Ha area, located within the Auca Mahuida provincial reserve in the province of Neuquén, in the category of the multiple use reserves management. Declared "Protected Paleontologist Area" by Provincial Decree #3,603/98. | Licensed production blocks on the Auca Mahuida Volcano, Bajo del Toro, Las Manadas and Don Ruíz, with a total surface of 36,212 Ha, representing 49% of the protected area. | 85 bird life: | Opening of locations and new roads | Protection that allows for lowering sound emissions | | | | |
| | | | 77 non-threatened species | | | | | | |
| | | | 4 vulnerable | | | | | | |
| | | | 2 threatened | | | | | | |
| | | | 1 in critical danger | | | | | | |
| | | | 1 not considered | | | | | | |
| | | | 18 mammals: 11 non-threatened species | | | Crushing of fauna by vehicles | Speed control and training | | |
| | | | 1 undetermined | | | | | | |
| | | | 2 almost threatened | | | | | Impact of drilling during guanacos' calving season | Drilling outside of the guanacos' mating season |
| | | | 3 vulnerable | | | | | | |
| 1 exotic | | | | | | | | | |
| 22 reptiles: | Loss and deterioration of the habitat | Restoring of the habitat in the Payunia region with hand-built rock shelters | | | | | | | |
| 8 non-threatened species | | | | | | | | | |
| 4 indeterminate | | | | | | | | | |
| 2 vulnerable | | | | | | | | | |
| 2 insufficiently known | | | | | | | | | |
| 6 not considered | | | | | | | | | |

Biodiversity Monitoring and Studies

To adapt the operational procedures and the monitoring activities within the frequent natural variation experiences of the ecosystems, the company executes various research activities in the licensed areas.

Via satellite image technology and calculating vegetation indexes, we executed a study in 2021 to identify and categorize sites that require restoration in northern Mendoza, the Colorado River region and San Jorge gulf basin, focusing on the areas where operations have been closed down. In previous years, we executed this analysis in the provinces of Santa Cruz and Neuquén.

Simultaneously, we continue to broaden a biodiversity baseline study in areas of the Neuquén basin operated by YPF, with the goal of detecting eventual impacts as well as strengthen or prepare the corresponding management plans. There is a total of 12 areas under study.

DOWNSTREAM BIODIVERSITY

In the Luján de Cuyo Industrial Complex, the company continued to develop conservation activities in their ecological reserve, an area of 32 hectares created in 1999 to contribute to conserving wild species and to providing a place for leisure, education and research. It has a species rescue and rehabilitation center which is a coordinated operation with the province of Mendoza's Dirección de Recursos Naturales Renovables (Renewal of Natural Resources Administration). In 2021, 1,904 animals were brought in, and 1,754 rehabilitated animals were set free. Visitors from schools, institutes and universities were welcomed.

In the La Plata Industrial complex, work is carried out with the Cooperativa Futuro Ensenadense (Future Ensenada Cooperative) in a nursery, the purpose of which is to encourage forestry within and outside of our facilities.



We systematically record generated waste to identify opportunities to reduce, re-use and re-value. Additionally, complying with Argentine regulations and our environmental standards, we guarantee their adequate treatment and final disposal, together with reducing their danger and environmental impact.

In 2019, YPF launched the Economía Circular (Circular Economy) project, to boost a culture within the whole group, based on the principles of this model inspired by nature's cyclical character. In 2021 an interdisciplinary work team was formed, supporting the businesses to implement circular initiatives, among which the following stand out:

- Re-use and recycling of more than 92 tons of worn-out catalysts from the La Plata and Luján de Cuyo industrial complexes, which contain precious metals. Since its implementation in 2019, we have managed to recover platinum and palladium. A process is being worked on to continue this initiative in 2022.
- The re-use of worn-out catalysts from the Cracking Catalytic unit of the Luján de Cuyo and La Plata industrial complexes as aluminum correctors in cement manufacturers. This activity reduces extracting virgin raw

material for the cement manufacturers and the final waste disposal for YPF.

- The washing and recycling of plastics with hydrocarbons, prioritizing their re-use to avoid CO₂ emissions produced by burning them. This activity is carried out in the province of Santa Cruz.
- A variety of reducing activities has eliminated a monthly use of more than 80,000 cups, 52,000 bags and 7,000 disposable cutlery in our facilities. This initiative is expected to be extended in 2022.
- Evaluation of projects to re-use disposable plastics as raw material in the petrochemical sector.
- Initiatives in gas stations focused on the re-use of coffee dregs, and the recovery and re-use of used vegetable oils generated in our stores.
- A pilot project in the use of modified asphalts, an action that was executed in 2021 with the application of a new product called "ASFASOL 30 Eco". In 2021 the first road building job was carried out in the city of Buenos Aires which included 2 stretches. The "ASFASOL 30 Eco" was manufactured

with Asfasol 10 and recycled polyethylene (equivalent to some 320 Kgs of empty used plastic containers), obtaining a total of 569 tons of asphalt mixture extended over a 5,080 m² surface.

- Tire recycling. In 2021 more than 300 tires and conveyor belts from the Santa Cruz operations were sent to be recycled.
- Agreements for recycling electronic waste, a process which was available only for the metropolitan area of Buenos Aires, and after agreements have been made in 2021, they will be extended to all our facilities in 2022.

4.3.1. Waste by Elimination Type and Method

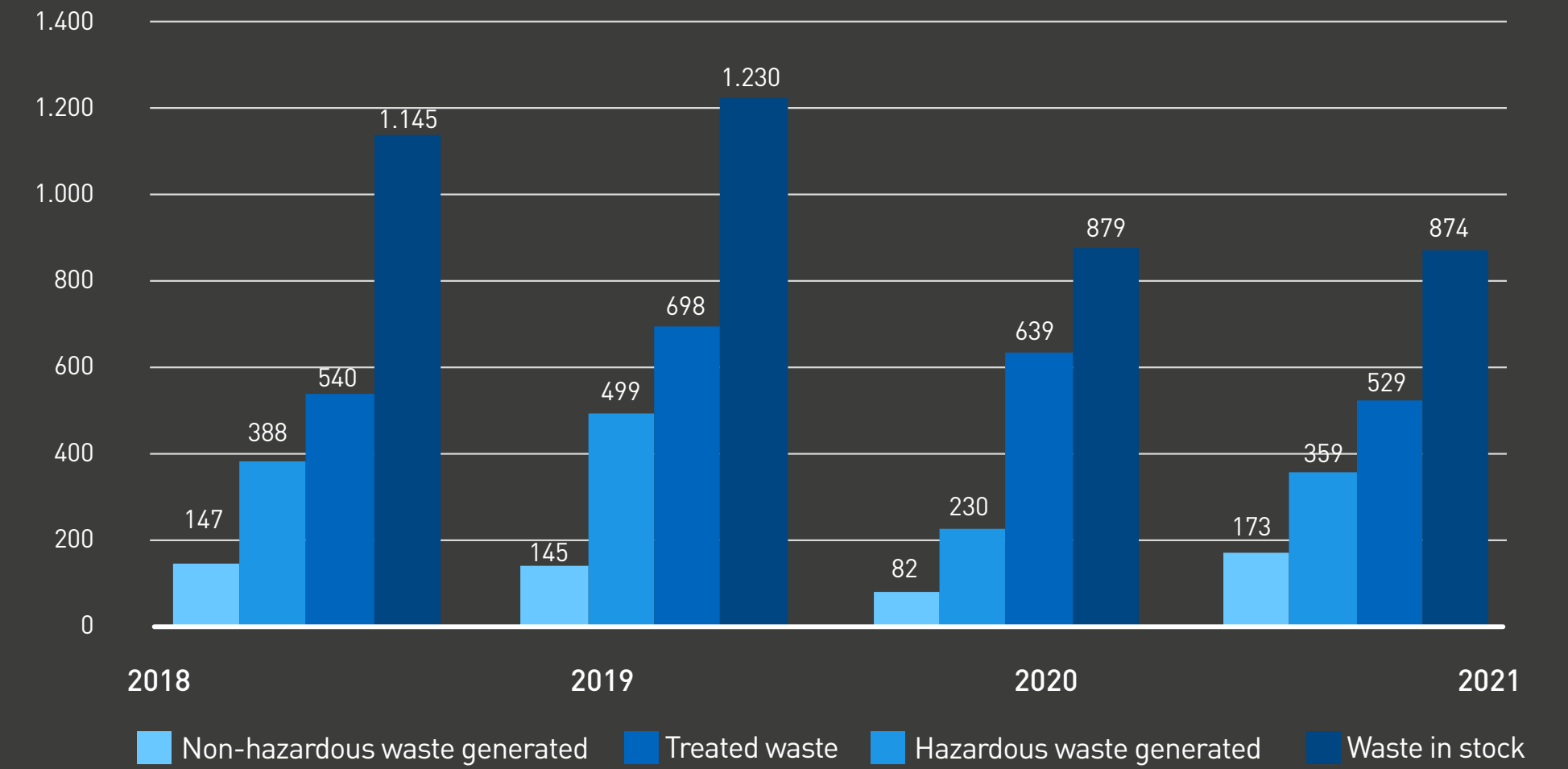
GRI 306-3, 306-4, 306-5

In 2021 the waste generated in YPF returned to pre-pandemic values, which implies that it will have increased by 71% compared to 2020, and will have reached 532 kilo tons, but lower than in 2018, confirming the downward tendency.

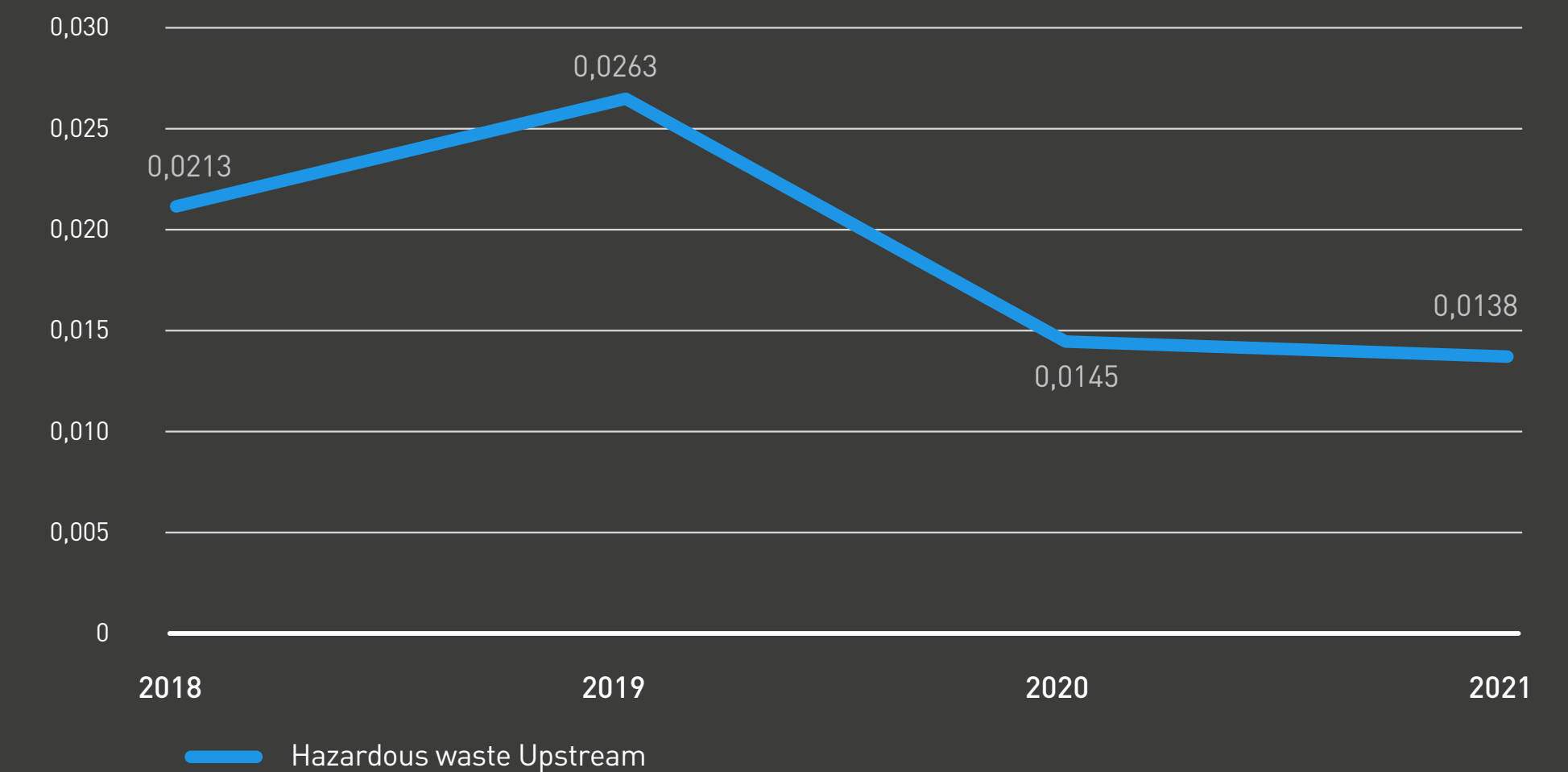
During 2021, an increase in the production of unconventional drilling was achieved —drilling new wells returned with strength. This led to an increase in cuttings³⁹, which in 2021 totaled 269.24 kilotons.

Although in Upstream the hazardous waste generated increased by 58% and the non-hazardous ones increased by 113% compared to the previous year, the treatment supported these values, therefore the waste stock remained at similar levels to 2020. The intensity of hazardous waste was 0.0138 kt per unit of equal production, which represents a 5% decrease compared to the previous year and 35% lower than in 2018.

TOTAL WASTE GENERATED (KT)



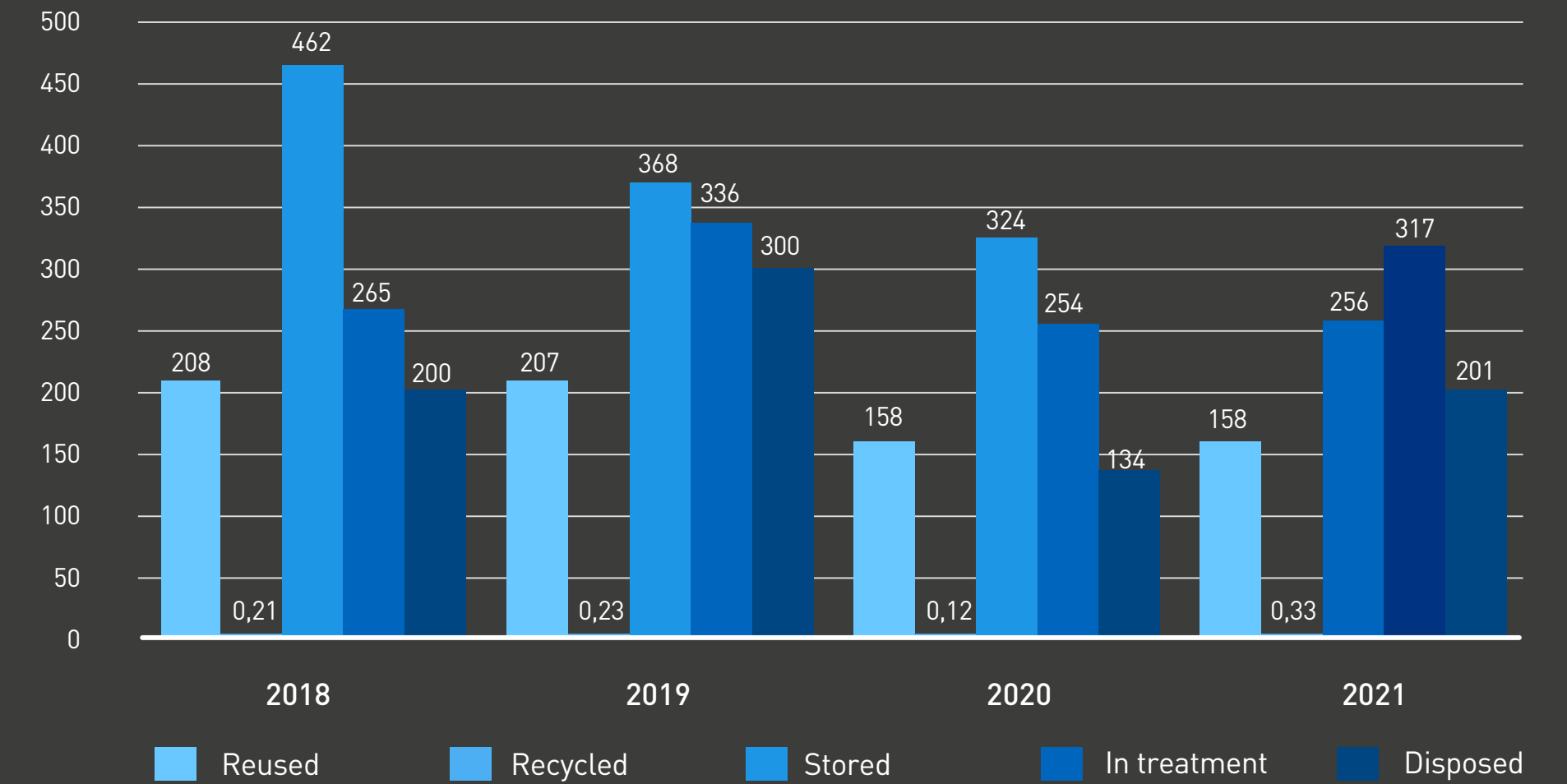
INTENSITY OF GENERATION OF HAZARDOUS WASTE IN THE UPSTREAM (KT/ PRODUCTION UNIT)



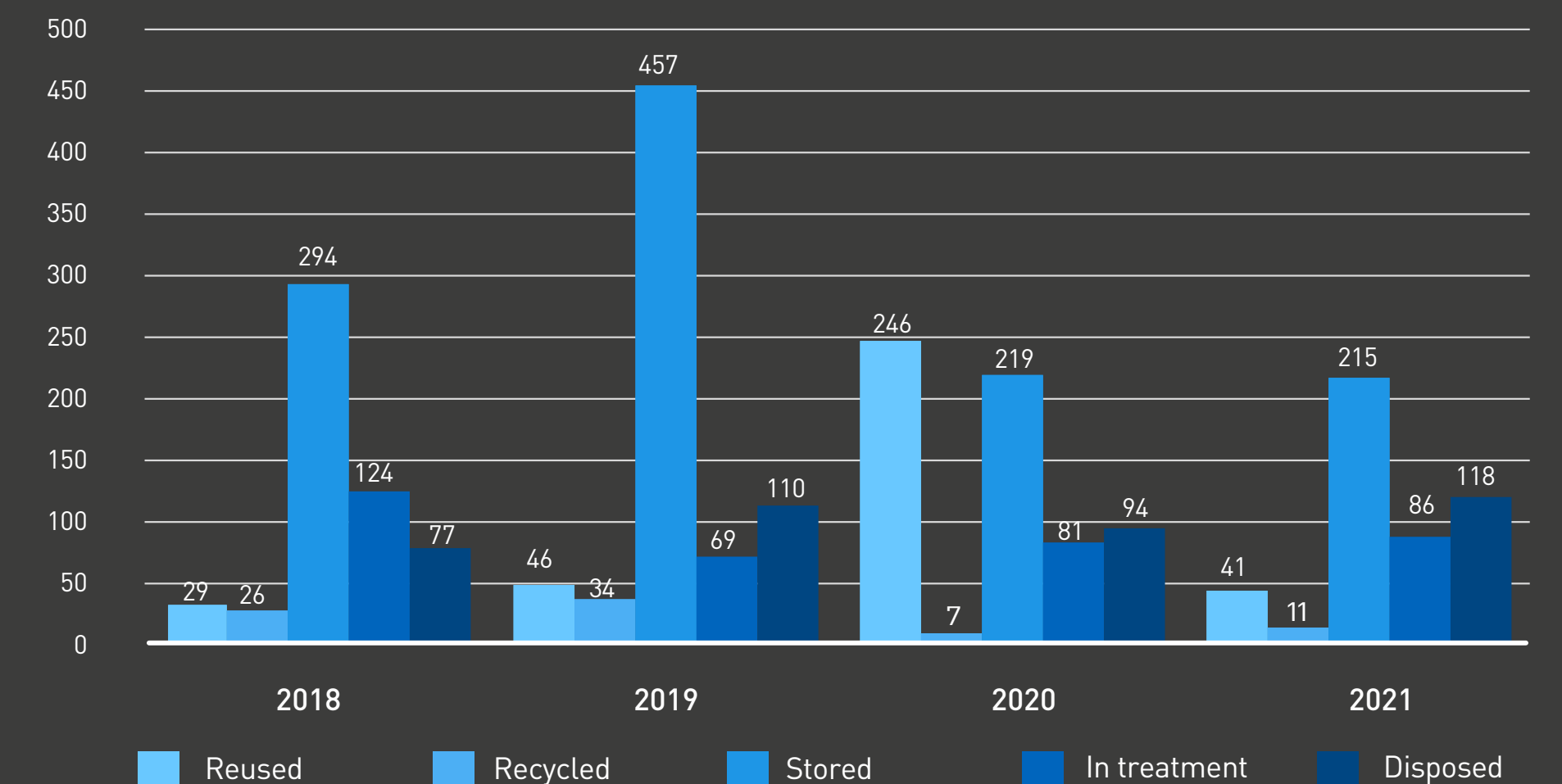
As part of the progress achieved in hazardous waste management, the startup of the new TRON AESA plant for the treatment of drilling currents must be mentioned. Located in the Loma Campana unconventional field (Neuquén), it allows for lowering the volume of cuttings and drilling muds sent to exterior treatment and also recovers the oil-based mud for re-use.

A total of 38.5 kilotons of muds and drilling cuttings were assessed during the year (14.3% of those generated in 2021). The percentage in 2021 of hazardous reused and recycled waste was 44% of the treated total.

HAZARDOUS WASTE BY DISPOSAL METHOD (KT)



NON-HAZARDOUS WASTE BY DISPOSAL METHOD (KT)





**BIODIVERSITY IS THE
MAIN ASSET OF OUR
NATURAL CAPITAL.
IT IS A SYSTEM THAT
INCLUDES NOT ONLY
THE ECOSYSTEMS,
BUT ALSO THE
ECOLOGICAL
PROCESSES THAT
SUPPORT THEM, AND
THE NECESSARY
RESOURCES DRAWN
FROM THEM.**

The environmental impact evaluations of all new projects include decommissioning and abandonment plans which must be implemented once activity has ceased, with measures for controlling erosion, stabilizing the soil and reconstructing the landscape. These plans are defined according to the site environment and all activities are agreed upon with the third parties involved.

For the management of environmental events environmental degradations caused by past events— YPF has internal procedures that detail the activities associated with each stage of the process, from detecting the event to its administrative closure. Additionally, the restoration measures are executed according to the applicable regulations.

All these actions are managed through plans updated at least once a year, according to the severity of the case, the commitments assumed by third parties and the regulatory requirements. The process costs are calculated according to the “Gestión de Situaciones Ambientales” (Environment Situations Management) and added to the provisions reported in the group’s financial statements, following the International Regulations of Financial Information.

Reduction of the soil stock with hydrocarbons

Since 2012 we have worked systematically to reduce our historic soil stock with hydrocarbons⁴⁰. In 2021 we fulfilled the objective of reductions to operational levels. This same year, we began to report on the stock linked to the management associated with the operation.

In this field, we are implementing different cutting-edge techniques, among which must be mentioned:

- **Stabilization and Solidification:** A method based on applying cement, lime and water to encase the hydrocarbons present in the soil and thereby avoid leakage. It allows using these stabilized soils for building roads. It has been implemented in Barrancas and Malargüe.
- **Bioremediation of oil currents through bacteria:** A treatment technique which uses the bacteria degradation of hydrocarbons. It has been used in the Cuttinera Mendoza repository. In the matter of bioremediation, the company has received Y-TEC support, one of whose lines of research is the development of biosurfactants, which are products that improve the

emulsion of hydrocarbons to liquidize and increase their availability for microbes.

- **Bioremediation of soils by stimulating fungal decay:** A biological treatment technique which, as well as incorporating the basic nutrients, includes a vegetable-based additive to stimulate the growth of mushrooms that degrade hydrocarbons. It has been applied at the Pampa Palauco repository.
- **Re-vegetation and ecological restoration of soils with direct seeding (Y-Siembra):** Direct seeding of native plants to recover arid zones impacted by desertification. This method, developed by Y-TEC and the Comahue University, reduces the restoration costs per hectare by 60%. There is currently an ongoing re-vegetation project in the province of Neuquén.⁴¹

NON-GHG ATMOSPHERIC EMISSIONS



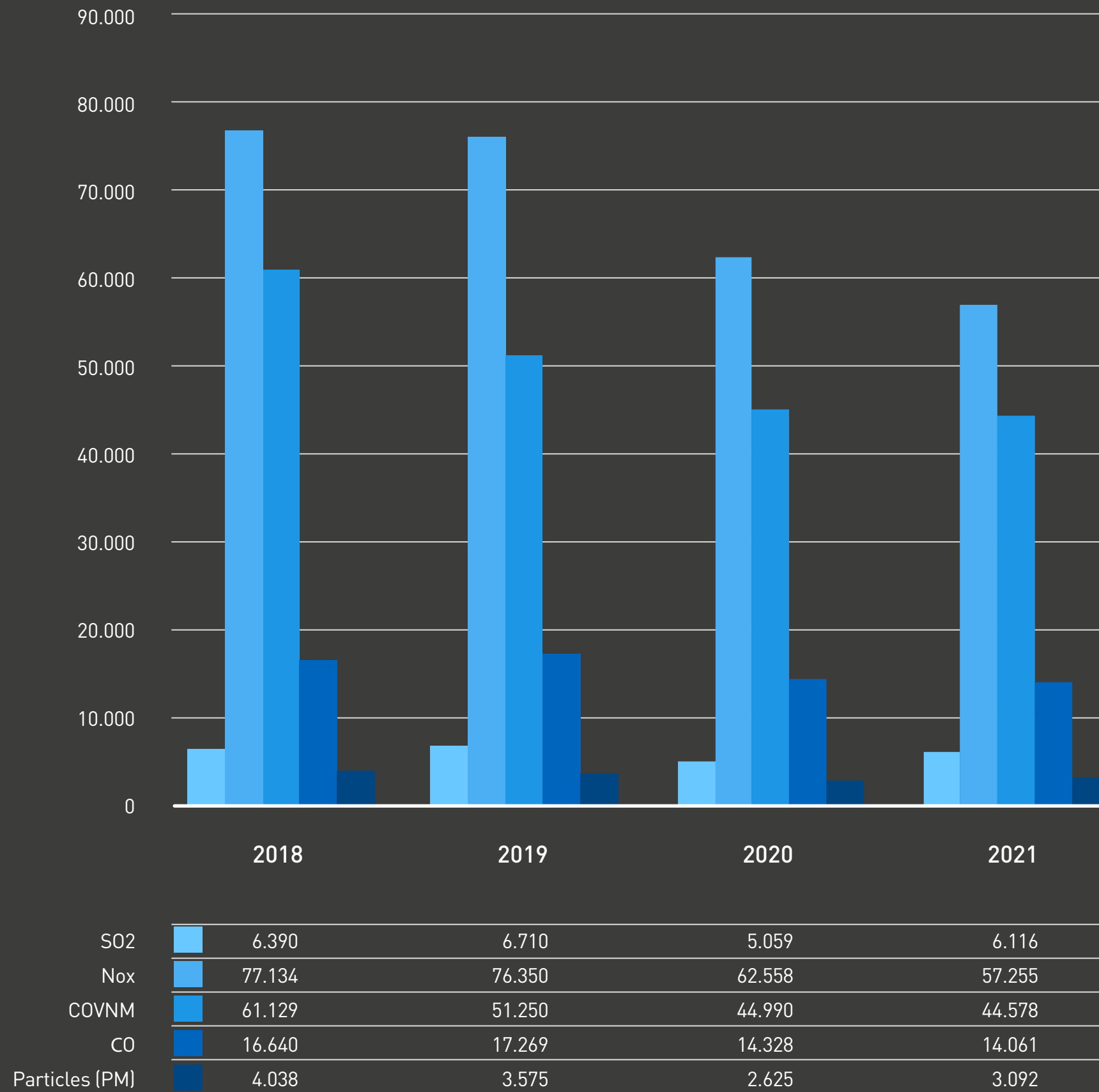
GRI 305-7, SASB EM-EP-120A.1

The management of the non-GHG atmospheric emissions is focused on minimization, and applying a treatment adapted to local regulations.

In 2021, total sulfur dioxide emissions (SO₂), nitrogen oxides (NO_x), volatile organic compounds (COVNM), carbon monoxide (CO) and particulate matter (PM10) decreased by 3.4% compared to 2020, from 129,560.61 t to 125,102.08 t. In four years they have retreated by 24%.

In Upstream, they decreased by 8%, totaling 91,042 t, while Río Colorado reduced 5,054 t, the result of a decrease in gas generated by the field's decline, a lower consumption of gas that led to halting the plants and improvements in the compressors' operation, which allowed for reducing the flares' venting and combustion. Meanwhile, Gas and Energy registered an inter-annual decrease of 1.2%, with 6,490 t in 2021, and Downstream experienced a rise of 14% to 27,567 Tn due to the increase in crude oil processing, achieving pre-pandemic values.

NON-GHG ATMOSPHERIC EMISSIONS (KT)



INTENSITY OF ATMOSPHERIC EMISSIONS (EQUIVALENT T/PRODUCTION UNIT) - 2021

| | |
|-----------------|-----------------------------|
| SO ₂ | 0,000385 -3,75% vs. 2020 |
| NO _x | 0,001635 -18,5 vs. 2020 |
| COVNM | 0,001424 - 11% vs. 2020 |
| CO | 0,000380 -5% vs. 2020 |
| Particles | 0,000187 -6,5% vs. 2020 |

Number of Refineries Located In or Near Densely Populated Areas (→ 50.000 people): 2

Emissions of Substances that Affect the Ozone Layer: 0

125.102,08 t

Local Emissions in 2021

-3,4% vs. 2020.

GRI 305-3, 305-4, 305-5, 306-3

| METRICS | UNIT OR FORMULA | 2021 | 2020 | 2019 | 2018 |
|--------------------------------------|-----------------|-----------|-----------|-----------|-----------|
| External Extracted Water | | | | | |
| Total | kt | 64,946.84 | 63,117.74 | 66,821.22 | 68,679.00 |
| In Zones with Water Stress | kt | 22,975.60 | 25,098.63 | 24,324.00 | 23,780.22 |
| Water Consumption | | | | | |
| Total | kt | 35,341.75 | 32,659.58 | 40,485.70 | 43,844.91 |
| In Zones with Water Stress | kt | 4,277.82 | 3,656.56 | 7,373.00 | 8,980.92 |
| Discharged Water | | | | | |
| Total | kt | 29,605.08 | 30,458.16 | 26,335.52 | 24,834.77 |
| In Zones with Water Stress | kt | 18,697.78 | 21,442.07 | 16,951.00 | 14,799.30 |
| Non-Hazardous Waste Generated | | | | | |
| Total YPF | kt | 173.44 | 82.00 | 145.00 | 147.00 |
| Upstream | kt | 163.74 | 77.11 | 134.00 | 137.00 |
| Downstream | kt | 9.45 | 5.24 | 9.83 | 9.26 |
| Gas and Energy | kt | 0.26 | 0.14 | 0.10 | 0.20 |

| METRICS | UNIT OR FORMULA | 2021 | 2020 | 2019 | 2018 |
|--|-----------------|--------|--------|--------|--------|
| Hazardous Waste Generated | | | | | |
| Total YPF | kt | 358.79 | 230.00 | 499.00 | 388.00 |
| Upstream | kt | 310.84 | 196.79 | 455.24 | 336.93 |
| Downstream | kt | 47.76 | 32.41 | 43.45 | 49.18 |
| Soils with hydrocarbons in Upstream | | | | | |
| In Stock | kt | 735.26 | 698.36 | 769.37 | 806.36 |
| Treated | kt | 270.99 | 266.37 | 367.51 | 349.00 |



05

HEALTH
AND SAFETY

OHS POLICIES AND MANAGEMENT SYSTEMS

GRI 403-1, 403-2, 403-8
SASB EM-EP-320A.2

Ensuring the health care and safety of all people working in the organization, as well as the reliability and integrity of our assets, businesses and projects are a strategic pillar for YPF.

We are an operator of exploration activities, oil and gas production, gas plant, refineries and wind farms, and we manage potential risks accordingly. These include uncontrolled wells, hydrocarbon leaks or spills, crimes, cyberattacks, occupational incidents and worker-related illnesses. Besides this, we not only operate in compliance with the current regulatory framework and applicable internal regulations, based on our Operational Excellence Policy⁴³, assuming baseline standards in the absence of specific legislation, but we have implemented a management system for occupational, industrial and process risks throughout our value chain, with a focus in adopting preventive actions.

Likewise, since that safety and health care are a shared responsibility, all YPF's personnel and contractors are committed to complying with the applicable legal and corporate requirements related to **Sustainability, Environment, Health and Safety (SASS)** management and requirements defined by the Vice Presidency of People and Culture in order to join the company. Our corporate objectives and goals encompass our personnel and contractors.

Thus, management of compliance with labor requirements of our contractors is conducted through the Contracted Resources System⁴⁴, where the company must report, as an Affidavit, the resources with which it performs the task for which it was contracted. This documentation is audited and the supplier may check the record of follow-up notes in order to address them as soon as possible. The main ones that are reviewed include:

- Condition of being formally registered as an employee, and status of contributions by employee and company.
- Annual preventive medical check-ups, as well as addiction prevention. .
- Taking the corresponding inductive training on general and specific operational safety matters according to the activity to be developed by the employee.
- Existence of specific insurance for the activity to be developed.
- Contractor Registration and Control

Operation of the Occupational Health and Safety System

This system covers 100% of YPF's employees and contractors and encompasses three fundamental aspects:

- Identification and mitigation of occupational, industrial and process risks in order to prevent incidents.
- Strengthening the company's emergency response capacity.
- Continuous improvement.

We have a Health and Safety management plan in place which is reviewed and executed annually in conjunction with the area managers in each business unit, who report to both the vice president of the operation and the **Corporate Vice Presidency** of Sustainability, Environment, Health and Safety. We have specific methodologies to assess and minimize risks associated with our processes, and to prepare to face emergencies. Systematic preventive inspections are conducted in the field, while any person who detects a risk during the course of their activities may report it to their hierarchical line and request that the task be suspended. Inspection reports are discussed in monthly safety committees, where action plans and barriers to reduce risks detected are defined.

OHS EVALUATION OF CONTRACTORS AND SUPPLIERS

Contracting company workers must comply with health and safety goals of YPF facilities where they work. Their adherence to internal guidelines is periodically evaluated through inspections, analysis of statistics submitted by each company and interviews with their technical managers. The SASS Follow-up Committee monitors and assesses the performance of critical suppliers in these matters, defining improvement plans and corrective actions.

CERTIFICATION

Our main facilities are certified with independent management systems ISO 14,001, focused on Environmental Management⁴⁹ ISO 45,001, aimed at improving the management of employees' Health and Safety⁵⁰ ISO 9,001 Quality Assurance Management Systems.⁵¹

The main certified facilities are: Thermal power plants (Los Perales, Manantiales Behr), Geological Operations, La Plata, Luján de Cuyo and Plaza Huincul Refineries, Logistics, Retail LPG (9 certified plants), Lubricants and Specialties, Profértil, Co-generation thermal power plants and wind farms. LNG stations, Bahía Blanca, Mega and Aesa. Diadema's and company Mega's gas operations

Meanwhile, the Executive Logistics Management complies with the external certification 39,001, which is specific to Road Safety.

In recent years, we have made significant progress both in the implementation of technical occupational safety measures - all our facilities have physical barriers to prevent accidents - and in our regulatory and management systems. A core objective is to continue strengthening a proactive safety and self-care culture embedded in everything we do, based on the 10 Golden Rules for Saving Lives, leadership, long-term commitment, continuous learning and monitoring and safety indicators.

For those facilities that are subject to structural and procedural modifications, it is necessary to analyze beforehand the scope and consequences of potential accidents through studies concerning specific risks⁴⁵.

When our personnel and contractors must perform non-routine tasks, in situ methodologies known as Permits-to-Work are set in place.

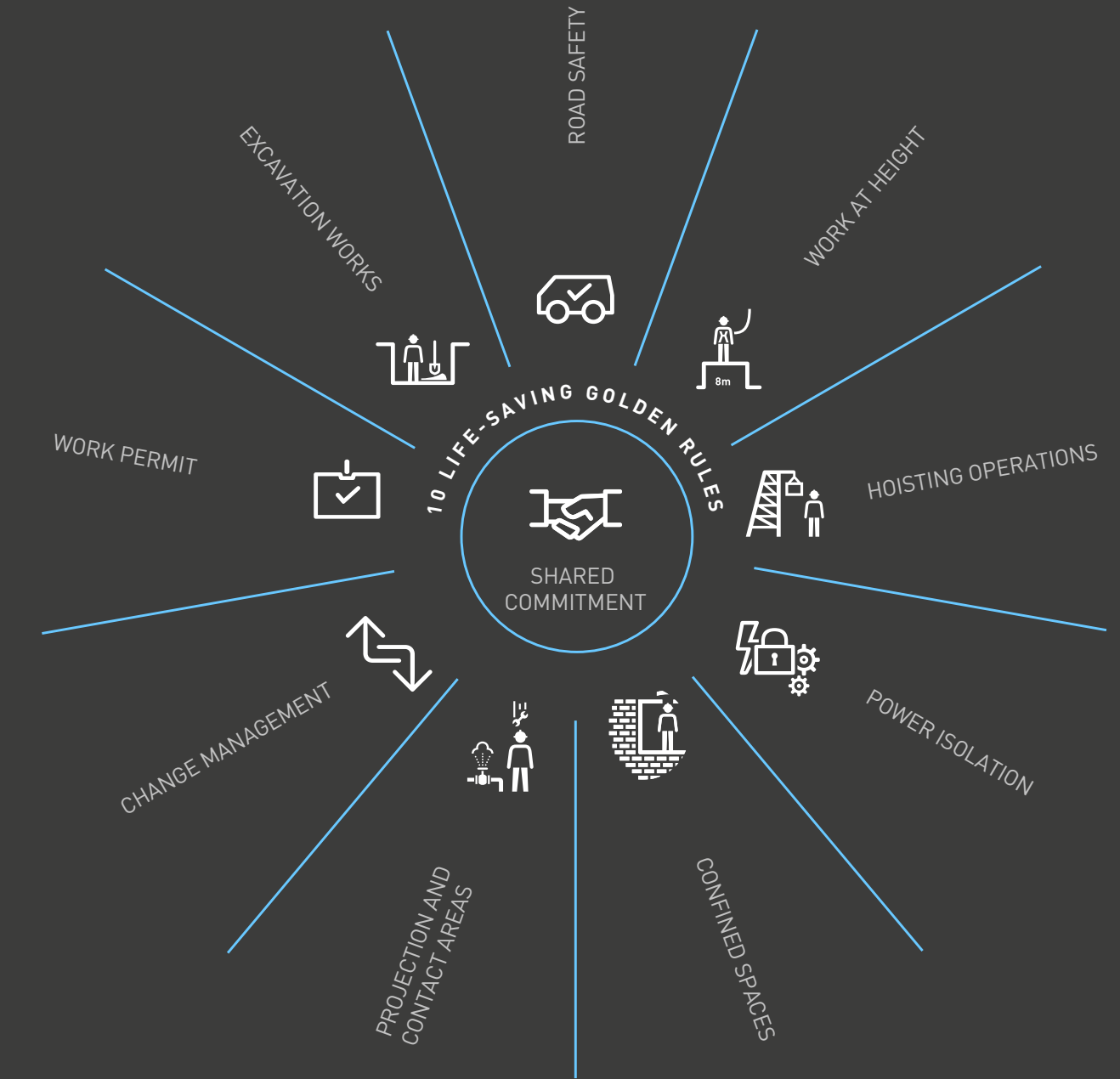
All occupational accidents are registered through the SIGEO (Integrated Management System for Operational Excellence) system, including not only the accident-related data, but also the root causes and the improvement actions that arise from the analysis of each accident.

