3.1

# Advancing towards a net zero world

TFCD / GRI: 3-3, 201-2, 302-1, 303-3, 303-4, 305-1, 305-2, 305-3, 305-5 / SASB: EM-EP-110a.3, EM-RM-110a.2, RT-CH-110a.2, EM-EP-530a.1, EM-RM-530a.1, EM RM-140a.1

## MILESTONES 2023

Expansion of the scope of Cepsa's ISO 14067 product carbon footprint certification to include asphalts and lubricants.

Expansion of the scope of Cepsa's ISO 14064 carbon footprint certification to include all the facilities and assets under operating control.

Addition of certified low-carbon LAB to the low-carbon product portfolio.

| KEY INDICATORS | 2023 | 2022 |
|---|---|---|
| Scope 1 GHG emissions (million $tCO_2eq$) | 4.7 | 5.3 |
| Scope 2 GHG emissions (million $tCO_2eq$)[1] | 0.2 | 0.2 |
| Scope 3 GHG emissions (million $tCO_2eq$)[2] | 58.0 | 62.2 |
| Energy consumption (TJ)[3] | 63,134 | 65,929 |

[1] Reported using the Scope 2 market-based method.
[2] The indirect Scope 3 emissions reported are limited to five categories (Purchased goods and services; Fuel- and energy-related activities; Upstream transportation and distribution; Downstream transportation and distribution; Use of sold products).
[3] This figure relates to the energy consumed within the organisation and excludes the energy generated and sold to third parties.

3.1.1

# Climate change governance

The Board of Directors is tasked with approving strategic climate change targets and signing off on the matters delegated in its advisory committees:

The Strategy and Sustainability Committee supervises Decarbonisation Plan, indicator and target recommendations and the impact of climate change risks and opportunities on the company's strategy.

The Audit, Compliance, Ethics and Risk Committee supervises climate change risks and compliance matters and oversees correct implementation of the internal control systems.

The Nomination and Compensation Committee supervises the correlation between the company's climate targets and its variable compensation.[4]

Lastly, the Management Committee is responsible for decision-making and resource allocation and checking that the company is performing in line with the established target.

We have an Energy Transition Panel, made up of a multidisciplinary team of people from all across the company, which is tasked with implementing the Decarbonisation Plan and monitoring the climate change mitigation measures put in place to address transition risks. Elsewhere, the Water Panel monitors the physical risks related with climate change associated with water scarcity.

For further information, refer to 2.3.1 We integrate sustainability into our business

To articulate our climate change and energy transition ambitions, we have formulated a number of related action plans that were reviewed and approved by the Board of Directors in 2023.

In addition to our dedicated Climate Action Policy, our commitments in this area are set down in our Code of Ethics and Conduct, Supplier Code of Ethics and Conduct, Sustainability Policy, Biodiversity Policy and our General Risk Policy.

For further information, refer to 2.1 Corporate governance

[4] The Scope 1 and 2 emissions reduction targets set down in the Positive Motion strategy were added to the company's variable remuneration metrics in 2023 and are monitored monthly.

3.1.2

# Climate strategy

## Management articulated around Positive Motion

Our goal is to achieve net zero emissions before 2050[5]. We aim to be an active and leading player in the transition towards a carbon-neutral economy by embracing more sustainable business models and providing our customers with lower-carbon types of energy and chemical products.

In line with Positive Motion, we have drawn up a Decarbonisation Plan, which runs to 2030 and pursues a dual target:

- Reducing our Scope 1 and 2 carbon emissions by 55% in 2030 by comparison with 2019, so shrinking the carbon footprint of our industrial facilities.
- Reducing the carbon intensity index of the energy we sell to end customers by between 15% and 20% in 2030 by comparison with 2019 levels, so shrinking the carbon footprint of the solutions we offer our customers.

Our goal of becoming net zero before 2050 aligns us with the climate scenarios[6] for global warming of no more than 1.5ºC of the International Energy Agency (IEA) Intergovernmental Panel on Climate Change (IPCC) and the Network for Greening the Financial System (NGFS), while our 2030 targets are consistent with the IEA's Sustainable Development Scenario (SDS) of < 2ºC.

For further information, refer to 1.1 Positive Motion

Our Decarbonisation Plan was evaluated using the Assessing Low Carbon Transition (ACT)[7], methodology specific for the oil & gas sector. The conclusions of that assessment endorse the solidity of our climate change governance model, our decarbonisation aspirations and targets and the reach of our Positive Motion strategy.

