

April 2026

Moeve's climate-related risks and opportunities: assessment and management

TCFD Summary Report

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Introduction

The **Financial Stability Board (FSB)**, established by the G20 in 2009, **created the Task Force on Climate-related Financial Disclosures (TCFD)** in 2015 to enhance **reporting of climate-related financial information**.

According to TCFD and the World Economic Forum Global Risk Report, one of the **most significant risks** that organizations face relates to **climate change**. It is widely recognized that continued greenhouse gas emissions will drive further global warming. However, the exact timing and severity of the physical impacts remain uncertain.

The large-scale and long-term nature of the problem makes it uniquely challenging, especially in the context of **economic decision making**. The potential **impacts** of climate change on organizations, however, **are not only physical and do not manifest only in the long term**.

Furthermore, **climate-related risks and the expected transition** to a lower-carbon economy **affect most economic sectors and industries**.

While changes associated with a transition to a lower-carbon economy present **significant risk**, they also **create significant opportunities** for organizations focused on climate change mitigation and adaptation solutions.

The TCFD organizes its recommendations around four thematic areas—governance, strategy, risk management, and metrics and targets—that represent core elements of how organizations operate. The four overarching recommendations are supported by recommended disclosures that build out the framework with information that will help investors and others understand how reporting organizations assess climate-related risks and opportunities.

In this summary report, **Moeve has adapted these core elements** to the following **structure**:

- 1. Governance**
- 2. Strategy and Targets**
- 3. Risk and Opportunity Management**
- 4. Metrics**



1. Governance



Climate-related policies and targets are approved by the **Board of Directors** through two advisory committees:

- **Audit, Compliance, Ethics and Risk Committee:** oversees climate-related risks and compliance and ensures the proper implementation of control systems.
- **Nomination, Compensation and Sustainability Committee:** integrates sustainability, including climate change, into business strategy and decision-making, and oversees the link between variable remuneration and climate targets.

The Board receives regular information on climate strategy, associated risks, action plans and performance through these committees, and oversees progress towards decarbonisation and energy transition targets.

The **Management Committee** ensures the operational execution of the strategy, including the management of climate-related risks, allocates resources and makes decisions to achieve the established objectives. Reporting to it are other specialised executive committees:

- **Sustainability Committee:** drives climate strategy, decarbonisation and the energy transition, among other areas.
- **Corporate Risk Committee:** reviews the most significant risks, including climate-related risks, and reports the Management Committee on their evolution.

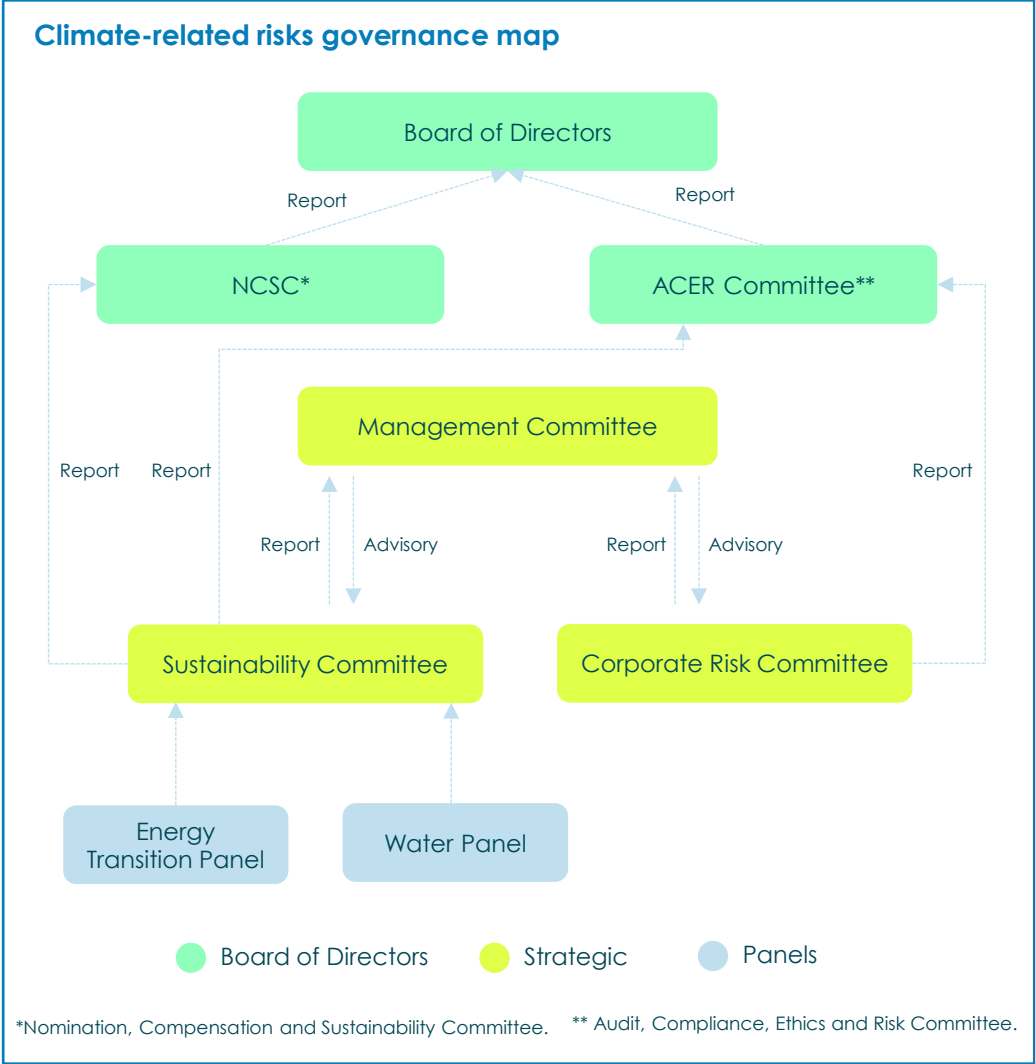
These committees meet quarterly or on an ad hoc basis in response to emerging risks or significant strategic decisions. Information reported to the Management Committee includes assessments of climate-related risks and opportunities, key indicators on decarbonisation and the energy transition, action plans, and progress against climate targets.