Occupational Safety Training

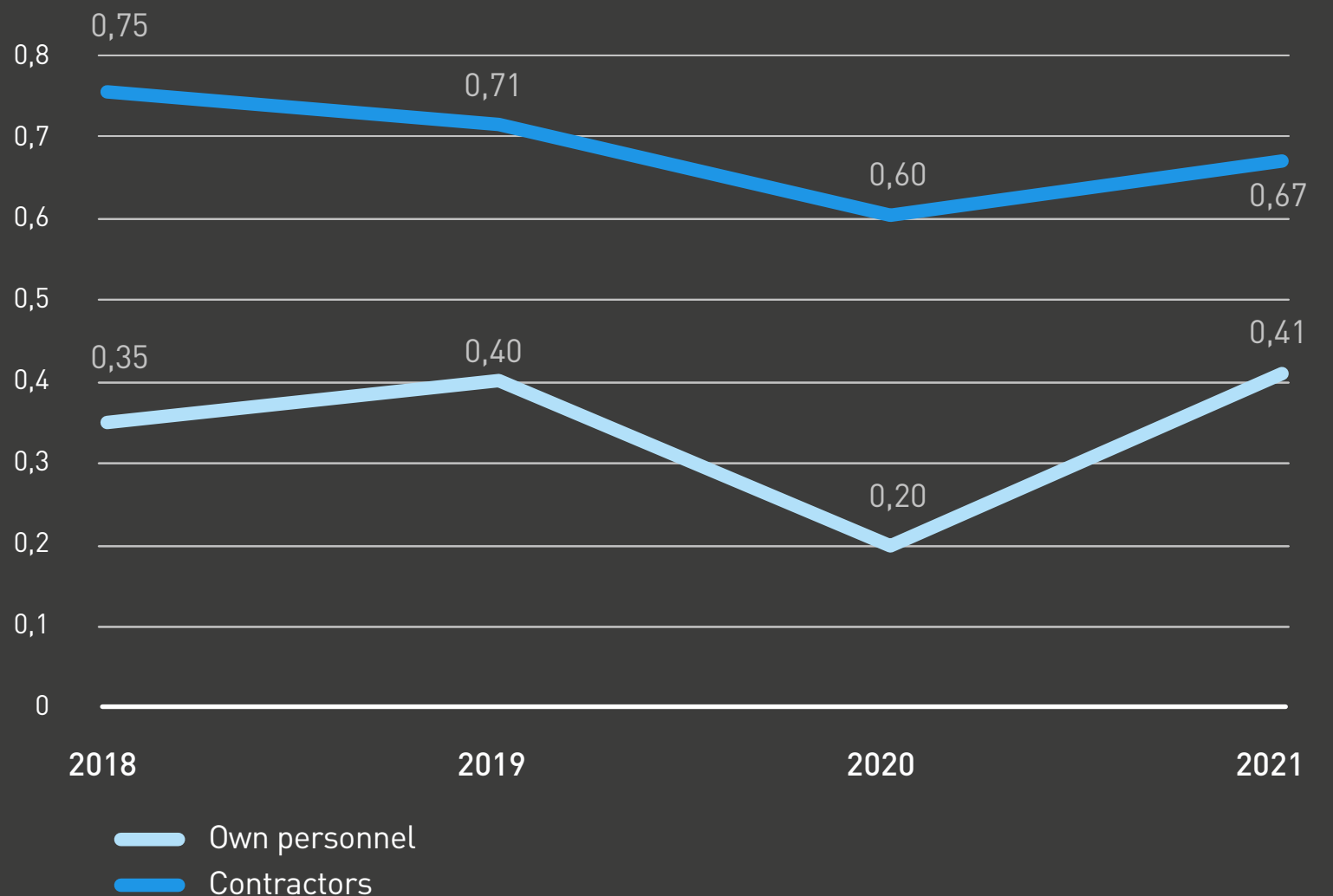
Basic training starts with a general safety induction as well as specific training focused on the function, which all employees receive directly and through contractors. Simultaneously, safety content for the entire organization is continuously fostered through actions on corporate online platforms to raise awareness and inform. Each vice-presidency also conducts specific actions according to its needs and focused on each contractor. These actions are communicated to the contracting company, through the contract inspectors, which act as a link between YPF and the contracting company. In 2021, the focus was on reinforcing awareness of our 10 Golden Rules for Saving Lives, with a special focus on those in operational roles⁴⁶. Each business unit implemented its own training plans with programs focused on the most critical risks from a potential impact point of view.

We also continued the safe driving program, implemented in previous years, in order to reinforce the significant reduction in the accident frequency rate of vehicle accidents in recent years.

10 LIFE-SAVING GOLDEN RULES



SAFETY TRAINING INDEX (STI) (Training hours/Hours worked x 100)



We also made a postgraduate course on safety culture available to managers, taught by the Institute for an Industrial Safety Culture (ICSI), a multinational organization based in France, in agreement with the University of San Andres. We have 40 openings per year: 15 for Upstream, 15 for Downstream and 10 for other YPF operations. This is in addition to a training program for senior management offered by the same academic entity.

Thus, in 2021, the training rates of our own staff and contractors increased compared to 2020, reaching pre-pandemic levels.

Occupational safety performance

GRI 403-9

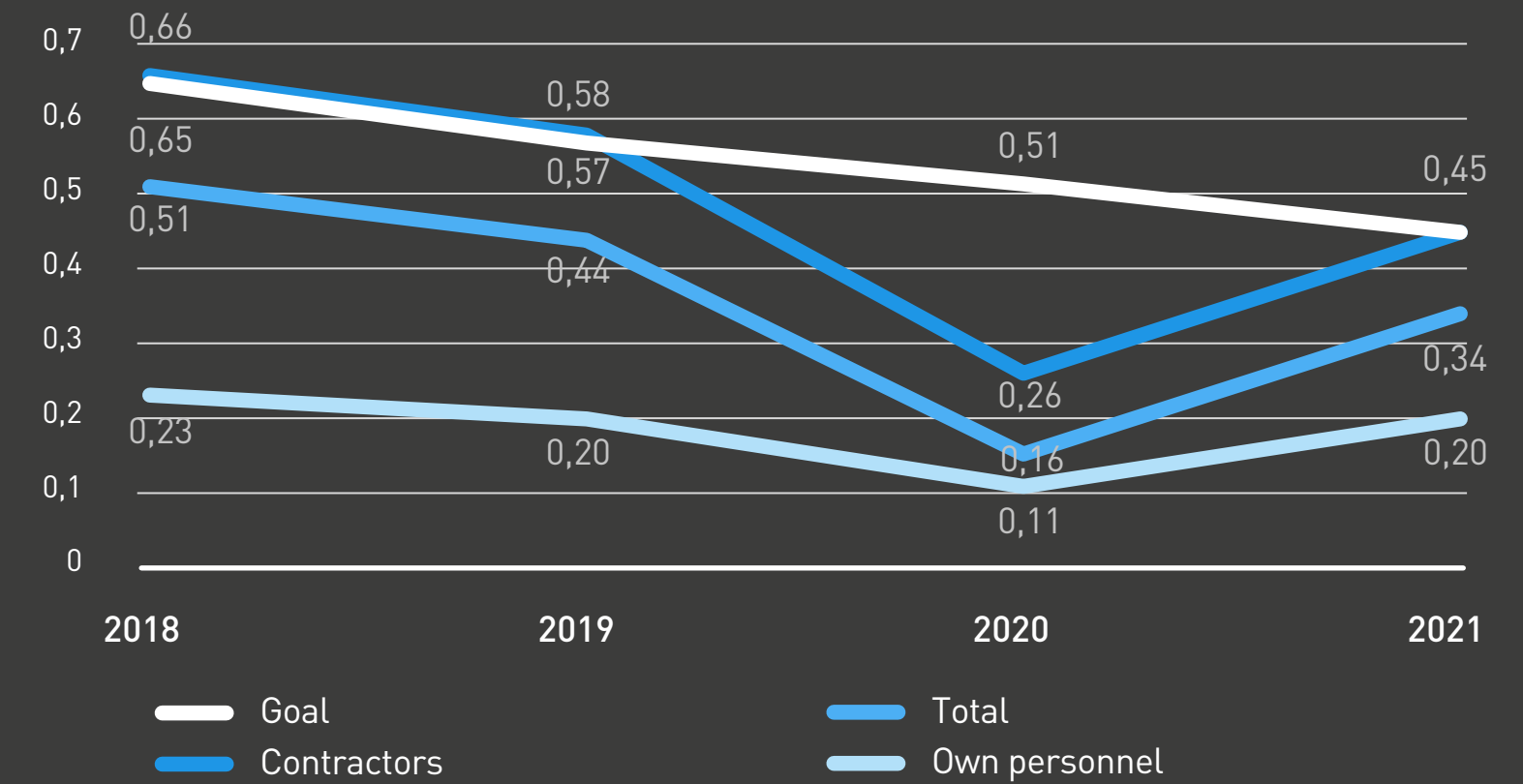
2021 continued to be an atypical year for us as a company, our contractors and employees, due to the continued Covid-19 pandemic context. However, our activities and operations were not significantly affected.

We believe that our management system fosters a safe working environment and is suitable for guiding our ambition for achieving zero harm to people and the environment, while at the same time intensifying efforts to improve our overall safety performance with which we are not yet fully satisfied.

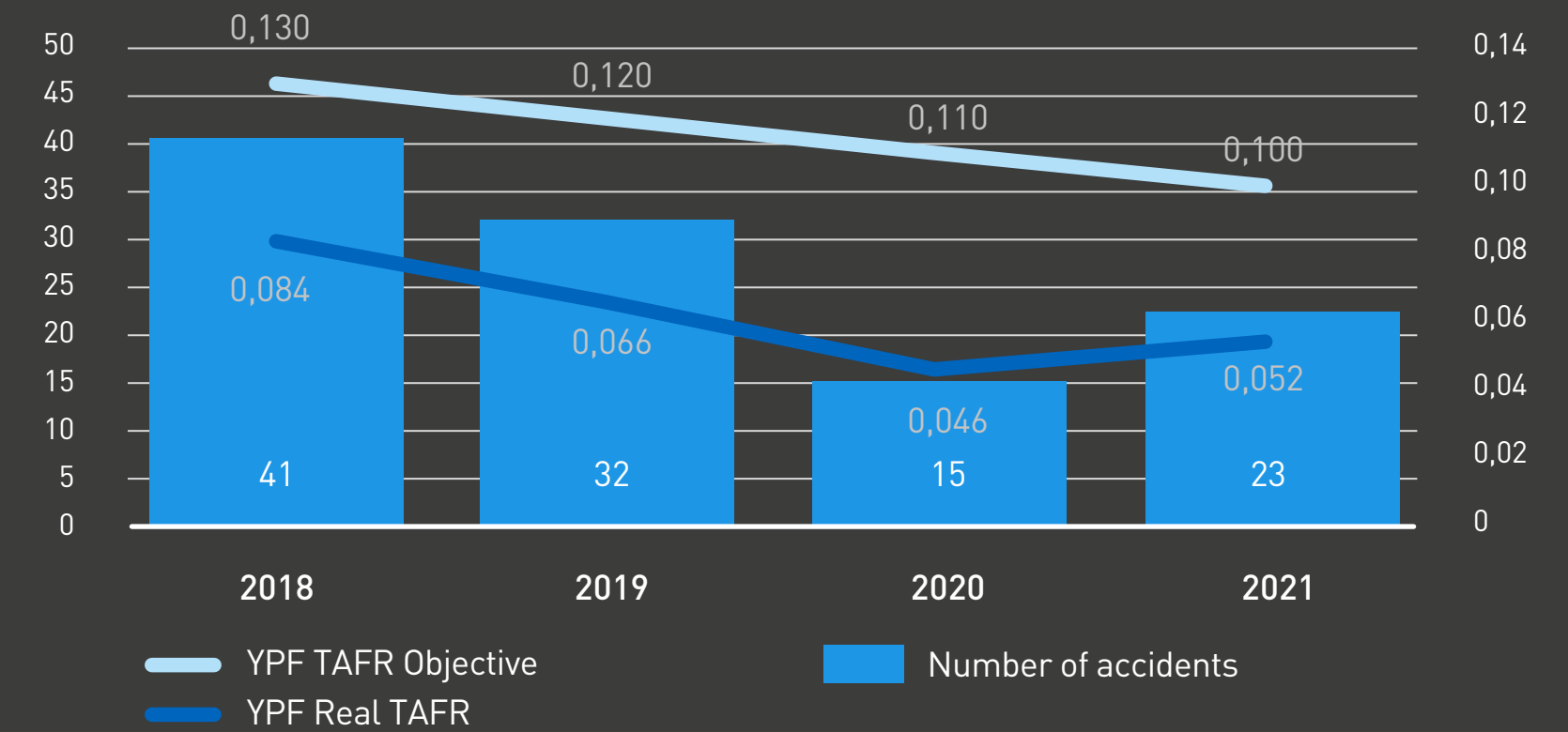
During this year, we continued to achieve improvements in the accident frequency rate (LTI-FR, which includes our own personnel as well as contractor personnel), which closed the period at 0.34, in line with the established goals, but unfortunately, in the month of January, we incurred a fatality of an AESA contractor employee.

ACCIDENT FREQUENCY RATE/LTIFR

(Lost Time Injury Frequency Rate)



TRAFFIC ACCIDENT FREQUENCY RATE*



* TAFR: Number of computable traffic accidents/1,000,000 km traveled

The accident occurred during an assembly operation on an Individual Pumping Unit (IPU) at the Loma Campana Upstream operation. The internal investigation was conducted in conjunction with YPF, and resulted in the implementation of improvements based on lessons learned, including reinforcing the concept of “stopping a task” that must be executed in the event of witnessing an unsafe action that puts the health and safety of any Company employee at risk.

The same downward slope as in 2018 is observed in the number of computable accidents with loss of days and in the injury frequency rate, which shows that the training and awareness programs are yielding good results and that they should continue.

Our performance in road safety

Transportation is a core activity in our business. During our activities, our own and contracted employees drive a distance that exceeds 400,000 km each year, so we focus on providing driving skills and contributing to proper driving behavior. Vehicle, road and weather conditions are also monitored. Over the past 4 years, we have set ourselves increasingly challenging goals in terms of vehicle accident rates and we have been achieving them. There were no fatal accidents during the year 2021.

Carriers must follow a specific route, comply with basic requirements such as using seat belts, not using cell phones or any other distracting elements while driving, respecting monitored speed limits and taking specific training courses.



The preventive approach, in this case, translates into actions to avoid the development of occupational diseases through the implementation of healthy work environments and the permanent surveillance of possible risk factors, but also in fostering people's well-being and emotional health.

To this end, we have a corporate and specific health service.

Occupational Health Service

YPF's health service is based on the legal requirements of the Superintendencia de Riesgos

RECERTIFICATION

In 2021, the health service was certified for three more years in the Health Care Quality Assurance, Patient Safety and Efficiency Program, an accreditation granted by the Specialized Center for Standardization and Accreditation in Health (CENAS). All regional coordinating offices and health units exceeded 95% compliance with the required quality of care standards.

del Trabajo (Labor Risks Superintendent's Office) (SRT) and the internal management standard, which establishes the criteria and standards that the company must meet to ensure healthy work environments, respond to medical emergencies and address the illnesses of those who work at its facilities, including suppliers and business partners. It is comprised of 8 regional medical coordinating offices and 24 health units.

During the reported year, consultations received in health units with evolutionary follow-up totaled 59,952, 10% more than 2020 and 41% more than 2019. The increase is mainly due to the COVID-19 pandemic, which also forced to adapt the modalities of care, favoring virtual consultations.

Our Pandemic Management

Just as in 2020 we faced the challenge of keeping operational continuity despite capacity limitations. In 2021 the greatest challenge was the gradual return to on-site operations, avoiding the spread of COVID-19 in the work environment. To this end, we implemented a series of measures.

Contagion Prevention

- We updated sanitary protocols already adopted the previous year, emphasizing distancing and work in cells, with very strict controls. The COVID-19 Risk Committee - chaired by the SASS vice-president and comprised of the Health, Safety, Operations, Human Resources and Labor Relations areas - held its weekly analysis of the evolution of the national health situation, in order to adapt protocols and preventive actions to different scenarios. We worked with local committees in regions where our operations are located to assess the realities of the different territories.
- We conducted periodic surveys of personnel vaccinated against Sars-Cov2 (own and contractor) and deployed campaigns to raise awareness of the benefits of immunization. By the end of 2021, 11,000 people had already received a dose of the vaccine and 7,000 had their full schedule.
- We continue to favor telecommuting for non-operational positions.

Contagion Tracking

- We created a system for reporting contagion cases, based on self-identification.
- We performed a close medical follow-up of all cases, regardless of whether the disease was spread at work or at home.
- We provided assistance networks and sanitary transfers in isolated areas.

Results

Thanks to these actions, there were no operational interruptions and, although the number of contagions was higher than in 2020 -totaling 11,000 over the course of the entire pandemic-, only 8% occurred in the workplace.

Counting our own personnel and contractors, by the end of 2021, the Occupational Health area was monitoring:

- 8,249 confirmed cases
- 7,954 recovered cases
- 5,237 cases in isolation due to suspicion of contagion
- 8,881 cases in isolation due to cohabitant or close contacts

During the year 67 people died from COVID-19, 20 YPF employees and 47 contractors. All the cases occurred due to contagions outside the work context and most of them had a pre-existing disease, which is why they had been on medical leave since the beginning of the pandemic.

Prevention and Mitigation of Health Impacts.

Every year, Health and Safety areas evaluate all the company's workplaces in order to draft maps with all the people exposed to any occupational risk. Through the NTEAR form (List of Workers Exposed to Risk Agents), this information is transferred to the occupational risk insurance company (ART), which determines which medical evaluations must be performed. YPF medical service is responsible for its enforcement and follow-up. In 2021, due to the limitation of on-site work, SRT extended the deadlines for risk examinations, prioritizing essential personnel in refineries, terminals and gas plants. In total, 95% of the staff was covered.

In addition, YPF has implemented a program for the early detection of pathologies through annual health examinations and preventive medical evaluations. In 2021, 60% of personnel with pre-existing conditions were screened annually, a lower percentage than in previous years due to restrictions imposed by the pandemic.



NEW AREA OF WELLNESS AND EMOTIONAL HEALTH

In order to strengthen the work which began in 2015 with the Emotional Health Program, in 2021 this new area focused on our own personnel was created. Its activities, based on psychoeducation, are broken down into two lines:

Prevention Strategy: Design and communication of useful, simple and scientific content that encourages

people to adopt health and wellness measures, including informative publications, online workshops and videos.

Approach Strategy: Specific individual and team interventions to address conditions that require containment and support, including in-person and virtual instances, such as a free video-conference therapy platform.

Our Preventive Programs

Based on the data collected over time, we have implemented a series of programs to prevent the development of pathologies that are highly prevalent in society. In the last two years, we have had to adapt them to the pandemic context through the use of digital tools. The main programs that were developed in 2021 were:

Tobacco Cessation

It is conducted jointly with YPF's social work to advise and train the company's own personnel on treatment alternatives against smoking. In 2021, 91 people were contacted through the program and 46 joined. These are followed up with periodic contacts through different means to stimulate cessation of the habit.

Cardiovascular Prevention

The company's own employees who show one or more cardiovascular risk factors in their annual examinations are included in a personalized follow-up plan to reinforce the continuity of the treatment prescribed by their doctor and monitor their progress. This program is closely linked to healthy eating. 460 people participated in 2021.

Healthy Eating Program

This is a nutritional counseling and monitoring program for those who require it according to the results of annual examinations. It is conducted by a professional bromatologist and a nutritionist. 452 patients took part in this program during 2021.

Emotional Health

Its goal is to contribute to the integral wellbeing of people, improve their working conditions and increase their motivation through talks and workshops on topics such as anxiety, stress, grief and resilience. It also includes spaces for support, coaching, a healthy library and psychometric evaluations for drivers.

In 2021, multiple awareness-raising and psycho-education activities were conducted with a focus on integral wellbeing, including: a campaign for World Mental Health Day and on the problems of psychoactive substance use in the workplace; workshops on Leadership, Communication and Bonding; The Human Factor in Accidents. Continuous publications were also created in Workplace, the corporate platform focused on Support, Calmness, Trust, The Missing Vaccine, Composure, Don't underestimate an alarm message and Mindfulness workshops were developed.

A survey of more than 300 people showed that for 99% of employees, it is "very important" to have an area in charge of managing these issues at work. The Workplace group reached 12,000 followers and had more than 190 publications and more than 3,300 likes in 2021.

Prevention of Psychoactive Substance Use

Through this initiative, we offer individual interventions of listening, support and guidance to people identified with a drug use problem, as well as accompaniment and evolutionary follow-up once they enter the program. In order to

identify those who need this support, together with preventive medical evaluations, in 2021 publications were published and virtual courses were offered to all personnel to teach them how to recognize drug use problems.

YPF has a mandatory rule for its own staff and contractors, whereby all personnel undergo preventive medical evaluations that include a clinical examination as well as alcohol and drug testing. During 2021, random checks were performed on more than 20% of employees.

| | ALCOHOL | | DRUGS | |
|---|----------|------|----------|------|
| | Quantity | % | Quantity | % |
| Preventive Examinations Performed in 2021 | 11.432 | 20 | 12.656 | 23 |
| Detected cases in 2021 | 15 | 0,13 | 62 | 0,49 |
| Cases that led to a treatment program | | | 47 | |

Health training

In 2021, the following training courses were held for direct health personnel:

| AUDIENCE | NO. OF PARTICIPANTS | TOPICS |
|---|---------------------|--|
| Occupational Health Coordinators | 196 | <ul style="list-style-type: none"> Preventive measures for COVID-19: periodic training by experts in infectious diseases and epidemiology |
| Doctors and nurses | 154 | <ul style="list-style-type: none"> Telemedicine: health and legal aspects Review of training and record keeping aspects Prehospital care for medical emergencies, polytraumatized and burned patients Biosafety, cleaning and disinfection in prehospital environment Referral and hospitalization criteria (medical emergency action plan) |
| Drivers | 126 | <ul style="list-style-type: none"> Biosafety, cleaning and disinfection in ambulances Knowledge and location of operational areas; satellite location and updated YPF MAPS loads on ambulance GPS. |

Occupational health performance

GRI 403-10

SARS-CoV-2 continues to have a major impact on health-related indicators of our personnel. Absences due to non-work-related illnesses experienced 3% year-on-year growth in 2021, reaching 142,126 days, of which 61,082 were for cases related to COVID-19. This brought the absenteeism rate to 3.72%, a slight increase over 2020. Since the pandemic began, sick days lost and absenteeism have doubled.



**ALL OUR PERSONNEL
AND THE CONTRACTORS
THAT CARRY OUT
ACTIVITIES FOR YPF
MUST ADHERE TO
CORPORATE AND
LEGAL REQUIREMENTS
RELATED TO SAFETY
AND HEALTH CARE.**

EMERGENCY PREPAREDNESS AND RESPONSE

GRI 3-3, 306-3 (2016)
SASB EM-EP-540A.2

As part of its OHS management system, the company has an emergency and crisis management system in place, which focuses on prevention and strengthening the company's resilience to unforeseen events.

Operation of Emergency and Crisis Management System

The system aligns prevention, preparedness, response and recovery activities including Incident Response Management, Business Continuity Management, Crisis Management.

Risk Identification and Preparation of Emergency Plans

Business areas and shared Safety and Risk areas are responsible for developing risk sheets and prevention programs to minimize exposure and the probability of incidents as well as reducing potential consequences. Its preparation is based on risk analysis with potential impact on workers, communities, the environment, assets and businesses, as well as reports from reinsurers, accident investigations, change management, audits, contractor management and environmental monitoring, among other sources.

PERCENTAGE OF INDUSTRIAL ASSETS COVERED BY RISK SURVEYS

| Upstream | Downstream | Gas and Energy |
|----------|------------|----------------|
| 81% | 100% | 100% |

Based on this analysis, emergency plans are defined, which should contain the following elements:

- The different scenarios
- Resources that may be affected
- Sources of information, such as legal requirements, statistics, risk studies and impact assessments
- Resources needed to respond
- The chain of command for action and recovery
- The necessary training for all personnel involved in the plan is provided
- A communication plan, including internal and external actions

Each regional headquarters, business, industrial complex and operating unit must adapt existing documents to comply with all the stages of this management system and the legal, national and provincial requirements of each operating site.

EMERGENCY DRILLS CONDUCTED IN 2021

| | | |
|-----------------------|-------|-----------------|
| Upstream | 741 | +66% vs. 2020 |
| Downstream | 1.209 | +32% vs. 2020 |
| Gas and Energy | 37 | +32% vs. 2020 |
| YPF Luz | 53 | +342% vs. 2020 |
| AESA | 56 | -85% vs. 2020 |
| Total | 2.096 | +18,4% vs. 2020 |

Incident response management, Business continuity management, Crisis management

In the event that a risk arises, action protocols established in the plans are applied, which include organizational and operational aspects to perform support, evaluation and control actions. In all cases, the priority is taking care of people.

In accordance with legal regulations in force in each province of the country, the facts are reported with the degree of detail required by the authority.

Depending on the seriousness of the incident, response teams are organized, especially if operational disruptions occur. In addition to having its own personnel prepared to face these situations, YPF has established agreements with companies specialized in major emergencies in the industry -Oil Spills Response (they attend Downstream and Upstream emergency events), Wild Well Control and Boots&Coots-, with which it maintains fluid contact through periodic activities and permanent training of our personnel.

We also have a system of specialized guards 24 hours a day in all our facilities, who evaluate the seriousness of each incident, activating the fire and emergency departments. In addition,

we have internal YPF firefighters for each business. Depending on the situation identified, external organizations (fire department, civil defense, etc.) are called in.

Emergency Response Plan for Emergencies with Community Impact (PREIC)

Promoted by YPF, together with other industrial companies operating in the La Plata area, a community emergency response agreement was signed by three municipalities, local hospitals, firefighters and other health and safety service providers in the area, with the aim of preventing damages and losses caused by accidents, industrial and environmental emergencies. This mutual aid program includes meetings, drills, plant visits, risk communications and capacity building. Our regular channels of communication include a Twitter account, through which we communicate news, drills and operational issues to our community. Some of our followers include the mainstream media journalists of the region. Twitter account: [@ypfLaPlata](#).

Similar projects and agreements were implemented in other refineries and port terminals from Bahía Blanca, Luján de Cuyo, Rincón de los Sauces, Tupungato, Malargüe, San Lorenzo, Plaza Huinul, Añelo and Allen, both for Downstream and Upstream operations.

Recovery

After the response and support of the event, necessary actions are taken to return to operating levels or to recondition the affected areas when required by the situation. In addition, relevant records are made and subsequently investigation of the case is conducted. At the most critical levels, a report is prepared. Lessons learned allow the emergency plan to be adapted.

Responsibilities

Roles and functions for emergency preparedness, response and investigation are defined in the corresponding internal procedure, which was recently updated.

In events that may have implications on a corporate scale, the Red Level Committee, comprised of members of the company's Executive Management, is summoned.

Brigadier Training

All employees and contractors who are part of a response team must attend scheduled training and develop the skills and proficiencies necessary to successfully respond to an incident or crisis. Our firefighters are usually trained in external academies, such as CAL-CIC-CEMM-MetroGas (Argentina), TEEX (United States) and Oil Spills Response (United King-

dom). Due to the pandemic, it was not possible in 2021 to participate in the courses offered by these entities, but internal training programs continued.

| BRIGADIERS TRAINED IN 2021 | |
|----------------------------|-----|
| Gas and Energy | 46 |
| YPF Luz | 20 |
| AESA | 44 |
| Total | 110 |

In addition, each operational and corporate unit should periodically conduct exercises to validate the company's emergency preparedness.

Therefore, the community is trained through outreach programs and drills included in the PREIC.

Safety Incident Occurrence

Process safety incidents continued their downward trend in 2021, and those related to people involved have decreased considerably when compared to those in 2019: incidents with moderate to major consequences decreased by 60%, while those without major consequences decreased by 30%.

Incident investigation, recording and analysis have been essential to achieving these results. In 2021, 93% of incidents involving people had validated investigations and 721 improvement actions were implemented.

Meanwhile, process safety events with major consequences⁴⁷ (level 1) were 44 in 2021, which implies an increase compared to the previous three years, mainly linked to an increase in the coverage of recording and reporting⁴⁸. However, if we consider the number of events per million hours worked, the downward trend compared to 2018 continues.

Spill Preparedness and Response

YPF has a spill prevention and control system that includes an investment plan focused on the integrity, maintenance and improvement of facilities and pipelines, in addition to a response procedure and a computerized communication system that automatically alerts the environmental authority. Every year, drills, including red level drills, are planned and conducted with the participation of senior management.

In 2021, work continued on risk mitigation plans, including inspection actions for hazardous liquid and natural gas pipelines, and the reduction of tanks in priority risk status.

Thus, the volume of hydrocarbon spills greater than one barrel was 2,911 barrels, 49% less than in 2020.

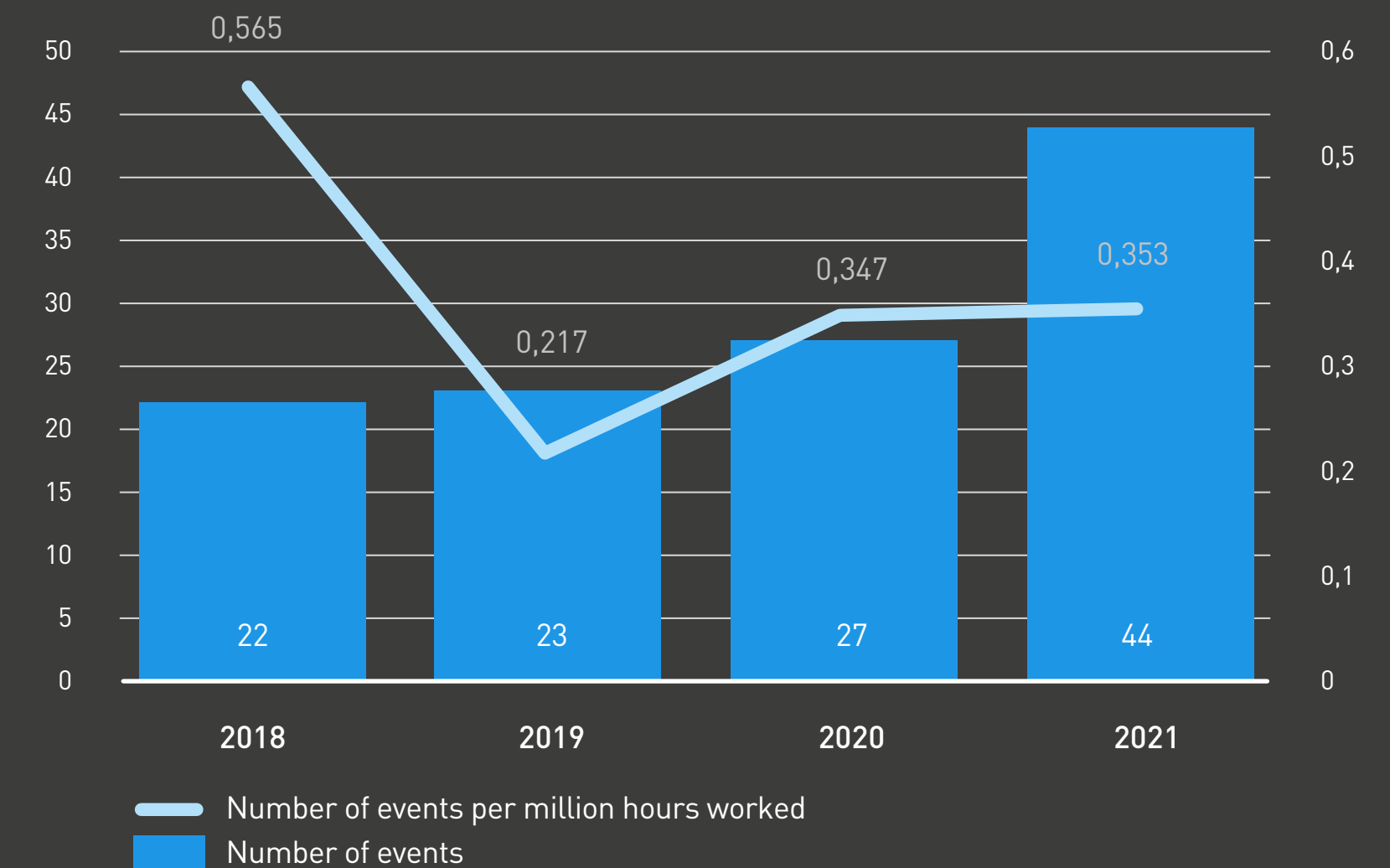
In Upstream operations, 87% of the volume spilled in 2021 corresponded to production water along with crude oil and 13% to hydrocarbons. In this segment, the spill frequency index (SFI) was 12, while in 2020 it had registered 11.48.

In Downstream, the SFI of the logistics system reached 0.104, below the annual target of

0.110, although higher than the 0.06 recorded in 2020. Beyond this variation, the indicator has remained low thanks to improvement activities focused on warehousing and transportation.

There were no relevant incidents related to pipelines, including those associated with the transportation of hazardous liquids or the transmission, collection and distribution of gas.

LEVEL 1 PROCESS SAFETY EVENTS



GRI 403-8, 403-9, 403-10

| STANDARD | METRICS | UNIT OR FORMULA | 2021 | 2020 | 2019 | 2018 |
|-------------------------------------|---|---|------|-------|-------|-------|
| Denominator | Hours worked | | | | | |
| | YPF Group* | Million hours | 125 | 110.3 | 146.2 | 124.6 |
| GRI 403-5 | Safety Training Index (STI) | | | | | |
| | Own staff | Training hours / worked hours x 100 | 0.41 | 0.20 | 0.40 | 0.35 |
| | Contractors | | 0.37 | 0.60 | 0.71 | 0.75 |
| | Accident Frequency Rate (AFR) / Lost Time Injury Frequency Rate (LTIFR) | | | | | |
| | YPF Group* | Number of lost time accidents per 1,000,000 hours | 0.34 | 0.20 | 0.44 | 0.51 |
| GRI 403-9 | Triable Injury Frequency Rate (TRIFR) | | | | | |
| | YPF Group* | Number of total accidents per 1,000,000 hours | 1.29 | 1.21 | 1.73 | 2.33 |
| | Fatalities | | | | | |
| | YPF Group* | Quantity | 1 | 0 | 2 | 3 |
| | Safety incidents involving people | | | | | |
| | Without major consequences | Quantity | 575 | 431 | 726 | 655 |
| With moderate or major consequences | Quantity | 133 | 88 | 222 | 280 | |

*YPF Group: Includes own personnel and contractors.

| STANDARD | METRICS | UNIT OR FORMULA | 2021 | 2020 | 2019 | 2018 |
|------------|-----------------------------------|--------------------------------------|-------|-------|-------|-------|
| | Validated incident investigations | Validated investigations / incidents | 93% | 96% | 86% | 92% |
| | Improvement actions implemented | Quantity | 747 | 271 | 426 | 538 |
| | Process safety events | | | | | |
| | Tier 1 Incidents | Total | 44 | 27 | 18 | 22 |
| | Tier 1 Incidents | Tier 1 incidents per 1,000,000 hours | 0.353 | 0.347 | 0.217 | 0.565 |
| | Tier 2 Incidents | Total | 79 | 60 | 52 | N/A |
| | Tier 2 Incidents | Tier 2 incidents per 1,000,000 hours | 0.634 | 0.770 | 0.491 | N/A |
| GRI 403-10 | Absenteeism rate | | | | | |
| | YPF Group** | | 3.72% | 3.53% | N/A | N/A |

* Computable accidents are accidents over which YPF has safety management. It does not include first aid.

** It Includes our personnel and contractors.



06
PEOPLE

The people who carry out the day-to-day operations at YPF make up a professional, diverse team committed to the business plan, the best results and resilience in the face of future challenges. For this reason, leadership, onboarding of talent and permanent development of human capital are priorities for the organization.

The rapid creation of new skills and permanent learning has also become critical to meeting our strategy and the context of Covid-19 has forced us to quickly adapt to new forms of learning. We continue to invest in training programs and work involving workers as well as their representatives in accordance with the provisions of the applicable regulation and our internal policies.

Likewise, the company is committed to the health and safety of all its own employees and contractors, as well as to the creation of a collaborative and flexible work environment, where diversity, non-discrimination, inclusion and equal opportunities are respected and fostered.

YPF fosters diverse and inclusive work environments, seeking to ensure equal opportunities for each of its members. These guidelines are key to all our strategic lines and are present in the scope of the business objectives.

In 2021, with a pandemic in remission as a result of national vaccination campaigns, the main priority continued to be the health of people, a focus to which was added the design of a hybrid work model adapted to the new scenario, suitable to combine the flexibility of remote work with the operational requirements of our activity. While we transformed the vice-presidency of Human Resources into a vice-presidency of Culture and People, with the leadership position held by a woman, changes that accentuate our intention to put people and their overall well-being always at the center of the activities we carry out, recognizing that they are the impetus to successfully implement our business plan and give sustainability to the organization.

Along with these management points, we continue to manage initiatives to strengthen leadership, develop the necessary job profiles and incorporate young and specialized talent, in addition to making organizational processes more agile with the support of digital tools.