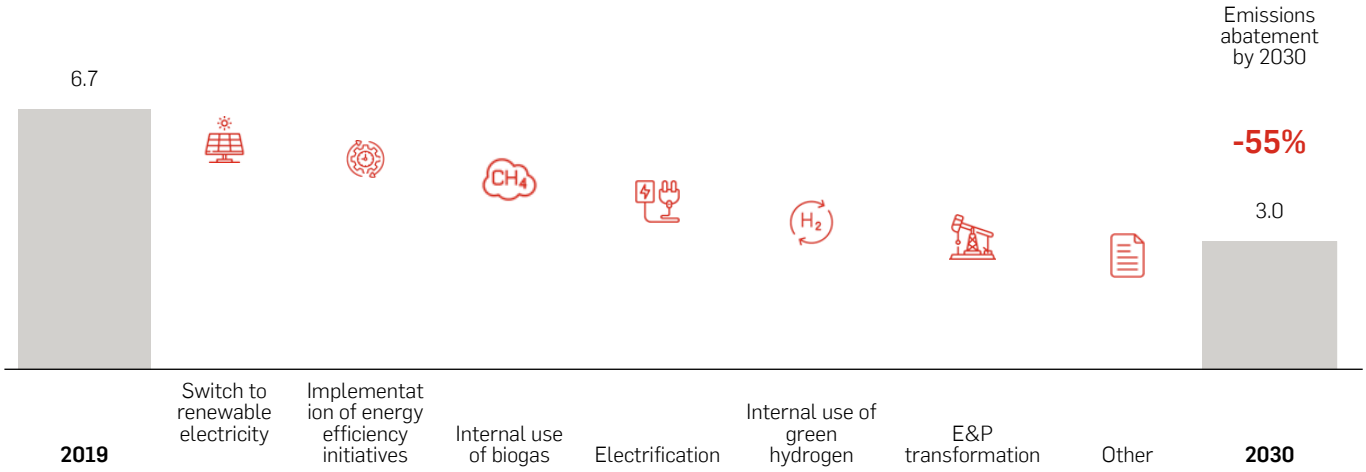
## Decarbonisation Plan

The goals for reducing our Scope 1 and 2 emissions are tied to the productive activity of the facilities under our operational control and articulated around a series of emission-abatement levers such as energy efficiency projects, consumption of green electricity, gradual electrification of our processes and steam generation. We are monitoring those levers constantly to assess the speed at which they are being implemented as a function of technological developments and utility sector prices, among other factors. Moreover, we factor the internal price of carbon emissions into our decisions and revenue projections. Specifically, we are projecting an internal carbon price of €140/tonne in 2030[8] based on a range of market forecasts.

[5] In line with the SBTi's Corporate Net-Zero Standard, to attain our goal by 2050, we will take measures to reduce our Scope 1, 2 and 3 emissions by at least 90% compared to benchmark levels. Any remaining emissions will be offset using nature-based solutions.
[6] Combination of climate, regulatory, technological, supply and demand factors, among others.
[7] Note that we used ACT methodology because the SBTi initiative has yet to publish a specific assessment protocol for the oil & gas sector and the Transition Pathway Initiative (TPI) only includes listed companies.
[8] In 2023, the internal carbon price was €86/tonne.

## Scope 1 and 2 carbon emissions reduction plan

**Cepsa's global Scope 1 & 2 emissions, million tonnes of $CO_2$**




- Switching 100% of our facilities' electricity consumption to renewable sources[9] and our electricity generation portfolio to renewable energy, ceasing to generate electricity from fossil fuels.
- Technology solutions for reducing the consumption of fossil fuels.[10]
- Replacement of natural gas, a fossil fuel, with biogas in both fuel and raw material applications.
- Electrification of CHP, processes and furnace steam generation, involving the replacement of combustion equipment that relies on fossil fuels with machines that run on renewable electricity.
- Consumption of green hydrogen in all our production processes.
- Transformation of our E&P assets to reduce their carbon intensity.[11]
- Other emission-abatement initiatives.