In addition, there are **working groups** where we address specific topics and report them to the various Committees:

- **Climate and Energy Transition Panel:** acts as a cross-functional forum responsible for the Decarbonisation and Energy Transition Plan, implements initiatives to disseminate information, and oversees the implementation of mitigation measures in response to climate change and transition risks.
- **Water Working Group:** carries out cross-cutting monitoring of water-related issues, including physical risks arising from climate change associated with water resources.

Moreover, the company has **specific functional units** that address all these aspects **along with the business units**.

For further information, please see the [Consolidated Management Report 2025](#) (p. 38, 42, 48-49)



2. Strategy and Targets

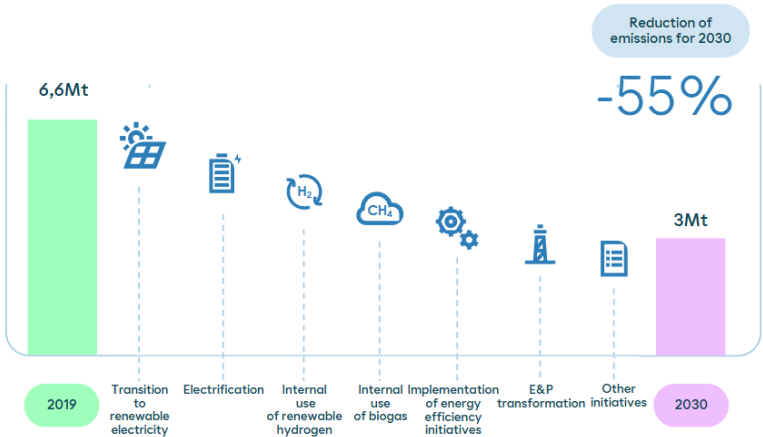


We address transition risks through our Positive Motion strategy, the Sustainability Plan, and the Decarbonisation and Energy Transition Plan. These are supported by specific mitigation targets and levers, which are monitored monthly and annually.