Our Team

GRI 2-7, 2-8, 2-30, 405-1

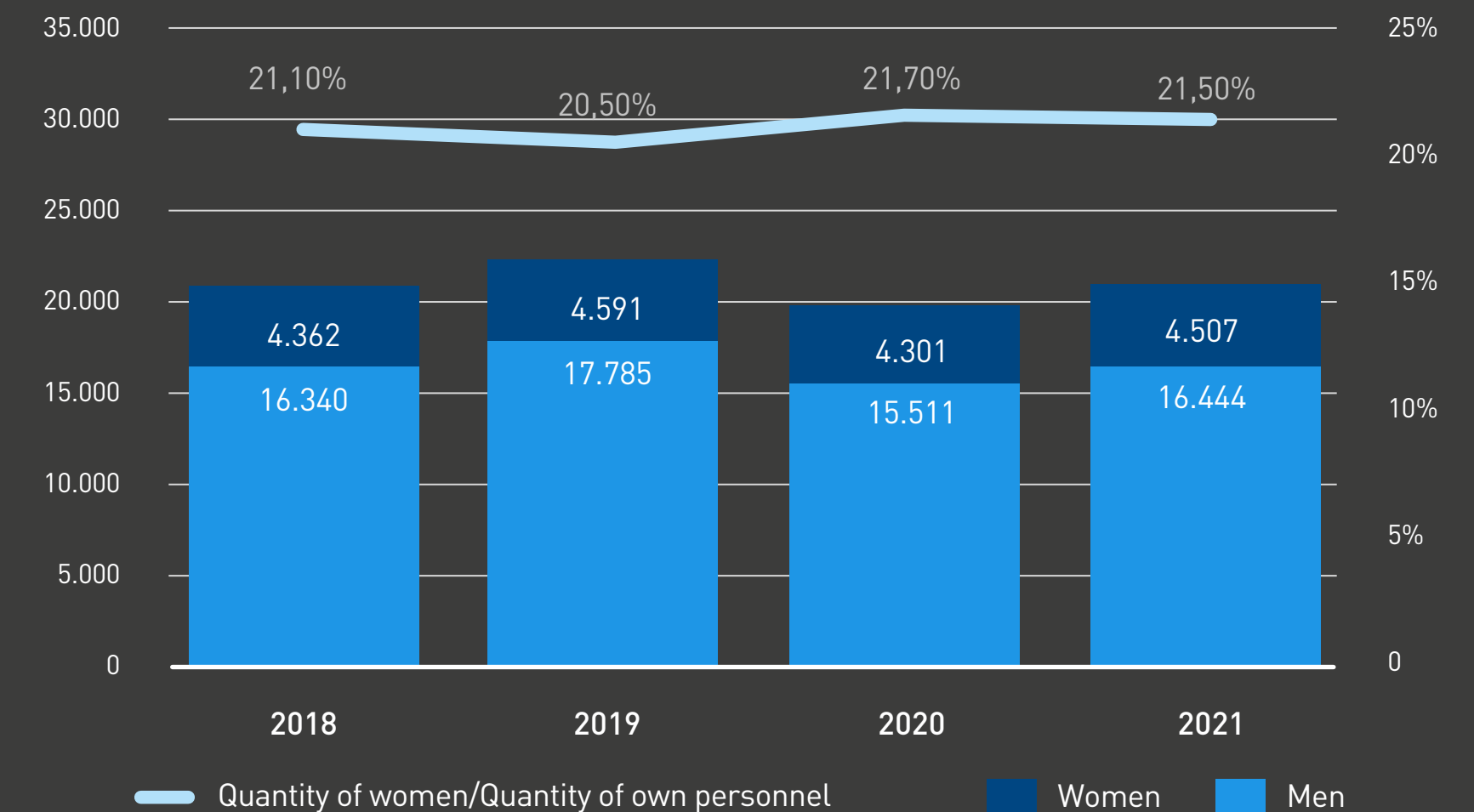
As of December 31, 2021, YPF had 59,956 employees, 9.4% more than at the end of the previous year. 35% of that figure corresponds to own staff (20,963) and 65% to staff of contracting companies (38,993). All our workers carry out their roles in accordance with labor legislation, the terms of the agreed bargaining agreements and corporate policies in this area, which foster freedom of association and permanent dialog between the parties.

Freedom of Association

GRI-2-30

| | |
|--|--------|
| Non-pay scale own staff | 35,35% |
| Own staff under agreement | 64,65% |
| Own employees represented by SUPeH | 40,96% |
| Employees of non-pay scale contractors | 7,51% |
| Employees of contractors represented by 9 unions in the oil and gas sector | 77,00% |
| Employees of contractors represented by other unions | 15,49% |

OWN PERSONNEL BY GENDER



ADAPTATION TO THE PANDEMIC AND NEW WAYS OF WORKING

In order to safeguard the health and integrity of people, in 2021 the protocols established the previous year remained in force, which were adapted to the evolution of the health context. The activities considered to be essential in operational areas continued to be carried out in person, while the administrative activities were carried out during a large part of the year remotely. In the first half of 2021, nearly 7,500 people worked from home. To successfully reconcile both modalities, two guidelines were key:

→ Closeness and permanent dialog: The different digital channels of communication and the spaces for the exchange of opinions remained open, which allowed for measuring the pace of the initiatives and proposals, ratifying or modifying their course.

→ Accompaniment to leaders: Initiatives aimed at fostering knowledge of trends and fluid contact among leaders and their teams continued, such as “Liderar Café” (Lead Coffee), the Leadership in one click guide —with more than 300 proposals for the self-development of the YPF leader’s profile— the iLead digital simulator —for those who take on their first leadership role— and the publication of videos, documents and courses on team management in the WorkPlace Leadership Group.

As the context made it possible for the authorities to lift mobility and capacity restrictions, remote work migrated to a hybrid modality. Along with providing accompaniment for the safe return to face-to-face activities of those who performed them 100% virtually, we began a process of defining a new labor system that combines both modalities.

Towards a New Working Model

Through meetings, surveys and workshops, we capitalized on the experience accumulated in teleworking during the last two years to lay the foundations for the design of a new hybrid system. In order for this to be a real contribution to the achievement of business goals and the improvement of the well-being of people who make up the company, this process seeks to establish a formula that meets a series of requirements:

- Foster the reconciliation between work, family and personal life.
- Encourage self-management in the performance of tasks and the achievement of objectives.
- Combine the benefits of remote work with meeting spaces that enhance interpersonal relationships, innovation, commitment, creativity and organizational culture.

→ Harmonize this new modality with the operational world of YPF, which represents more than 60% of the workforce.

We are also defining the tools that workers and their leaders will require to perform in this new format. We hope to announce the results of this process during 2022.

GRI 3-3, 202-2, 405-1, 406-1; 407-1

In addition to creating a more representative workforce of society, organizational diversity collaborates to make companies more innovative, profitable and successful. Therefore, we remain committed to the consolidation of a corporate culture based on gender equity, inclusion and the convergence of different ideas, experiences and contexts. These values are included in our *Ethics and Code of Conduct* and in the Company's *Behavior Manual*, in addition to having given rise to two policies: *Diversity and Inclusion* and *Workplace Free from Abuse and Harassment*. Likewise, we are part of the commission that addresses these issues at the Argentine Oil and Gas Institute (IAPG), and our Diversity Committee⁵², made up of representatives of the main areas of YPF, drives initiatives to foster a culture in accordance with these principles.

In 2021 we published two new protocols to continue to advance on this path: *Equal Opportunities* and *Gender Identity Transition*. Likewise, we continued to develop training modules and manuals on gender diversity and equity in our leadership programs and integrated this perspective into all leaders' communications. We also unfurled awareness campaigns and offered workshops and open talks on gender, diversity, self-development, parental co-responsibility, good treatment, unconscious biases, equal opportunities and non-discrimination.

At the beginning of the reported year, we signed an agreement with the Ministry of Women, Gender and Diversity to agree on an institutional framework that fosters joint actions in these matters.

Gender Equity

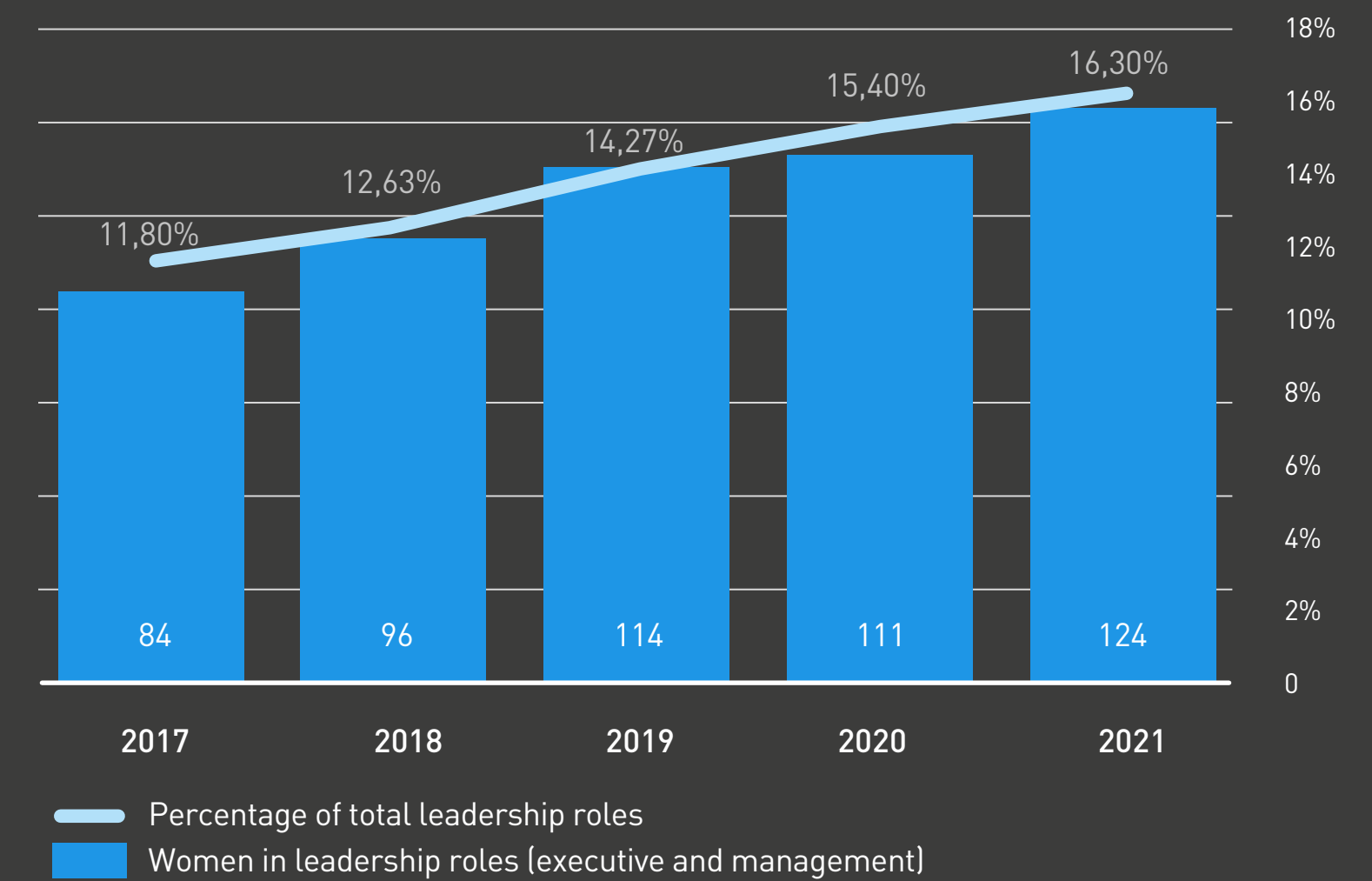
GRI 2-7, 2-8,

21.5% of our own staff are women and at the same time we have as a strategic objective to reach at least 25% of women in leadership positions in executive and management⁵³ positions by 2025. To do this, we have been working on a plan with ten work points that began in 2017; it was submitted for evaluation in 2021. Through an internal survey, we sought to know the impact of the actions implemented, and additionally, we monitored 18 indicators that allow us to follow the progress of wom-

en in different areas: including remuneration, participation, development and recognition. On the other hand, we integrated the gender equity perspective into our recruitment processes, mobility, entry of young professionals, internships, talent maps, succession plans and wage adjustment.

In this way, we managed to increase the percentage of senior leadership positions (executive positions, maximum of two levels of the CEO) held by women by more than 4 points from 5.8% (2017) to 10.1% (2021) and in executive and management leadership positions from 11.8% in 2017 to 16.3% in 2021.

WOMEN IN LEADERSHIP*



* YPF S.A. and controlled companies (except Metrogas and Fundación YPF).

Desde 2019, YPF adhiere a los Principios para el Empoderamiento de las Mujeres o WEPs (Women's Empowerment Principles) de ONU Mujeres y United Nations Global Compact.

At the end of this year, fiscal year 2021, women in junior leadership⁵⁴ positions represented 23.3% of them, a growth of 4.3 percentage points since 2017. At the same time, 18% of executive positions in revenue-generating areas were held by women.

16.3%

of senior leadership positions held by women

18%

of executive positions in revenue-generating areas held by women

These advances show the perseverance in deploying this effort in favor of gender equity, beyond the urgencies imposed by the health crisis. In this regard, we are one of the five Argentine companies that lead the national Gender Equity Initiative with the support of the Inter-American Development Bank and the World Economic Forum. And we participated in the initiative “Win-Win. Gender equality is good business”, implemented jointly by UN Women, the ILO and the European Union.

Program to Promote Female Leadership

In 2021, the implementation of the LiFe program continued, whose purpose is to contribute to the development of professionals with the potential to assume leadership positions. Started in 2019, more than 40 participants from different businesses took part in workshops and other activities that promote self-knowledge and provide the opportunity to share professional experiences with leaders of the company and other organizations.

Awareness-Raising Activities

On the occasion of International Women’s Day, which is commemorated every March 8, we launched a communication campaign to reflect on the achievements made in gender equality and the remaining challenges. In addition, we disseminated a language guide with gender empathy.

Parental Co-Responsibility

To promote co-responsibility in raising children, we extended leaves for pregnant and non-pregnant caregivers.⁵⁵

Shortening the Wage Gap

GRI 405-2

The wage gap between men and women registered a year-on-year decrease of 8% and reached 6.1% in favor of the former, below the local market. This means that the average salary of women in relation to that of men was 93.9%, a proportion that varies between 91.2% in the executive segment and 96.6% in the sector of analysts and coordinators. The gap is mainly due to the level of the position, the seniority of the person in the position and the performance of each employee.

Prevention and Attention of Domestic Violence

Since 2020, in response to the increase in cases of domestic violence in the country in the context of social isolation, we have developed a protocol to accompany women of the company who are going through this situation and we have created a subcommittee to implement it, in which references from the Diversity Committee and the Compliance areas, People and Culture, Health, Labor and Legal Relations participate.

To consolidate the implementation of the protocol, in 2021 we continued to train the key YPF teams and we added to our investee companies (OPESSA, Y-TEC, AESA, YPF Luz and YPF Gas), the leading network of service stations and union references.

In addition, we developed internal and external communication awareness actions. On the International Day for the Elimination of Violence against Women, we launched a national campaign to help raise awareness of the problem and strengthen awareness of Line 144⁵⁶, which we also disseminate through our network of gas stations, pursuant to the agreement signed with the Ministry of Women. In addition, with the support of that portfolio, we train those who work in the stations that are on the route of human trafficking to collaborate in the early detection of this crime.

Win-Win Program

In 2021 we managed to certify the action plan we elaborated as participants of the Win-Win program: Gender equality is good business, implemented by UN Women, the International Labor Organization (ILO) and the European Union.

Employability and Inclusion Programs

YPF develops a set of initiatives that contribute to promoting the employability of different social groups through the acquisition of knowledge, experiences and behaviors of the work culture.

→ Internships and Professionalizing Practices
In 2021 they reached more than 200 young people who are pursuing undergraduate degrees linked to industry at universities in the country. Again, 50% of the quotas were for women.

→ Employability program for people who were deprived of their freedom
It added seven participants in the year, bringing the total to 25 people who have benefited from the experience, 60% of whom had joined the YPF network of gas stations at the close of this report.

→ Employability program for technicians
With a focus on women, in its first edition it had 67 participants. It has a theoretical phase facilitated by the universities of La Plata, Cuyo and UTN Neuquén, and another one of a practical nature that was developed in the facilities of La Plata, Luján de Cuyo and Plaza Huinul. After the completion of the experience, 64% agreed to an employment contract in YPF's industrial facilities.

→ FULL Smile Program
This initiative that integrates young people with Down syndrome and Asperger's to work in Full stores had three participants in 2021, a figure that is expected to expand once the pandemic is over. When the context allows face-to-face activities, we will also resume our employability program for people with disabilities. As of December of the reported year, YPF had 52 people with certified disabilities.

→ Internship Program
In order to contribute to the return of local intellectual capital generated abroad, we continued to develop this program aimed at Argentine students who pursue master's degrees abroad. The initiative gives them the opportunity to join YPF projects during their academic breaks through internships. It is supported by the Ministry of Education and the Fulbright Commission.

GRI 3-3, 401-1, 401-2, 401-3

A central part of our business strategy is attraction, onboarding and development of young talent and other key profiles for business activity. With this objective, we have a value proposition that aims to put into action the potential capabilities of those who work in the organization, properly manage compensation and offer a set of benefits that enhance the people's overall well-being.

In 2021, 3,829 new admissions of own staff were registered (3,360 men and 469 women). The recruitment rate⁵⁷ stood at 18.27% (16.03% for men and 2.24% for women). Meanwhile, there were 2,675 reductions (840 volunteers), which was reflected on a turnover rate of 12.53%.

Under the premise of "people at the center", we are working on the design of a new study of work environment and commitment that will be implemented in 2022 through a survey for the entire staff.

In this regard, a study was carried out to reconstruct the value proposition to the employee and design a communication strategy of YPF as an employer brand.

Compensation and Benefits

GRI 2-21

One of the points of the YPF Compensation and Benefit Program is the setting of competitive remunerations, a process that is carried out in accordance with a specific internal standard and the corporate equity policy. Both guidelines seek that employees receive the same levels of wages at the same position, seniority, experience and performance.

→ In 2021 the wage of the initial category in the YPF Group was equivalent to 1.8 times the local minimum wage.

→ The ratio of the total annual compensation of the highest paid person at YPF Group was 23 times compared to the average of the other employees (the same as in 2020)⁵⁸.

→ 18 times was the ratio of the total annual compensation of the highest paid person at YPF S.A. compared to the average of the other employees (versus 14% in 2020).

→ 1.09% was the ratio of the percentage increase in total annual compensation (versus 2.1% in 2020).⁵⁹

In addition to wage, employees receive a variable monetary incentive linked to the annual achievement of objectives, which are calculated on the basis of goals and indicators set at the organizational, vice-presidential and individual levels.

YPF also has the Long-Term Variable Compensation Program, which promotes the permanence of executives and key staff through the granting of company shares. 6.7% of the eligible population had the long-term allocation in 2021.

In terms of benefits, the company has set out to improve the well-being of its workers, covering the physical, emotional, psychological, financial and professional fields. Among others, the current benefits provided include a medical plan, life insurance, personal loans, savings and pension plan with co-participation of the company, transportation for staff in operations, aid for births and children of school age and fuel discounts. In addition, we encourage the completion of secondary studies and the development of undergraduate and higher studies through co-financing.

Permits for Pregnant and Non-Pregnant Caregivers

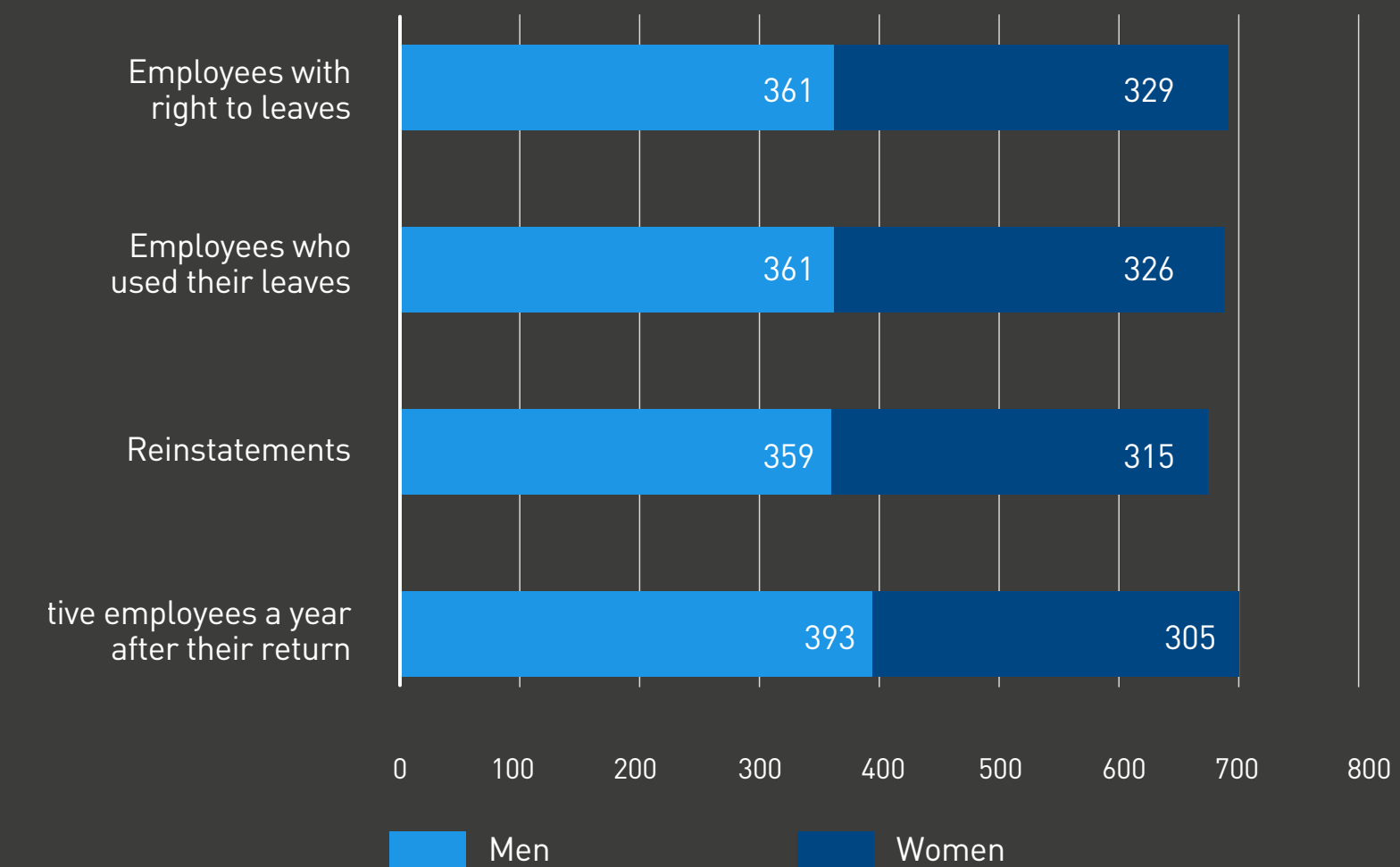
GRI 401-3

We know that promoting the shared distribution between men and women of domestic and personal care tasks promotes job development in an equitable way. It improves people's experience, fosters greater general well-being and collaborates so that YPF may achieve its objectives.

In this regard, at the beginning of 2021 we replaced the concept of "maternity and paternity leave" with those of "pregnant caregiver" and "non-pregnant caregiver". This modification was accompanied by other advances:

- We raised the leave of non-pregnant caregivers to 30 days equaling the benefit granted by YPF for pregnant caregivers.
- We established 30 calendar days for adoption leaves, with no age limit.
- We allocated 15 days for adoption procedures, which can be used before the final resolution or added to the leave.

CAREGIVER LEAVES IN 2021*



* YPF S.A. and controlled companies (except Metrogas and Fundación YPF).



**IN ADDITION
TO CREATING
A WORKFORCE
THAT BETTER
REPRESENTS
THE SOCIETY,
THE DIVERSITY
HELPS YPF BE
MORE INNOVATIVE,
PROFITABLE AND
SUCCESSFUL.**

DEVELOPMENT OF HUMAN CAPITAL

GRI 3-3, 404-1, 404-2

As in the first year of the pandemic, in 2021 we continue to work to adapt and sustain the development actions that allow us to ensure critical capabilities for business, with emphasis on the evolution towards more agile processes. In this regard, “talent review” meetings were held to reflect on the profile and potential of people who make up the company, identifying possible successors to critical positions and defining consequent development plans. In light of the contents that have been established as crucial, we review our leadership programs and look for new proposals of a more experimental nature, based on trainings, tutorials and mobility plans.

Strengthening Leadership

One of the points of work in 2021 was the development of leadership and the accompaniment of our leaders in the exercise of their role and in the acquisition of new skills for team management. To do this, we deployed strategic leadership, results, people and self-programs virtually, in addition to expanding the learning ecosystem with a new program called Agile Leader, so that supervisors develop skills. In total, 922 people participated in leadership programs in 2021, a figure much higher than in previous years.

Executives and managers also have access to coaching and mentoring to accelerate the careers of high potentials. We applied other techniques such as “shadowing”, based on observation, and exchanges of roles. In addition, we have guides so that each employee can design their own individual development plan.

In 2022 it is planned to launch the new version of the program for executives, whose redesign was carried out during the reported year.

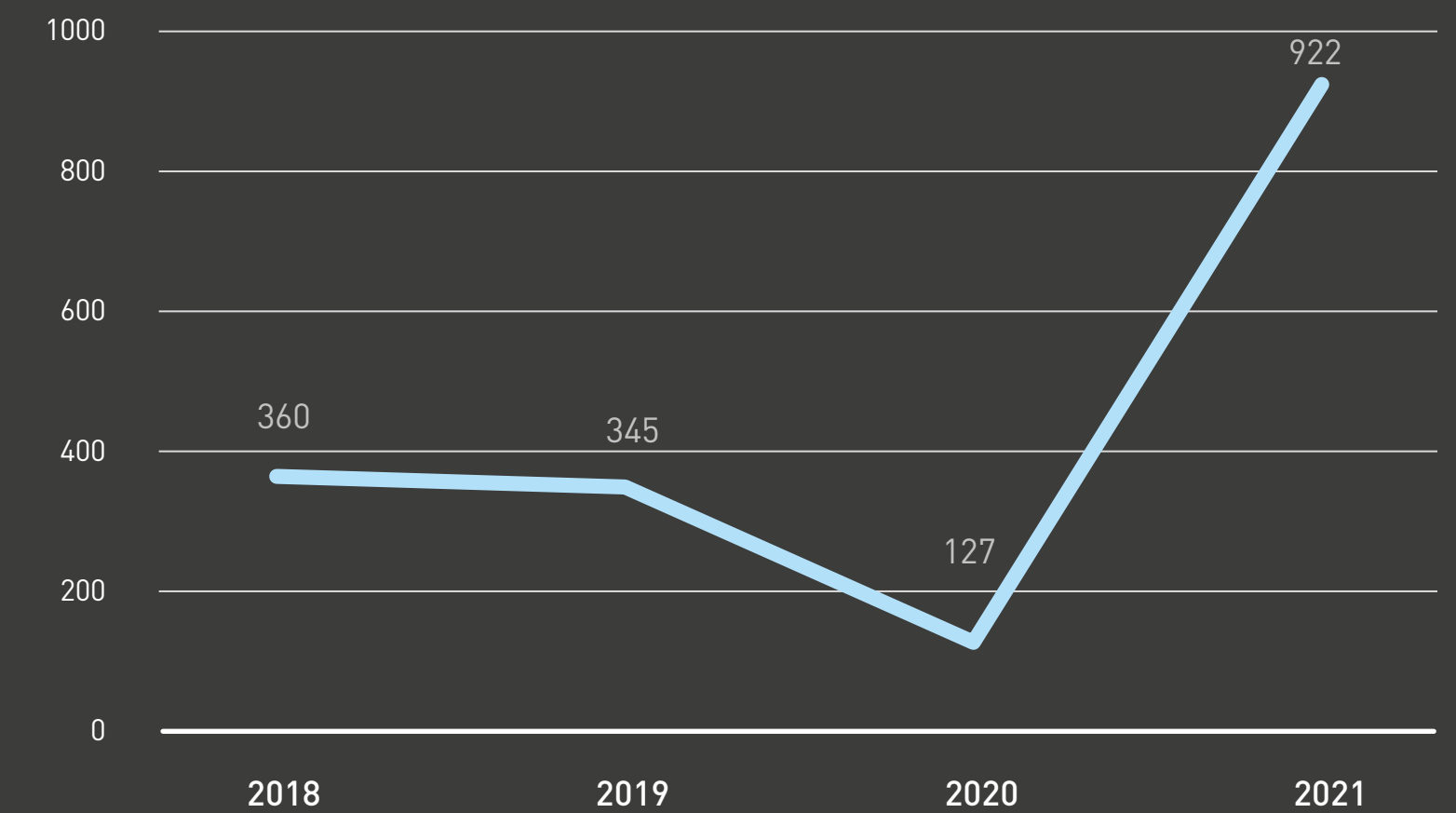
Internal Mobility

As in each period, we carry out a mapping of talent in order to identify people with the potential to assume more complex leadership positions or specialized positions, in order to work on their development and facilitate their flow to those positions. Each manager evaluates their employees, after which a calibration, consolidation and validation process is carried out in which the highest executive level participates.

Another resource to fill vacancies with own staff is the “job posting”, a practice that continued to consolidate, also with a focus on gender equity.

With all this, 40.77% of vacancies in 2021 were held by internal candidates.

PARTICIPANTS IN LEADERSHIP PROGRAMS*



* YPF S.A. and controlled companies (except Metrogas and Fundación YPF).

Training

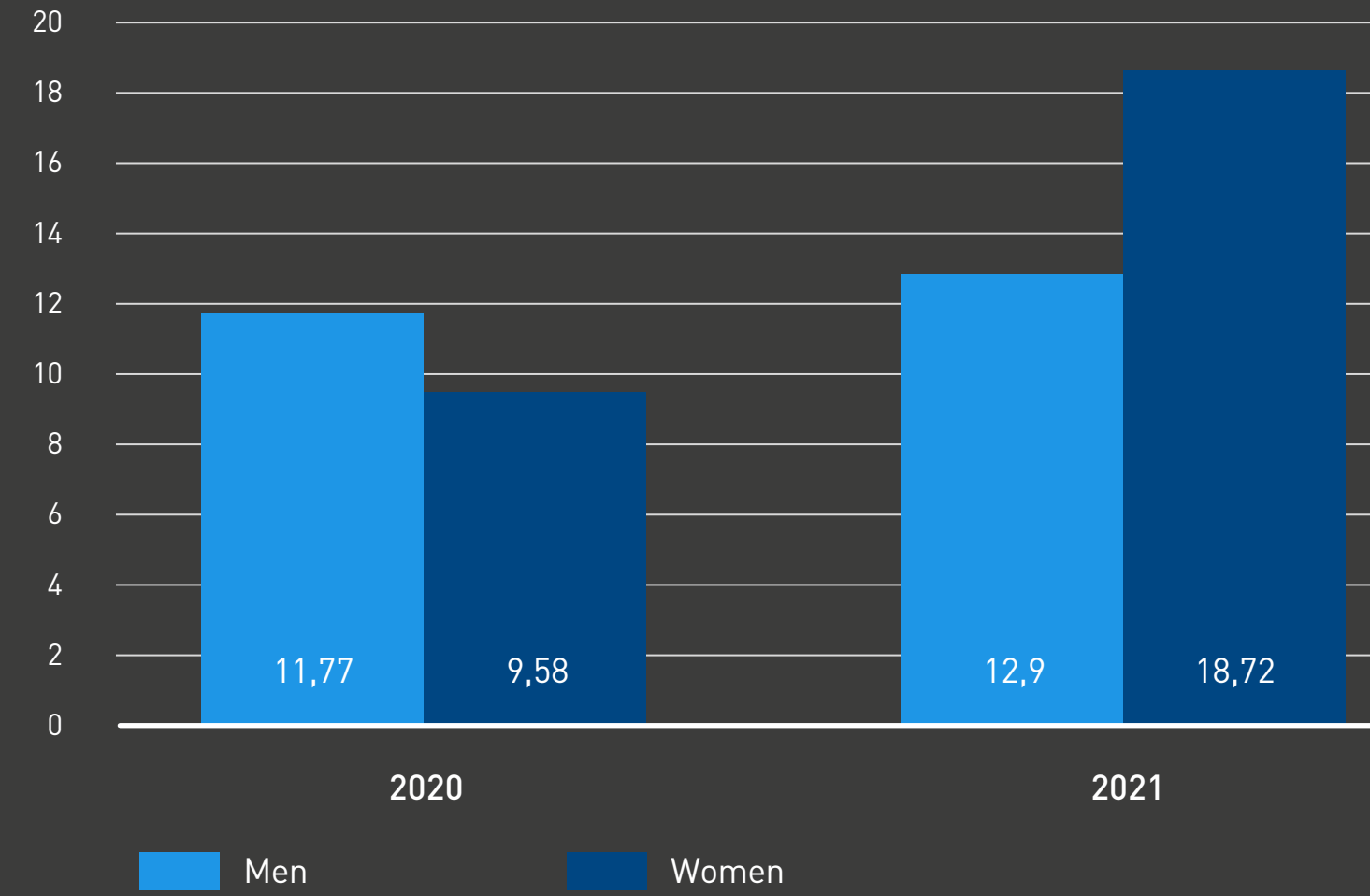
GRI 404-1

After a year in which the health and economic crisis forced us to reduce the scope of our capacity building initiatives, in 2021 we strove to reinforce them, for which the digitization and virtualization of content were crucial. 65% of the training proposal was executed remotely (25% e-learning and 40% virtual), which increased accessibility by 20% compared to 2020.

In this way, we managed to sum up 296,714 training hours for our own staff at the YPF Group, 33% more than the previous year, with an average of 14 hours of training per person, a figure which was 24% higher than the average of 2020. The increase was especially significant in companies controlled by YPF, where the average number of training hours increased from 4.79 in 2020 to 11.57.

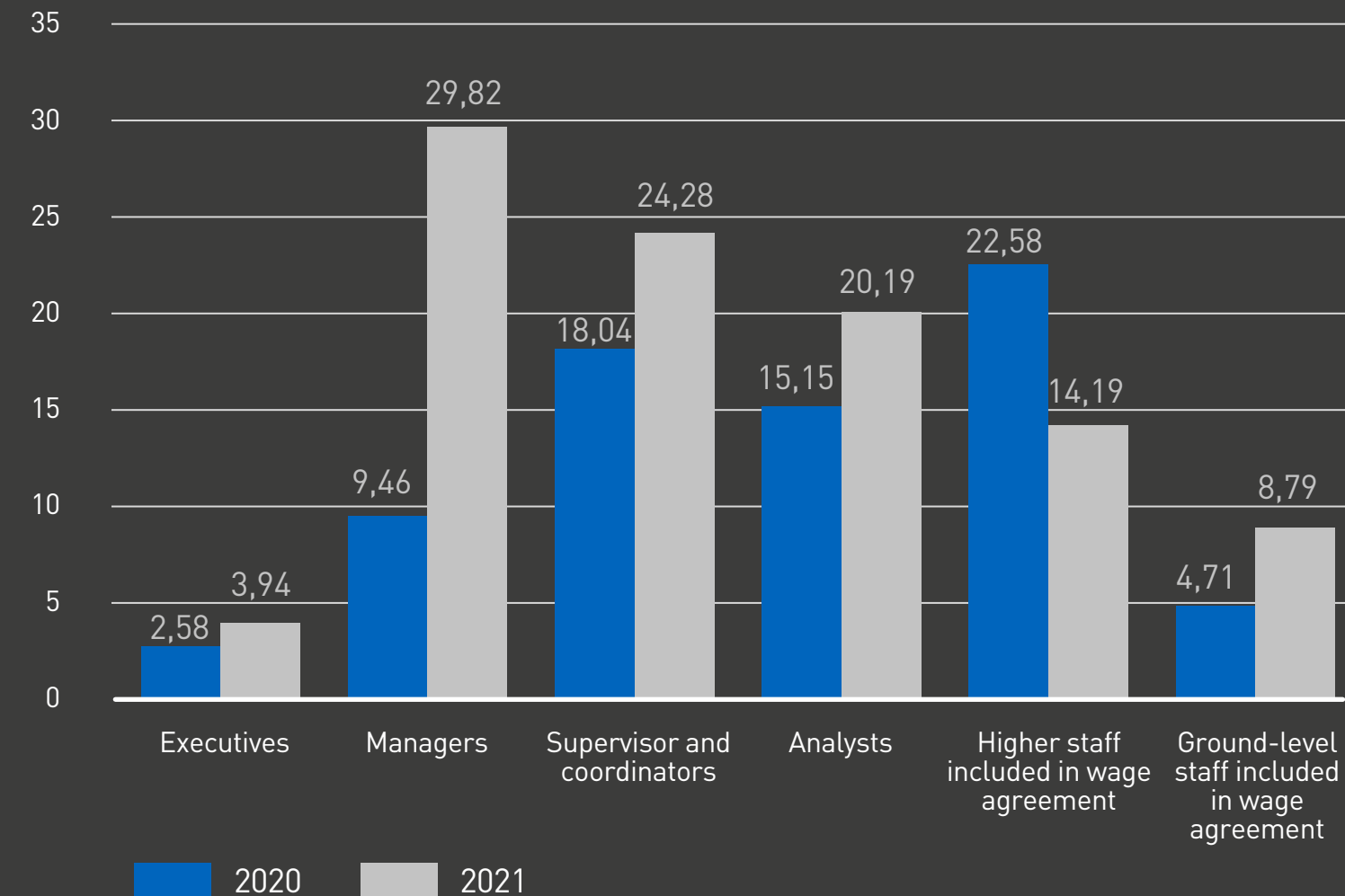
AVERAGE TRAINING HOURS PER PERSON, PER GENDER*

* YPF S.A. and controlled companies (except Metrogas and Fundación YPF).