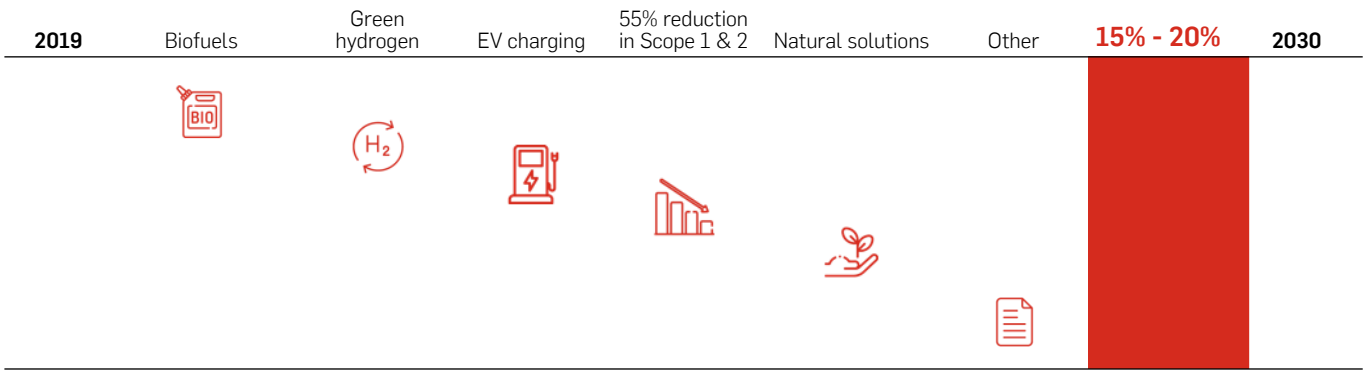
[9] Our Spanish chemicals facilities consume renewable electricity only. Since 2021, all productive areas of our Energy Parks and our factory in Tenerife are likewise exclusively consuming green electricity. In addition, in the Mobility & New Commerce and Commercial & Clean Energies businesses, our network of service stations and lubricant and asphalt factories are supplied solely with renewable electricity.
[10] To turn our commitment to reducing our energy consumption into a reality, our main Energy Parks and Chemicals factories in Spain have ISO 50001-certified energy management systems.
[11] The assets we operate in this business have not generated emissions from venting since 2021.

Elsewhere, the reduction of the carbon intensity index (CII)[12] of the energy sold to end customers is related with the transition to low-carbon business models.

The Commercial & Clean Energies' new customer decarbonisation area focuses on evaluating how our customers can decarbonise and striking alliances for the supply of renewable energy.

As for offsetting, we have created a new voluntary carbon credit area within this same business that is devoted to searching for new investments in nature-based projects so as to build a carbon offset portfolio for the purpose of offering carbon-neutral products. In 2023, the volume of emissions offsets associated with products sold to customers was 31,000 $tCO_2$.

## Cepsa aims to reduce its carbon intensity by 15% to 20% by 2030




- Increased co-processing at our facilities. We already have a fatty acid methyl ether (FAME) production facility and we are planning to commission new biofuel facilities.
- Renewable hydrogen for direct sale to third parties or for conversion into new green molecules, such as methanol and ammonium, to enable energy transition in other sectors, such as shipping.
- Creation of a network of ultra-rapid EV chargers in Spain and Portugal
- Reduction of the carbon intensity of the energy we sell will be spurred by the levers underpinning the direct emissions reduction target.
- Offset of the emissions from our products 'in use' by offering our customers a range of carbon-neutral products.
- Other emission-abatement initiatives.

### CDP Climate Change

Thanks to our participation in the CDP Climate Change initiative, we report on our climate change management practices and on the associated key performance indicators. We have ranked in the leadership group with a score of A- since 2020.

For further information, visit the CDP's website

[12] The CII is expressed in terms of tonnes of $CO_2$ per unit of energy ($tCO_2$/TJ). The numerator is the sum of the Scope 1 and 2 emissions generated upstream and downstream in producing energy products and the Scope 3 emissions associated with the use of those products. The denominator reflects the energy the company puts on the market. Chemical products are excluded from the calculation because the CII is only used to express the intensity of the carbon of the energy Cepsa sells. The company follows the Transition Pathway Initiative's methodology to define this metric.

3.1.3.