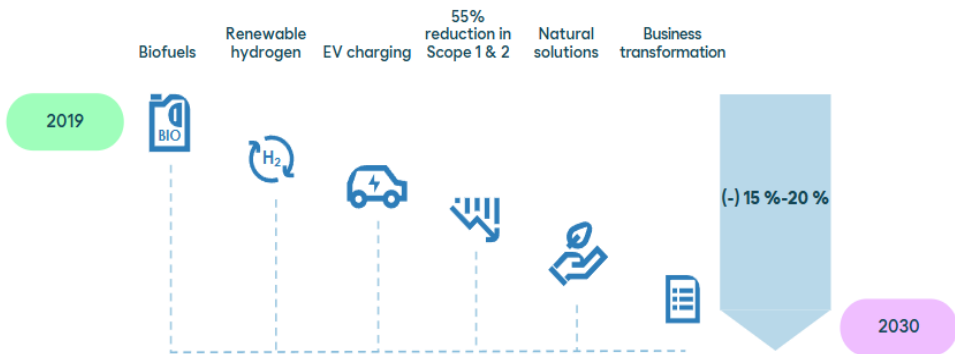
We set two climate targets by 2030 compared to 2019:

- Reduce Scope 1 and 2 CO₂e emissions by 55%, thereby lowering the carbon footprint of our industrial operations.
- Reduce the Carbon Intensity Index (CII) of energy sold to end customers by between 15% and 20%, thereby lowering the carbon footprint of the energy products sold to our customers.

Scope 1 and 2 CO₂e emissions target levers



Carbon Intensity Index (CII) target levers



Moreover, our aim is to achieve Net Zero before 2050, aligning with international climate scenarios such as those limiting global warming to no more than 1.5°C by 2100, as developed by the IPCC (Intergovernmental Panel on Climate Change). Our 2030 targets are consistent with the IPCC’s C1 scenarios, in line with global mitigation efforts compatible with the Paris Agreement and with 1.5°C pathways in the short term. This plan was evaluated using the ACT (Assessing low Carbon Transition) methodology, and the results confirm the robustness of our climate governance model and the ambition of the decarbonization targets under the Positive Motion strategy.

In addition, to address physical risks we are developing an adaptation plan, initially focused on Moeve Chemicals, to identify and address specific operational vulnerabilities, aiming to implement effective resilience measures in the industrial plants we operate. Moreover, considering that periods of droughts is the physical risk with the highest potential financial impact we set a freshwater withdrawal target. Specifically, once having achieved our target of reducing freshwater withdrawal in water-stressed areas by 20% in 2025 compared with 2019, we have set a new target to reduce freshwater withdrawal by 25% by 2028 relative to 2019. In this regard, several measures have been implemented in our facilities (for example, the Water Recirculation Plant in San Roque, enabling the recirculation of approximately 1 million cubic meters per year).

The investment to address the climate-related risks and opportunities are considered in the Positive Motion strategy (7-8 billion euros of accumulated investment, more than 60% sustainable), and is integrated in our financial planning. In this sense, it should be noted that 43.9% of the CapEx is aligned with the EU Taxonomy in 2025, of which 0.5% corresponds to the R&D activity.

For further information, please see the Sustainability Plan and the Consolidated Management Report 2025 (p. 8, 39, 50-52, 59, 139)



3. Risk and Opportunity Management



Climate-related risk and opportunity assessment and management process

Moeve integrates the management of climate-related risks into the Enterprise Risk Management System, in line with the recommendations of the TCFD. Short-term (2030) climate-related risks are consolidated in the Positive Motion 2030 risk map using a bottom-up approach, extending the analysis to the medium-term (2040) and long-term (2050). The assessment covers 100% of existing operated facilities and future operations, including upstream and downstream activities (e.g. supply of raw materials and energy (upstream), customer behaviour and reputation (downstream)).

To conduct climate risk assessments and quantifications, the starting point is risk taxonomy and climate scenarios. The focus on risks to be analysed is based on categories linked to climate variables, taking into account operations and locations. The evaluation is made for both physical and transition risks over short-, medium- and long-term horizons under climate scenarios, in order to assess the resilience of the strategy. In addition, the WWF Water Risk Filter tool is used to identify and assess water risks.

These risks are analysed using quantitative criteria, evaluating potential financial impact, frequency, and/or probability of occurrence. Their relevance to the strategy enables the determination of prioritization criteria and to define response strategies (mitigation plans for transition risks and adaptation plans for physical risks).