AVERAGE TRAINING HOURS PER PERSON, PER WORK CATEGORY*

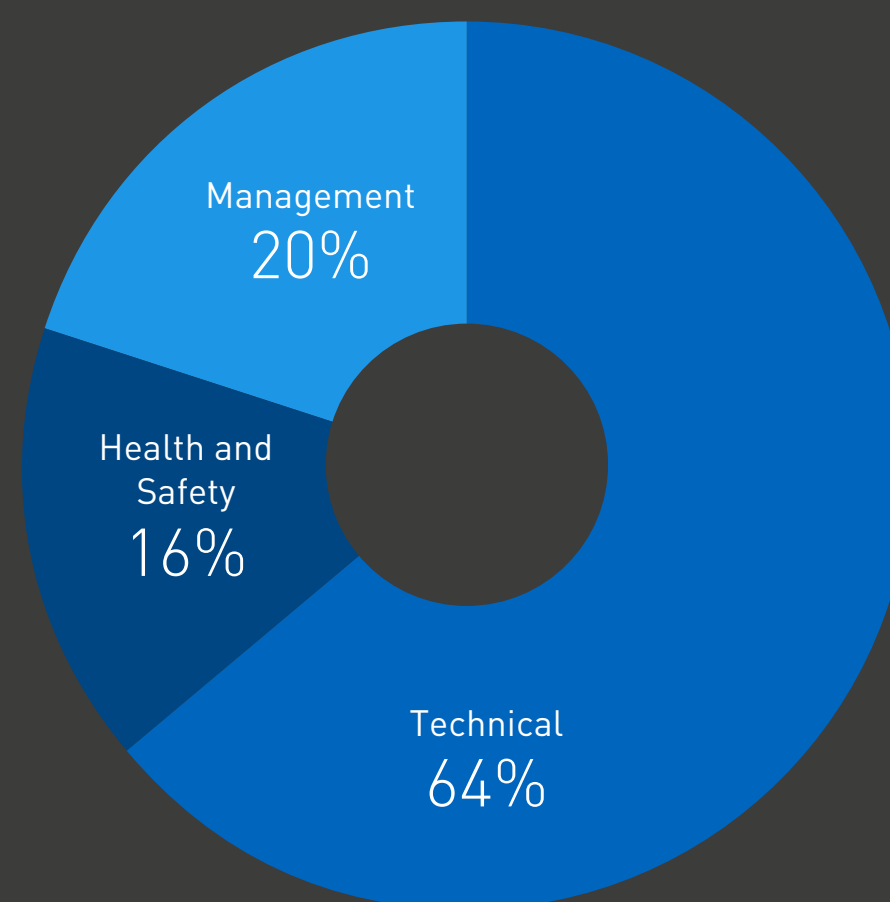
* YPF S.A. and controlled companies (except Metrogas and Fundación YPF).



This meant being able to fulfill an ambitious training plan that covered the technical, operational, leadership and shared capabilities in all businesses, thus achieving significant impacts on ensuring the sustainability of our company.

- We implemented 1,407 virtual training events through the Teams platform.
- We achieved 4 points of evaluation of the experience, on a scale of 1 to 5.
- We resumed the management of external training, increasing from 107 to 613 approved applications (74% corresponds to technical courses, 17% to postgraduate courses and 9% to undergraduate courses).
- We increased real investment in learning, training and development per person by 54% compared to 2020. The average cost of trainings was US\$ 202.36.
- The return on investment in human capital was 3.97, more than double that in 2020 (1.89).⁶⁰

DISTRIBUTION OF TRAINING HOURS BY TYPE - TOTAL YPF GROUP 2021



Development of Technical Capacities

Another feature of our training management in 2021 was the impetus given to the deployment of technical capacity building programs (Expertise, PACTO and FTO) and the enabling of new proposals for technicians and professionals in key areas.

- We expanded the scope from 4 to 13 disciplines unfurled, with 591 standard positions and 233 defined technical skills.
- We conducted 1,061 skill assessments.
- We integrated 12 knowledge matrices.
- We recorded technical actions in 175 development plans.
- We offered 270 technical and operational learning pathways in the systems.
- We evolved key business roles to ensure a learning network with new knowledge management references in each business, field leaders, expert panel members, tutors and mentors.

In addition, we organized 92 meetings of the Sharing Experiences cycle, where knowledge

and technical experiences applied to strategic projects are exhibited, and seven technical conferences, activities that were enhanced by virtuality, with 15,000 people connected, 160 facilitators and more than 100 projects submitted by the different communities of practice.

Development of Transversal (Shared) Skills

In 2020 we began to develop a new concept in training to reinforce four capabilities that cross the work of the entire company and are crucial to its future: agility, data management, project management and digital skills. As a result of this work, during 2021 we launched four academies, each focused on a skill.

New Learning Platforms and Technologies

The learning offer was extended with the addition of more platforms and portals, such as LinkedIn Learning, Harvard Management Mentor and PetroAcademy.

On the other hand, in terms of technology applied to learning:

- We improved the experience of My Learning in SuccessFactors (Learning Management System) and added the staff to this module “pure manpower” (MOP), to ensure basic skills.
- We optimized the experience and functionalities in SCP, SAP Cloud platform for the certification of technical expertise, and in Career Worksheet, a system to evaluate technical skills.
- We signed a multi-year agreement with Degreed, under which we began to implement its LXP (Learning Experience System) cognitive system, to unify the learning experience and knowledge management and integrate the available content.

- We addressed more than 60 improvement and retraining projects with the inclusion of technological and methodological innovations in laboratories, such as the first School of Geoscience Change, in which we incorporated simulators that allow us to develop shared skills from situational learning in synchronous digital environments.

Performance Evaluation

GRI404-3

100% of own staff had an individual performance evaluation in 2021, the year in which the ratings for measurable objectives agreed with the top line were reactivated, which in 2020 had been replaced by individual challenges without impact on the calculation of the annual bonus due to the pandemic. Everyone received a formal comparative classification within an employee category.



PERFORMANCE INDICATORS

GRI 2-7, 2-8, 2-30, 401-1, 401-3, 404-1, 404-3, 405-1



| INDICATOR | UNIT OR FORMULA | 2021 | 2020 | 2019 | 2018 |
|--|----------------------------------|--------|--------|--------|--------|
| Employment | | | | | |
| Total | quantity | 59,944 | 54,796 | 67,673 | 62,905 |
| Own staff | quantity | 20,951 | 19,812 | 22,376 | 20,702 |
| Hired staff | quantity | 38,993 | 34,984 | 45,297 | 42,203 |
| Type of contract for own staff | | | | | |
| Fixed | Percentage of total | 90.3% | 94.7% | 88.6% | 92.4% |
| Temporary | Percentage of total | 9.7% | 5.3% | 11.4% | 7.6% |
| Distribution of direct staff, labor category | | | | | |
| Executives | quantity | 103 | 104 | 100 | 95 |
| Managers | quantity | 656 | 615 | 699 | 665 |
| Heads and coordinators | quantity | 864 | 871 | 1,318 | 1,793 |
| Analysts | quantity | 5,788 | 5,465 | 5,660 | 4,661 |
| Senior staff under agreement | quantity | 3,309 | 3,240 | 2,963 | 3,519 |
| Core staff under agreement | quantity | 10,243 | 9,517 | 11,636 | 9,969 |
| Women's participation | | | | | |
| Women in staff | Percentage of total own staff | 21.5 | 21.7 | 20.5 | 21 |
| Women in executive positions -executives and managers- | Percentage of total in the staff | 16.38% | 15.4% | 14.3% | 12.6% |

| INDICATOR | UNIT OR FORMULA | 2021 | 2020 | 2019 | 2018 |
|---|----------------------------------|-------|-------|-------|-------|
| Women in junior leadership positions | Percentage of total in the staff | 23.3% | 21.6% | 20.5% | 19.2% |
| Women in senior executive positions -maximum 2 CEO levels- | Percentage of total in the staff | 10.1 | 11% | 10.4% | 9.6% |
| Women in leadership positions in revenue-generating areas | Percentage of total in the staff | 18% | 15% | 14.1% | 11.1% |
| Average training hours per person | | | | | |
| Only companies YPF S.A. | Average hours per person | 17.21 | 18.38 | S/I | S/I |
| Companies controlled by YPF S.A. | Average hours per person | 11.57 | 4.79 | S/I | S/I |
| Proportion of own staff covered by bargaining agreements | Percentage of total own staff | 64.7% | 65.4% | 64.9% | 65.1% |
| Turnover rate | Percentage | 12.8% | 20.0% | 16.4% | 9.1% |
| Parental leave | | | | | |
| Return-to-work rate - women | Percentage | 97% | 97% | 99% | 100% |
| Return-to-work rate - men | Percentage | 99% | 99% | 99% | 100% |
| Retention rate - women | Percentage | 90% | 90% | 95% | 91% |
| Retention rate - men | Percentage | 94% | 94% | 93% | 94% |
| Performance evaluations | | | | | |
| Own employees with performance evaluation | Percentage | 100% | 100% | 100% | S/I |
| Own employees with comparative classification within an employee category | Percentage | 100% | 100% | 100% | 0.0% |
| Employee engagement ⁶¹ | Percentage | N/A | N/A | 78% | 79% |



07

SHARED SOCIAL VALUE

The production activities performed by the company enable the development of a wide range of activities, including transportation and electricity for industries, organizations and homes, for heating or cooking, and the supply of a wide range of products, from lubricants to fertilizers.

Throughout its centennial history, YPF has contributed and still contributes to the economic development of the country and of the provinces where it operates in different ways, through energy that it provides; services and goods that it contracts with national and local suppliers; the staff it hires and helps grow; as well as taxes and royalties it pays to governments. YPF is the company that invests the most in the country; therefore, one of the most significant contributions regarding economic value for the Company is the contracting of goods and services. This includes the indirect impact that suppliers of the value chain of the company produce when they create jobs and develop activities destined to satisfy the requirements of the Group.

In order to enhance its contribution to society, the company also works together with public agencies and private and social institutions on strategic initiatives, such as promoting education through Fundación YPF and direct social contribution to communities. Within this framework, a large portion of the social investment of the company is focused on quality education in science and technology, as well as in the local development of communities. Value is also created through the training of cooperators, as well as investment in R&D regarding new energy solutions, both of which are topics explained in other chapters of this report.

The active management of its supply chain and the attention to the impact that it may generate, as well as the support to local industries and suppliers without compromising quality, safety and other corporate and sustainability requirements, are a priority for YPF.

The organization of the supply chain in YPF is led by the Supply Chain Vice Presidency and is performed within the framework of corporate policies of Purchasing, Operational Excellence, and Risk Management. The suppliers are valued as strategic partners along with their selection and the execution of contracts, our focus is to guarantee that they comply with the regulations in effect regarding applicable technical, fiscal, legal, labor, and social security aspects, as well as ethic, environmental and social requirements included in the General Purchasing and Contracting Conditions of the group.

We have an operative model based on three Pillars: strategic supply, end-to-end logistics, and a specific platform for transactional purchasing (4Buy). This model has the following parts:

- Suppliers that provide proposals and are inspired by the different interactions with YPF and each other.
- Market specialists: understand and articulate with the ecosystem,
- Valuation and modeling specialists: generate information and value contents,
- Supply specialists: manage purchases and contracting based on the prepared plan,
- Back-office: process and provide timely information for decision making.
- Agile cells: for strategic or complex subjects, cells build innovative solutions through cross-discipline groups.

Ympulso program for the development of national SMEs

Years ago, we implemented the Sustenta project focused on the sustainable development of our suppliers. In 2021, we took another step in that direction by launching Ympulso, a new program, destined to enhance the national value chain, to promote innovation, growth, and competitiveness of local and regional SMEs. Thus, YPF seeks to consolidate itself as a leading company in order to boost capital stock, production, and quality employment in the country.

Ympulso will be focused on in three lines of action:

- Technical assistance for the purpose of accompanying the transformations linked to the new needs of the energy industry.
- Project financing and incubation in order to enhance the development of local suppliers and small business owners of our value chain.
- Training for companies focused on competitiveness and on the perspectives for the industry in the medium- and long-term.

And it will be aimed to SMEs and local small business owners who seek:

- Digital transformation for more process and products/services efficiency.
- Promotion of partnerships in order to overcome the insufficiency of individual scales.
- Exports growth with competitive substitution for the inclusion in global value chains.
- Sustainable development for the efficient management of resources.
- Enterprise management in order to develop organizational capabilities.
- Design and innovation in order to add value and to position more competitive products.

For more information about this program, see <https://www.ypf.com/Provedores/ympulso/>

Supplier expenses

GRI 204-1

In 2021, the total expenses in purchases reached 894,087 million Argentine pesos, 91% more than in 2020. Of that amount, 87% was for purchases in Argentina, an amount that has been stable during the last years. Whereas 47% of the total expenses was destined to contracting suppliers of high criticality.

Suppliers' assessment

GRI 308-1, 308-2, 414-1, 414-2, 409-1

Every company that is part of the supply chain of YPF is graded before it is able to provide services or sell goods to the company. The demands depend on how critical the contract is. Later, the services rendered are constantly monitored.

In 2021, YPF had 5,083 direct suppliers (Tier 1) with valid qualifications, capable of supplying goods, materials or services. Of these, 2,059 were identified as highly critical.

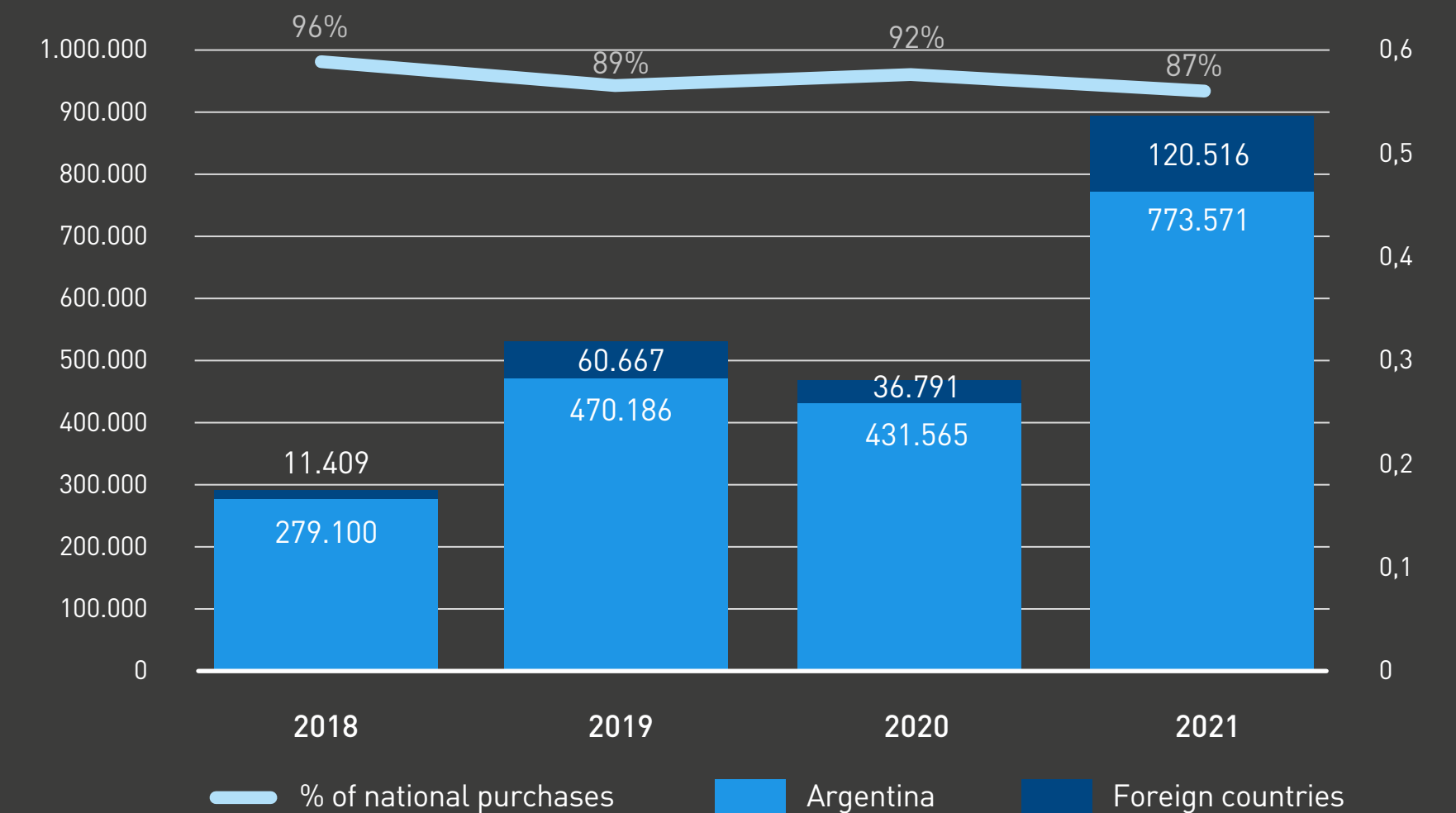
RESPONSIBLE INCLUSIVE PURCHASE (RIP) INITIATIVE

In order to promote purchases to offerers that provide employment to vulnerable groups, we have in-house guidelines and regulations that direct our in-house buyers towards this path. We also have a seal to identify these types of purchases and a space for inclusive products on the Supply Chain common purchasing platform (4Buy). In 2021, the amount for this type of contracting was 11.5 million Argentine pesos.

CRITERIA FOR DEFINING IF A SUPPLIER IS CRITICAL:

- Legal, economic, and financial aspects.
- Volume of purchases and whether they provide non-replaceable components for the operation.
- Their link to the productive processes of the company.
- Their quality, safety, health, and environment management systems.

ORIGIN OF PURCHASES (M ARS)

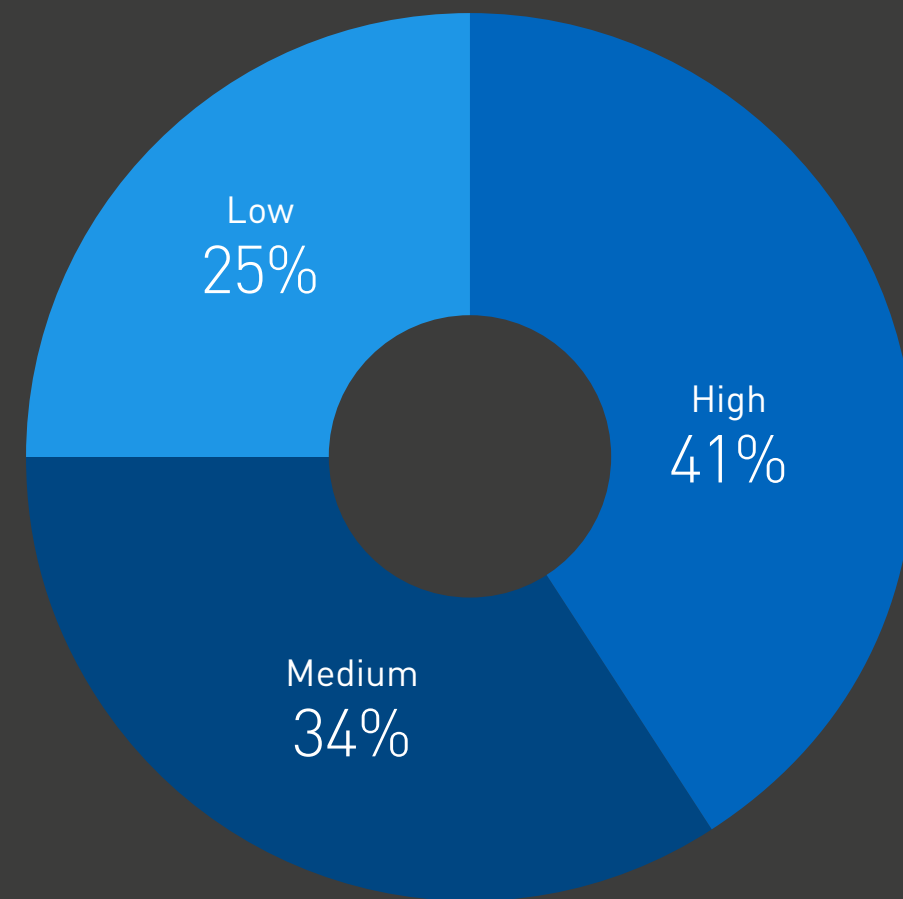


Qualification

GRI 308-1, 414-1

Through this process, the suitability of a potential supplier or of a supplier renewing its qualification is thoroughly analyzed.

SUPPLIERS QUALIFIED BY SEVERITY LEVEL



Total: 5.083

SUPPLIERS' QUALIFICATION PROCESS

| GENERAL | FOR HIGHLY CRITICAL SUPPLIERS | COMPLIANCE | RESULT |
|---|--|--|--|
| <p>The audited aspects include economic and financial status, legal compliance in social security matters, infrastructure for providing the service or manufacturing of the product, and other criteria set forth in the in-house regulation Management of the Suppliers Portfolio.</p> | <p>In the field, the implementation of a quality, safety, health, and environment protection management system pursuant to applicable law by level 1 local companies is verified.</p> <p>The companies having foreign origin may be required to provide evidence to prove that they maintain these systems, with proper certification.</p> | <p>Together with the Compliance area, an integrity analysis of third parties with which the company interacts is performed⁶².</p> | <p>The suppliers that approve this process obtain a qualification status for one or more groups of items, in a specific geographic area and with a corresponding critical level, for a defined period of time.</p> <p>With this, they are enabled to provide services or to supply materials to the company.</p> |

576 high criticality companies audited in 2021

87 new ones and **489** requalified

5.083 suppliers with valid qualifications in 2021

28% audited in 2021. The rest is audited at least once every three years

Performance assessment

The performance of active contracts is assessed throughout its validity, based on the in-house suppliers' assessment procedure, which states the frequency of the process, criteria, and estimates of key indicators.

During the year 2021, we worked with 4,638 suppliers with active contracts, 20% of which are qualified as highly critical. During this year, 1,450 contracts were assessed through 4,044 performance assessments, 6 companies were sanctioned in the Safety and Environment, Ethics, and Legal sectors. These sanctions are channeled through the corresponding committees.

SUPPLIERS' PERFORMANCE ASSESSMENT PROCESS

Assessed aspects:

- Legal and contractual requirement compliance
- Working relations
- Performance in terms of health and safety
- Environment conservation



The Suppliers' Monitoring Committee, formed by members of Supply Chain and SEHS managers, analyzes the results of the assessments, defines the execution of improvement plans or of corrective measures and, if necessary, works in providing alternatives to replace a supplier.

4,638 suppliers with active contracts

914 critical suppliers with active contracts

1,450 assessed contracts

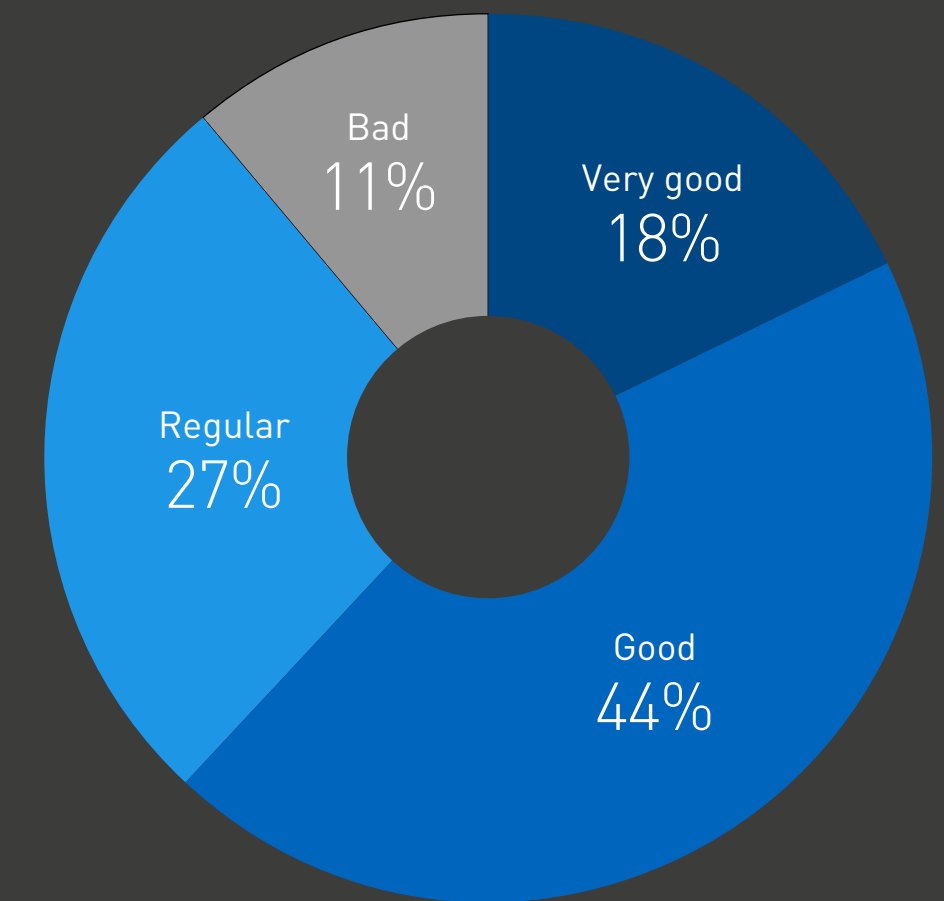
4,044 performance assessments performed

523 suppliers assessed regarding their environmental impact

479 suppliers assessed regarding their social impact - people safety

6 sanctioned companies

SUPPLIERS EVALUATED ACCORDING TO RESULTS OBTAINED - 2021



Total: 4,044 evaluations carried out

System of Contracted Resources (SCR)

It is the system provided by YPF that centralizes information about different contracted resources (staff, vehicles, and/or special equipment) and the different aspects related to the Registration and Control of Contracted Resources.

It consists of a management and communication system in a Web platform, where the Contractor Company must inform the resources with which it will perform the job for which it was contracted as an Affidavit. Moreover, it may access updated information about the status of the audited documentation and check its remarks to complete them as soon as possible. The Contractor Company shall report every resource involved in the contract, both of itself

and of its subcontractors, in said System, and it must complete and keep all information related to those updated, without leaving out or altering any data. At the time of entering YPF facilities, it is necessary that the resources be affected and endorsed in the SCR. Besides, the Contractor Company shall have the documentation detailed in the annexed link in its possession*.

With this control and management system, we ensure that our contractors make every investment and contributions as per the applicable national and provincial law, ensuring the right to collective association and negotiation, not hiring child workers, no forced labor, nor mandatory labor.

This system manages 38,993 people, which accounts for 100% of the staff working for contracting companies.



***For more information:**
[https://www.ypf.com/
Proveedores/Paginas/
quieres-ser-proveedor-
de-ypf.aspx](https://www.ypf.com/Proveedores/Paginas/quieres-ser-proveedor-de-ypf.aspx)



IN LINE WITH ITS COMMITMENT TO ACHIEVE THE GOALS CONCERNING SUSTAINABLE DEVELOPMENT, YPF HELPS IN THE CREATION OF SHARED VALUE THROUGH SUSTAINABLE DEVELOPMENT PROJECTS IN COMMUNITIES AND ENERGY EDUCATION.

GRI 3-3, GRI 413-1, 413-2, SASB EM-EP 320 A.2

We base the relationships with the local communities, where we perform our operations, in recognition, mutual respect, and trust. We seek to create shared value by respecting the applicable law, as well as the guidelines of our Relationship with the Communities Policy⁶³, and implementing due diligence processes in terms of human rights. This implies a preventive and protection approach in our intervention scope that seeks to create lasting bonds governed by dialog, integrity, responsibility, good faith, informative transparency, and openness to all inhabitants of the territories, beyond their legal status regarding ownership of the land.

All of our projects take into account the environmental impact assessment, according to applicable laws and in-house regulations, which includes the regulation on Environmental, Social, and Health Impact Assessment. Moreover, we participate in public hearings as per the provisions of the applicable regulation, we design and execute plans of action which come from these proceedings, which include necessary measures to prevent and/or mitigate potential adverse impact that is submitted before application authorities. In case negative impact should occur, it would be addressed within the framework of the valid legislation for the purpose of compensating or repairing in an adequate and proportional manner. At the

same time, we have a social investment plan, which promotes local development, and which is described in this Chapter. In the field, we have teams of experts who are in permanent contact with the towns, land renters, and inhabitants of the areas where we operate. These experts facilitate the communication and the use of the complaint mechanisms, for which there also are digital and in person channels.

For the continuous learning in terms of relationships, we participate in sectoral initiatives with the work groups of the United Nations Global Compact, the Argentine Business Council for Sustainable Development (CEADS), and the Argentine Institute of Oil and Gas (IAPG).

Participation and relationship strategies

All operated assets have relationship and participation strategies with the communities of their areas of influence. These become a reality in communication and training measures, collaborative or social investment projects, according to local predicaments and with towns, land renters, and indigenous communities.

During the year 2021, there were no problems with local or indigenous communities that had a significant impact on how the company operated.

In this specific case, in the case of our refineries, we have a Response Plan for Emergencies with Impact on the Community (PREIC). This plan includes communication and interaction with municipalities, firefighters, Civil Defense areas, Police Force, and Environmental organizations, among others, which is implemented both for preventive measures and in case an event takes place.

Through this communications system, the complaints of said communities are received and answered and, based on the assessment of potential consequences, measures are taken, together with the participants involved.

SUPPORT TO COMMUNITIES DURING THE PANDEMIC

Throughout the year, YPF kept dealing with specific needs of the communities that appeared because of the health crisis and in cooperation with the public health system. 12 initiatives and donations were carried out, which implied a total investment of 4.1 million Argentine pesos, designated to:

- protection equipment for hospital staff,
- computer equipment for vaccination sites,
- beds and sheets for hospitals and hospitalization sites,
- supplies for healthcare staff and public offices (coveralls, caps, face masks, alcohol gel, and sanitizers),
- freezers and sanitizing products for the vaccination campaign,
- gas supply for hospitals.

Relationship with indigenous communities⁶⁴

GRI 3-3, GRI 413-1, 413-2, 411-1

The relationship with Indigenous Communities is carried out within the scope of effective regulations and of the in-house policies of the Company in this matter. This document regularizes the commitment that YPF has with the identity and culture of the indigenous communities with which it is connected. This relationship occurs especially in the province of Neuquén, where the greatest presence of communities in concession areas where the company operates exists.

Although the provisions of Convention 169 of the ILO regarding indigenous people, which contains obligations for member states, have been included into Argentine domestic law, they are still not regulated in the country. Nevertheless, YPF coordinates a permanent dialog with the communities located in the areas where it performs its operations, exercising a due diligence role in operational projects through training, regular meetings, project information, addition of suggestions from the communities, action monitoring, and compensation measures within the scope of the applicable legislation.

Regarding new projects and before the startup of operations, the Company also carries out a resident and indigenous communities identification process in the area of influence, according to information provided by government authorities and to its own surveys performed in the field, together with external consultants. This activity is complemented by an assessment of vulnerability, needs, and complaints from the communities, based on basic rights, with regular updates. YPF has not required the relocation or resettlement of any community. YPF has no knowledge of third parties pretending the relocation or resettlement of any of the communities that live in the areas where the company operates. In 2021, no resettlements took place.

In addition to the citizen participation mechanisms provided by the effective and applicable regulations to the activities performed by YPF, the company has its own mechanisms to receive complaints and concerns through a designated telephone number and a mailbox for that purpose. Moreover, indigenous communities can raise any concerns or claims they have during the periodic and regular meetings that company leaders from YPF carry out with the authorities of the communities.



Throughout 2021, with social distancing restrictions and allowed limits stipulated due to the Covid-19 pandemic, the team from YPF continued to carry out a fluid relationship with the indigenous communities where all dialog channels remained open. To adapt to the pandemic context and protocols, in person meetings were resumed, to the extent to which the epidemiological circumstance allowed for it, while, at the same time, virtual, telephone and digital communication tools, such as emails and mobile applications were maintained.

At the same time, together with each of the communities, YPF is implementing agreed-upon social investment initiatives.

Main activities regarding the relationship with indigenous communities in 2021

Comunidad Paynemil/33 families/ Concession Area of Loma La Lata – Neuquén

Communication is carried out on a regular basis, based on a periodical meeting mechanism, which includes the submission of needs and expectations of the directors of the community on social and environmental issues. For operational projects, a continuous informative dialog is performed in the scope of due diligence, and compensation agreements are executed as part of the applicable regulations, while clean-up of environmental situations is carried out by the Company, according to what is set forth by the application authorities, and with active and open participation of the community.

In order to improve the quality of life of the families of the community and to promote their cultural strengthening, the Company implements several social investment projects agreed upon with the community, such as, for example, improving the electricity connections in homes; the supply of drinking water, energy, and gas; health insurance; veterinary service, and the systematization of alfalfa and corn cultivation plots for new members of the community.

Kaxipayiñ/33 families/Concession Area of Loma La Lata – Neuquén

Throughout 2021, dialog with community authorities prevailed, even when some community leaders gave rise to legal actions that prevented, without support, that YPF perform some preventive maintenance jobs of its facilities and comply with environmental remediation required as per applicable environmental regulations and that were approved by the provincial enforcement authorities. The interaction took place through regular face-to-face meetings, maintaining the applicable COVID-19 protocols, and through digital communication tools.

Regarding operative projects, the Company is still implementing a continuous informative dialog in the scope of due diligence, performing compensations agreed upon with the community within the scope of applicable regulations and applicable to the relationship between the parties.

YPF also maintained social investment projects throughout the year: health insurance for health assistance of people who do not have this service; energy in the homes; control posts for the safety of community members; drinking water supply, bulk gas, and the systematization of alfalfa crops.

Campo Maripe/7 families/Concession Area of Loma Campana – Neuquén

Throughout 2021, the dialog with the authorities of this community continued, in spite of their continuous conditions against the operational activities of YPF to the decision regarding a territorial claim that they maintain with the Province of Neuquén and with other third parties, and regarding which the company is an external third party. Within this framework, the projected activity in that area was minimal.

Lucero Pichinau/17 families – Neuquén

There is a permanent and participative dialog with its authorities. In 2021, YPF and the community carried out cultural strengthening agreements and improvement works in plots where the community plans to develop.

Of the current assets in production, 8 have required community consultation, representing 9.8% of total assets.

Of the assets under development, 5 have required community consultation, representing 6.8% of the total assets under development.

Besides contributing to the economic development of the country through their own sector activities, YPF is committed to cooperating with its stakeholders in common challenges that allow for the creation of long-term shared value. These social impact initiatives, based on strategic alliances with relevant parties in the public and private sectors, also strengthen the commitment of the employees and social license.

The company Social Investment and donations Policy, as well as the work plan of Fundación YPF provide the framework within which these efforts are developed, while different local contexts are taken into account for its application.

Throughout 2021, the main lines of action on which the programs and projects continued to be developed were:

- Sustainable local development;
- Quality education focused on energy;
- Strengthening of community abilities and competences;
- Care and protection of the environment;
- Inclusion and diversity.

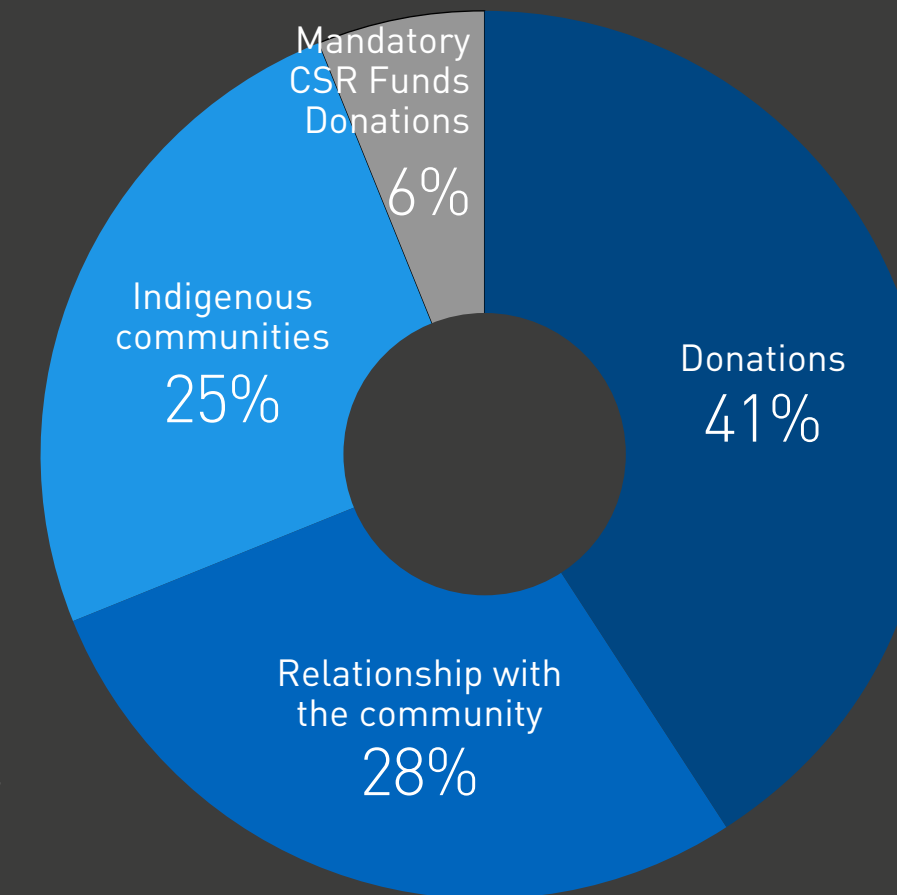
The extended context of the pandemic during 2021 demanded us to stay alert, with support actions for health and education systems of the local communities. In this sense, initiatives and donations to address the health emergency continued, as well as the program for the delivery of computer equipment in order to contribute with the reduction of the digital gap.

Contributions in 2021

GRI 413-1

YPF performed direct social investments through voluntary and mandatory contributions, donations, volunteering hours, support or sponsorships to educational and social institutions. In 2021, the total amount was 972,724 million Argentine pesos more than in 2020 and it was completely financed with YPF's own resources. Within that total amount, provincial Mandatory CSR Funds added up to 60.2 million Argentine pesos in this period.

SOCIAL INVESTMENT BY TYPE OF CONTRIBUTION IN 2021 (IN MILLIONS OF ARS)



Total social investment: M AR\$ 972.5

| VOLUNTARY SOCIAL INVESTMENT 2021 | MARS |
|----------------------------------|--------------|
| Total | 912,5 |
| Donations * | 396,0 |
| Relationships with the community | 269,8 |
| Indigenous communities | 246,7 |

* Donations: It includes the annual donation to Fundación YPF (230.3 million Argentine pesos), donations in kind (164.7 million Argentine pesos), and donations to help fight Covid-19 (960,934 Argentine pesos).

Cash contributions; 581.7 MARS; In-kind donations: 162MARS; General management expenses 101 MARS; Employee volunteering during paid working hours.11.2 MARS.

| MANDATORY CSR FUNDS** | 60 |
|-----------------------|----|
|-----------------------|----|

** USD 628,694 at the average exchange rate of the year 2021 (95.8 ARS/USD).

In addition to the amounts reported in the social investment chart by type for the year 2021, 191.1 million Argentine pesos were invested in the Forestry Project carried out in the province of Neuquén, as well as 81.6 million Argentine pesos that were taken as fiscal incentives available at a national and provincial level destined to 87 educational and cultural projects.