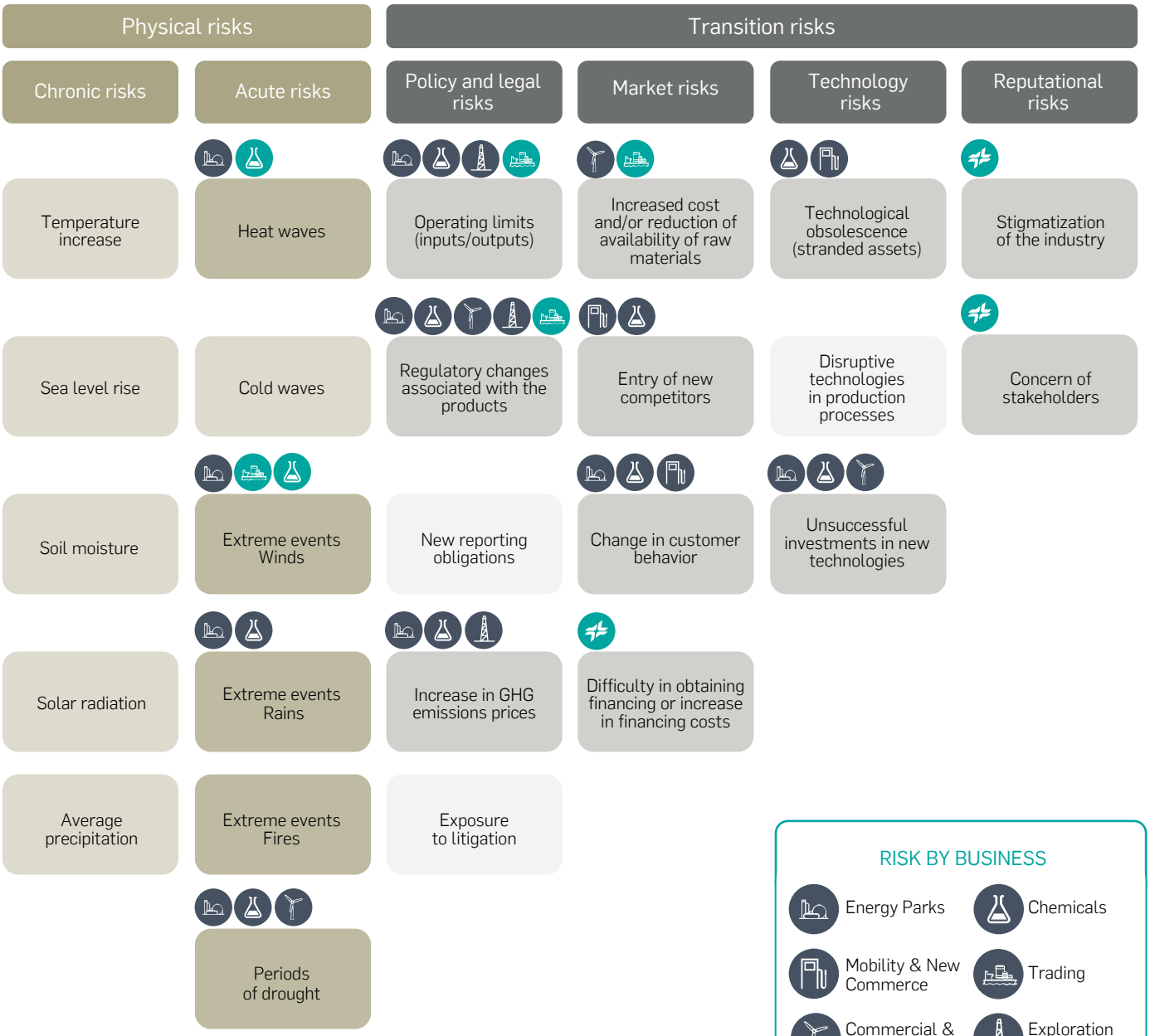
# Climate change: risk and opportunity management

## Climate risks

Climate risk management falls under the scope of our Integrated Risk Management and Control System. We classify climate risks following TCFD recommendations, taking a bottom-up approach for all businesses, then consolidating them in the company's risk map. The steps in this process are: scenario-setting; physical and transition risk identification; analysis, evaluation and impact assessment; risk management; and monitoring and review.

For further information, refer to 2.2 Risk management

**Key risks identified by business**




All of the risks itemised in the TCFD taxonomy have been analysed by business unit. The risks in shaded colours were assessed to calculate their financial impact.

The icons in blue indicate a relevant financial impact.

The icons in green indicate risks without a relevant financial impact.

## Climate opportunities

The company also classifies its climate-related opportunities following TCFD recommendations.

**Key opportunities identified by business**

| Energy source | Products and services | Markets | Resource efficiency |
|---|---|---|---|
| Use of lower-emission sources of energy | Development of low emission goods and services | Use of supportive policy incentives | Reduced water usage and consumption |
| Participation in carbon market | Shift in consumer preferences | Access to new markets | |

## Financial impact of climate-related risks and opportunities

We defined three climate scenarios using the guidance provided by the IEA, IPCC and NGFS to test the resilience of Positive Motion and our climate ambitions over three time horizons: 2030, Positive Motion; 2040, interim horizon; and 2050, net zero ambition:

- Scenario 1. Source: Net Zero Emissions in 2050 (NZE-IEA), SSP 1-1.9ºC (IPCC), Net Zero 2050 (NGFS - Orderly Scenario).
- Scenario 2. Source: Sustainable Development Scenario in 2050 (SDS-IEA), SSP 1-2.6ºC (IPCC), NGFS- NDCs Scenario.
- • Scenario 3. Source: Stated Policies Scenario in 2050 (STEPS-IEA), SSP 2-4.5ºC (IPCC), NGFS- Fragmented World.

We then determined the financial impacts of the relevant risks assessed under the three defined climate scenarios and three time horizons. We improved our risk analysis in 2023 and updated our financial impact calculations; by better aligning the climate scenarios and calculation criteria we obtained more coherent findings.

The scenario with the lowest impact on our cash flow is the 1.5ºC scenario in which we leverage our leadership in the energy transition. The biggest financial impact would derive from the scenario of greatest global warming in which the targets announced by the public sector are not met and our leadership is not acknowledged by society or the market. Uncertainty around regulations, social demand and technology is higher in the 2040 scenario.