The assessment covers all types of climate-related risk considered by TCFD:



Physical climate scenarios

Physical risk assessment is based on IPCC climate scenarios:

1. SSP1-1.9 (Very low emissions scenario)
2. SSP1-2.6 (Low emissions scenario)
3. SSP2-4.5 (Intermediate scenario)
4. SSP5-8.5 (High emissions scenario)

Transition scenarios

Transition scenarios incorporate transition pathways derived from S&P Global Commodity Insights' Energy & Climate Scenarios as a reference, and they are aligned with the IPCC physical scenarios:

1. Accelerated transition scenario (Net Zero)
2. Moderate transition scenario (Central Scenario)
3. Slowed or delayed transition scenario (No net-zero, slow transition)

Similarly, climate-related opportunities are classified aligning them with the TCFD framework:



Climate opportunities have been assessed by 2030 in accordance with Moeve Positive Motion strategy, considering new low-carbon products projected to be sold (advanced biofuels, green hydrogen and derivatives, ultra fast EV charging infrastructure, etc.) and new opportunities in enhanced energy efficiency, electrification and the use of new low carbon energies in our operations. Moreover, ambition by 2050 has been planned to incorporate any climate opportunities beyond 2030, including new technologies arising and new customers and alliances to support the strategy. Nevertheless, some further opportunities have been identified, such as access to new geographic markets with green products, and they will be gradually integrated into the strategy over time.

For further information, please see the Consolidated Management Report 2025 (p. 37, 52-55, 141)



3. Risk and Opportunity Management

Financial impact of climate-related risks and opportunities



As a result of the analysis of the **financial impacts of climate-related risks and opportunities**, the analysis indicates that **Moeve Positive Motion strategy** faces increasing risks, both physical and transition-related, between 2030 and 2050 across all scenarios, demonstrating **greater resilience under a Net Zero-aligned scenario**.

The expected losses associated with the identified risks have been **projected in terms of EBITDA across all three-time horizons and climate scenarios**. The results shows how the balance between physical and transition risks may shift over time depending on the underlying climate trajectory. This analysis thereby enables the company a more informed interpretation of long-term exposure and resilience.

The impacts of **transition risks** account for, on average, more than **80% of total impacts**, exceeding physical risks in all scenarios, with the **gap between physical and transition risks widening in high-emission scenarios**. Moeve **integrates climate-related opportunities into new businesses and targets of Positive Motion**, which is reflected in the projected financial performance.

Physical risks

The results indicate that physical risks increase over time, particularly in longer-term horizons, and they are amplified under high-emissions scenarios.

Transition risks

The evolution indicates that exposure to economic impacts become more relevant in the medium and long term. In accelerated transition scenarios, the main impacts would be associated to technological risks, given Moeve's strong commitment to clean energy. In delayed transition scenarios, the impacts are more closely linked to policy and legal, and market risks, due to a possible rollback in energy-transition regulations that would affect the demand for Moeve's sustainable products.

3. Risk and Opportunity Management



Physical Risks: description and financial impact identified by risk

Chronic Risks

- **Temperature increases, Sea level rises, Soil moisture, Solar radiation, and Average precipitation:** there is not enough forecasted variation across the time horizons (2030-2050) to determine a meaningful financial impact. For example, in the worst-case scenario (SSP5-8.5), sea level rise by 2050 is estimated at around 0.2 m. According to location-specific sea level rise assessments for our assets, this increase does not result in material impacts on our plants. Beyond 2050, greater variations in climate variables (related to chronic risks) are projected by IPCC physical scenarios, increasing their relevance in the years following 2050.

Acute Risks

The results indicate that **rising temperatures (heat waves) and periods of drought** are the **dominant acute physical risks in high-emissions scenarios and in the longer-term horizons**, as their intensity and frequency increase over time.