Forestry Project in Neuquén

Born in 1998 due to agreements celebrated by YPF with the province of Neuquén, the Forestry Project continues to this day with an accumulated investment that surpasses 30 million dollars. This amount takes into account the purchase of lands, the planting of almost 7,000 hectares of pines and their preservation, performed by Corporación Forestal Neuquina S.A. The planted hectares extend throughout the area of the province's mountain range, from North to South. It is a project that has a triple impact:

- **Economic:** it promotes the development of the industry, mainly of the Northern forestry basin of the province, driving a productive hub in that area.
- **Social:** more than 140 families are linked to the project, if we take into consideration those working in the preservation of the forests, silvicolous activities, and industrialization in Las Ovejas sawmill. In 2021, 137,515 daily wages were created for men and 8,096 for women.

→ **Environmental:** Based on afforestation methodologies and tools available on the website of the United Nations Framework Convention on Climate Change, we estimate that approximately 760,000 tons of CO2e were captured during the first 16 years of the project.

Fundación YPF

GRI 413-1

Fundación YPF promotes science, technology and energy-related education in all educational stages, since early childhood. It also promotes the sustainable development of the cities that generate energy for the country. For that purpose, it works on strategic alliances with various public, private, and social parties of each province or community. Its work plan is in line with the Sustainable Development Goals, focusing its contributions on SDG 7 (Affordable, safe, sustainable, and modern energy for everyone), 4 (Quality education), 5 (Gender equality), 9 (Innovation promotion), 11 (Inclusive, safe, and sustainable cities), and 17 (Alliances to achieve goals).

Every activity and program carried out by the foundation incorporates gender perspective.

Technical-professional training

Throughout 2021, we offered technical-professional training courses in subjects such as electrical installations, renewable energy, industrial automation and instrumentation for priority towns of the provinces of Neuquén, Chubut, Mendoza, Río Negro, Santa Cruz, and Tierra del Fuego.

Due to the context of the pandemic, they were carried out with virtual and online support by the teachers. We also provided the auto-support option through the digital platform Fundación YPF LAB. Practices were performed during the second four-month period in schools, training centers, municipal institutions, as well as in the refinery in Plaza Huinul.

- **2,650** people enrolled
- **91 courses** taught in 13 towns
- **1,351 people trained in technical professions**
- **19,000 people trained** in self-administered online courses from Fundación YPF LAB

Pilot project for the professional training for the basin of Neuquén and of the San Jorge gulf

With the eye on the new generations from the provinces producers of oil and gas, we launched a project that seeks to reduce the existing gap between the educational offer and the labor demand in the field of energy in the upcoming years. It is a series of proposals that bring technological innovation of the industry and the knowledge of its most distinguished professionals to students and technical and university education institutions of the basin of Neuquén and of the San Jorge gulf, as well as supporting applied research projects.

One of the first measures taken was professionalizing practices in drilling and finishing of hydrocarbon wells for technical schools of the basin of Neuquén, and production, secondary and tertiary recovery for institutions of the San Jorge gulf. In total, 84 students from Caleta Olivia, Plaza Huinul, Centenario and Añelo were able to learn in a real work environment with the latest technologies.

Moreover, together with the branch of UTN Regional Neuquén, we organized university level seminars about drilling and finishing of oil and gas wells. With the Universidad Nacional de Río Negro, we offered and intensive course in environment, hygiene, and work safety in the oil and

gas industry, in preparation for the technical college degree to be taught in 2022. In total, 134 students participated in both activities.

STEAM Education

We continue to organize workshops for teachers and students that stimulate curiosity for science and energy and in which the learning process is achieved through experiments, games, investigations, and relating contents with everyday life. In addition, during the year we created pedagogical games and laboratory kits for primary and secondary schools.

- **164** You and Primary Energy dissemination workshops, with the participation of **2,828** primary school students from 134 schools located in 15 towns of six provinces.
- **10 workshops y 7 webinars** regarding You and Primary Energy for teachers, with 588 trained teachers.
- **311 educational games** regarding You and Primary Energy and 150 laboratory kits delivered to **138 schools**.
- **269 teachers** of 138 secondary schools of six provinces trained in the course Energy

in secondary school. Teaching and learning based on projects.

- **300 educational games** regarding You and Secondary Energy delivered to **224 schools**.

Vocations Program

This initiative seeks to promote scientific and technological vocations of students, focusing on the link between academia and students in the senior year of secondary school. Thirty students of technical schools from Comodoro Rivadavia visited Manantiales Behr together with YPF professionals in 2021.

We have a website <https://vocaciones.fundacionypf.org.ar> with updated information concerning the academic offer of the country, in the fields of Science, Technology and Energy.

Scholarships program

With this program, we accompany public university students from strategic careers for the energy and technological development of the country linked to engineering, earth science, and environment. In 2021, the initiative provided:

- **149 undergraduate scholarships** for advanced students of careers linked to energy
- **75 undergraduate scholarships** for aspiring students
- **59%** of scholarship holding students were women.
- **186 mentorships** with YPF experts

Moreover, the annual fellows meeting took place for the first time outside of Buenos Aires, in a province that produces energy — Neuquén — in order for the participants to have a first-hand experience of the operations. The experience included technical visits to the Loma Campana field and the Plaza Huincul refinery. Before the meeting, an “ideatón” [marathon of ideas] in which solutions to energy industry challenges were created, related to conventional hydrocarbons, unconventional hydrocarbons, new sources of energy, renewable energies and Downstream.

ECO Challenge

In alliance with the National Institute of Technological Education, we awarded 20 scholarships to the best educational projects for the construction of an electric car, which were submitted by technical secondary schools of

all over the country. The scholarships allow the teams to participate in the competition, since they include a kit to build their prototype and the expenses for transportation, housing, and snacks. In the selection, the quality and the degree of innovation of the projects was not the only thing assessed, but also the level of participation of all the members of the teams and gender balance.

Notebooks for students of technical schools.

Focusing on oil towns and in order to contribute with equality in the access to quality education and to technology, we delivered 4,212 notebooks to 1st year students of the oriented course of all technical schools of 18 towns of the provinces of Tierra del Fuego, Santa Cruz, Chubut, Río Negro, Neuquén, Mendoza, and Buenos Aires. The devices have more than 100 educational resources available offline, provided by Educ.ar and Fundación YPF. The goal of this initiative was to reduce the impact of the digital gap deepened by the pandemic. YPF contributed part of the budget of said project.

Gender equality

We continue with the program “Ingenias”, in which teenage women identify a problem in their town and develop a mobile phone application as a solution. In this occasion, 111 young women participated, and 31 apps were created.

Through an alliance with ARSAT and INET, the competition “Tic Tac, ¡Hora de Innovar!” took place, which challenged female students from 12 to 18 years old and teachers from technical schools with the development of technological projects to solve problems from their communities regarding energy, mobility, waste, technology, and connectivity. The initiative had 300 enrolled teams and 1,300 participants.

Renewable energy

We organized a series of seminars regarding sustainability and energy transition for technical secondary and university education, and the general public, taught by experts from YPF, Y-TEC, and YPF Luz, which addressed the development and use of hydrogen, lithium, renewable energy, and those more environment-friendly. The series had 1,000 live participants and 5,000 subsequent visitors.

Sustainable cities

In alliance with governments and communities, and through a methodology developed together with the Inter-American Development Bank and CONICET, Fundación YPF accompanies cities where the company operates in the design of plans of action and projects that allow them to motivate sustainable development.

Río Grande Plan of action

In 2021, the Centenary Plan of Action was introduced: Sustainable Río Grande, created by our Foundation, the municipality, urban planning experts, and the citizens. The plan addresses the topics that the inhabitants of the town are more interested in, such as improving the habitat and public spaces, the quality of the environment and socioeconomic and gender equality, which were identified through an urban sustainability diagnostic. Additionally, an “Ideatón” was carried out, in which 34 residents proposed ideas for the new Río Grande urban park.

Project funding for 12 municipalities.

As a result of the training in sustainable land development for municipal technical teams that we carried out in 2020, projects aiming to improve waste management, urban forests, agroecology, and construction were designed, among other environmental and social issues.

In 2021, Fundación YPF and the company made the decision to support its implementation with a contribution of 10,000 dollars for each project presented by the 12 municipalities: Añelo, Rincón de los Sauces, Cutral C6, Centenario, Plaza Huincol, Allen, Río Grande, Senillosa, Caleta Olivia, Cañad6n Seco, Comodoro Rivadavia, and Malarg6e.

Sustainability trainings

Returning to in-person activities allowed for the reopening of participation spaces together with the communities and municipalities of Río Grande, Añelo, Caleta Olivia, Comodoro Rivadavia, Centenario, Cutral C6, and Plaza Huincol, with training activities in sustainability, waste management, and food sovereignty. 176 people participated in these activities. Moreover, together with the autonomous body Comodoro Conocimiento, we developed leader workshops in Comodoro Rivadavia, with 48 graduates.



08

ETHICS AND COMPLIANCE

ETHIC BUSINESS BASES

GRI 3-3, 2-15, 2-23, 2-24, 2-25, 2-26, 2-27



For YPF, doing the right thing and acting with integrity are a must in the way business is done, contributing to business sustainability and to strengthening our brand as employers. During 2021 we continued strengthening a culture of ethics and transparency within the organization, always subject to our corporate ethical values, legislation, and the highest national and international standards, including Transparency International's Business Principles for Countering Bribery.

For that purpose,, we have our Integrity Program, which includes:

- Ethics and Code of Conduct, as well as related policies
- Mapping of corruption risks, which is regularly updated
- Anti-corruption Policy
- Channels for filing formal complaints supported by policies for Non-retaliation and Complaints Investigation Management.
- Conflict of Interests Policy
- Third-party Employment Program

- Training and Educational Plans
- Systems for continuous control and monitoring

Having an independent Compliance department that reports to the Board's Auditing Committee, supported by upper management, has been key for advancing the program. This department is responsible for promoting the implementation of program initiatives, creating awareness about the importance of ethics and compliance within the organization, and providing advisory about any likely ethical dilemmas.

During 2021, the Compliance department strengthened its work by means of a triple approach:

- **Upper management:** mentoring as objectives and corporate strategy are being defined.
- **Strategic partner of the organization:** for better implementing said objectives across the varied businesses and company projects.
- **Third parties:** program extension for interacting with third parties, contributing value to the organization, providers, contractors, and stakeholders.

In 2021, YPF chaired the Commission of Compliance of the Argentine Institute of Petroleum and Gas (IAPG).

#COMPLIANCE MODE

With a commitment to ethics and transparency in mind for the YPF Group, in 2021 representatives of varied departments, including the president and the CEO of the company, met in order to strengthen our Integrity Programs in investee companies, sharing experiences and good practices.

Additionally, a conceptual framework was created for the sake of coherence and clarity in the integrity program of each company of the group, so as to allow for collaborative work between companies, the exchange of experiences, lessons learned, and continuous improvement.

Furthermore, actions to strengthen the ethical approach in specific areas of the company were developed, mechanisms for the mitigation of risks and continuous improvement of the Integrity Program were strengthened, and long-term measures were planned for continuous improvement. Likewise, we worked with investee companies (AESAs, OPESSA, Y-TEC, YPF GAS) in the implementation of their own integrity programs and in response to compliance requirements. We began work with YPF CHILE and YPF BRAZIL with the same objective.

Additionally, we continue to communicate our integrity endeavors at the Compliance department via an internal communications campaign, always placing an emphasis on zero tolerance to corruption, pursuant to key guidelines of the Ethics and Code of Conduct.

Corporate ethical values

Our values establish how we want to carry out our activities. The directives and expectations about the conduct of each member of the company stem from said values. These values are:

- We act with integrity
- We create value
- We give priority to safety
- We are committed to sustainability
- We focus on the client
- We value gender equality and diversity

In 2021 the codes of ethics and conduct of investee companies AESA, YPF GAS, YTEC, OPESSA were renewed in alignment with the ethical values of YPF.

The Ethics and Code of Conduct and the policies and standards related to the integrity of the company apply to all of its collaborators, Board members, affiliates, parent companies, contractors, subcontractors, providers, consultants, and the rest of the business partners that work with YPF either directly or on its behalf. The commitment to zero tolerance to bribery and corruption is established by the Ethics and Code of Conduct and the Anti-corruption Policy.

Ethics and Code of Conduct⁶⁵

Said guidelines and policies - the cornerstone of our Integrity Program - clearly establish what is acceptable and what is not allowed in YPF. Together with the commitment to “zero tolerance” against corruption, it accounts for the protection of those using the channels to file a complaint in good faith, the prohibition of making political contributions, guidelines about the attitude expected from a leader, measures for confidentiality and data protection, and a number of guidelines about how to interact with the public sector and business partners, reliable records and reporting, undue influence for personal benefit, protection of client privacy, responsible advertising, use of social networks and maintenance of a safe workplace, free of discrimination, mistreatment, and any other form of harassment or abuse, among others.

New policies

In 2021, we updated our integrity policies associated with the Ethics and Code of Conduct, the approval of which should be given in 2022. Among them:

- **Donation Policies:** Establish the guidelines to prevent risks of integrity within the framework of social investments carried out by YPF.

- **Gifts, Presents, and Hospitality Policies:** Establish the rules to be followed by YPF members for the delivery and acceptance of gifts, presents and hospitality, pursuant to the Ethics and Code of Conduct.

- **Procedure for the Recording of Gifts, Presents, and Hospitality to Public Officers:** Establish how YPF members must record gifts, presents, and hospitality extended to public officers within the limits allowed by YPF S.A. Policy for the Interaction with Public Officers.

At the same time, the Ethics Committee approved the recommendations regarding donations, as communicated to the corresponding business departments, which shall apply until formal approval of the new Policy.

Policy for the Management and Investigation of Complaints

GRI2-16

The company identifies a breach of law to its Code of Ethics, policies and integrity expectations by means of regular audits and complaints received via established channels. Complaints are managed according to the Policy for the Management and Investigation of Complaints that establishes the commitment of the company to keep the confidentiality of complainants, guarantee their safety, and to uphold the no-retaliation principle.

Several channels are available for members of the organization as well as for third parties, which are internally communicated and detailed in our website.⁶⁶ The option to remain anonymous is given in all options.

→ In person: via a conversation with the department manager or handler, a representative of the Department of Human Resources and Culture, Internal Audits Department, or Compliance Department.

→ Ethic Line, via Internet or Telephone:
<https://www.lineadenuncias.com.ar/>
User: YPF
Password: 1922YPFArgentina
0800-444-7722
Monday through Friday, from 9:00 a.m. to 6:00 p.m.

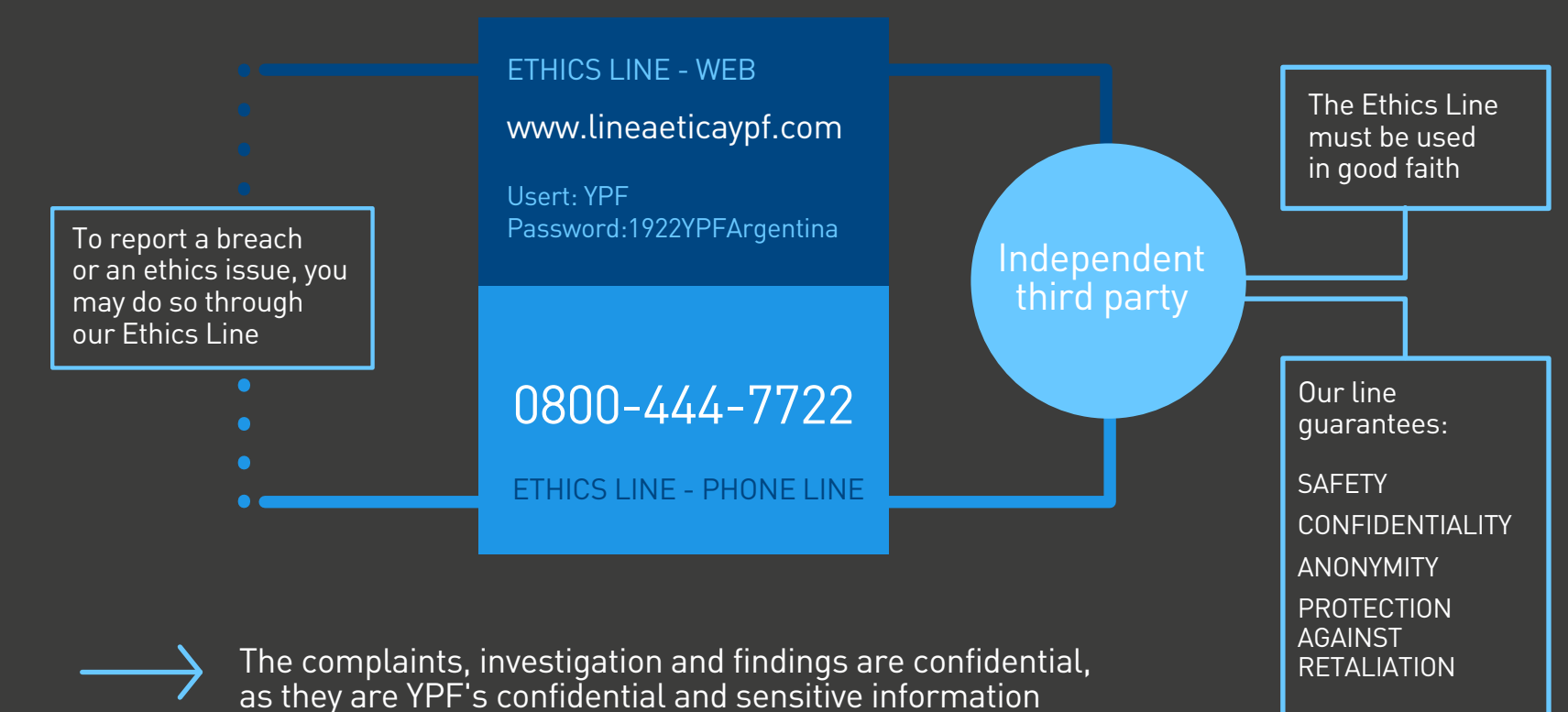
→ Ethics Committee Email:
ComiteDeEtica@ypf.com

In 2021 most complaints were received via the Ethic Line and the complainants did not opt for anonymity. Sixty-two percent of the complaints went through the entire management cycle. Out of that percentage, 72% required an action such as termination, disciplinary action, rotation, actions related to providers, monitoring, or recommendations, among others.

COMPLAINTS AND VIOLATIONS IN 2021

| COMPLAINTS ABOUT A VIOLATION OF THE CODE OF ETHICS | COMPLAINTS TAKEN INTO INVESTIGATION | | CLOSED COMPLAINTS | | SANCTIONED COMPLAINTS | |
|--|-------------------------------------|----|-------------------|----|-----------------------|----|
| | Nº | % | Nº | % | Nº | % |
| 164 | 160 | 98 | 102 | 62 | 75 | 72 |

COMPLAINT LINE



To report a breach or an ethics issue, you may do so through our Ethics Line



**DURING 2021,
WE CONTINUED
STRENGTHENING A
CULTURE OF ETHICS AND
TRANSPARENCY WITHIN
THE ORGANIZATION,
ALWAYS SUBJECT TO OUR
CORPORATE ETHICAL
VALUES, LEGISLATION AND
THE HIGHEST NATIONAL
AND INTERNATIONAL
STANDARDS.**

Conflict of Interest Policy

YPF has defined principles and rules to prevent and manage conflicts of interest in a way that every member of the company knows the steps to follow when facing these types of situations, declaring their conflict of interests and abstaining from getting involved in actions that lead to those conflicts.

The YPF directors are obliged to declare any conflict of such nature, present or likely, as well as any other issue about its existence before the Audit Committee. Therefore, the organization's personnel must declare their conflict of interests by filling out a form to be sent to the Compliance department.

Sixty-four percent of the conflicts of interests submitted and closed in 2021 required an action.

Continuous Monitoring and Evaluation Program

Aimed at evaluating the effectiveness of our approach to ethics and compliance, and the progress of the Integrity Program, including:

- review of our matrix of corruption risks,
- measurement of adherence to our Ethics and Code of Conduct,
- training plan implemented,
- traceability of providers classified according to level of corruption risk,
- analysis of how complaints regarding violations evolve and the trend of complaint channels.

As part of the Monitoring Program, by mid-2021 a poll was taken to measure how the Compliance department is valued and the level of knowledge members of the company have about the Integrity Program. Some of results worth highlighting are:

- Good knowledge of the Ethics and Code of Conduct, Anti-corruption Policy, complaint channels as well as the e-learning platform. Ninety-seven percent of those polled think an integrity program contributes towards ethics and transparency in the company.
- Ninety-five percent of those polled think it is important that the Compliance department be cross-linked to varied departments of the organization.
- Ninety-five percent sees the Compliance department as a strategic partner for the development of business, contributing value to the organization.

Additionally, we have strengthened actions for mitigation and continuous improvement of our Integrity Program. With that objective in mind, we have developed meetings with shared agendas across departments. We have also provided specific training to interest groups, developed new procedures and indicators for the management of integrity, and designed long-term actions.

Anti-corruption Policy

GRI 2-27, 3-3, 205-1, 205-3

Our commitment to integrity includes compliance with all applicable national and international anti-corruption standards. In such regard, we do not tolerate corruption of any level. The offer, delivery, and receipt of bribes, favors, or any form of corruption are prohibited. Also, the direct or indirect financing of electoral campaigns and political parties with company funds, or on its behalf, is prohibited.

During 2021, YPF Luz achieved a landmark for the Integrated Compliance Program: International Certification ISO 37001:2016 (Anti-bribery Management System) for 100% of its operations - free of non-compliances.

Mapping and Management of Corruption Risks

The Compliance department maps corruption risks associated to its own personnel and third parties, encompassing all its businesses and operations, and then integrates them into a map of corporate risks with the corresponding mitigation actions. In 2021, we updated the corresponding entries by sending forms and questionnaires to referential departments and operations, analysis of possible changes in our businesses and processes due to the pan-

demic, a study of the regulatory and industry ecosystem, and a diagnosis of the internal compliance processes that identified the implementation of our new tool for the management of integrity risks in third parties (GRIP) as a relevant element for mitigating corruption risks.

In 2021, there were no confirmed cases of corruption or significant non-compliances of laws and regulations.

Additionally, within the framework to update the map of corporate risks, we began to work in the analysis and identification of emerging risks associated with compliance. In addition, corruption risks were mapped in four investee companies.

Policy and Program for the Employment of Third Parties

SASB EM-EP-510A.2

YPF has a specific policy for guaranteeing that our commercial relations with others meet the corporate integrity standards and applicable anti-bribery and anti-corruption laws. This requirement is part of the general conditions for YPF purchases and contracts; contractors are required to communicate those to their own vendors.

In 2021, a tool that manages integrity risks in third parties (GRIP) was implemented. The tool classified them according to four levels of risk, each with specific mitigation actions.

Training and Communication in Ethics and Compliance

GRI 205-2

In order to strengthen commitment with our values and standards, the company provides its members with mandatory training on the Ethics and Code of Conduct, related policies, and anti-corruption procedures.

During 2021, all direct employees (20,963) and members of the Board (67%) received communication regarding anti-corruption policies and procedures. This action included 1,379 business partners.

On the other hand, 3,607 employees in the organization were trained via specific actions:

- 2,663 in the Ethics and Code of Conduct and anti-corruption policies (23.15% of the total that had not been trained in anti-corruption during 2019 and 2020)
- 792 in the management of integrity risks of third parties
- 152 in anti-corruption and interaction with public officers
- 8 government members in anti-corruption

Additionally, within the employability program framework: Downstream Leaders in Action, training to specific groups of interests and talks to young professionals were held.

Training to Providers

As part of the mitigation actions foreseen in the Third Parties Program, we implemented an online course for third parties classified as medium-high and high risk in 2021. Through this learning platform, we convey values and the main themes of our Integrity Program. The course also includes an evaluation in order to check if the contents were understood.

Additionally, 89 of our providers attended two virtual encounters for the training of industry providers, organized by the Compliance Commission of IAPG where our guidelines and anti-corruption standards were reinforced.

SASB EM-EP-530A.1

The oil and gas industry in Argentina is subject to extensive regulations, at both a national and provincial level. In order to detect and manage beforehand the risks and opportunities that may appear in this regard, YPF is a member of industry chambers that interact with officers and legislators at the three levels of government, such as the Chamber of Hydrocarbon Production Companies (CEPH). Moreover, it is a member of technical agencies such as the Argentine Oil and Gas Institute (IAPG) and the Chamber of Chemical and Petrochemical Industry (CIQyP). In this way, as a whole we approach topics such as the development of the different types of hydrocarbon resources, business sustainability, energy transitions, gender equality, supplier development, or the effectiveness in how resources are managed. Worth mentioning is also the follow-up of a set of possible regulations being evaluated at Congress, and at provincial legislatures when it comes to economics, taxes, the environment, and indigenous communities, among others.

Among the opportunities and regulatory risks with short and medium terms, we have recently identified:

REGULATORY RISKS

- New regulations related to mitigation and adaptation to climate change aimed at reducing carbon emissions, improving energy efficiency, and collecting carbon taxes.
- Continuity and duration of oil and gas concessions or of export permits.
- Regulations related to foreign trade, capital markets, types of exchange rates and taxes at national, provincial, and municipal levels
- Regulatory initiatives related to hydraulic stimulation and other non-conventional oil and gas drilling activities, as well as stricter requirements for our products.
- Limitations to the local prices of our products.
- Tighter restrictions on the labor market and on the direct provision of goods and services from small and medium-sized regional companies.

REGULATORY OPPORTUNITIES

- New National Hydrocarbon Investment Promotion Law.
- Provincial regulatory frameworks for specifically fostering investment in mature oil fields.
- Sustainable Mobility Bill.
- Modifications to the regulatory framework for promoting the use of renewable energies for the generation, injection, and distribution of electricity, which might include aspects related to energy efficiency, electric mobility, and sustainability of the production of wind and solar energy.
- Regulatory legal framework to promote the production of natural gas and furthering the development of compressed natural gas (CNG) and liquefied natural gas (LNG) in Argentina.

Contribution to Public Debate

GRI 2-28, 415-1

In order to channel their proposals in different topics of national interest, in 2021 YPF contributed with a total of 47,477 MARS over its participation in companies, organizations that promote responsible business deals, and study centers. More than 72% of the total contributed was designated to the promotion of responsible business practices, as well as to the oil and gas industry, while 15% was designated to strengthening institutions or initiatives of technical nature. Nine percent was contributed to institutions that boost commercial relations.

Yearly memberships and sponsoring of projects associated with IAPG (Argentine Oil and Gas Institute), Arpel (Regional Association of Oil and Gas Companies), and the Global Pact of United Nations are worth mentioning. The amount also covers payment of services, mainly for training.

Among the distinguished topics spearheaded by the company in 2021,

- Sustainability and employment agreements carried out in different provinces with Upstream activity to balance creating decent job posts with sustainable costs for the activity during the pandemic.
- The new legal framework necessary to boost the production of natural gas in Argentina, a transition fuel par excellence.
- The establishment of industry best practices regarding the management of methane emissions, which is coordinated by YPF within a work group of the IAPG.

It should be noted that the Ethics and Code of Conduct prohibits the financing of electoral campaigns and political parties; therefore, there were no contributions in this regard during the reported period.

PARTICIPATION OF YPF AT THE B20 SUMMIT

Between October 7th and 8th in 2021, Rome (Italy) hosted the last B20 Summit, the private sector equivalent of the G20, that gathers representatives of the major companies in the world, where first-level government officers participate and directors of international agencies such as OECD, WTO, and the United Nations Program for Climate Change meet. Within said framework, Sergio Affronti, CEO of YPF, co-chaired the Energy and Resource Efficiency group, led by Francesco Starace from ENEL. YPF was the only oil and gas company — and the only one from Latin America — present at the leadership table of that group.

Led by the motto “Remodeling the future: include, share, act,” two of the main topics addressed were decarbonization and sustain-

able development. In the role of representing Argentina and developing economies, YPF highlighted that decarbonization must be accompanied by fair transitions, which implies the acknowledgment that, in order to achieve the goals proposed, there are multiple paths and speeds, depending on preexisting resources, different start points, tools available, development priorities, and the share of each country in the carbon footprint (Argentina contributes with less than 1%). Likewise, we highlighted the role of natural gas produced in an efficient and sustainable manner as a transitional energy course, given its consumption generates less emissions than other fossil fuels, which makes it a flexible partner for the intermittence of renewable resources and the lack of availability of large-scale electrical storage.

GRI 207-1, 207-2, 207-3, 207-4.

YPF pays its taxes and files its tax returns pursuant to laws in an efficient and effective manner, providing faithful and complete information, seeking to minimize significant tax risks, uphold its rights and interests, and strengthen its bonds with different tax entities.

The Tax Policy of YPF defines goals, responsibilities, and resources for the comprehensive management of taxes, which is in charge of a team of professionals specialized in the business of hydrocarbons. All information related to taxes paid is reported in the financial statements of the company with the details required by applicable accounting standards.

Some of the tax practices that differentiate our tax approach are:

- Simplification of the company structure in the tax reports.
- Transfer prices aligned with the creation of value and the arm's length principle.

→ Presentation before the Federal Administration of Public Revenue (AFIP) of the country by country report (CbC) indicating the taxes paid by the company in each country.

→ Participation in the Extractive Industries Transparency Initiative (EITI), the global standard for the good governance of oil, gas and mineral resources.

Payment of taxes in 2021

Although YPF ended the year 2021 with an increase in income and growth of EBITDA in pesos, its revenue in 2018, 2019 and 2020 was in the red mainly due to devaluations of the currency in those years. Thus, the net earnings of the company for the year 2021 were completely absorbed by the losses accumulated in the preceding years. The above had a low impact on the income taxes paid by companies.

TAX REPORT (MILLIONS OF ARGENTINE PESOS)

| | ARGENTINA | OTHER COUNTRIES |
|-----------------------|-----------|-----------------|
| Earnings before taxes | 62.337 | 1.264 |
| Income tax accrued | -130 | -64.279 |
| Income tax paid | -385 | -130 |

| STANDARD | METRICS | UNIT | 2021 | 2020 | 2019 | 2018 |
|-----------|---|------------------------------|--------|--------|--------|--------|
| GRI 2-27 | Compliance with laws and regulations | | | | | |
| | Number of significant cases of non-compliance with laws and regulations during the period reported | Total number | 0 | - | - | - |
| | Total monetary value of fines due to non-compliance of laws and regulations paid during the reported period | Argentine pesos | 0 | - | - | - |
| GRI 205-2 | Communication and training in anti-corruption policies and procedures | | | | | |
| | Percentage of organization employees that were informed about anti-corruption policies and procedures | % | 100% | 100% | 100% | - |
| GRI 205-3 | Confirmed cases of corruption and measures taken | | | | | |
| | Total number and nature of confirmed corruption cases | Total number | 0 | 0 | 0 | - |
| GRI 415-1 | Public contributions | | | | | |
| | Institutions that promote responsible businesses, business associations, study centers, and institutions that collaborate in the discussion of public affairs | Thousands of Argentine pesos | 47,477 | 31,309 | 62,208 | 50,322 |
| | Lobbying or lobbying organizations | | 0 | 0 | 0 | 0 |
| | Political campaigns, organizations, or candidates | | 0 | 0 | 0 | 0 |
| | Others | | 0 | 0 | 0 | 0 |

Monetary contributions to institutions related to the company's activities; Largest contributions to entities: IAGP 12.4 MARS; AOG 10.2 MARS; ARPEL 3.4 MARS

- 1 Any legislation or administrative regulations that regulate the administration, management and control of companies or entities in which the national State or the provincial States have participation are not applicable, by virtue of the provisions of Law 26,741.
- 2 For more information on 2021 businesses performance, please refer to the 20F report available on YPF website.
- 3 General Law of Companies No. 19,550, Law 26,741, the Capital Market Law No. 26,831, the regulations of the Argentine National Securities Commission and the United States Securities and Exchange Commission.
- 4 On November 9, 2021, the Board of Directors agreed to accept the resignation of Elizabeth Dolores Bobadilla from her position as a regular director, being replaced by María Eugenia Tulia Snopek, whose resignation was accepted at the meeting held on December 3, 2021. She was replaced by Gabriela Alejandra del Valle Lasquera, with a term of office until new directors are elected through the shareholders' meeting.
- 5 More information about the Board of Directors' committees may be found at Comités del Directorio (Board of Directors Committees) (ypf.com)
- 6 More information in chapter 3 of this report.
- 7 The Audit Committee's report on YPF's cybersecurity strategy in 2021 has published in document 20F, under the title "Board of Directors and Senior Management Roles in cybersecurity", available at: <https://www.ypf.com/inversoresaccionistas/Lists/InformeAnualForm20/20-F-2021.pdf>
- 8 Loans less cash and investment in short-term financial assets.
- 9 Argentina.gob.ar (2022). Vaca Muerta. <https://www.argentina.gob.ar/economia/energia/vaca-muerta>
- 10 Available at: <https://www.ypf.com/LaCompania/Documents/Politica-de-sustentabilidad-YPF-2017.pdf>
- 11 M³ of extracted water/m³ of eq. oil produced.
- 12 (Number of major spills/gross production + accumulated injected water) x 10⁶
- 13 More information in chapter 3 of this report.
- 14 National resolutions 236/93 and 143/98 of the former National Secretary of Energy (SEN) and provincial regulations.
- 15 This mechanism was created through article twelve of the Kyoto Protocol, in order for developed countries to comply with part of their GHG emission reduction commitments and for developing countries to benefit from the activities of projects that generate certified emissions reductions, i.e., additional to any reduction that would have been produced if the project hadn't been in existence.
- 16 Potential for global warming from fossil source methane during a period of 100 years, according to the Sixth Assessment Report from the Intergovernmental Panel on Climate Change (IPCC), published in 2021.
- 17 The main sources of information used to date have been the API Compendium of Green House Gas Emissions Methodologies for the Oil and Natural Gas Industry (August, 2009), the IPCC Guidelines for National Greenhouse Gas Inventories (2006), and EPA AP42.
- 18 Cogeneration is the simultaneous production of electric power and thermal power for industrial processes, which allows for substantially reducing carbon emissions and energy expenses as well as using fuels more efficiently.
- 19 The emission factor of vapor produced in La Plata Cogeneration was used, which is assimilated to equipment used by the vapor supplier in CILC.
- 20 For the estimation of indirect emissions derived from the electric power purchase from CAMMESA, the last available Emission Factor (EF) of the Operative Margin (OM) of the electrical grid of Argentina (0.4282 tCO₂/MWh) was used, considering only the thermal element. The factor is available at: <http://datos.minem.gob.ar/dataset/calculo-del-factor-de-emision-de-co2-de-la-red-argentina-de-energia-electrica>
- 21 Relationship between renewable energy purchased from YPF Luz (source: YPF Luz) and the total of energy purchased by YPF (Source: APA).
- 22 Consumption of energy purchased by YPF from YPF Luz (source: YPF LUZ) + consumed renewable energy by YPF Luz (source: APA).
- 23 Where energy is transacted between marketers/generators and big users of the wholesale electric market.
- 24 More information about the consortium may be found at <https://y-tec.com.ar/consorcio-h2ar/>
- 25 A device for producing hydrogen through a chemical process (electrolysis) which separates hydrogen and oxygen molecules.
- 26 Penelli, Sebastián (September 2, 2021). YPF breaks into the lithium business with a new company. *Ámbito*. <https://www.ambito.com/energia/ypf/incursiona-el-negocio-del-litio-una-nueva-empresa-n5268831>
- 27 These are the projects defined as critical according to the internal procedure of Investments and Disinvestments Management.
- 28 The extracted water includes the external water capture plus the water production in the oil and gas wells.
- 29 The water rising with the hydrocarbons being extracted from the field itself, or obtained in exploratory surveys. After its treatment, it is reused for secondary recovery, hydraulic stimulation, or it is injected for final disposal.
- 30 Collected from surface or underground stream beds, or the public water supply.
- 31 The new combined cycle of YGEN II that began operations in October 2020, which has cooling towers requiring water.
- 32 More information in the "Business Strategy" section in Chapter 1 of this Report.
- 33 Water consumed is the external water capture minus discharged water.
- 34 Water that is reused within the same facility in the same industrial processes or in other operations. The production water that is treated and incorporated to the secondary recovery process in mature fields has been considered as such since 2017.
- 35 Water injected at the oil field to increase production.
- 36 There are differences in the 2020 (173,071 Ha) and 2021 surfaces due to the adjustments to the surfaces of protected areas in Tierra del Fuego.
- 37 A Ramsar site is a wetland site designated to be of international importance under the Ramsar Convention, also known as "The Convention on Wetlands", an intergovernmental environmental treaty established in 1971 by UNESCO, which came into force in 1975.
- 38 The number of species present in the area and included in the IUCN (The International Union for Conservation of Nature) Red List of Threatened Species and in the national conservation lists.
- 39 The drill cuttings are formed by the fragments of rock coming through the geological formations, as well as the remainders of fluids used in the operation, which in turn are made of clay and a liquid that can be water or oil-based.
- 40 Those that come from the remediation of liabilities in environment situations.
- 41 More information in the "Business Strategy" section in Chapter 1 of this Report.
- 42 In 2021, a balanced average was calculated with regards to the concentration of all active well sinkholes of the unconventional segment.
- 43 For more information: https://www.ypf.com/LaCompania/Documents/POLITICA-EXC-OPERACIONAL-14-05.pdf?_ga=2.94971612.1787625092.1651148599-71453940.1648066269
- 44 For more information: <https://www.ypf.com/Proveedores/Paginas/quieres-ser-proveedor-de-ypf.aspx>
- 45 Risk Studies: Hazop: Hazard and Operability /Hazid: Hazard Identification/SIL: Safety IntegrityLevel.
- 46 Nearly 500 hours of training in the 10 golden rules were conducted for the company's own employees and contractors.
- 47 As defined by the International Association of Oil and Gas Producers (OGP).

48 In 2018, Downstream events were reported and as of 2019, events from the Upstream and Gas and Energy businesses were included.

49 Coverage of 70% of certified facilities.

50 Coverage of 70% of certified facilities.

51 Coverage of 50% of certified facilities.

52 Learn more: <https://www.ypf.com/diversidad/Paginas/comite-de-diversidad.aspx>

53 Executive and management positions.

54 First level of management, leadership and coordination.

55 Learn more in the "Attraction and Retention of Talents" section of this chapter.

56 Number assigned by the Argentine Government for the attention of domestic violence.

57 The sum of workers hired in the period divided by the average staff of the period.

58 The total annual compensation for the highest paid person in the organization divided by the average annual total compensation for all employees of the organization, excluding the highest paid person. The compensations of vice-presidents and CEOs are not taken into account.

59 The percentage increase in the total annual compensation of the highest paid person in the organization divided by the average percentage increase in the total annual compensation of all employees of the organization, excluding the highest paid person. The compensations of vice-presidents and CEOs are not taken into account.