The transition risks have a greater financial impact that the physical risks in all scenarios, accounting on average for over 80% of all estimated impacts. The physical risks increase over time and are more pronounced in the second half of this century.

The differences in financial impact between the various scenarios over the three time horizons are low (around 10% on average), evidencing the resilience of the Positive Motion strategy on.

As for quantification of our climate-related opportunities, note that they are included in the new businesses and targets set down in the Positive Motion strategy and are therefore reflected in the related financial projections.

3.1.4

# Climate change metrics

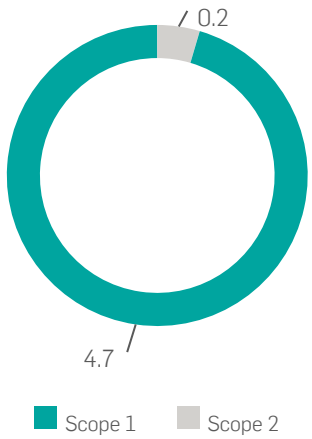
## Scope 1 and 2 emissions

Every year we certify our carbon footprint under ISO 14064. This measurement covers our facilities and our assets under operating control. This year we added our international chemicals facilities and our lubricant and aviation fuel businesses to the measurement and certification. We also drew up a specific certificate for the Exploration & Production business. 93% of our Scope 1 and 2 emissions are under regulated carbon systems, which, coupled with ISO 14064 certification, means that all our reported emissions figures are reliable, traceable and offer a high level of assurance.

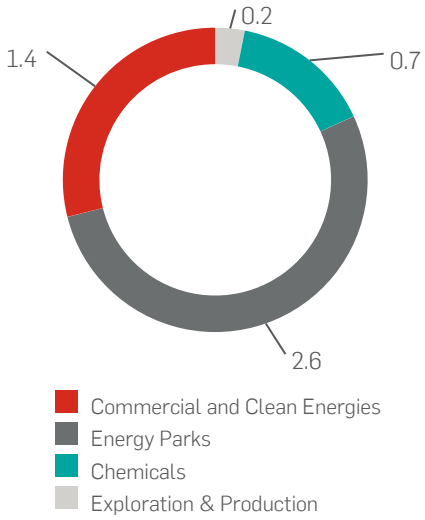
In 2023 we also widened the scope of our product carbon footprint certification under ISO 14067 to include asphalts and lubricants, in addition to all the products made at our Energy Parks. By constantly improving our calculation methodology and having an accredited third party certify it, we are able to provide our customers with information about our products' footprints over the different stages of their life cycles that can help them manage and track their own decarbonisation goals and commitments.

In 2023 our Scope 1 and 2 emissions totalled 4.9[13] million tonnes of $CO_2$eq, which is down around 28% from 2019.

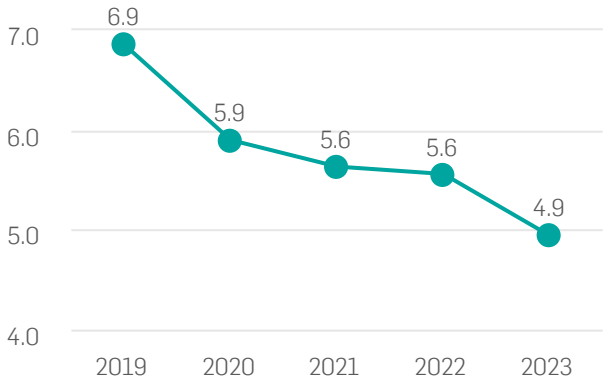
Scope 1 and 2 GHG emissions in 2023 (million $tCO_2eq$)




Scope 1 and 2 GHG emissions by business in 2023 (million $tCO_2eq$)