- **Periods of drought:** periods of abnormally dry weather lasting long enough to cause a serious hydrological imbalance. The variable used is the number of periods of consecutive days per year with mean daily precipitation below a specified threshold. This risk has been evaluated and may have potential financial impact on Energy Parks, Chemical and C&CE sites, considering both Business-as-usual operations and Moeve's future new business operations as electrolytic hydrogen production facilities. These facilities are in Spanish Andalusian region in where Local Administration has defined drought as a serious topic at industrial level. The risk is observed in all four climate scenarios and increases over time. Potential operational disruptions and associated costs have been quantified.
- **Heat waves:** prolonged periods of abnormally high temperatures, typically lasting several days or more. The variable used is the number of consecutive days with maximum temperatures exceeding a defined threshold. This risk has been evaluated for Energy Parks, Chemical and C&CE (Hydrogen) sites. No relevant financial impact has been identified for Chemical sites. This risk has been assessed in Energy Parks and Hydrogen projects located in Andalusian region under all four climate scenarios, showing higher financial impacts in the least sustainable scenario increasing over time. Technological impact (insufficient cooling) and potential damage causing operation interruption have been translated into financial figures.
- **Extreme events winds:** extreme values of meteorological variables related to winds. The variable used is number of days with wind gusts exceeding a specified threshold (km/h). This risk has been evaluated for Energy Parks and Chemical, C&CE (Bios and Hydrogen) sites and Trading Business operation. No relevant financial impact has been identified for Chemical sites in Spain, Hydrogen projects and Trading Business. Energy Parks and Bio projects located in the Andalusian region have assessed this risk, which may result in potential financial impacts under all four climate scenarios, with higher figures in the less sustainable scenario. Port unavailability and potential damage causing operation interruption have been translated into financial figures. In Brazil, Canada and China Chemical facilities, the material worst case scenarios have been quantified.
- **Extreme events fires:** defined as large-scale wildfires that spreads rapidly due to extreme weather conditions, such as high temperatures and strong winds. The variable used is number of days with wildfire risk (Fire Weather Index) exceeding a selected threshold. This risk has been evaluated for Energy Parks, Chemical, Mobility Business C&CE (Bios and Hydrogen sites). Financial impact is low compared to the other risks analyzed, although with higher figures in the least sustainable scenario. Technological impact and potential damage causing operation interruption have been translated into financial figures.
- **Extreme events rains:** extreme values of meteorological variables related to precipitation. The variable used is the number of days with mean daily precipitation above a selected threshold. This risk has been evaluated for Energy Parks, Chemical, Mobility Business and Hydrogen project. Climate models indicate a relatively low probability of extreme rainfall events; however, if such events were to occur, they could have a financial impact on the business. A specific in-depth analysis is being conducted to improve the assessment of these risks by identifying ways to complement and enhance the data provided by climate models.
- **Cold waves:** no material financial impact to Moeve operation sites and geographies has been detected.



3. Risk and Opportunity Management



Transition Risks: description and financial impact identified by risk

Policy and Legal risks: the results show higher financial impacts under the climate scenarios with less sustainability pathways. Moeve's transition strategy and hybrid portfolio enhance the company's ability to manage these risks.

- **Operating limits:** restrictions on the use of available energy resources or limits on operation (as cap in emissions, cap in fossil energy use) affecting directly on Moeve operations (Energy Parks, Chemical and Exploration/Production). Risk of new regulations imposing severe obligations and limits in energy use and production (this risk is related with Scope 1 emissions).
- **Regulatory changes affecting products:** in the most sustainable scenarios, Moeve's products (when based on fossil) are impacted by regulation (e.g. banning fossil fuel vehicles). Similarly, fossil-based chemical products face increasing regulatory constraints in these scenarios, accelerating the shift toward low-carbon and alternative feedstocks (the demand of low carbon chemical products increases in these scenarios). High-ambition transition scenarios assume a rapid and material decline in fossil fuel demand. These regulation changes force to build new business lines and to substitute the supply of fossil raw materials with new ones. In the less sustainable scenarios, where climate regulations are relaxed, the demand for Biofuels or green hydrogen and its byproducts is expected to decline due to reduced incentives for their adoption (this risk is related with Scope 3 emissions).
- **Increase in GHG emission prices:** Moeve's operations can be affected by CO₂ prices (Energy Parks, Exploration/Production and Chemical) and they may have financial impact related to prices variations (this risk is related with Scope 1 emissions).
- **New reporting obligations:** Risk of additional compliance costs, with low short-term impact under more sustainable scenarios in Exploration/Production.
- **Exposure to litigation:** no material financial impact has been identified.

Market risks: the results show higher financial impacts under the climate scenarios with less sustainability pathways.