60 Formula: $(\text{total revenue} - (\text{total operating expenses} - \text{total employee-related expenses})) / \text{total employee-related expenses}$

61 The survey was not conducted during the years 2020 and 2021 due to COVID. It was resumed during the year 2022.

62 More information may be found in Chapter 8 of this report.

63 At the time this Report is published, we have an updated policy on Human Rights and on Relationships with the Com-

munities, in line with the United Nations Guiding Principles on Business and Human Rights.

64 14% of proven net reserves of YPF are located in areas where indigenous communities live or areas that are close to them. If we take into account the probable net reserves, the percentage is 8%.

65 Available at: <https://www.ypf.com/Paginas/home.aspx>

66 Available at: <https://www.ypf.com/LaCompania/compliance/Paginas/Compliance-integridad-y-etica.aspx>

This report is not intended to and will not constitute an offer to sell or a solicitation of an offer to sell or a solicitation of an offer to buy, any security, or a solicitation of any vote of approval, nor will any sale be made of any securities. securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction.

Forward-looking Statements

Certain matters discussed in this report include forward-looking statements that are subject to risks and uncertainties. Readers are advised that our forward-looking statements do not constitute guarantees of our future actions or developments, which may differ materially from those described or recommended herein. We undertake no duty to provide updates to these forward-looking statements after the date of this report to reflect events or changes in circumstances or changes in expectations or the occurrence of expected events. Links to websites in this report are for informational purposes only.

ABOUT THIS REPORT

GRI 2-3, 2-4, 2-5, 2-14



This YPF Sustainability Report describes the economic, social and environmental performance of the company and its subsidiaries during the period between January 1 and December 31, 2021. As in previous years, it includes the activities developed by Fundación YPF.

This report has been prepared in accordance with the GRI Standards Core Option (2021), aligning for the first time with the new Oil and Gas industry standard, GRI 11, which was published in 2021. In addition, it uses the Sustainability Accounting Standards Board (SASB) standard for the Oil and Gas Exploration and Production sector as a reference, together with the recommendations of the Task Force on Climate-Related Financial Disclosures. It also represents the Communication on Progress to the United Nations Global Compact (UNGC) in relation to its 10 Principles and Sustainable Development Goals (SDGs), to which YPF adheres. The report has been approved by the company's CEO, analytically reviewed and externally verified by Deloitte & Co S.A., with limited independent assurance on certain indicators of sustainable management that the company has included in the document.

Indicators and historical numbers may in some cases be adjusted based on changes in reporting frameworks, or in the calculation of factors, and also based on a reclassification of information following relevant analyses. In these cases, the historical series is reconstructed, the adjustments are explained and the indicator is included again in the verification base. In this edition, there have been no significant modifications to the information published in previous reports or to the material topics prioritized.

More information on YPF's performance on environmental, social and governance issues included in this report can be accessed through the corporate website (to access, [click here](#)), where the corresponding GRI table, SASB and TCFD are available. If you have any questions regarding the contents of this report, you can also write to sustentabilidad@ypf.com.

CHAPTER 1: "ENERGY COMPANY"

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|----------------------------|--|--|-----------|---------|---------|---------|
| | Total hydrocarbon production | BOE/D (thousands of barrels of oil equivalent per day) | 469.7 | 467.0 | 514.4 | 530.2 |
| | Natural gas production | Mm3/d (Million cubic meters per day) | 35.7 | 35.6 | 39.7 | 42.0 |
| | Crude oil production | Thousands of BBL (barrels) per day | 210.9 | 206.8 | 226.1 | 227.1 |
| | LNG production | Thousands of BOE per day | 34.4 | 36.5 | 38.5 | 38.8 |
| | Shale production (YPF S.A. and partners) | Thousands of BOE per day | 139.0 | 101.3 | 92.1 | 109.4 |
| | Refinery processing levels | % | 82% | 73% | 87% | 88.8% |
| | Gasoline supply in the country (market share) | % | 54% | 53% | 56% | 56% |
| Size of the Company | Percentage of participation in the production of oil in the country | % | 40% | 43% | 42% | 46% |
| GRI 2-6 | Percentage of participation in the production of gas in the country, including LNG | % | 31% | 34% | 33% | 37% |
| | Diesel production | Millions of BBL per year | 43.6 | 39.3 | 41.0 | 41.5 |
| | Gasoline production | Millions of BBL per year | 24.0 | 17.8 | 24.8 | 26.1 |
| | Fuel oil production | Thousands of tons per year | 390 | 349 | 308 | 234 |
| | Total electricity produced | GWh | 11,444 | 8,991 | 8,930 | 9,710 |
| | Total proved reserves* | Millions of BOE | 1,143 | 922 | 1,073 | 1,080 |
| | Installed capacity of YPF Luz** | MW | 2,384 | 2,250 | 1,819 | N/A |
| | Sales** | mill. of Argentine pesos | 1,271,330 | 669,186 | 678,595 | 435,820 |

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|--------------------------------|------------------------------|--------------------------|-----------|-----------|-----------|---------|
| Size of the Company GRI 2-6 | EBITDA** | mill. of Argentine pesos | 365,514 | 97,435 | 169,857 | 121,549 |
| | Fiscal year result** | mill. of Argentine pesos | -808 | -71,017 | -33,379 | 38,606 |
| | Total Loss** | mill. of Argentine pesos | 1,541,950 | 1,239,830 | 1,025,190 | 631,659 |
| | Total Net Profit** | mill. of Argentine pesos | 848,118 | 683,395 | 548,099 | 362,357 |
| | Gas stations | quantity | 1,653 | 1,632 | 1,620 | 1,591 |
| | Direct employees (YPF Group) | quantity | 20,951 | 19,812 | 23,376 | 20,702 |
| | Female employees | % | 21.5% | 21.7% | 20.5 % | 21.1% |

* Reserve estimates were prepared using engineering and geological standard methods, generally accepted by the oil industry and according to the Securities and Exchange Commission (SEC) and the National Securities Commission (CNV) applicable regulations. The choice of the method or the combination of methods used for each field analysis was based on the experience in the area, the extent of development, the quality and reliability of the source information, and the production history. The value of total proved reserves corresponds to developed and undeveloped reserves and it is comprised of the addition of crude oil, gas and LNG reserves, expressed in equivalent barrels. For more details, refer to 20-F, by clicking here

** The information is presented in millions of Argentine pesos and arises from the Consolidated Financial Statements of YPF S.A., as of December 31, 2021, approved by the Board of Directors and the Shareholders Meeting and audited by Deloitte. For more detailed financial information, click here. Reported EBITDA represents Adjusted EBITDA. EBITDA = Operating profit + Depreciation of properties, plants, and equipment + Depreciation for the right to use assets + Amortization of intangible assets + Unproductive exploratory drilling + (Reversion)/Property, plant, and equipment deterioration. Adjusted EBITDA = EBITDA that excludes the impact of IFRS 16 and IAS 29 + non-recurring items.

CHAPTER 3: "CLIMATE ACTION"

The Indicators of Climate action cover all controlled companies, with the exception of MetroGAS.

| | UNIT | 2021 | 2020 | 2019 | 2018 |
|---|-----------------------------|-------------|-------------|-------------|-------------|
| Total energy consumption (a+b) | GJ | 199813405 | 183,063,035 | 203,010,971 | 212,537,928 |
| Energy consumption from non-renewable sources (a) | | | | | |
| Total energy consumption | GJ | 197,563,322 | 181,426,838 | 201,497,595 | 212,064,337 |
| Fuel consumption | 106 T | 3.82 | 3.49 | 3.84 | 3.87 |
| Purchased electricity | 106 MW/h | 2.46 | 2.24 | 2.37 | 2.31 |
| Purchased steam | 106 GJ | 11.1 | 7.67 | 7.41 | 7.65 |
| Energy consumption from renewable sources (b) | | | | | |
| Total energy consumption | GJ | 2,250,083 | 1,636,196 | 1,513,375 | 321,710 |
| Electricity | | | | | |
| Purchased | GJ | 8,863,161 | 8,056,156 | 8,483,879 | 7,756,629 |
| Produced | GJ | 42,960,315 | 34,835,873 | 32,130,497 | 35,520,238 |
| Sold | GJ | 36,673,460 | 28,693,132 | 25,690,238 | 28,425,199 |
| Energy intensity | | | | | |
| YPF (weighted) | GJ/production unit | 4.56 | 4.69 | 4.77 | 4.78 |
| Upstream | GJ/t of Oil&Gas produced | 2.75 | 3.16 | 3.22 | 3.31 |
| Downstream | GJ/t of crude oil processed | 5.02 | 5.10 | 5.50 | 5.31 |
| G&E | GJ/MWh of energy produced | 5.72 | 6.13 | 6.15 | 6.32 |

**Energy consumption and
energy intensity**
GRI 302-1, 302-3

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 | |
|--|--|---------------------------|------------|------------|------------|------------|--|
| Scope 1 of direct GHG emissions GRI 305-1 SASB EM-EP 110a.1, EM-EP 110a.2 | Total direct GHG emissions (Scope 1)* | tCO ₂ e | 15,603,375 | 15,204,794 | 16,981,198 | 17,951,758 | |
| | Carbon dioxide (CO ₂) emissions | tCO ₂ | 12,228,567 | 11,352,215 | 12,792,308 | 13,557,352 | |
| | Methane (CH ₄) emissions | tCO ₂ | 3,190,378 | 3,684,834 | 3,996,431 | 4,185,646 | |
| | Methane (CH ₄) emissions | % of the total of Scope 1 | 0.20% | 0.24% | 0.24% | 0.23% | |
| | Nitrous oxide (N ₂ O) emissions | tCO ₂ | 184,411 | 167,746 | 192,458 | 208,760 | |
| | Direct GHG emissions per business unit (Scope 1) | | | | | | |
| | Upstream | tCO ₂ e | 7,840,651 | 8,685,380 | 9,991,616 | 10,565,160 | |
| | Refineries | tCO ₂ e | 3,071,685 | 2,751,091 | 3,448,653 | 3,511,116 | |
| | Chemicals | tCO ₂ e | 622,296 | 529,395 | 678,542 | 638,610 | |
| | Logistics | tCO ₂ e | 145,756 | 142,699 | 160,217 | 190,044 | |
| | Gas and Energy | tCO ₂ e | 3,907,220 | 3,081,476 | 2,689,022 | 3,033,476 | |
| | Business and Others | tCO ₂ e | 15,767 | 14,753 | 13,148 | 13,353 | |
| | Direct GHG emissions by source (Scope 1) | | | | | | |
| | Flared hydrocarbons | tCO ₂ e | 1,270,408 | 1,293,244 | 1,374,330 | | |
| | Other combustions | tCO ₂ e | 10,909,734 | 10,446,631 | 11,765,860 | | |
| Process emissions | tCO ₂ e | 29,900 | 25,213 | 27,547 | | | |
| Other vented emissions | tCO ₂ e | 2,168,697 | 2,696,333 | 2,979,756 | | | |
| Operations fugitive emissions | tCO ₂ e | 633,721 | 741,926 | 833,599 | | | |

* The total of Scope 1 of direct GHG emissions takes into consideration CO₂, N₂O, and CH₄. The estimates have the rates of the potential for global warming (PGW) of AR4.

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|--|---|---------------------|-----------|-----------|-----------|-----------|
| Scope 2 of indirect GHG emissions GRI 305-2 | Total indirect GHG emissions when generating energy (Scope 2) | tCO ₂ eq | 757,093 | 692,783 | 688,682 | 884,484 |
| | Indirect emissions Electricity* | tCO ₂ eq | 384,900 | 313,032 | 315,057 | 479,410 |
| | Indirect emissions Steam | tCO ₂ eq | 372,193 | 379,751 | 373,625 | 405,074 |
| | Upstream - Purchased electricity | MWh* | 1,032,997 | 1,222,175 | 1,212,054 | 1,140,855 |
| | | tCO ₂ eq | 191,221 | 177,845 | N/A | N/A |
| | Downstream - Purchased electricity | MWh* | 1,147,357 | 987,576 | 1,126,448 | 1,146,793 |
| | | tCO ₂ eq | 190,518 | 131,595 | N/A | N/A |
| | Others/Purchased electricity | MWh* | 11,635 | 8,388 | N/A | N/A |
| | | tCO ₂ eq | 3,160 | 3,592 | N/A | N/A |

For the calculation of emissions corresponding to electric power purchased from the Argentine electric market, only the percentage of non-renewable electric power purchased from CAMMESA was taken into account. The last emission factor generated by the Secretary of Energy of the Argentine Republic available at the time of calculation was used. It has a value of 0.4282 tCO₂/MWh. The energy purchased from YPF Luz is not included, since the emissions from its generation are already included within Scope 1 of the company.

| | INDICATOR | UNIT | 2021 | 2020 |
|--|---|---------------------|------------|------------|
| Scope 3 of other indirect GHG emissions GRI 305-3 | Total of other indirect GHG emissions (Scope 3) | tCO ₂ eq | 62,359,732 | 54,715,930 |
| | Use of the products sold (Category 11) | tCO ₂ eq | 59,216,913 | 52,715,838 |
| | Purchase of goods and services (Category 1) | tCO ₂ eq | 1,282,941 | 825,361 |
| | Waste generated in operations (Category 5) | tCO ₂ eq | 1,066,559 | 485,987 |
| | Treatment of end of life of the products sold (Category 12) | tCO ₂ eq | 599,239 | 512,178 |
| | Franchises (Category 14) | tCO ₂ eq | 194,080 | 176,565 |

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|--|----------------|---|-------|-------|-------|-------|
| Intensity of GHG emissions* GRI 305-4 | YPF (weighted) | tCO ₂ /MWh of produced electricity | 0.325 | 0.366 | 0.374 | 0.380 |
| | Upstream | tCO ₂ e/t of Oil&Gas produced | 0.348 | 0.404 | 0.409 | 0.420 |
| | Downstream | tCO ₂ e/t of crude oil processed | 0.28 | 0.29 | 0.31 | 0.30 |
| | Gas and Energy | tCO ₂ /MWh of produced electricity | 0.322 | 0.344 | 0.347 | 0.360 |

* The metrics of intensity consider direct GHG emissions (Scope 1).

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|--------------------------------|---|------------------|---------|---------|---------|---------|
| GHG emissions reduction | Total emissions reduction by CDM projects | tCO ₂ | 185,232 | 113,840 | 168,687 | 172,909 |
| GRI 305-5 | La Plata Industrial Complex (CILP) | tCO ₂ | 163,479 | 98,263 | 150,099 | 152,697 |
| | Luján de Cuyo Industrial Complex (CILC) | tCO ₂ | 21,753 | 15,577 | 18,589 | 20,212 |

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|-------------------|--|--------------------|-------------|-------------|------|------|
| SASB EM-EP-420a.2 | Estimated carbon dioxide emissions included in proven hydrocarbon reserves | tCO ₂ e | 423,757,972 | 337,642,981 | N/A | N/A |

| | | UNIT | 2021 | 2020 | 2019 | 2018 |
|--|---|------|---------|---------|---------|---------|
| Volume of flared and vented hydrocarbon GRI OG6 | Flared gas and Vented gas | | | | | |
| | Flared gas | t | 560,588 | 468,702 | 522,952 | 369,911 |
| | Vented gas | t | 119,111 | 112,846 | 116,918 | 114,435 |
| | Intensity of flared and vented hydrocarbon (Upstream)* | | | | | |
| | Combustion in flare/production | t/t | 0.017 | 0.015 | 0.014 | 0.009 |
| | Vented gas/production | t/t | 0.005 | 0.005 | 0.005 | 0.004 |
| | Intensity of flared and vented hydrocarbon (Downstream)** | | | | | |
| | Combustion in flare/production | t/t | 0.013 | 0.012 | 0.013 | 0.010 |
| | Vented gas/production | t/t | 0.000 | 0.000 | 0.000 | 0.000 |

* Volume of flared and vented hydrocarbon by production unit (tons of natural gas and oil produced).

** Volume of flared and vented hydrocarbon by production unit (tons of crude oil processed).

CHAPTER 4: “SUSTAINABLE PRODUCTION”

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|---|----------------------|------|-------------|-------------|-------------|-------------|
| Capital investments and operational expenses linked to environmental management | Total | USD | 466,879,700 | 224,388,482 | 328,160,987 | 328,146,335 |
| | Capital investments | USD | 365,852,000 | 152,022,482 | 229,999,779 | 228,052,667 |
| | Operational expenses | USD | 101,027,700 | 72,316,000 | 98,161,208 | 100,093,668 |

WATER MANAGEMENT

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 | |
|---|--|--|---------|---------|---------|---------|--|
| Water extraction GRI 303-3 SASB EM-EP-140a.1 | Total water extraction* | Kt | 216,011 | 219,760 | 241,129 | 243,300 | |
| | Total water produced | Kt | 151,064 | 156,642 | 174,308 | 174,621 | |
| | Total from external sources | Kt | 64,947 | 63,118 | 66,821 | 68,679 | |
| | Total from public water distribution system | Kt | 1,766 | 1,478 | 2,262 | 2,290 | |
| | Total from superficial sources | Kt | 46,011 | 46,620 | 48,402 | 49,927 | |
| | Total from underground sources | Kt | 17,054 | 14,973 | 15,982 | 16,245 | |
| | Total from other external sources | Kt | 117 | 47 | 175 | 217 | |
| | Water extraction by business | | | | | | |
| | Upstream | Kt | 17,097 | 12,369 | 17,710 | 16,378 | |
| | Downstream | Kt | 37,186 | 44,075 | 44,285 | 46,595 | |
| | Gas and Energy | Kt | 10,620 | 6,622 | 4,746 | 5,614 | |
| | Other businesses | kt | 43 | 52 | 80 | 92 | |
| | Water extraction from areas with water stress | | | | | | |
| | Total of areas with water stress | Kt | 23,273 | 25,099 | 24,324 | 23,780 | |
| | Total of areas with water stress | % of total extraction | 35.8% | 39.8 | 36.4 | 34.6 | |
| | Intensity of water extraction | | | | | | |
| | YPF (weighted) | kt of extracted water/production unit | 1.77 | 2.72 | 2.28 | 2.36 | |
| | Upstream | kt of extracted water/kt of crude oil and gas produced | 0.76 | 0.57 | 0.72 | 0.65 | |
| | Downstream | kt of extracted water/kt of crude oil processed | 2.74 | 3.74 | 3.18 | 3.25 | |
| Gas and Energy | kt of extracted water/MWh of electricity produced | 0.0009 | 0.0007 | 0.0007 | 0.0008 | | |

* Extracted water = External captured water + produced water. Produced water is that which accompanies hydrocarbons when extracted, proceeding from the field itself, or that obtained in exploratory probing. After its treatment, it is reused for secondary recovery, hydraulic stimulation, or it is injected for final disposal.

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 | |
|------------------------------|---|------|-----------|---------|---------|---------|--|
| Water discharge GRI 303-4 | Total water discharge* | Kt | 182,872 | 191,715 | 209,776 | 208,024 | |
| | Process water discharge** | Kt | 29,605 | 30,458 | 26,336 | 24,835 | |
| | Injected water*** | Kt | 153,267 | 161,257 | 183,441 | 183,189 | |
| | Process water discharge by destination | | | | | | |
| | Surface body | Kt | 26,392 | 28,199 | 22,331 | 21,151 | |
| | Underground body/Formation | Kt | 3,212 | 2,258 | 3,076 | 2,841 | |
| | Soil | Kt | 1.33 | 1.88 | 929 | 843 | |
| | Process water discharge by business | | | | | | |
| | Upstream | Kt | 2,767 | 1,683 | 2,285 | 2,051 | |
| | Downstream | Kt | 24,687 | 28,202 | 23,893 | 22,049 | |
| | Gas and Energy | Kt | 2,151 | 573 | 158 | 734 | |
| | Water discharge by area | | | | | | |
| | Fresh water | Kt | 24,326.55 | N/A | N/A | N/A | |
| | Other waters | kt | 5,278.53 | N/A | N/A | N/A | |
| | Water discharge in areas with water stress | | | | | | |
| | Fresh water | kt | 18,697.78 | N/A | N/A | N/A | |
| | Other waters | kt | 0 | N/A | N/A | N/A | |
| | Hydrocarbon concentration in water discharge - 2021 | | | | | | |
| | Produced water discharge | kt | 2,767.05 | | | | |

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|-------------------------------------|---|------|--------|------|------|------|
| Water discharge GRI 303-4 | Hydrocarbon concentration in produced water discharge | mg/L | 48.9 | | | |
| | Process water discharge | Kt | 29,605 | | | |
| | Hydrocarbon concentration in process water discharge | mg/L | 5.3 | | | |

* Total water discharge = Discharged water + injected water.

** Discharged water: discharged to a receiving body (surface or underground), channels, wastewater network, etc. The water is discharged in compliance with the conditions established by the application authority. It includes the water captured by the Luján de Cuyo Industrial Complex that circulates, as authorized, through the refinery's supply channel, whether it has been incorporated into the production process (consumed water) or not.

*** Injected water: into the field itself in order to increase production.

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|---------------------------------------|--|------------------------|--------|--------|--------|--------|
| Water Consumption GRI 303-5 | Total water consumption | Kt | 35,342 | 32,660 | 40,486 | 43,845 |
| | Water consumption in areas with water stress | | | | | |
| | Consumption in areas with water stress | Kt | 4,575 | 3,657 | 7,373 | 8,981 |
| | Consumption in areas with water stress | % of total consumption | 12.9 | 11.2 | 18.2 | 20.5 |
| | Intensity of water consumption | | | | | |
| | YPF (weighted) | Kt/mmboe | 127.3 | 123.2 | 137.4 | 144.6 |

* Taking the suggestion of GRI, in cases where there is no direct measurement of water consumption, we have calculated the difference between captured water and process discharge in order to obtain total consumption.

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|---|--|------------------|-----------|-----------|-----------|-----------|
| Produced water and generated flowback SASB EM-EP-140A.2 | Total of produced water and flowback (Upstream) | Kt | 151,064 | 156,642 | 174,308 | 174,621 |
| | Discharged | % | 1.8 | 1.1 | 1.3 | 1.1 |
| | Injected | % | 98.2 | 98.9 | 99.2 | 99.7 |
| | Recycled | % | 0.04 | 0.02 | 0.03 | 0.03 |
| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
| Use of water for hydrofracture SASB EM-EP-140a.3, EM-EP-140a.4 | Hydraulically fractured wells with public disclosure of chemicals used for fluids | % of total wells | 100 | 100 | 100 | 100 |
| | Sites of hydraulic fracture where the quality of underground or surface water has deteriorated as compared to a baseline | % of total sites | 0 | 0 | 0 | 0 |
| | Total volume of hydraulic fracture fluid* | cubic meters | 7,332,093 | 1,857,294 | 3,772,898 | 2,007,878 |
| | Percentage of used hydraulic fracture fluid which is hazardous | % | <1% | <1% | <1% | N/A |

* More than 95% of the fluid is water, 4% is sand, and less than 1% are chemicals.

MANAGEMENT OF BIODIVERSITY

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 | |
|---|----------------------|----------|------|------|------|------|--|
| <p>Species that appear on the IUCN Red List and in national preservation lists whose habitats are in areas that are affected by operations</p> <p>GRI 304-4</p> | Laguna de Llanquihue | | | | | | |
| | Total species: Birds | quantity | 105 | 105 | 102 | 101 | |
| | Not threatened | quantity | 98 | 98 | 96 | 95 | |
| | Minor concern | quantity | 0 | 0 | 0 | 0 | |
| | Almost threatened | quantity | 0 | 0 | 0 | 0 | |
| | Vulnerable | quantity | 7 | 7 | 6 | 6 | |
| | Threatened | quantity | 0 | 0 | 0 | 0 | |
| | Endangered | quantity | 0 | 0 | 0 | 0 | |
| | Auca Mahuida | | | | | | |
| | Total species: Birds | quantity | 86 | 86 | 86 | 85 | |
| | Not threatened | quantity | 77 | 77 | 77 | 77 | |
| | Minor concern | quantity | 0 | 0 | 0 | 0 | |
| | Insufficiently known | quantity | 1 | 1 | 1 | 1 | |
| | Vulnerable | quantity | 4 | 4 | 4 | 4 | |
| | Threatened | quantity | 2 | 2 | 2 | 2 | |
| | Endangered | quantity | 1 | 1 | 1 | 1 | |
| | Not considered | quantity | 1 | 1 | 1 | | |

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|---|-------------------------|----------|------|------|------|------|
| Species that appear on the IUCN Red List and in national preservation lists whose habitats are in areas that are affected by operations GRI 304-4 | Total species: Mammals | quantity | 18 | 18 | 18 | 18 |
| | Not threatened | quantity | 11 | 11 | 11 | 11 |
| | Undetermined | quantity | 1 | 1 | 1 | 1 |
| | Almost threatened | quantity | 2 | 2 | 2 | 2 |
| | Vulnerable | quantity | 3 | 3 | 3 | 3 |
| | Threatened | quantity | 0 | 0 | 0 | 0 |
| | Endangered | quantity | 0 | 0 | 0 | 0 |
| | Exotic | quantity | 1 | 1 | 1 | 1 |
| | Total species: Reptiles | quantity | 22 | 22 | 22 | 22 |
| | Not threatened | quantity | 8 | 8 | 8 | 8 |
| | Undetermined | quantity | 4 | 4 | 4 | 4 |
| | Almost threatened | quantity | 0 | 0 | 0 | 0 |
| | Vulnerable | quantity | 2 | 2 | 2 | 2 |
| | Threatened | quantity | 0 | 0 | 0 | 0 |
| | Endangered | quantity | 0 | 0 | 0 | 0 |
| Insufficiently known | quantity | 2 | 2 | 2 | 2 | |
| Not considered | quantity | 6 | 6 | 6 | 6 | |

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|------------------------------------|---|------|------|------|------|------|
| Reserves in protected areas | Percentage of net proven reserves located in sites with protected preservation status or in areas of endangered species habitats | % | 3.1 | 4.5 | N/A | N/A |
| SASB EM-EP-160A.3 | Percentage of net potential reserves located in sites with protected preservation status or in areas of endangered species habitats | % | 4.8 | 3.2 | N/A | N/A |

| | INDICATOR | QUANTITY | HA |
|--------------------------------------|--|----------|-----------|
| 2021 exposure to biodiversity | Total sites that are used for production or extraction activities | 98 | 7,831,904 |
| | Total sites that have been assessed and mapped regarding biodiversity in the last 5 years | 28 | 4,499,861 |
| | Total sites that contain or are adjacent to areas with high biodiversity significant at a global or national level | 24 | 163,796 |
| | Total sites that have management plans for biodiversity | 2 | 56,098 |

WASTE MANAGEMENT

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|--|---|------------------------|-------|-------|---------|---------|
| | Total generated waste | Kt | 532.2 | 312.0 | 644.0 | 535.0 |
| | Hazardous waste generated | Kt | 358.8 | 230.0 | 499.0 | 388.0 |
| | Non-Hazardous Waste Generated | Kt | 173 | 82 | 145 | 147 |
| | Total treated waste | kt | 529.1 | 639.4 | 698.3 | 540.3 |
| | Total stock waste | kt | 873.9 | 878.7 | 1,230.4 | 1,145.2 |
| | Total generated waste (hazardous and non-hazardous) by business | | | | | |
| Total waste (hazardous and non-hazardous) GRI 306-3 | Upstream | Kt | 474.6 | 273.9 | 589.2 | 473.9 |
| | Refining | Kt | 35.6 | 26.5 | 35.0 | 43.3 |
| | Chemicals | Kt | 2.7 | 2.1 | 4.1 | 5.7 |
| | Gas and Energy | Kt | 0.4 | 1.2 | 0.2 | 0.4 |
| | Commercial | Kt | 6.5 | 6.3 | 11.2 | 9.4 |
| | Logistics | Kt | 11.5 | 2.1 | 2.8 | 1.5 |
| | Others | Kt | 1.0 | 1.3 | 1.1 | 1.1 |
| | Intensity of generated waste Upstream | | | | | |
| | Hazardous waste Upstream | Kt/production unit eq. | 0.014 | 0.015 | 0.026 | 0.021 |
| | Non-hazardous waste Upstream | Kt/production unit eq. | 0.007 | 0.004 | 0.005 | 0.005 |

* Land with hydrocarbons originating from historical environmental circumstances that are accounted for in the item "Stock of soils with hydrocarbons" is not included.

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|--|---|------|-------|-------|-------|-------|
| Mud and drill cuttings waste GRI 306-3, 306-4, 306-5 | Total generated mud and drill cuttings waste | Kt | 269.2 | 119.4 | 322.2 | 252.5 |
| | Waste generated by conventional activities | Kt | 7.6 | 42.2 | 149.4 | 172.6 |
| | Waste generated by unconventional activities | Kt | 189.9 | 77.2 | 172.8 | 79.9 |
| | Total valued mud and drill cuttings waste | Kt | 38.5 | 247.4 | 76.1 | 45.5 |
| | Total non-valued mud and drill cuttings waste | Kt | 79.4 | 151.4 | 256.4 | 158.9 |

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|--|--|------|-------|-------|-------|-------|
| | Total of treated waste | kt | 529.1 | 639.4 | 698.3 | 540.3 |
| | Total valued waste (hazardous + non-hazardous) | Kt | 209.9 | 411.5 | 288.0 | 263.2 |
| | Total non-valued waste (hazardous + non-hazardous) | kt | 319.2 | 227.9 | 410.3 | 277.2 |
| | Percentage of Reused + Recycled waste/Total | % | 40% | 64% | 41% | 49% |
| | Hazardous Waste | | | | | |
| | Reused | kt | 158.1 | 158.5 | 207.3 | 208.0 |
| | Recycled | kt | 0.3 | 0.1 | 0.2 | 0.2 |
| | Stored | kt | 255.5 | 324.1 | 367.9 | 462.4 |
| | Undergoing treatment | kt | 317.2 | 253.7 | 336.4 | 264.8 |
| | Disposed of | kt | 200.9 | 134.4 | 300.0 | 200.0 |

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|--|-------------------------------------|------|-------|-------|-------|-------|
| Waste by type and method of disposal GRI 306-4, 306-5 | Non-Hazardous Waste | | | | | |
| | Reused | kt | 40.5 | 245.9 | 46.1 | 29.0 |
| | Recycled | kt | 11.0 | 7.0 | 34.3 | 26.0 |
| | Stored | kt | 215.5 | 219.4 | 456.6 | 294.0 |
| | Undergoing treatment | kt | 85.8 | 81.4 | 69.5 | 124.0 |
| | Disposed of | kt | 118.3 | 93.5 | 110.3 | 77.2 |
| | Soils with hydrocarbons in Upstream | | | | | |
| | Stock | Kt | 735.3 | 698.4 | 769.4 | 806.4 |
| | Treated | Kt | 271.0 | 266.4 | 367.5 | 349.0 |

* Land with hydrocarbons originating from historical environmental circumstances that are accounted for in the item "Stock of soils with hydrocarbons" is not included.

SITES MANAGEMENT AND RECOVERY

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|-------------------------------------|-----------|------|-------|-------|-------|-------|
| Soils with hydrocarbons in Upstream | Stock | Kt | 735.3 | 698.4 | 769.4 | 806.4 |
| | Treated | Kt | 271.0 | 266.4 | 367.5 | 349.0 |

OTHER ATMOSPHERIC EMISSIONS

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 | |
|---|---|------------------------|---------|---------|---------|---------|--|
| Nitrous oxides (NO_x), sulfur oxides (SO_x) and other significant air emissions GRI 305-7 | Total atmospheric emissions | t | 125,102 | 129,561 | 155,155 | 165,331 | |
| | SO ₂ | t | 6,116 | 5,059 | 6,710 | 6,390 | |
| | NO _x | t | 57,255 | 62,558 | 76,350 | 77,134 | |
| | COVNM | t | 44,578 | 44,990 | 51,250 | 61,129 | |
| | CO | t | 14,061 | 14,328 | 17,269 | 16,640 | |
| | Particulates | t | 3,092 | 2,625 | 3,575 | 4,038 | |
| | Intensity of atmospheric emissions - YPF (weighted average) | | | | | | |
| | SO ₂ | kg/production unit eq. | 0.38 | 0.37 | 0.41 | 0.40 | |
| | NO _x | kg/production unit eq. | 1.63 | 1.99 | 2.26 | 2.21 | |
| | COVNM | kg/production unit eq. | 1.42 | 1.61 | 1.44 | 1.77 | |
| | CO | kg/production unit eq. | 0.38 | 0.41 | 0.43 | 0.41 | |
| | Particulates | kg/production unit eq. | 0.19 | 0.17 | 0.21 | 0.23 | |

CHAPTER 5: “HEALTH AND SAFETY”

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|-------------------|-------------------------------------|--------------------|------|------|------|------|
| | Safety training index (STI) | | | | | |
| | STI: own staff | STI* | 0.41 | 0.20 | 0.40 | 0.35 |
| | Average training hours: own staff | hours per person** | 8.4 | 4.0 | 8.9 | 7.8 |
| | STI: contractors | STI | 0.37 | 0.60 | 0.71 | 0.75 |
| | Average training hours: contractors | hours per person** | 16.2 | 13.1 | 16.8 | 17.7 |
| | Trained firefighters | quantity | 110 | 21 | 788 | 640 |
| GRI 403-5 | Upstream | quantity | 0 | 0 | 221 | 141 |
| SASB EM-EP-320a.1 | Downstream | quantity | 0 | 0 | 496 | 434 |
| | Gas and Energy | quantity | 46 | 6 | 45 | 65 |
| | YPF Luz | quantity | 20 | 12 | 12 | N/A |
| | AESA | quantity | 44 | 3 | 14 | N/A |

* STI (%) = hours of training/hours worked x 100.

** Average safety training hours: Training hours/Amount of people

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|---|--|----------|-------|-------|-------|-------|
| Injuries due to work-related accidents GRI 403-9 SASB EM-EP-320a.1 | Fatalities | | | | | |
| | Total | quantity | 1 | 0 | 2 | 3 |
| | Own personnel | quantity | 0 | 0 | 0 | 0 |
| | Contractors | quantity | 1 | 0 | 2 | 3 |
| | Fatality Rate (FR)* [per 1,000,000,000 hours worked] | | | | | |
| | Total | IM | 0.01 | 0 | 1.41 | 2.41 |
| | Own personnel | IM | 0 | 0 | 0 | 0 |
| | Contractors | IM | 1.26 | 0 | 2.10 | 3.66 |
| | High potential injuries due to work-related accidents | | | | | |
| | Total | quantity | 6 | 0 | 7 | 7 |
| | Own personnel | quantity | 0 | 0 | 1 | 1 |
| | Contractors | quantity | 6 | 0 | 6 | 6 |
| | Rate of high potential injuries due to work-related accidents [per 1,000,000 hours worked] | | | | | |
| | Total | rate | 0.048 | 0.000 | 0.048 | 0.056 |
| | Own personnel | rate | 0.000 | 0.000 | 0.020 | 0.023 |
| | Contractors | rate | 0.075 | 0.000 | 0.063 | 0.073 |
| | Total computable accidents* (with and without loss of workdays) | | | | | |
| | Total | quantity | 42 | 22 | 63 | 61 |

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 | |
|---|--|-----------|-------|-------|-------|-------|--|
| Injuries due to work-related accidents GRI 403-9 SASB EM-EP-320a.1 | Own personnel | quantity | 7 | 5 | 10 | 10 | |
| | Contractors | quantity | 17 | 53 | 51 | 69 | |
| | Total Recordable Injury Frequency Rate*** (TRIFR) [per 1,000,000 hours worked] | | | | | | |
| | Total | TRIFR | 1.29 | 1.21 | 1.73 | 2.33 | |
| | Own personnel | TRIFR | 1.18 | 1.12 | 2.38 | 3.54 | |
| | Contractors | TRIFR | 1.36 | 1.26 | 1.38 | 1.70 | |
| | Computable accidents with and without loss of workdays | | | | | | |
| | Total | quantity | 42 | 22 | 63 | 61 | |
| | Own personnel | quantity | 7 | 5 | 10 | 10 | |
| | Contractors | quantity | 35 | 17 | 53 | 51 | |
| | Accident Frequency Rate (AFR)/Lost Time Injury Frequency Rate (LTIFR)**** [per 1,000,000 hours worked] | | | | | | |
| | Total | AFR/LTIFR | 0.34 | 0.20 | 0.44 | 0.51 | |
| | Own personnel | AFR/LTIFR | 0.16 | 0.11 | 0.20 | 0.23 | |
| | Contractors | AFR/LTIFR | 0.45 | 0.26 | 0.58 | 0.66 | |
| | Days lost by computable accidents | | | | | | |
| | Total | days | 3,681 | 1,367 | 5,602 | 5,316 | |
| | Own personnel | days | 342 | 119 | 903 | 1,102 | |
| | Contractors | days | 3,339 | 1,248 | 4,699 | 4,304 | |

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|--|--|--|--------|-------|--------|-------|
| | Hours worked - millions | | | | | |
| | Total | MM hours | 124.7 | 110.3 | 146.22 | 124.6 |
| | Own personnel | MM hours | 45.0 | 44.7 | 50.88 | 42.7 |
| | Contractors | MM hours | 79.7 | 65.6 | 95.34 | 81.9 |
| Injuries due to work-related accidents | Traffic accidents | Number of computable accidents | 23 | 11 | 32 | 41 |
| GRI 403-9 | | | | | | |
| SASB EM-EP-320a.1 | Millions of Km traveled | Millions of Km | 440.10 | 327.9 | 483.6 | 487.6 |
| | IFAT(Traffic Accident Frequency Rate)***** | N computable traffic accidents per Million Km traveled | 0.052 | 0.034 | 0.066 | 0.084 |

* Fatality Rate (FR): amount of fatalities x 100,000,000/Amount of man-hours worked

** Computable accidents: Accidents over which YPF has safety management. During 2021, the highest number of injuries were due to blows to the hands.

*** Recordable injury frequency rate: Amount of computable accidents with and without loss of workdays per 1,000,000 hours worked (not including first aid care).

**** Accident Frequency Rate (AFR): Amount of computable accidents with loss of workdays per 1,000,000 hours worked. Equivalent to the Lost Time Injury Frequency Rate.

***** Total YPF Group excluding YPF Luz

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|-----------|---|----------|------|------|------|------|
| | Safety incidents involving people | quantity | 708 | 519 | 948 | 935 |
| | Safety incidents involving people without major consequences | quantity | 575 | 431 | 726 | 655 |
| | Safety incidents involving people with moderate or major consequences | quantity | 133 | 88 | 222 | 280 |
| | Validated investigations of safety incidents involving people | quantity | 124 | 85 | 190 | 257 |
| GRI 403-9 | % of safety incidents involving people that have validated investigations | % | 93 | 96 | 86 | 92 |
| | Improvement measures implemented arising from validated investigations of safety incidents involving people | quantity | 747 | 271 | 426 | 538 |

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 | |
|--|---|----------|---------|---------|--------|--------|--|
| Work-related illnesses and diseases GRI 403-10 | Fatalities resulting from a work-related illness or disease | quantity | 0 | N/A | N/A | N/A | |
| | Cases of recordable work-related illnesses and diseases | quantity | 279** | N/A | N/A | N/A | |
| | Lost days due to psychopathologies | days | 10,623 | 12,063 | 12,146 | 10,736 | |
| | Absence rate* | | | | | | |
| | Absences due to non-work-related diseases | days | 142,126 | 138,089 | 72,971 | 98,897 | |
| | Absence rate - Total | % | 3.72 | 3.53 | N/A | N/A | |
| | Absence rate by gender | | | | | | |
| | Women | % | 5.02 | 5.01 | 2.60 | 3.79 | |
| | Men | % | 3.03 | 2.99 | 1.71 | 2.00 | |

* Absence rate = lost days due to non-work-related diseases/(working days x population) x 100. An average of 22 working days per month is taken into account.