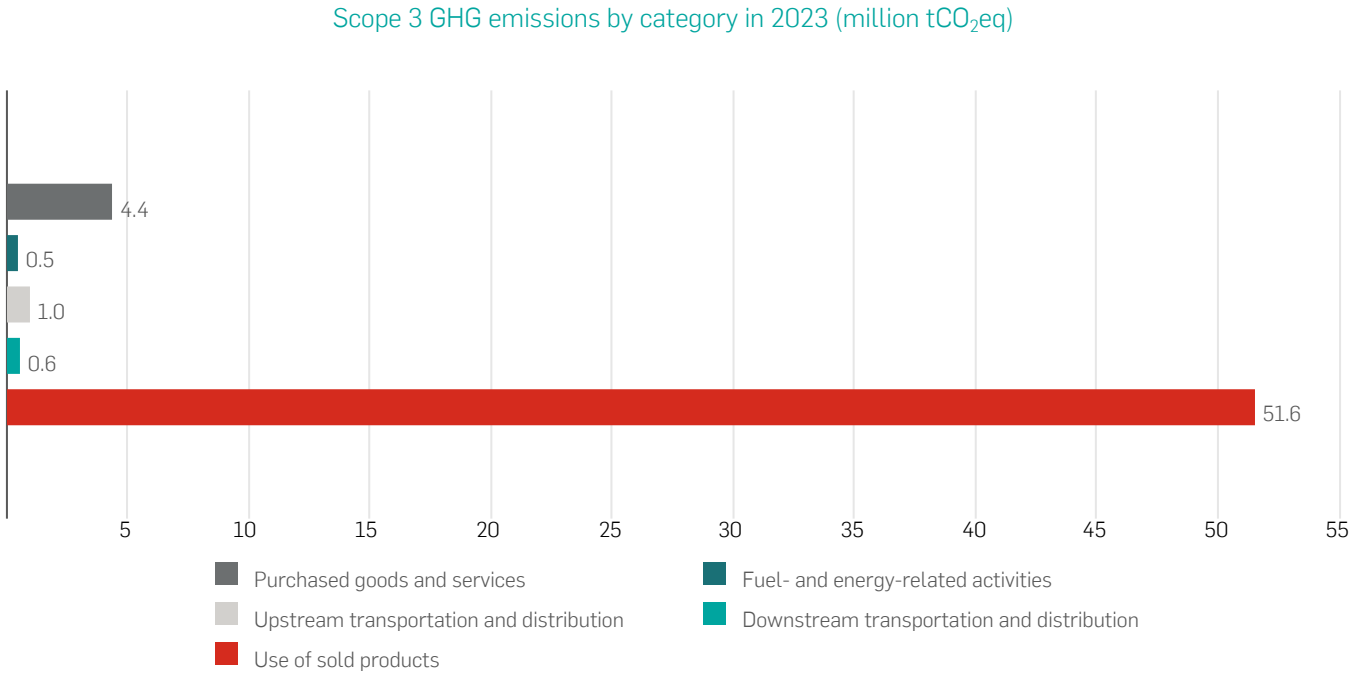

Trend in Scope 1 and 2 emissions over last 5 years (million $tCO_2eq$)




The reduction during the last five years demonstrates the strength of our commitment to reducing our emissions and has been driven notably by the increased use of low-carbon energy sources like renewable electricity, the consumption of biomethane at our chemicals facility in Bécancour (reduction of 4.782 $tCO_2eq$) and the use of renewable energy generated by co-processing vegetable oil at our Energy Parks (reduction of 5,238 $tCO_2eq$),as well as our ongoing efforts to spur energy efficiency projects. Our emissions also decreased in 2023 as a result of a reduction in our business volumes.

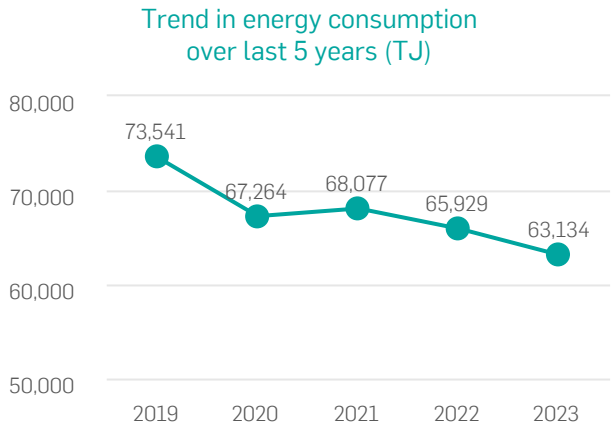
[13] The scope of the Positive Motion target differs slightly from that reported in this Integrated Report. The Positive Motion target is circumscribed to $CO_2$ emissions and excludes fugitive emissions from our assets. Nevertheless, the latter are indirectly addressed and tackled in the Decarbonisation Plan measures. Additionally, the Positive Motion target does not include other GHG emissions, except for the CH4 emissions from our Exploration & Production assets as a result of flaring. Elsewhere, the asphalts business and the bioenergy plant in San Roque are not included in the scope on account of their scant materiality.

## Scope 3 emissions[14]




In 2023 the Scope 3 emissions included in this scope amounted to 58.0 million tonnes of $CO_2$eq, which is down 7% from 2022. This reduction is attributable to an improved calculation methodology in the 'Purchased goods and services' category, specifically reflecting the origin of our crudes by using the Ecoinvent database.

## Energy consumption




# 2.1

# Climate change

## 2.1.1

[14] The five most important Scope 3 categories are represented, meaning those that account for at least 95% of ISO 14064-certified total Scope 3 emissions.
[15] This figure relates to the energy consumed within the organisation and excludes the energy generated and sold to third parties.