** 93% Covid 19 cases (259 cases)

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|---|--|----------|--------|--------|--------|--------|
| Coverage of the health and safety management system in the workplace GRI 403-8 | Psychoactive substance abuse prevention program | | | | | |
| | Performed examinations | quantity | 24,088 | 14,711 | 69,168 | 56,383 |
| | Detected cases (drugs or alcohol) | quantity | 77 | 49 | 203 | 415 |
| | Cases of sick leave due to drug abuse | quantity | 77 | 32 | 67 | 25 |
| | Cases that led to a treatment program | quantity | 47 | 9 | 13 | 25 |
| | Health service | | | | | |
| | Medical consultations at health units | quantity | 59,952 | 54,495 | 42,472 | 0,00 |
| | Advanced cardiovascular vital support - trained medical staff - physicians | quantity | 144 | 144 | 144 | 0 |
| | Basic vital support - trained medical staff - nurses | quantity | 124 | 124 | 124 | 0 |
| | Medical examinations (own staff) | | | | | |
| | % of the staff with annual examination performed | % | 60% | 88% | 95% | 95% |
| | Performed preventive medical examinations | | | | | |
| | Performed preventive medical examinations - Drugs | quantity | 12,656 | 14,511 | 35,192 | 29,619 |
| | Preventive medical examinations - Drugs - % of the staff | % | 90 | 25 | 56 | 53 |
| | Performed preventive medical examinations - Alcohol | quantity | 11,432 | 11,143 | 33,976 | 26,764 |
| | Preventive medical examinations - Alcohol - % of the staff | % | 82 | 20 | 54 | 48 |

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|---|---|----------|-------|-------|----------------|---------------|
| Process safety events GRI 11.8.3 SASB EM-EP-540a.1 | Process safety events – Tier 1 | | | | | |
| | Tier 1 events - Total | quantity | 44 | 27 | 23 | 22 |
| | Tier 1 events per 1,000,000 hours worked - Total | Rate | 0.353 | 0.347 | 0.217 | 0.565 |
| | Tier 1 events - Upstream | quantity | 35 | 9 | 5 | N/A |
| | Tier 1 events per 1,000,000 hours worked - Upstream | Rate | 0.698 | 0.214 | 0.082 | N/A |
| | Tier 1 events - Downstream | quantity | 9 | 18 | 18 | 22 |
| | Tier 1 events per 1,000,000 hours worked - Downstream | Rate | 0.231 | 0.508 | 0.407 | 0.565 |
| | Process safety events – Tier 2 | | | | | |
| | Tier 2 events - Total | quantity | 79 | 60 | 52 | N/A |
| | Tier 2 events per 1,000,000 hours worked - Total | Rate | 0.634 | 0.770 | 0.491 | N/A |
| | Tier 2 events - Upstream | quantity | 62 | 21 | 16 | N/A |
| | Tier 2 events per 1,000,000 hours worked - Upstream | Rate | 1.237 | 0.498 | 0.261 | N/A |
| | Tier 2 events - Downstream | quantity | 17 | 39 | 36 | N/A |
| | Tier 2 events per 1,000,000 hours worked - Downstream | Rate | 0.436 | 1.103 | 0.815 | N/A |
| | Emergency drills | | | | | |
| | Upstream | quantity | 741 | 446 | 541 | 423 |
| | Downstream | quantity | 1,209 | 914 | 1,700 | 1,719 |
| | Gas and Energy | quantity | 37 | 28 | 50 | ⁴⁵ |
| | YPF Luz | quantity | 53 | 12 | ¹² | N/A |
| | AESA | quantity | 56 | 370 | ¹¹³ | N/A |

| | SIGNIFICANT SPILLS | UNIT | 2021 | 2020 | 2019 | 2018 | |
|--|---|--|-------|-------|-------|-------|--|
| Significant spills GRI 11.8.2 SASB EM-EP-160a.2 | Major hydrocarbon spills into a barrel* | amount of barrels | 2,958 | 5,784 | 6,289 | 4,493 | |
| | Spill frequency rate | | | | | | |
| | Upstream | Number x 1,000,000/Gross production + Accumulated injected water | 12.00 | 11.48 | 10.75 | 9.93 | |
| | Downstream | Number x 1,000,000/transported m3 | 0.10 | 0.06 | 0.05 | 0.10 | |
| | Hydrocarbons in spilled volumes | | | | | | |
| | Production water | % | 87 | 74 | 87 | 95 | |
| | Hydrocarbon | % | 13 | 26 | 13 | 5 | |
| | Hydrocarbon in discharged water | | | | | | |
| | Downstream | t | 23.03 | 31.47 | 29.64 | 27.61 | |
| | Refiner and chemicals | t | 23.03 | 31.33 | 29.60 | 27.53 | |

* Hydrocarbon spills, volume of which is higher than a barrel that has reached the environment, Upstream and Downstream, are included. There were no hydrocarbon spills in the Polar Arctic Circle or that had impact on the coasts.

CHAPTER 6: "PEOPLE"

Human Resources items cover YPF S.A. and all controlled companies, excluding MetroGAS and Fundación YPF.

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 | |
|----------------------------------|--|--------|--------|--------|--------|--------|--|
| Employees GRI 2-7, 2-8 | Total of the Staff of YPF Group | people | 59,944 | 54,796 | 67,673 | 62,905 | |
| | Direct employment (own staff) | people | 20,951 | 19,812 | 22,376 | 20,702 | |
| | Indirect employment (contractors) | people | 38,993 | 34,984 | 45,297 | 42,203 | |
| | Direct staff distribution by gender | | | | | | |
| | Women | % | 21.5 | 21.7 | 20.5 | 21.1 | |
| | Men | % | 78.5 | 78.3 | 79.5 | 78.9 | |
| | Direct staff distribution by age group | | | | | | |
| | Under 30 years old | % | 14 | 15 | 18 | 19 | |
| | Between 30 and 50 years old | % | 72 | 71 | 68 | 67 | |
| | Over 50 years old | % | 14 | 14 | 14 | 14 | |
| | Direct staff distribution by type of employment contract | | | | | | |
| | Permanent contract | % | 90.3 | 94.7 | 88.6 | 92.4 | |
| | Temporary contract | % | 9.7 | 5.3 | 11.4 | 7.6 | |
| | Direct staff distribution by geographic distribution | | | | | | |
| | Buenos Aires | % | 30 | 32 | 35 | 33 | |
| | City of Buenos Aires | % | 14 | 15 | 15 | 15 | |
| | Chubut | % | 5 | 5 | 5 | 5 | |
| Córdoba | % | 2 | 2 | 3 | 2 | | |
| Mendoza | % | 12 | 13 | 12 | 13 | | |
| Neuquén | % | 20 | 18 | 15 | 15 | | |

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 | |
|----------------------------------|--|------|------|------|------|------|--|
| Employees GRI 2-7, 2-8 | Santa Cruz | % | 7 | 6 | 6 | 6 | |
| | Tierra del Fuego | % | 0 | 0 | 0 | 2 | |
| | Rest of the country (Argentina) | % | 8 | 9 | 9 | 9 | |
| | Other countries | % | 3.8 | 3.4 | 0 | 0 | |
| | Direct staff distribution by work category | | % | | | | |
| | Executive officers | % | 0.5 | 0.5 | 0.4 | 0.5 | |
| | Managers | % | 3.1 | 3 | 3 | 3 | |
| | Heads | % | 4.1 | 4 | 4 | 9 | |
| | Analysts and coordinators | % | 27.6 | 28 | 27 | 23 | |
| | Senior staff under agreement | % | 15.8 | 16 | 13 | 17 | |
| | Core staff under agreement | % | 48.9 | 48 | 52 | 48 | |
| | Direct staff distribution by nationality | | % | | | | |
| | Argentina | % | 96.2 | 96.6 | | | |
| | Other nationalities | % | 3.8 | 3.4 | | | |

Other nationalities: Venezuelans: 1.1%- Chileans 0.7%- Bolivians 0.6%- Brazilians 0.5%- Others 0.9%.

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|---|-----------------------------|------|------|------|------|------|
| Diversity in government agencies and employees GRI 405-1 | Executive officers | | | | | |
| | Women | % | 9.7 | 10.6 | 10.0 | 9 |
| | Men | % | 90.3 | 89.4 | 90 | 90.5 |
| | Under 30 years old | % | 0.0 | 0 | 0.0 | 0.0 |
| | Between 30 and 50 years old | % | 54.4 | 57 | 57.0 | 57.9 |
| | Over 50 years old | % | 45.6 | 43 | 43.0 | 42.1 |
| | Managers | | | | | |
| | Women | % | 17.4 | 15.4 | 14.3 | 12.7 |
| | Men | % | 82.6 | 84.6 | 85.1 | 86.9 |
| | Under 30 years old | % | 0.0 | 0 | 0.0 | 0.0 |
| | Between 30 and 50 years old | % | 65.4 | 65 | 58.9 | 56.7 |
| | Over 50 years old | % | 34.6 | 35 | 41.1 | 43.3 |
| | Heads | | | | | |
| | Women | % | 18.1 | 15.7 | 14.9 | 13.0 |
| | Men | % | 81.9 | 84.3 | 82.4 | 81.1 |
| | Under 30 years old | % | 0.4 | 0 | 0.0 | 0.1 |
| | Between 30 and 50 years old | % | 80.7 | 83 | 77.7 | 74.0 |
| | Over 50 years old | % | 18.9 | 17 | 21.2 | 25.9 |
| | Analysts and coordinators | | | | | |
| | Women | % | 39.1 | 30 | 30.0 | 30.3 |
| | Men | % | 69.5 | 70 | 70.0 | 69.7 |
| | Under 30 years old | % | 9.21 | 9 | 11.0 | 13.7 |
| | Between 30 and 50 years old | % | 77.7 | 78 | 74.7 | 74.6 |

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 | |
|---|--|------|------|------|------|------|--|
| Diversity in government agencies and employees GRI 405-1 | Over 50 years old | % | 13.1 | 12 | 13.2 | 11.7 | |
| | Senior staff under agreement | | | | | | |
| | Women | % | 11.0 | 11 | 11.1 | 10.4 | |
| | Men | % | 89.0 | 89 | 88.9 | 89.6 | |
| | Under 30 years old | % | 4.3 | 6 | 7.0 | 7.5 | |
| | Between 30 and 50 years old | % | 74.0 | 72 | 71.8 | 71.5 | |
| | Over 50 years old | % | 21.7 | 23 | 20.9 | 21.0 | |
| | Core staff under agreement | | | | | | |
| | Women | % | 20.6 | 22 | 19.1 | 21.5 | |
| | Men | % | 79.4 | 78 | 80.9 | 78.5 | |
| | Under 30 years old | % | 22.0 | 25 | 27.0 | 30.0 | |
| | Between 30 and 50 years old | % | 68.7 | 66 | 63.3 | 62.0 | |
| | Over 50 years old | % | 9.3 | 9 | 9.7 | 8.7 | |
| | Executive positions in areas that generate revenue | | | | | | |
| | Women | % | 17.9 | 14.9 | 14.1 | 11.1 | |

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|---|--|------|-------|-------|-------|-------|
| Collective bargaining agreements | Own staff under agreement | % | 64.6% | 65.4% | 64.9% | 65.1% |
| GRI 2-30 | Direct staff with union representation (own staff) | % | 41.0% | 42.8% | 41.0% | 44.3% |
| | Indirect staff with union representation (contractors) | % | 77.0% | 72.0% | 74.3% | 81.2% |

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|---|--|-------|------|------|------|------|
| Ratio of total annual compensation | Ratio of total annual compensation | | | | | |
| GRI 2-21 | YPF S.A. | ratio | 18 | 14 | 19 | 21 |
| | YPF Group | ratio | 23 | 23 | 24 | 27 |
| | Ratio of percentage increment of total annual compensation | | | | | |
| | Percentage increment of total annual compensation of the highest paid person | % | 75% | 64% | 68% | 32% |
| | Percentage increment of the median of the total annual compensation of all employees | % | 69% | 30% | 47% | 32% |
| | Ratio of percentage increment of total annual compensation | ratio | 1.1 | 2.1 | 1.5 | 1.0 |

* Ratio of the total annual compensation of the highest paid person in the organization versus the median of the total compensation of all other employees. Staff out of the union.

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|---|--|------|-------|-------|-------|-------|
| Ratio of basic wage and of the compensation of women versus men GRI 405-2 | Female wages, as compared to male wages* | | | | | |
| | Total | % | 93.9% | 92.0% | 95.9% | 95.9% |
| | Executive officers | % | 91.2% | 85.2% | | |
| | Managers | % | 94.9% | 93.2% | | |
| | Heads | % | 94.1% | 93.3% | | |
| | Analysts and coordinators | % | 96.6% | 95.7% | | |
| | Senior staff under agreement | % | 93.4% | 93.3% | | |
| | Core staff under agreement | % | 93.0% | 91.3% | | |

* Staff out of the union.

| | MANAGERS DISTRIBUTION BY GEOGRAPHIC AREA | UNIT | 2021 | 2020 | 2019 | 2018 |
|---|--|--------|------|------|------|------|
| Executive officers distribution by Province GRI 202-2 | Total | people | 103 | 104 | 100 | 94 |
| | San Juan | people | 0 | 0 | 0 | 0 |
| | Río Negro | people | 0 | 0 | 1 | 1 |
| | Buenos Aires | people | 38 | 42 | 39 | 33 |
| | City of Buenos Aires | people | 29 | 29 | 30 | 28 |
| | Neuquén | people | 3 | 2 | 1 | 1 |
| | Mendoza | people | 16 | 17 | 13 | 13 |
| | Santa Fe | people | 3 | 3 | 4 | 5 |
| | Chubut | people | 3 | 2 | 2 | 2 |

| MANAGERS DISTRIBUTION BY GEOGRAPHIC AREA | | UNIT | 2021 | 2020 | 2019 | 2018 |
|---|------------------|--------|------|------|------|------|
| Executive officers distribution by Province GRI 202-2 | Tierra del Fuego | people | 0 | 0 | 0 | 0 |
| | Tucumán | people | 1 | 1 | 2 | 2 |
| | Corrientes | people | 1 | 1 | 1 | 1 |
| | Entre Ríos | people | 0 | 0 | 0 | 0 |
| | Foreigners | people | 2 | 2 | 1 | 1 |
| | Santa Cruz | people | 1 | 0 | 0 | 0 |
| | Córdoba | people | 6 | 5 | 6 | 7 |

| INDICATOR | 2021 | | 2020 | | 2019 | | 2018 | |
|--|--------|-------|--------|-------|--------|-------|--------|-------|
| | PEOPLE | RATE | PEOPLE | RATE | PEOPLE | RATE | PEOPLE | RATE |
| Total hires | 3,829 | 18.3% | 1,325 | 6.7% | 5,343 | 23.9% | 4,259 | 20.6% |
| Total turnover (voluntary and involuntary) | 2,627 | 12.5% | 3,893 | 20.0% | 3,664 | 16.4% | 1,834 | 9.1% |
| Total voluntary turnover | 840 | 4.0% | 958 | 4.8% | 671 | 3.0% | 523 | 2.5% |
| Hires by gender | | | | | | | | |
| Women | 469 | 2.2% | 94 | 0.5% | 493 | 2.2% | 662 | 3.2% |
| Men | 3,360 | 16.0% | 1,231 | 6.2% | 4,850 | 21.7% | 3,597 | 17.4% |

| | INDICATOR | 2021 | | 2020 | | 2019 | | 2018 | |
|---|-----------------------------|--------|-------|--------|-------|--------|-------|--------|-------|
| | | PEOPLE | RATE | PEOPLE | RATE | PEOPLE | RATE | PEOPLE | RATE |
| New hires of employees and staff turnover GRI 401-1 | Turnover by gender | | | | | | | | |
| | Women | 264 | 1.3% | 410 | 9.5% | 279 | 6.1% | 282 | 6.5% |
| | Men | 2,411 | 11.5% | 3,483 | 22.5% | 3,385 | 19.0% | 1,552 | 9.5% |
| | Hires by age group | | | | | | | | |
| | Under 30 years old | 1,314 | 5.4% | 394 | 2.0% | 1,779 | 8.0% | 1,661 | 8.0% |
| | Between 30 and 50 years old | 2,395 | 11.3% | 811 | 4.1% | 3,141 | 14.0% | 2,293 | 11.1% |
| | Over 50 years old | 288 | 1.4% | 120 | 0.6% | 423 | 1.9% | 305 | 1.5% |
| | Turnover by age group | | | | | | | | |
| | Under 30 years old | 607 | 2.9% | 725 | 3.7% | 912 | 3.0% | 472 | 2.3% |
| | Between 30 and 50 years old | 1,636 | 7.8% | 2,266 | 11.4% | 2,127 | 0.0% | 998 | 4.8% |
| | Over 50 years old | 432 | 2.1% | 902 | 4.6% | 625 | 0.0% | 364 | 1.8% |
| | Hires by region | | | | | | | | |
| | Buenos Aires | 1,414 | 6.7% | 463 | 2.3% | 2,860 | 12.8% | 1,668 | 8.1% |
| | City of Buenos Aires | 211 | 1.0% | 88 | 0.4% | 116 | 0.5% | 395 | 1.9% |
| | Chubut | 206 | 1.0% | 16 | 0.1% | 103 | 0.5% | 129 | 0.6% |
| | Córdoba | 19 | 0.1% | 55 | 0.3% | 195 | 0.9% | 117 | 0.6% |
| | Mendoza | 283 | 1.3% | 94 | 0.5% | 592 | 2.7% | 392 | 1.9% |
| | Neuquén | 1,337 | 6.4% | 542 | 2.7% | 846 | 3.8% | 630 | 3.0% |
| | Santa Cruz | 271 | 1.3% | 25 | 0.1% | 198 | 0.9% | 413 | 2.0% |
| | Santa Fe | 25 | 0.1% | 7 | 0.0% | 26 | 0.1% | 129 | 0.6% |
| Tierra del Fuego | 4 | 0.0% | 3 | 0.0% | 1 | 0.0% | 0 | 0.0% | |
| Brazil | 23 | 0.1% | 22 | 0.1% | 20 | 0.1% | 0 | 0.0% | |

| | INDICATOR | 2021 | | 2020 | | 2019 | | 2018 | |
|---|----------------------|--------|------|--------|-------|--------|------|--------|------|
| | | PEOPLE | RATE | PEOPLE | RATE | PEOPLE | RATE | PEOPLE | RATE |
| New hires of employees and staff turnover GRI 401-1 | Rest of the Country | 36 | 0.2% | 10 | 0.1% | 386 | 1.7% | 386 | 1.9% |
| | Turnover by region | | | | | | | | |
| | Buenos Aires | 1,202 | 5.7% | 2,114 | 10.7% | 1,605 | 7.2% | 520 | 2.5% |
| | City of Buenos Aires | 202 | 1.0% | 433 | 2.2% | 106 | 0.5% | 172 | 0.8% |
| | Chubut | 58 | 0.3% | 133 | 0.7% | 88 | 0.4% | 73 | 0.4% |
| | Córdoba | 17 | 0.1% | 327 | 1.7% | 248 | 1.1% | 23 | 0.1% |
| | Mendoza | 198 | 0.9% | 223 | 1.1% | 583 | 2.6% | 244 | 1.2% |
| | Neuquén | 801 | 3.8% | 447 | 2.3% | 581 | 2.6% | 271 | 1.3% |
| | Santa Cruz | 103 | 0.5% | 65 | 0.3% | 87 | 0.4% | 168 | 0.8% |
| | Santa Fe | 38 | 0.2% | 34 | 0.2% | 9 | 0.0% | 60 | 0.3% |
| | Tierra del Fuego | 5 | 0.0% | 15 | 0.1% | 0 | 0.0% | 0 | 0.0% |
| | Brazil | 10 | 0.0% | 23 | 0.1% | 17 | 0.1% | 0 | 0.0% |
| | Rest of the Country | 41 | 0.2% | 79 | 0.4% | 340 | 1.5% | 303 | 1.5% |

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|-------------------------------------|--|----------|------|------|------|------|
| Average contracting expenses | Average expenses by full-time employee | USD/FTE* | 537 | 746 | 513 | 622 |

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|---|--|------|------|------|------|------|
| Percentage of vacant positions filled by in-house candidates | Vacant positions filled by in-house candidates | % | 41% | 65% | 30% | 35% |

| | INDICATOR | UNIT | 2021 | | 2020 | | 2019 | | 2018 | |
|-----------------------|---|--------|-------|-----|-------|-----|-------|-----|-------|------|
| | | | WOMEN | MEN | WOMEN | MEN | WOMEN | MEN | WOMEN | MEN |
| Parental leave | Employees entitled to parental leave | people | 329 | 361 | 367 | 459 | 338 | 456 | 371 | 468 |
| GRI 401-3 | Employees who took parental leave | people | 326 | 361 | 340 | 422 | 335 | 456 | 371 | 468 |
| | Reinstatements | people | 315 | 359 | 331 | 418 | 333 | 451 | 371 | 468 |
| | Back-to-work rate** | % | 97% | 99% | 97% | 99% | 99% | 99% | 100% | 100% |
| | Active employees one year after their return*** | people | 305 | 393 | 300 | 429 | 294 | 444 | 373 | 488 |
| | Retention rate**** | % | 90% | 94% | 90% | 94% | 95% | 93% | 91% | 94% |

* FTE: Full Time Equivalent

**Back-to-work rate = Reinstatements/employees who took parental leave.

*** Leave taken one year prior to the reported year, with 12 months completed during the reported year.

**** Retention rate = Active employees one year after their return/employees who took parental leave.

| | INDICATOR | UNIT | 2021 | 2020 | 2019 | 2018 |
|--|--|-----------|---------|---------|---------|---------|
| Average training hours per year by employee GRI 404-1 | Training hours own staff | | | | | |
| | YPF Group | hours | 296,714 | 223,717 | 573,696 | 606,418 |
| | YPF S.A. | hours | 165,384 | 174,190 | 442,485 | 398,213 |
| | YPF S.A. CONTROLLED COMPANIES | hours | 131,330 | 49,527 | 131,212 | 208,206 |
| | Average training hours per person(own staff) | | | | | |
| | YPF Group | hours/FTE | 14.2 | 11.3 | 25.7 | 29.3 |
| | Women [YPF Group] | hours/FTE | 18.7 | 9.6 | 28.9 | 30.6 |
| | Men [YPF Group] | hours/FTE | 12.9 | 11.8 | 24.9 | 29.0 |
| | Executive officers [YPF Group] | hours/FTE | 3.9 | 2.6 | 45.0 | 28.6 |
| | Managers [YPF Group] | hours/FTE | 29.8 | 9.5 | 50.3 | 56.6 |
| | Heads [YPF Group] | hours/FTE | 24.3 | 18.0 | 67.1 | 48.1 |
| | Analysts and coordinators [YPF Group] | hours/FTE | 20.2 | 15.2 | 32.5 | 47.6 |
| | Senior staff under agreement [YPF Group] | hours/FTE | 14.2 | 22.6 | 32.9 | 20.9 |
| | Core staff under agreement [YPF Group] | hours/FTE | 8.8 | 4.7 | 14.1 | 20.8 |
| | Average training cost (own staff) | | | | | |
| | YPF Group | USD/FTE | 202 | 131 | 394 | 116 |

FTE = Full Time Equivalent

CHAPTER 7: “SHARED SOCIAL VALUE”

| | DISTRIBUTION OF PURCHASES BY REGION | UNIT | 2021 | 2020 | 2019 | 2018 | |
|---|---|-----------|----------|-------|-------|-------|-------|
| Expenses ratio for local suppliers GRI 204-1 | Upstream | | | | | | |
| | National | % | 4% | 51% | 9% | 64% | |
| | Chubut and Santa Cruz | % | 27% | 17% | 25% | 11% | |
| | La Plata | % | 0% | 0% | 0% | 0% | |
| | Mendoza | % | 18% | 11% | 17% | 6% | |
| | Neuquén and Río Negro | % | 51% | 21% | 49% | 19% | |
| | Downstream | | | | | | |
| | National | % | 96% | 81% | 62% | 63% | |
| | Chubut and Santa Cruz | % | 0% | 0% | 0% | 0% | |
| | La Plata | % | 0% | 15% | 23% | 28% | |
| | Mendoza | % | 3% | 4% | 13% | 7% | |
| | Neuquén and Río Negro | % | 1% | 0% | 2% | 1% | |
| | Geographic distribution of suppliers based on their ability to provide services | | | | | | |
| | | Argentina | quantity | 4,761 | 4,919 | 6,111 | 7,995 |
| | Area of the City of Buenos Aires | quantity | 51 | 61 | 113 | 1.180 | |
| | Central Area | quantity | 34 | 47 | 56 | 162 | |
| | Great La Plata Area | quantity | 158 | 183 | 215 | 231 | |
| | Coastal Area | quantity | 56 | 54 | 63 | 55 | |
| | Area of the Argentine NW | quantity | 46 | 10 | 14 | 13 | |
| | Western Area | quantity | 606 | 665 | 828 | 990 | |
| | Pampas Area | quantity | 109 | 63 | 105 | 92 | |
| | Southern Area | quantity | 314 | 338 | 376 | 900 | |

| INDICATOR | | 2021 | 2020 | 2019 | 2018 | |
|---|--|----------|-------|-------|-------|-------|
| Qualification and assessment of suppliers GRI 414-1, | Suppliers with valid qualifications | quantity | 5,083 | 5,276 | 6,721 | 6,546 |
| | Qualification processes | quantity | 597 | 477 | 646 | 601 |
| | Total of audited suppliers | quantity | 576 | 458 | 602 | 550 |
| | New audited suppliers | quantity | 87 | 64 | 102 | 40 |
| | Qualification results | | | | | |
| | Complete qualification | quantity | 467 | 364 | 472 | 448 |
| | Provisional qualification | quantity | 58 | 55 | 118 | 112 |
| | Not accepted | quantity | 72 | 58 | 56 | 41 |
| | Performance assessment | | | | | |
| | Assessed suppliers | quantity | 734 | 1,391 | 1,448 | 446 |
| | Result - Very good | quantity | 1,791 | 1,780 | 2,000 | 1,196 |
| | Result - Good | quantity | 1,069 | 731 | 889 | 465 |
| | Result - Average | quantity | 450 | 387 | 749 | 219 |
| | Result - Poor | quantity | 734 | 1,391 | 1,448 | 446 |
| | Sanctioned suppliers | quantity | 6 | 3 | 13 | 16 |
| | Environmental and social aspects assessment | | | | | |
| | New suppliers that have approved selection filters according to environmental criteria | % | 42.5 | 43.8 | 35.3 | 70.0 |
| | Assessed suppliers regarding environmental impact | quantity | 523 | 643 | 752 | 377 |
| | New suppliers that have approved selection filters according to social criteria | % | 71.0 | 65.6 | 32.0 | 100.0 |
| | Assessed suppliers regarding social impact | quantity | 579 | 712 | 836 | |

| | | INDICATOR | 2021 | 2020 | 2019 | 2018 | |
|--|--|-----------|------|------|------|------|----|
| Qualification and assessment of suppliers | Suppliers according to criticality level (of the total with effective qualification status) | | | | | | |
| | GRI 414-1, | High | % | 41 | 38 | 32 | 34 |
| | | Medium | % | 34 | 34 | 38 | 38 |
| | | Low | % | 25 | 28 | 29 | 28 |

CHAPTER 8: “BUSINESS FUNDAMENTALS”

| | ASSOCIATION | PARTICIPATION |
|-------------------------------------|---|--|
| | National | |
| | APLA - Latin American Chemical Association. | Member of the Board and the Logistics Commission. Monthly and quarterly meetings. |
| | CADER - Argentine Chamber of Renewable Energy. | Member of the Board of Directors. Bimonthly meetings |
| | CAEM - Argentine Chamber of Mining Business Owners. | Participation in various activities of the industry |
| | CAI - Argentine Center of Engineers | Member of the Board and the Energy and Mining, Young CAI, Urban Planning, and Housing Commissions. Monthly, bimonthly, and semi-annual meetings. |
| | CEADS - Argentine Business Council for Sustainable Development | Participating members. Periodic meetings on ESG-relevant topics. |
| | CEPH - Chamber of Companies that Produce Hydrocarbon | Member of the Board and of the Communications, Taxes, Crude Oil, Regulatory Framework, Gas, Security, Labor, Inter-Chambers, Vaca Muerta, and Competitiveness Commissions. Monthly, bimonthly, and semi-annual meetings |
| Memberships and Associations | | |
| GRI 2-28 | CIPPEC - Center for the Implementation of Public Policies for Equity and Growth | During 2020, there were no meetings due to the pandemic |
| | CIQyP - Argentine Chamber of the Chemical and Petrochemical Industry | Member of the Board of Directors and of the Environmental Affairs, Raw Materials and Energy, Small and Medium Chemical Industry, Commercial, Commercial Affairs Commissions, and of Chemical Regulations work group. Monthly, bimonthly, and semi-annual meetings |
| | IAPG - Argentine Institute of Oil and Gas | Member of the Board of Directors and the Young Professionals, Energy Transitions, Technological Innovation, Integrity of Oil and Gas Pipelines, Asset Management and Reliability, SSO, and Environment Commissions, among others. Monthly, bimonthly, and semi-annual meetings |
| | IDEA - Institute for Business Development of Argentina | Member of the Board of Directors and the Institutional Relations, Sustainability, and CSR Commissions. Monthly and bimonthly meetings |

| | ASSOCIATION | PARTICIPATION |
|-------------------------------------|--|--|
| | International | |
| | AmCham - American Chamber of Commerce in Argentina | Member of the Environment and Sustainability Commissions. Monthly meetings |
| | ARPEL - Regional Association of Companies of the Oil, Gas, and Biofuel Sector in Latin America and the Caribbean | Member of the Board of Directors and of Social Responsibility, Communications, Pipelines and Terminals of ARPEL, Refining and Fuels, Climate Change, Industrial Health and Safety, and Cybersecurity Commissions, among others. Monthly and bimonthly meetings |
| | IGU - International Gas Union -Represented in Argentina by IAPG 3 - Argentine Institute of Oil and Gas | Presidency of the Compliance Commission. Monthly, bimonthly, and semi-annual meetings |
| Memberships and Associations | IOGP - International Association of Oil & Gas Producers | Member of the Environment and Safety Commissions. Meetings without specific frequency |
| GRI 2-28 | Argentine Network for the United Nations Global Compact | Presidency of the Board of Directors. Participation in the work groups of Circular Economy, Climate Care, Sustainability in the Value Chain, Human Rights, and Companies and Sustainable Transport. Periodic meetings |
| | SIGTTO - International Gas Transport Terminal Operators | Meetings without specific frequency. |
| | SPE - Society of Petroleum Engineers | Member of the Broadcasting and Publications, Conferences, and Social Meetings Committees. Monthly and bimonthly meetings |
| | WCA - World Compliance Association | Partners |
| GRI 415-1 | Contribution to political parties and/or representatives | No contributions to political parties and/or representatives have been done. |



Deloitte & Co. S.A.
Florida 234, 5° piso
C1005AAF
Ciudad Autónoma
de Buenos Aires
Argentina
Tel.: (+54-11) 4320-2700
Fax: (+54-11) 4325-8081/4326-7340
www.deloitte.com/ar

Independent Public Accountant Limited Assurance Report (on Sustainability Report)

To
YPF S.A.
Macacha Güemes 515
Ciudad Autónoma de Buenos Aires
CUIT: 30-54668997-9

1. Scope of work

We have been engaged by YPF S.A. to issue a limited assurance report on certain information contained in the 2021 Sustainability Report ("SR"), for the period January 1st to December 31st, 2021. This assurance engagement was carried out by a multidisciplinary team that includes assurance professionals and sustainability specialists.

2. Responsibility of YPF S.A.

The Board of Directors of YPF S.A. is responsible for:

- The content of the SR, which implies determining which is the coverage and performance indicators to be included, and of relevance to the stakeholders to which it is directed;
- The definition of the criteria applicable in the elaboration of the SR, being the criteria adopted by the Entity those defined in the GRI Standards (Global Reporting Initiative); the Oil and Gas Sector 2021 (GRI) and the SASB Disclosures for the industry;
- Proper records and book-keeping to support the information management process relevant to the purposes stated herein and the execution of the performance measurement based on the established criteria;

- The design, implementation and execution of adequate internal controls for the preparation of the information under analysis;

- The preparation and presentation of the SR. This responsibility also includes the design, implementation and maintenance of internal control relevant to the preparation of the 2021 Sustainability Report that is free from material misstatements, whether due to fraud or error. Non-financial information is subject to its own limitations, given its nature and the methods used to calculate, sample or estimate values, which are subject to individual assumptions and criteria. We have not performed any work outside the agreed scope and therefore our conclusion is limited only to the identified sustainability information.

3. Independence and Quality Control

We have complied with the standards of independence and other ethical requirements included in the Code of Ethics for Professional Accountants issued by IESBA ("International Ethics Standards Board for Accountants") which is based on the fundamental principles of integrity, objectivity, professional competence, due care, confidentiality and professional conduct. Our firm applies the International Standards on Quality Control (ISQC 1) and, consequently, we have a quality control system, including policies and processes to ensure compliance with ethical standards, professional standards and regulatory and legal requirements.

4. Responsibilities of the public accountant

Our responsibility was to issue a limited assurance report, in accordance with the rules established in section V.A of Technical Resolution No. 37 of the Argentine Federation of Professional Councils of Economic Sciences, which addresses the International Standard on Assurance Engagements (ISAE) 3000 "Assurance Engagements Other than Audits or Reviews of Historical Financial Information" issued by the International Auditing and Assurance Standards Board (IAASB). These standards require that we comply with the ethic requirements, as well as that we plan and perform our work in order to issue a limited assurance report with the scope detailed in this report.

A limited assurance engagement includes examining, on a test basis, evidence supporting the selected sustainability information in-scope for our report. It also includes an assessment of the estimates, and inquiries to the individuals responsible for the preparation of the information submitted, and other similar procedures, which are less in extent compared to a reasonable assurance engagement and therefore do not provide assurance that we have become aware of all the significant issues that could be identified in a reasonable assurance engagement.

To obtain limited assurance on the information identified in Annex I to this Report, our work consisted of:

- interview the management and staff of the entity responsible for the collection of information and the development of selected performance indicators in order to obtain an understanding of the Entity's sustainability policies, the activities implemented and the information collection systems used and to evaluate the application of GRI Standards and SASB Disclosures;
- perform tests, on a selective basis, to verify the accuracy of the information submitted for the selected indicators;

- analyze, where appropriate, the information systems and methodology used for the compilation of quantitative data corresponding to the entity's performance indicators;

- inspect, on a selective basis, the existing documentation to corroborate the Management statements' in our interviews.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion below.

5. Conclusion

Based on the limited assurance procedures we have performed, nothing has come to our attention that causes us to believe that the selected subject matter identified in chapter 4 of this report has not been prepared, in all its significant aspects, in accordance with the SASB and GRI Standards (2016, 2018 and 2021 of the Oil and Gas Sector).

Ciudad Autónoma de Buenos Aires, August 9, 2022.

DELOITTE & Co. S.A.
(Registro de Sociedades Comerciales
C.P.C.E.C.A.B.A. - T° 1 - F° 3)

Esteban Enderle
Public Accountant (U.B.A)
C.P.C.E.C.A.B.A. - T°364 - F°233

ANNEX I

| Indicator | Description |
|--------------------------|--|
| Own Indicator | Voluntary social investment |
| 204-1 (2016) GRI | Proportion of spending on local suppliers |
| 302-1 (2016) GRI | Energy consumption within the organization |
| 303-3 (2018) GRI | Water withdrawal |
| 303-4 (2018) GRI | Water discharge |
| 305-1 (2016) GRI | Direct (Scope 1) GHG emissions |
| 305-2 (2016) GRI | Energy indirect (Scope 2) GHG emissions |
| 305-7 (2016) GRI | Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions |
| Own Indicator | Methane emissions |
| 306-4 (2020) GRI | Waste diverted from disposal |
| 306-5 (2020) GRI | Waste directed to disposal |
| Own Indicator | Oil spills that affected the environment |
| EM-EP-160a.3 SASB | Percentage of (1) proved and (2) probable reserves in or near sites with protected conservation endangered species habitat |
| Own Indicator | Computable death rate |
| Own Indicator | Accident Frequency Rate - Employees |
| Own Indicator | Accident Frequency Rate - Contractors |
| Own Indicator | Total Recordable Injury Frequency Rate (TRIFR) - Employees |
| Own Indicator | Total Recordable Injury Frequency Rate (TRIFR) - Contractors |
| Own Indicator | Process Safety Events - Level 1 |
| Own Indicator | Process Safety Events - Level 2 |
| Own Indicator | Occupational disease frequency rate |
| 404-1 (2016) GRI | Average hours of training per year per employee |
| 405-1 (2016) GRI | Diversity in governing bodies and employees |
| 405-2 (2016) GRI | Ratio of basic salary and remuneration of women to men |
| 410-1 (2016) GRI | Security personnel trained in human rights policies or procedures |
| Own Indicator | Contribution to political parties and / or representatives |

This Annex is an integral part of our report dated August 9, 2022.

DELOITTE & Co. S.A.

(Registro de Sociedades Comerciales
C.P.C.E.C.A.B.A. - T° 1 - F° 3)

Esteban Enderle
Public Accountant (U.B.A)
C.P.C.E.C.A.B.A. - T°364 - F°233

Deloitte & Co. S.A. Registration of Business Companies CPCECABA Volume 1 Page 3

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee ("DTTL"), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as "Deloitte Global") does not provide services to clients. Please see www.deloitte.com/about to learn more about our global network of member firms. Deloitte Touche Tohmatsu Limited is a private company limited by guarantee incorporated in England & Wales under Company number 07271800, and its registered office is Hill House, 1 Little New Street, London EC4A, 3TR, United Kingdom.