# GHG emissions

## [GRI 305-1] Direct (Scope 1) GHG emissions / [GRI 305-2] Energy indirect (Scope 2) GHG emissions

### Scope 1 and 2 GHG emissions by business (million $tCO_2eq$)[1, 2,3,4]

| | | 2023 | | | 2022 | | |
|---|---|---|---|---|---|---|---|
| **Business** | | **Scope 1** | **Scope 2 (location)** | **Scope 2 (market)** | **Scope 1** | **Scope 2 (location)** | **Scope 2 (market)** |
| Exploration & Production | | 0.1 | 0.04 | 0.1 | 0.1 | 0.05 | 0.1 |
| Chemicals | | 0.6 | 0.2 | 0.1 | 0.7 | 0.3 | 0.2 |
| Energy | Energy Parks | 2.6 | 0.2 | — | 2.9 | 0.2 | — |
| | Commercial & Clean Energies | 1.4 | 0.001 | — | 1.6 | 0.002 | — |
| **Total (Scopes)** | | **4.7** | **0.5** | **0.2** | **5.3** | **0.5** | **0.2** |
| **Total (Scope 1 + Scope 2 \| market-based)** | | | | **4.9** | | | **5.6** |

1. Because of the reporting date, the $CO_2eq$ data may differ slightly from the audited data reported under the carbon schemes to which the company is subject or our voluntary reports under ISO 14064.
2. Gases included in the calculation: $CO_2$, $CH_4$ and $N_2O$.
3. Measurement methodology: calculated using regulatory methodologies and/or the voluntary ISO 14064 international standard. The Scope 2 figures have been updated with respect to prior reports as the reporting approach has been modified to layer in the distinction between market- and location-based measurements.
4. The emissions figures do not include the Mobility & New Commerce or Trading businesses on account of their scant materiality. Scope 1 emissions include fugitive emissions from natural gas transport for alignment with our scope in ISO 14064. The asphalt facilities have been included under the scope of ISO 14064 since 2021, so that they are included within the Commercial & Clean Energies business; although they do not generate material emissions or consume material amounts of energy, they are reported on for consistency with the ISO standard.

### Methane emissions (thousand tonnes of CH4 and as a percentage of $CO_2eq$)[1]

| 2023 | | 2022 | |
|---|---|---|---|
| **Direct $CH_4$ emissions** | **$CH_4$ as a % of $CO_2eq$** | **Direct $CH_4$ emissions** | **$CH_4$ as a % of $CO_2eq$** |
| 1.9 | 1 % | 2.0 | 1 % |

1. Reported CH4 includes venting emissions and emissions from flaring, combustion and natural gas transport (fugitive). Calculated using the audited methodology under ISO 14064.

## [GRI 305-3] Other indirect (Scope 3) GHG emissions

**Scope 3 GHG emissions by category (million $tCO_2eq$)[1,2,3]**

| Category | 2023 | 2022 |
|---|---|---|
| Purchased goods and services | 4.4 | 9.8 |
| Fuel- and energy-related activities | 0.5 | 0.5 |
| Upstream transportation and distribution | 1.0 | 0.9 |
| Downstream transportation and distribution | 0.6 | 0.3 |
| Use of sold products | 51.6 | 50.7 |
| **Total** | **58.0** | **62.2** |

1. Because of the reporting date, the $CO_2eq$ data may differ slightly from the figures reported voluntarily under ISO 14064.
2. The 2022 'Fuel- and energy-related activities' figure has been updated.
3. Gases included in the calculation: $CO_2$, $CH_4$ and $N_2O$.

## [GRI 305-4] GHG emissions intensity

**GHG emissions intensity (thousand $tCO_2eq$ / thousand tonnes)[1,2]**

| Business | 2023 | 2022 |
|---|---|---|
| Exploration & Production | 0.18 | 0.10 |
| Chemicals | 0.30 | 0.27 |
| Energy Parks | 0.17 | 0.16 |

1. Emissions intensity reporting is based on the same rationale as the energy intensity indicator (GRI 302-3). The primary energy consumption in the Commercial & Clean Energies business included in the energy consumption indicator (GRI 302-1) is not reported in this indicator since part of the final energy generated, and, therefore, the associated emissions, is consumed by Energy Parks and Chemicals and is, therefore, shown in these businesses' emissions intensity.
2.The denominator in the Exploration & Production business is expressed in thousands of tonnes of crude oil and gas. The denominators in Chemicals and Energy Parks are expressed in thousands of tonnes processed.