GRI, SASB AND TFCO INDEX

| GRI STANDARD | CONTENTS | GRI CODE 2016/ GRI STANDARD | PAGE NUMBER OR URL | RESPONSE, EXPLANATION OR OMISSION | GLOBAL COMPACT | SDGS |
|------------------|---|------------------------------------|--------------------------|---|---|------|
| General Contents | | | | | | |
| GRI 1 | Declaration of use | | About this report | YPF has reported in accordance with GRI Standards for the period between January 1, 2021 and December 31, 2021. | | |
| | Standards used by sector | | About this report | GRI 11: Oil and Gas Sector 2021 | | |
| GRI 2 | 2-1 Organizational Description | 102-1, 102-3, 102-4, 102-5 | 8 | | | |
| | 2-2 Entities Included in the Organization's Sustainability Report | 102-45 | About this report | Click here to see the Consolidated Financial Statements. | | 12 |
| | 2-3 Reporting period and frequency and point of contact | 102-50, 102-52, 102-53 | About this report | YPF's sustainability reports are submitted annually. Contact: sustentabilidad@ypf.com | | 12 |
| | 2-4 Restatement of information | 102-48 | About this report | | | 12 |
| | 2-5 External Verification | 102-56 | Limited Assurance Report | | | 12 |
| | 2-6 Activities, Value Chain and Other Business Relationships | 102-2, 102-6, 102-7, 102-9, 102-10 | 10 | | | |
| | 2-7 Employees | 102-7, 102-8 | 98, 100-102, Appendices | | No. 6 | 8 |
| | 2-8 Non-employee Workers | 102-8 | 98, 100-102, Appendices | | | 8 |
| | 2-9 Governance Structure | 102-18, 102-22 | 12 | | | |
| | 2-10 Nomination and Selection of the Highest Governance Body | 102-24 | 13 | | | |
| | 2-11 Chairmanship of the Highest Governance Body | 102-23 | 12 | | According to the Bylaws, the Chairperson of the Board of Directors may not be a General Manager or CEO. For further information, click here | |

| GRI STANDARD | CONTENTS | GRI CODE 2016/ GRI STANDARD | PAGE NUMBER OR URL | RESPONSE, EXPLANATION OR OMISSION | GLOBAL COMPACT | SDGS |
|--------------|--|--------------------------------|-----------------------|--|-------------------|------|
| | 2-12 Oversight of the Highest Governance Body on Impact Management | 102-21, 102-26, 102-29, 102-30 | 14, 35 | The company's Board of Directors establishes the general business strategy and approves the strategic plan prepared by management, taking into account environmental, social and corporate governance aspects. Oversees the implementation of the plan based on financial and non-financial indicators. (Click here to see the Code of Corporate Governance, pp. 3, 4, 6, and 7.) The Board of Directors is in charge, through the Risk and Sustainability Committee, of monitoring the proper implementation of integral risk management policies, promoting best practices in sustainability matters, and preparing and approving the annual and quarterly Financial Statements, as well as the corresponding Prospectus and Form 20-F, among other functions. | | |
| | 2-13 Delegation of Responsibility for Impact Management | 102-19, 102-20 | 35 | | | |
| | 2-14 Role of the Highest Governance Body in Sustainability Report | 102-32 | 35, About this report | One of the functions of the Board of Directors is to supervise -through its various Committees (Audit Committee, Risk and Sustainability Committee)- and review that all the information to be reported in the Financial Statements, Annual Report, Corporate Governance Code, shareholder proposals before each Shareholders' Meeting, 20F and Sustainability Report, among others, is correctly reflected in the aforementioned documents. One of the functions of the Board of Directors is to supervise —through its various Committees (Audit Committee, Risk and Sustainability Committee)— and review that all the information to be reported in the Financial Statements, Annual Report, Corporate Governance Code, shareholder proposals before each Shareholders' Meeting, 20F and Sustainability Report, among others, is correctly reflected in the aforementioned documents. | | |
| | 2- 15 Conflicts of Interest | 102-25 | 11, 132 | | | |
| | 2-16 Reporting concerns | 102-33, 102-34 | 130 | | | |
| | 2-17 Expertise of the Highest Governance Body | 102-27 | 11-12 | Clicking here to see the expertise of the current members of the Board of Directors can be accessed. | | |

| GRI STANDARD | CONTENTS | GRI CODE 2016/ GRI STANDARD | PAGE NUMBER OR URL | RESPONSE, EXPLANATION OR OMISSION | GLOBAL COMPACT | SDGS |
|-----------------|--|--------------------------------|-----------------------|--|-------------------|------|
| | 2-18 Performance Evaluation of the Highest Governance Body | 102-28 | 12 | | | |
| | 2-19 Compensation policies | 102-35 | 13 | | | |
| | 2-20 Process for Determining Compensation | 102-36, 102-37 | 13 | | | |
| | 2-21 Ratio of Total Annual Compensation | 102-38, 103-39 | 103 | | | |
| | 2-22 Sustainable Development Strategy Statement | 102-14 | 3-4 | | | |
| | 2-23 Commitments | 102-11, 102-16 | 14, 40, 128 | | No. 10 | 16 |
| | 2-24 Integration and Implementation of Commitments | N/A | 35, 128 | | | |
| | 2-25 Processes for Remediation of Negative Impacts | 103-2 | 130 | | | |
| | 2-26 Mechanisms for seeking advice and raising concerns | 102-17 | 14, 130 | | No. 10 | 16 |
| | 2-27 Compliance with Laws and Regulations | 307-1, 419-1 | 128-129, 132-133 | No payments of environmental fines in excess of US\$10,000 were recorded in the Company during 2021. | | |
| | 2-28 Memberships to associations | 102-13 | 135 | | | 17 |
| | 2-29 Stakeholders Participation Approach | 102-40, 102-42, 102-43 | 32 | | | 17 |
| | 2-30 Collective Bargaining Agreements | 102-41 | 98, Appendices | | No. 3 | 8 |
| Material Topics | | | | | | |

| GRI STANDARD | CONTENTS | GRI CODE 2016/ GRI STANDARD | PAGE NUMBER OR URL | RESPONSE, EXPLANATION OR OMISSION | GLOBAL COMPACT | SDGS |
|--|--|--------------------------------|-----------------------|--------------------------------------|-------------------|--------------|
| GRI 3 | 3-1 Process for Determining Material Topics | 102-46 | 32-33 | | | 12 |
| | 3-2 List of Material Topics | 102-47, 102-49 | 32-33 | | | 12 |
| 11.1 GHG Emissions | | | | | | |
| 11.1.1 | 3-3 Material Topics Management | GRI 103 | 46-52 | | | |
| 11.1.2 | Energy consumption within the organization | GRI 302-1 | 51-52, Appendices | | No. 7, 8 | 7, 8, 12, 13 |
| 11.1.3 | Energy consumption outside the organization | GRI 302-2 | | | No. 8, 9 | 7, 8, 12, 13 |
| 11.1.4 | Energy intensity | GRI 302-3 | 51-52, Appendices | | No. 8 | 7, 8, 12, 13 |
| 11.1.5 | GHG direct emissions (Scope 1) | GRI 305-1 | 46-49, Appendices | | No. 7, 8 | 13 |
| 11.1.6 | GHG indirect emissions (Scope 2) | GRI 305-2 | 50, Appendices | | No. 7, 8 | 13 |
| 11.1.7 | Other indirect GHG emissions (Scope 3) | GRI 305-3 | 58, Appendices | | No. 7, 8 | 13 |
| 11.1.8 | Intensity of GHG emissions | GRI 305-4 | 49, Appendices | | No. 8, 9 | 13 |
| Proprietary indicator | Methane emissions | | 48, Appendices | | | |
| Proprietary indicator | Volume of flared and vented hydrocarbon | OG6 | 48, Appendices | | | |
| 11.2 Climate adaptation, resilience and transition | | | | | | |
| 11.2.1 | 3-3 Material Topics Management | GRI 103 | | | | |
| 11.2.2 | Financial implications and other risks and opportunities derived from climate change | GRI 201-2 | 59, Appendices | | No. 7 | 13 |
| 11.2.3 | GHG emissions reduction | GRI 305-5 | 42-43, 59 | | No. 8, 9 | 13 |

| GRI STANDARD | CONTENTS | GRI CODE 2016/ GRI STANDARD | PAGE NUMBER OR URL | RESPONSE, EXPLANATION OR OMISSION | GLOBAL COMPACT | SDGS |
|----------------------------|--|--------------------------------|--------------------------|--|-------------------|--------|
| 11.2.4 | Approach to climate change policy development and lobbying | | 44, 46-50, Appendices | We disclose information on our memberships and contributions that can take a position on climate change in in section C12.3 of our response to the CDP Climate Change questionnaire. | No. 8, 9 | 13 |
| Proprietary indicator | GHG emissions contained in hydrocarbon reserves. | | Appendices | | | |
| Proprietary indicator | Investment in renewable energy sources and sales generated | | Appendices | | | |
| 11.3 Atmospheric emissions | | | | | | |
| 11.3.1 | 3-3 Material Topics Management | GRI 103 | Appendices | | | |
| 11.3.2 | Nitrous oxides (NOX), sulfur oxides (SOX) and other significant air emissions | GRI 305-7 | 76, Appendices | | No. 7, 8 | 12 |
| 11.3.3 | Evaluation of health and safety impacts of product or service categories | GRI 416-1 | 25 | | | 12 |
| 11.4 Biodiversity | | | | | | |
| 11.4.1 | 3-3 Material Topics Management | GRI 103 | | | | |
| 11.4.2 | Operation centers owned, leased or managed located within or adjacent to protected areas or areas of high biodiversity value outside protected areas | GRI 304-1 | 69-71 | Only the total area in hectares is reported by site category. | No. 7 | 12, 15 |
| 11.4.3 | Significant impacts of activities, products, and services on biodiversity | GRI 304-2 | 69-71, Appendices | | No. 7 | 12, 15 |
| 11.4.4 | Protected or restored habitats | GRI 304-3 | 69-71 | | No. 7 | 12, 15 |

| GRI STANDARD | CONTENTS | GRI CODE 2016/ GRI STANDARD | PAGE NUMBER OR URL | RESPONSE, EXPLANATION OR OMISSION | GLOBAL COMPACT | SDGS |
|--------------------------|---|--------------------------------|-----------------------|--|-------------------|--------|
| 11.4.5 | Species that appear on the IUCN Red List and in national preservation lists whose habitats are in areas that are affected by operations | GRI 304-4 | 70-71, Appendices | | No. 7 | 12, 15 |
| Proprietary indicator | Percentage of net proven reserves located in sites with protected preservation status or in areas of endangered species habitats. | | 69, Appendices | | | |
| 11.5 Waste | | | | | | |
| 11.5.1 | 3-3 Material Topics Management | GRI 103 | 72-74 | | | |
| 11.5.2 | Waste generation and significant impacts of waste | GRI 306-1 | 72 | | No. 8 | 12 |
| 11.5.3 | Management of significant impacts related to waste | GRI 306-2 | 72, Appendices | | No. 8 | 12 |
| 11.5.4 | Waste generated | GRI 306-3 | 73-74, Appendices | | No. 8 | 12 |
| 11.5.5 | Waste not intended for disposal | GRI 306-4 | 73-74, Appendices | | No. 8 | 12 |
| 11.5.6 | Waste intended for disposal | GRI 306-5 | 73-74, Appendices | | No. 8 | 12 |
| 11.6 Water and effluents | | | | | | |
| 11.6.1 | 3-3 Material Topics Management | GRI 102-11, 103 | 65-68 | | | |
| 11.6.2 | Interaction with water as a shared resource | GRI 303-1 | 65 | The management approach and measurement tools used are reported. | No. 7, 8 | 6 |
| 11.6.3 | Management of impacts related to water discharges | GRI 303-2 | 65, 67-68 | | No. 8 | 6 |
| 11.6.4 | Water extraction | GRI 303-3 | 66-67, Appendices | | No. 7, 8 | 6 |
| 11.6.5 | Water discharge | GRI 303-4 | 67-68, Appendices | | No. 8 | 6, 12 |

| GRI STANDARD | CONTENTS | GRI CODE 2016/ GRI STANDARD | PAGE NUMBER OR URL | RESPONSE, EXPLANATION OR OMISSION | GLOBAL COMPACT | SDGS |
|---|---|--------------------------------|-----------------------|---|-------------------|----------|
| 11.6.6 | Water Consumption | GRI 303-5 | 67, Appendices | | No. 8 | 6, 8, 12 |
| Proprietary indicator | Use of water for fracking | | 67, Appendices | | | |
| 11.7 Closure and rehabilitation | | | | | | |
| 11.7.1 | 3-3 Material Topics Management | GRI 103 | 76 | | | |
| 11.7.2 | Minimum notice periods for operational changes | GRI 402-1 | | YPF S.A. is committed to comply with the terms and modalities established by the legal regulations, its internal regulations, and the Collective Bargaining Agreements it subscribes by itself or through the Chambers of the Activity it formally integrates | | 8 |
| 11.7.3 | Programs to improve employee skills and transition assistance programs | GRI 404-2 | | Information not available | | 4, 8 |
| 11.7.4 | Operational sites with closure plan, closed or in the process of being closed | | | Information not available | | |
| 11.7.5 | Dismantled structures left in place | | | Information not available | | |
| 11.7.6 | Total monetary value of financial provisions for closure and rehabilitation | | | Information not available | | |
| Proprietary indicator | Soils with hydrocarbons in Upstream | | 76, Appendices | | | |
| 11.8 Asset integrity and critical incident management | | | | | | |
| 11.8.1 | 3-3 Material Topics Management | GRI 103 | 91-93 | | | |
| 11.8.2 | Significant spills | GRI 306-3 (2016) | 93, Appendices | | No. 7 | 12 |
| 11.8.3 | Total number of level 1 and level 2 process safety events | | 93, Appendices | | No. 7 | 12 |
| 11.8.4 | Tailings/sand facilities | | | Information not available | | |
| 11.9 Occupational Health and Safety | | | | | | |
| 11.9.1 | 3-3 Material Topics Management | GRI 103 | 81-89 | | | |

| GRI STANDARD | CONTENTS | GRI CODE 2016/ GRI STANDARD | PAGE NUMBER OR URL | RESPONSE, EXPLANATION OR OMISSION | GLOBAL COMPACT | SDGS |
|--------------------------|---|--------------------------------|-----------------------|---|-------------------|------|
| 11.9.2 | Health and safety management system in the workplace | GRI 403-1 | 81-83 | | No. 1 | 8 |
| 11.9.3 | Hazard identification, risk assessment and incident investigation | GRI 403-2 | 81-83 | | No. 1 | 8 |
| 11.9.4 | Health services in the workplace | GRI 403-3 | 86-88 | | No. 1 | 8 |
| 11.9.5 | Worker involvement, consultation and communication on occupational health and safety | GRI 403-4 | 83-85 | | No. 1 | 8 |
| 11.9.6 | Training of workers on health and safety in the workplace | GRI 403-5 | 83-84, 89, Appendices | | No. 1 | 8 |
| 11.9.7 | Promotion of workers' health | GRI 403-6 | 86-89 | | No. 1 | 8 |
| 11.9.8 | Prevention and mitigation of impacts on the health and safety of workers directly linked through business relationships | GRI 403-7 | 86-89 | | No. 1 | 8 |
| 11.9.9 | Coverage of the health and safety management system in the workplace | GRI 403-8 | 81-82, Appendices | | No. 1 | 8 |
| 11.9.10 | Injuries due to work-related accidents | GRI 403-9 | 84, Appendices | | No. 1 | 8 |
| 11.9.11 | Work-related illnesses and diseases | GRI 403-10 | 84, 89 Appendices | | No. 1 | 8 |
| 11.10 Internships | | | | | | |
| 11.10.1 | 3-3 Material Topics Management | GRI 103 | 97,103 | | | |
| 11.10.2 | New hires of employees and staff turnover | GRI 401-1 | 103, Appendices | | No. 6 | 5, 8 |
| 11.10.3 | Benefits for full-time employees not provided to part-time or temporary employees | GRI 401-2 | 117 | YPF has no part-time employees. Temporary employees temporary employees have the same benefits as the company's own employees | No. 6 | 8 |
| 11.10.4 | Parental leave | GRI 401-3 | 104, Appendices | | No. 6 | 5, 8 |

| GRI STANDARD | CONTENTS | GRI CODE 2016/ GRI STANDARD | PAGE NUMBER OR URL | RESPONSE, EXPLANATION OR OMISSION | GLOBAL COMPACT | SDGS |
|--|---|--------------------------------|----------------------------|--|-------------------|------|
| 11.10.5 | Minimum notice periods for operational changes | GRI 402-1 | | YPF S.A. is committed to comply with the terms and modalities established by the legal regulations, its internal regulations, and the Collective Bargaining Agreements it subscribes by itself or through the Chambers of the Activity it formally integrates. | | 8 |
| 11.10.6 | Average training hours per year by employee | GRI 404-1 | 107-108, Appendices | | | 4, 8 |
| 11.10.7 | Programs to improve employee skills and transition assistance programs | GRI 404-2 | | Information not available | | 4, 8 |
| 11.10.8 | New suppliers that have approved selection filters according to social criteria | GRI 414-1 | 115-117, Appendices | | No. 2 | 8 |
| 11.10.9 | Negative social impacts on the supply chain and actions taken | GRI 414-2 | 115-117, Appendices | | No. 2 | 8 |
| Proprietary indicator | Average recruitment cost | | Appendices | | | |
| Proprietary indicator | Vacant positions filled by internal candidates | | Appendices | | | |
| 11.11 Non-discrimination and equal opportunity | | | | | | |
| 11.11.1 | 3-3 Material Topics Management | GRI 103 | 100-102 | | | |
| 11.11.2 | Ratio of senior executives recruited from the local community | GRI 202-2 | 102, Appendices | | No. 6 | 8 |
| 11.11.3 | Parental leave | GRI 401-3 | 104, Appendices | | No. 6 | 5, 8 |
| 11.11.4 | Average training hours per year by employee | GRI 404-1 | 107-108, Appendices | | | 4, 8 |
| 11.11.5 | Diversity in government agencies and employees | GRI 405-1 | 98, 100-101, Appendices | | No. 6 | 5, 8 |
| 11.11.6 | Ratio of basic wage and of the compensation of women versus men | GRI 405-2 | 101, Appendices | | No. 6 | 5, 8 |

| GRI STANDARD | CONTENTS | GRI CODE 2016/ GRI STANDARD | PAGE NUMBER OR URL | RESPONSE, EXPLANATION OR OMISSION | GLOBAL COMPACT | SDGS |
|--|---|--------------------------------|------------------------|--|-------------------|-------|
| 11.11.7 | Discrimination cases and corrective actions taken | GRI 406-1 | 130 | Complaints and reports of possible violations of company regulations and behavior related to discrimination, mistreatment, abuse of power and harassment are received through the Ethics Line and are dealt with by the Ethics Committee | No. 6 | 5, 8 |
| 11.12 Forced labor and modern slavery | | | | | | |
| 11.12.1 | 3-3 Material Topics Management | GRI 103 | 115-118 | | | |
| 11.12.2 | Operations and suppliers with significant risk of cases of forced or compulsory labor | GRI 409-1 | 118 | Based on the assessment tools available, YPF did not identify forced labor risks for operations and suppliers with current contracts for the period covered by this report. | No. 4 | 8 |
| 11.12.3 | New suppliers that have approved selection filters according to social criteria | GRI 414-1 | 115-117, Appendices | | No. 2 | 8 |
| 11.13 Freedom of association and collective bargaining | | | | | | |
| 11.13.1 | 3-3 Material Topics Management | GRI 103 | 98 | The company respects and promotes freedom of association and collective bargaining. Based on the assessment tools available, YPF did not identify significant risks of freedom of association for operations and suppliers with current contracts for the period covered by this report. | | |
| 11.13.2 | Operations and suppliers whose right to freedom of association and collective bargaining may be at risk | GRI 407-1 | 98 | | No. 3 | 8 |
| 11.14 Economic impacts | | | | | | |
| 11.14.1 | 3-3 Material Topics Management | GRI 103 | 26-30 | | | 8 |
| 11.14.2 | Direct economic value generated and distributed | GRI 201-1 | 26-30 | | | 8, 9 |
| 11.14.3 | Ratio of senior executives recruited from the local community | GRI 202-2 | 102, Appendices | | No. 6 | 8 |
| 11.14.4 | Infrastructure investments and services supported | GRI 203-1 | 28,123 | | | 9, 11 |

| GRI STANDARD | CONTENTS | GRI CODE 2016/ GRI STANDARD | PAGE NUMBER OR URL | RESPONSE, EXPLANATION OR OMISSION | GLOBAL COMPACT | SDGS |
|------------------------------------|--|--------------------------------|-----------------------|---|-------------------|------|
| 11.14.5 | Significant indirect economic impacts | GRI 203-2 | 123 | | | 8 |
| 11.14.6 | Expenses ratio for local suppliers | GRI 204-1 | 115, Appendices | | | 8 |
| 11.15 Local communities | | | | | | |
| 11.15.1 | 3-3 Material Topics Management | GRI 103 | 120-126 | | | |
| 11.15.2 | Operations with local community participation, impact assessments and development programs | GRI 413-1 | 120-126 | | No. 1 | |
| 11.15.3 | Operations with significant negative impacts - actual and potential - on local communities | GRI 413-2 | 120 | | No. 1 | |
| 11.15.4 | Number and type of grievances from local communities identified | | 120 | | No. 1 | |
| 11.16 Right to land and resources | | | | | | |
| 11.16.1 | 3-3 Material Topics Management | GRI 103 | | | | |
| 11.16.2 | Involuntary relocation | | 120 | YPF has not required or encouraged the relocation or resettlement of any community. Nor has YPF become aware of third parties seeking the relocation or resettlement of the communities living in the areas where the company operates. | No. 1 | |
| 11.17 Rights of indigenous peoples | | | | | | |
| 11.17.1 | 3-3 Material Topics Management | GRI 103 | 121-122 | | | |
| 11.17.2 | Violations to the rights of indigenous peoples | GRI 411-1 | 120 | During 2021, no cases of violations to the rights of indigenous peoples were recorded | No. 2 | |
| 11.17.3 | Operations where indigenous peoples are present or are affected by the organization's activities | | 121-122 | | No. 2 | |

| GRI STANDARD | CONTENTS | GRI CODE 2016/ GRI STANDARD | PAGE NUMBER OR URL | RESPONSE, EXPLANATION OR OMISSION | GLOBAL COMPACT | SDGS |
|--------------------------------|---|--------------------------------|-----------------------|--|-------------------|------|
| 11.17.4 | Free, previous and informed consent | | 121 | | No. 2 | |
| Proprietary indicator | Percentage of reserves on or near indigenous lands | | Appendices | | | |
| 11.18 Conflict and safety | | | | | | |
| 11.18.1 | 3-3 Material Topics Management | GRI 103 | | | | |
| 11.18.2 | Safety personnel trained in human rights policies or procedures | GRI 410-1 | 40 | | No. 2 | |
| 11.19 Anticompetitive behavior | | | | | | |
| 11.19.1 | 3-3 Material Topics Management | GRI 103 | | | | |
| 11.19.2 | Legal actions related to unfair competition and antitrust and monopolistic practices and against free competition | GRI 206-1 | | During 2021, there were no complaints filed with the National Antitrust Commission | No. 10 | 16 |
| 11.20 Anti-corruption | | | | | | |
| 11.20.1 | 3-3 Material Topics Management | GRI 103 | 132-133 | | | |
| 11.20.2 | Operations assessed for corruption-related risks | GRI 205-1 | 132-133 | | No. 10 | 16 |
| 11.20.3 | Communication and training in anti-corruption policies and procedures | GRI 205-2 | 132-133 | | No. 10 | 16 |
| 11.20.4 | Confirmed cases of corruption and measures taken | GRI 205-3 | 133 | During 2021, there were no final court rulings against YPF S.A. on corruption cases. | No. 10 | 16 |
| 11.20.5 | Approach to contract transparency | | | We are part of the Multi-stakeholder Group of EITI Argentina. For more information click here. | No. 10 | 16 |
| 11.20.6 | Beneficial owners / actual beneficiaries | | | We are part of the Multi-stakeholder Group of EITI Argentina. For more information click here. | No. 10 | 16 |

| GRI STANDARD | CONTENTS | GRI CODE 2016/ GRI STANDARD | PAGE NUMBER OR URL | RESPONSE, EXPLANATION OR OMISSION | GLOBAL COMPACT | SDGS |
|---|---|--------------------------------|-----------------------|---|-------------------|------|
| 11.21 Payments to governments | | | | | | |
| 11.21.1 | 3-3 Material Topics Management | GRI 103 | 136 | | | |
| 11.21.2 | Direct economic value generated and distributed | GRI 201-1 | 26-30 | | | |
| 11.21.3 | Financial assistance received from the government | GRI 201-4 | Appendices | | | 16 |
| 11.21.4 | Tax Approach | GRI 207-1 | 136 | | | 16 |
| 11.21.5 | Government, control and management of tax risk | GRI 207-2 | 136 | | | 16 |
| 11.21.6 | Stakeholder relations and handling of tax-related concerns | GRI 207-3 | 136 | | | 16 |
| 11.21.7 | Tax reporting by country | GRI 207-4 | 136, Appendices | | | 16 |
| 11.21.8 | Oil and gas purchased from the State | | | Not Applicable due to non-existence. | | 16 |
| 11.22 Public policy | | | | | | |
| 11.22.1 | 3-3 Material Topics Management | GRI 103 | 135 | | | |
| 11.22.2 | Contribution to political parties and/or representatives | GRI 415-1 | 135; Appendices | During 2021, YPF did not make any contributions to political parties or their representatives, in accordance with the policies and guidelines established by the company for these matters. | No. 10 | 16 |
| Additional indicators | | | | | | |
| GRI 308 Environmental assessment of suppliers | | | | | | |
| GRI 308-1 | New suppliers that have approved assessment and selection filters according to environmental criteria | | 115-117, Appendices | | No. 8 | 12 |
| GRI 308-2 | Negative environmental impacts on the supply chain and actions taken. | | 115-117, Appendices | | No. 8 | 12 |

| GRI STANDARD | CONTENTS | GRI CODE 2016/ GRI STANDARD | PAGE NUMBER OR URL | RESPONSE, EXPLANATION OR OMISSION | GLOBAL COMPACT | SDGS |
|--------------------------------|--|--------------------------------|-----------------------|--------------------------------------|-------------------|------|
| GRI 404 Training and Education | | | | | | |
| GRI 404-3 | Percentage of employees receiving regular performance and professional development evaluations | | 109 | | | 8 |
| GRI 417 Marketing and labeling | | | | | | |
| GRI 417-1 | Requirements for information and labeling of products and services | | 25 | | | |
| GRI 417-2 | Non-compliance cases related to product and service information and labeling | | 25 | | | |
| GRI 417-3 | Non-compliance cases related to marketing communications | | 25 | | | |
| GRI 418 Customer privacy | | | | | | |
| GRI 418-1 | Substantiated complaints regarding breaches of customer privacy and loss of customer data | | 25 | | No. 1 | |

**SASB INDEX:
OIL & GAS – EXPLORATION
& PRODUCTION (2018)**



| UP CODE | TOPIC | METRICS | PAGE NUMBER OR URL | RESPONSE, EXPLANATION OR OMISSION |
|--------------|--|--|--------------------|---|
| EM-EP-110a.1 | GHG Emissions | Scope 1 gross global emissions, methane percentage, percentage covered by emission limitation regulations | 47-49, Appendices | All GHG emissions associated with our operations are covered by the Argentine Government regulations. |
| EM-EP-110a.2 | GHG Emissions | Amount of Scope 1 gross global emissions for: (1) Burnt hydrocarbons, (2) Other combustion, (3) Process emissions (4) Other vented emissions and (5) Fugitive emissions | 48-49, Appendices | |
| EM-EP-110a.3 | GHG Emissions | Discussion on the strategy or short and long-term plan to manage Scope 1 emissions, goals for emission reduction and a performance analysis related to these goals | 44, 46 -50 | |
| EM-EP-120a.1 | Air quality | Air emissions from the following pollutants: (1) NOx (excluding N2O), (2) SOx, (3) Volatile organic compounds (VOC) and (4) Particulate matter (PM10) | 76, Appendices | |
| EM-EP-140a.1 | Water management | (1) Total sweet water extracted, (2) total sweet water consumed, percentage of each in areas with high or extremely high water stress | 66, Appendices | |
| EM-EP-140a.2 | Water management | Volume of water produced and generated flowback; percentage (1) discharged, (2) injected, (3) recycled; hydrocarbon content in discharged water | Appendices | |
| EM-EP-140a.3 | Water management | Percentage of hydraulically fractured wells on which there is public information regarding all the chemical products of the fractured fluids used | Appendices | |
| EM-EP-140a.4 | Water management | Percentage of hydraulic fractured sites where the underground or surface water quality deteriorated compared to the baseline / Policies and practices related to the quality of underground and surface water management | Appendices / 66 | |
| EM-EP-160a.1 | Impacts on biodiversity | Description of the environment policies and practices management for active sites | 63 | |
| EM-EP-160a.2 | Impacts on biodiversity | Number and volume added to hydrocarbon spills, volume in the Arctic, volume that impacts on the coasts with an ESI 8-10 classification and recovered volume | Appendices | We do not operate in the Arctic. |
| EM-EP-160a.3 | Impacts on biodiversity | Percentage of (1) Proven and (2) Potential reserves in or near sites with protected conservation status or endangered species' habitats. | 69, Appendices | |
| EM-EP-210a.1 | Safety, Human Rights and Indigenous Communities Rights | Percentage of (1) Proven and (2) Potential reserves in or near areas of conflict | | We do not operate in areas of conflict. |

| UP CODE | TOPIC | METRICS | PAGE NUMBER OR URL | RESPONSE, EXPLANATION OR OMISSION |
|--------------|--|---|--------------------|--|
| EM-EP-210a.2 | Safety, Human Rights and Indigenous Communities Rights | Percentage of (1) Proven and (2) Potential reserves in or near indigenous lands | 119-120 | 14% of YPF's proven net reserves o are located in areas where indigenous communities live or areas that are close to them. If we take into account potential net reserves, the percentage is 8%. |
| EM-EP-210a.3 | Safety, Human Rights and Indigenous Communities Rights | Discussion on the participation and practices of due diligence processes regarding human rights, indigenous communities' rights and operations in areas of conflict | 121-122 | |
| EM-EP-210b.1 | Relationship with the communities | Discussion on the process to manage risks and opportunities associated with the communities' rights and interests | 119 | |
| EM-EP-210b.2 | Relationship with the communities | Number and length of non-technical delays | | |
| EM-EP-320a.1 | Occupational health and safety | (1) Total rate of incidents registered (TRIR), (2) Mortality rate, (3) "Near misses" frequency rate (NMFR) and (4) Training hours average in health, safety and response to emergencies for (a) full-time employees, (b) employees under contract, and (c) short-term employees | 83-84, Appendices | |
| EM-EP-320a.2 | Occupational health and safety | Discussion on the management systems to integrate a safety culture throughout the exploration and production life cycle | 81-93 | |
| EM-EP-420a.1 | Reserves and capital expenditure | Sensitivity of hydrocarbon level of reserves to projection scenarios for future prices that illustrate a price on carbon emissions | 42-43 | |
| EM-EP-420a.2 | Reserves and capital expenditure | Estimated carbon dioxide emissions included in proven hydrocarbon reserves | Appendices | |
| EM-EP-420a.3 | Reserves and capital expenditure | Amount invested in renewable energies, revenue generated by renewable energies sales | Appendices | |
| EM-EP-420a.4 | Reserves and capital expenditure | Discussion on how prices and demand for hydrocarbons and/or the climate regulation influence the capital expenditure strategy for exploration, acquisition and development of assets | 42-43 | |
| EM-EP-510a.1 | Business and Transparency Ethics | Percentage of (1) Proven and (2) Potential reserves in countries that are located among the lowest 20 positions in Transparency International's Corruption Perception Index | | We do not operate nor have reserves in countries that are in the lowest positions of Transparency International's Corruption Perception Index. |

| UP CODE | TOPIC | METRICS | PAGE NUMBER OR URL | RESPONSE, EXPLANATION OR OMISSION |
|--------------|---|--|--------------------|---|
| EM-EP-510a.2 | Business and Transparency Ethics | Description of the management system for the prevention of corruption and bribery along the value chain | 132-133 | |
| EM-EP-530a.1 | Legal and Regulatory Framework Management | Discussion of corporate positions related to government and/or political proposal regulations that address environment and social factors that affect the industry | 134 | |
| EM-EP-540a.1 | Critical incidents risk management | Process safety events (PSE) rates on Tier 1 loss of primary containment (LOPC) | Appendices | |
| EM-EP-540a.2 | Critical incidents risk management | Description of management systems used to identify and mitigate catastrophic and final risks | 91-93 | |
| EM-EP-000.A | Activity metrics | Production of: (1) oil, (2) natural gas, (3) synthetic oil, (4) synthetic gas | Appendices | |
| EM-EP-000.B | Activity metrics | Number of offshore sites | 4 | As of December 31, 2001, we held interests in 119 oil and gas fields in Argentina. Information from 20F |
| EM-EP-000.C | Activity metrics | Number of land sites | 115 | As of December 31, 2001, we held interests in 119 oil and gas fields in Argentina. Information from 20F |

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD) – RECOMMENDED REPORTS INDEX

| TCFD PILLAR | RECOMMENDED REPORTS | WHERE TO FIND RELEVANT YPF INFORMATION |
|---|--|---|
| Governance Organizational governance over climate-related risks and opportunities. | a. Describing the board of directors' control over climate-related risks and opportunities. | <ul style="list-style-type: none"> • Sustainability Report 2021 - p35, <i>Sustainability Governance</i> • Sustainability Report 2021 - p12, <i>Board of Directors Committees</i> • CDP Response to Climate Change – C1.1 |
| | b. Describing the role of management in evaluating and managing climate-related risks and opportunities. | <ul style="list-style-type: none"> • Sustainability Report 2021 - p35, <i>Sustainability Governance</i> • Sustainability Report 2021 - p38, <i>Sustainability Priorities</i> • CDP Response to Climate Change – C1.2, 1.3 |
| Strategy Actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy and financial planning. | a. Describing climate-related risks and opportunities identified by the organization in the short, medium and long term. | <ul style="list-style-type: none"> • Sustainability Report 2021 - p15-16, <i>Emerging Risks</i> • CDP Response to Climate Change – C2.1, 2.3, 2.4 |
| | b. Describing the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning. | <ul style="list-style-type: none"> • Sustainability Report 2021 - p15-16, <i>Emerging Risks</i> • Sustainability Report 2021 - p42-43, <i>Energy Perspectives</i> • Sustainability Report 2021 - p54-57, <i>New Renewable Energy Solutions</i> • CDP Response to Climate Change – C2.3, 2.4, 3.1, 3.3, 3.4 |
| | c. Describing the resilience of the organization's strategy, considering different climate-related scenarios, such as a scenario with 2°C or less. | <ul style="list-style-type: none"> • Sustainability Report 2021 - p42-45, <i>Energy Perspectives</i> • sustainability report 2021, p59, <i>Resilience to Climate Change Impacts</i> • Sustainability Report 2021 - p19, <i>Business Strategy</i> • Sustainability Report 2021 - p35 -39, <i>Sustainability Strategy and Management</i> • CDP Response to Climate Change – C3.2, 3.3, 3.4 |
| Risk Management – Processes used by the organization to identify, evaluate and manage climate-related risks. | a. Describing the organization's processes to identify and evaluate climate-related risks. | <ul style="list-style-type: none"> • Sustainability Report 2021 - p59, <i>Evaluation of climate impact on assets and operations</i> • Sustainability Report 2021 - p59, <i>Climate maps</i> • CDP Response to Climate Change – C2.1, 2.2 |
| | b. Describing the organization's processes to manage climate-related risks. | <ul style="list-style-type: none"> • Sustainability Report 2021 - p36, <i>Sustainability Risk Management</i> • sustainability report 2021, p59, <i>Resilience to Climate Change Impacts</i> • CDP Response to Climate Change – C2.1, 2.2 |
| | c. Describing how processes to identify, evaluate and manage climate-related risks are integrated into the organization's overall risk management. | <ul style="list-style-type: none"> • Sustainability Report 2021 - p14 -16, <i>Risk Management</i> • Sustainability Report 2021 - p36, <i>Sustainability Risk Management</i> • CDP Response to Climate Change – C2.1, 2.2 |

| TCFD PILLAR | RECOMMENDED REPORTS | WHERE TO FIND RELEVANT YPF INFORMATION |
|--|---|--|
| <p>Metrics and goals –</p> <p>Metrics and goals used to evaluate and manage relevant climate-related risks and opportunities.</p> | <p>Disclosing the metrics used by the organization to evaluate climate-related risks and opportunities in accordance with its strategy and risk management process.</p> | <ul style="list-style-type: none"> • Sustainability Report 2021 – p37-39, <i>Sustainability priorities and contribution to SDGs</i> • Sustainability Report 2021, <i>Low carbon oil and gas operations</i> – climate metrics and performance discussion: <ul style="list-style-type: none"> • Energy efficiency (<i>consumption, sources, intensity</i>), p51-52, Appendices • Burned and vented hydrocarbon, p49, Appendices • Methane emission reductions, p47-49, Appendices • Emission reductions for CDM projects, p46, Appendices • Emissions offsets, Forestry projects, p124 • Domestic Price of Carbon, p59 • New Renewable Energy Solutions, p54-56 • Products Based on Lower Carbon Hydrocarbons, p57 • Sustainability Report 2021, other metrics related to climate change risks and opportunities <ul style="list-style-type: none"> • Estimated CO₂ emissions from reserves incorporated in proven hydrocarbon reserves, Appendices • Amount invested in renewable energy sources and sales generated, Appendices • Water management, p66-68, Appendices, including water extraction from areas under water stress. • Waste management, p73-74, Appendices |
| | <p>Disclosing Scope 1, Scope 2 and, if applicable, Scope 3 greenhouse gas (GHG) emissions and related risks.</p> | <ul style="list-style-type: none"> • Sustainability Report 2021, <i>Low carbon oil and gas operations</i> – climate metrics and performance discussion: <ul style="list-style-type: none"> • GHG emissions scope 1 (intensity, total, by business, by activity), p46-49, Appendices • GHG Emissions Scope 2 – Sustainability Report 2021, p50, Appendices • GHG emissions scope 3 (Goods and services purchased, Waste generated in operations, Use of products sold, <i>Franchises</i>) – Sustainability Report 2021, p58, Appendices • CDP Response to Climate Change – C6, C7 |
| | <p>Describing the goals used by the organization to manage climate-related risks and opportunities and performance against goals.</p> | <ul style="list-style-type: none"> • Sustainability Report 2021, p44, <i>Climate Change Roadmap</i> • Sustainability Report 2021 – p37-39, <i>Sustainability priorities and contribution to SDGs</i> • CDP Response to Climate Change – C4.1, 4.2 |



Propelling our own energy **YPF**