## [SASB EM-EP-110a.2] Amount of gross global Scope 1 emissions from: flared hydrocarbons, other combustion, process emissions, other vented emissions, and fugitive emissions

**Scope 1 GHG emissions in the Exploration & Production business by type (million $tCO_2eq$)**

| | 2023 | 2022 |
|---|---|---|
| Hydrocarbons flared | 0.04 | 0.07 |
| Other combustion | 0.03 | 0.07 |
| Process emissions | — | — |
| Other vented emissions | — | — |
| Fugitive emissions from operations | 0.001 | 0.01 |

## [SASB EM-EP-420a.2] Estimated carbon dioxide emissions embedded in proved hydrocarbon reserves

**Estimated GHG emissions embedded in proved hydrocarbon reserves (million $tCO_2$)[1]**

| 2023 | 2022 |
|---|---|
| 9.1 | 31.2 |

1. The decrease is due to the sale of the Abu Dhabi assets.

2.1.2

# Energy consumption

## [GRI 302-1] Energy consumption within the organization

### Energy consumption within the organization by fuel type (TJ)[1,2]

| Fuels | 2023 | 2022 |
|---|---|---|
| Renewable electricity | 4,618 | 4,580 |
| Renewable fuel | 181 | — |
| Non-renewable electricity | 1,083 | 1,453 |
| Gas oil/diesel | 589 | 607 |
| Fuel oil | 1,130 | 2,923 |
| Natural gas | 41,081 | 41,623 |
| Residual gas | 1,703 | 2,328 |
| Crude oil | 24 | 46 |
| Fuel gas | 25,326 | 28,114 |
| Steam | 2,198 | 2,158 |
| **Total** | **77,932** | **83,831** |

1. The data reported correspond to directly incoming energy and fuel at the facilities both for own consumption and the production of energy for sale to third parties. As a result, the figures differ from those reported for the purpose of GRI 302-3, which only reflect the energy consumed.
2. The energy figures do not include the Mobility & New Commerce or Trading businesses on account of their scant materiality.

### Energy sold by fuel type (TJ)[1]

| | 2023 | 2022 |
|---|---|---|
| Electricity | 7,825 | 9,754 |
| Steam | 965 | 1,060 |
| **Total** | **8,790** | **10,814** |

1. Reflects the electricity and steam sold to a third party.

## [GRI 302-2] Energy consumption outside the organization

### Energy consumption outside the organization by category (TJ)[1]

| Categories (GHG protocol) | 2023 | 2022 |
|---|---|---|
| Purchased goods and services | 846,677 | 916,549 |
| Fuel- and energy-related activities | 9,055 | 9,542 |
| Upstream transportation and distribution | 18,084 | 15,729 |
| Downstream transportation and distribution | 9,987 | 5,735 |
| Use of sold products | 726,196 | 711,009 |
| **Total** | **1,609,999** | **1,658,564** |

1. The 2022 'Fuel- and energy-related activities' figure has been updated.

## [GRI 302-3] Energy intensity

### Energy intensity by business (TJ/thousand tonnes of product)[1,2,3]

| Business | 2023 | 2022 |
|---|---|---|
| Exploration & Production | 1.26 | 1.14 |
| Chemicals | 5.21 | 4.83 |
| Energy Parks | 2.54 | 2.24 |

1. The primary energy consumption in the Commercial & Clean Energies business included in the energy consumption indicator (GRI 302-1) is not reported in this indicator since part of the final energy generated is consumed by Energy Parks and Chemicals and, therefore, shown in those businesses' energy intensity.
2. Types of energy included: fuel, electricity, heating, cooling and steam.
3. The denominator in the Exploration & Production business is expressed in thousands of tonnes of crude oil and gas. The denominators in Chemicals and Energy Parks are expressed in thousands of tonnes processed.

## [SASB RT-CH-130a.1] Total energy consumed

**Energy consumed in the Chemicals business (TJ)**

| Energy | 2023 | 2022 |
|---|---|---|
| Total energy consumed | 15,161 | 17,519 |
| Energy consumed supplied from grid electricity | 1,538 | 1,743 |
| Percentage grid electricity | 10 % | 10 % |
| Energy consumed that is renewable energy | 1,248 | 1,318 |
| Percentage renewable | 8 % | 8 % |
| Total amount of self-generated energy | 76 | 81 |

2.1.3

# Renewable energy

**Renewable energy production in 2023**[1]

| Renewable energy source | Gross generation (GWh) | Installed capacity (MW) |
|---|---|---|
| Wind | 51 | 29 |

1. Excludes the energy generated for self-consumption at our service stations.

**Biofuels produced (thousands of litres)**[1]

| 2023 | 2022 |
|---|---|
| 209,463 | 59,843 |

1. Biofuel produced in keeping with sustainability criteria.

## [SASB EM-RM-410a.1] Renewable Volume Obligation (RVO) met through: production of renewable fuels and purchase of separated renewable identification numbers (RIN) (%)

| | 2023 | 2022 |
|---|---|---|
| % met through production of renewable fuels [1] | 40 % | 16 % |
| % met through purchase of separated renewable identification numbers (RIN) | 60 % | 84 % |

1. Includes biofuels, cellulosic biofuel, ethanol, advanced biofuels and other renewable fuels.