- **Increased cost and/or reduction of availability of raw materials:** this risk can financially affect Mobility, Bios and Hydrogen businesses. The Fit for 55 energy package, including ReFuelEU Aviation and FuelEU Maritime, sets increasingly ambitious targets about the use of advanced fuels and RFNBOs (Renewable Fuels of Non-Biological Origin). Price volatility and supply-chain constraints will be key factors in managing the associated risks and impacts (this risk is related with Scope 3 emissions). Trading has also reviewed the risk; however, no material impact has been assessed.
- **Entry of new competitors:** in new energies affecting Mobility business. New competitors in electric mobility could attract customers away from Moeve service stations.
- **Change in customer behaviour:** specially affecting Mobility business, Energy Parks or Chemical. EU climate and energy policies, supporting net-zero objectives, are intended to drive demand to low-carbon energy and transport electrification. While customer preferences increasingly favour sustainable fuels and products, higher energy prices may slow down the pace of the transition and affect demand dynamics (this risk is related with Scope 3 emissions).
- **Difficulty and/or cost increase in financing:** failing to meet Moeve environmental commitments would imply a risk of higher financing costs. This could be particularly relevant for new businesses, in the process of investment and project development.

Technology risks: higher financial impacts are observed under the climate scenarios aligned with more sustainable transition pathways.

- **Technological obsolescence:** refers to the devaluation of assets due to the technological progress and innovation. Moeve's Strategy is based on decarbonize operations by implementing different mitigation levers and new arising business lines which are based on new low carbon energies, as biofuels or hydrogen facilities. However, under an accelerated transition scenario, these operations could become obsolete. Chemical sites are being migrated to lower carbon and non-fossil raw materials to be aligned to climate ambition. These traditional operations are being modified through investments to achieve the energy transition at Moeve, which leaves them exposed to a risk of obsolescence due to the emergence of new technologies. Mobility business could also be impacted by technological obsolescence.
- **Unsuccessful investments in new technologies** it refers to the possibility that investment actual returns may differ from the expected returns. Moeve's strategy is highly influenced by the new regulation, by the climate policy scenario and ambition, hence the investments are aligned with new technologies around new low carbon and neutral energies (Energy Parks, Chemical, Bios and Hydrogen). The field of R+D+i is agile, and it may evolve fast, driven by subsidies and regulatory objectives, leading to the emergence of new technologies that would quickly leave behind those already present in our strategy.
- **Disruptive technologies in production processes:** this risk has been assessed and mitigated in Moeve's Strategy

Reputational risks

- **Stigmatization of the industry:** difficulty in obtaining financing or increased financing costs in case Moeve industry is stigmatized.
- **Stakeholders' concerns:** no material financial impact has been identified.

4. Metrics



The **most relevant metrics used** to assess **climate-related risks and opportunities are both financial and environmental metrics**, such as **impact on EBITDA, Scope 1, 2 and 3 GHG emissions, total water withdrawal, and water withdrawal in water-stressed areas**.

Moeve's **GHG reporting** covers **scope 1, 2 and 3 emissions** across all facilities under operational control. **Over 90% of scope 1 and 2 emissions** are under **Carbon Systems** and under the ambitious **European Energy and Climate regulation**. Analysing GHG emissions across different business units allow us to have a better evaluation of the impact related to the climate risks. Moreover, pricing mechanisms implemented across our operations result in different financial impacts (e.g., EU ETS, ETS China, Cap & Trade in Quebec-Canada).

Scope 1, 2 and 3 GHG emissions (million tCO_{2eq})

Categories	2025	2024
Scope 1	5.2	5.0
Scope 2 ¹	0.1	0.2
Scope 3 ²	77.5	71.9

¹Report according to the market-based approach.

²Report covers the five most relevant categories: purchased goods and services, fuel- and energy-related activities, upstream transportation and distribution, downstream transportation and distribution, and use of sold products.

Scope 3 GHG emissions by category^{3,4} (million tCO_{2eq})

Categories	2025	2024
Purchased goods and services	18.8	16.7
Fuel- and energy-related activities	0.5	0.5
Upstream transportation and distribution	0.9	1.0
Downstream transportation and distribution	0.7	0.7
Use of sold products	56.6	53.0
Total	77.5	71.9

³Data may differ from the audited figures reported under ISO 14064 due to the report's closing date.

⁴Gases included in the calculation: CO₂, CH₄, and N₂O.

Water withdrawal (thousand m³)

Metric	2025		2024	
	All areas	Areas with water stress	All areas	Areas with water stress
Total water withdrawal	15,298	13,789	24,248	13,150

¹ The water resources data do not include the Mobility business (except for the Matosinhos factory), Trading, and the C&CE activities of storage, aviation, lubricants, as well as the wind farm, due to their materiality.

For further information on financial impact, please see previous slides. For further information on environmental metrics, please see the [Consolidated Management Report 2025](#) (p. 56, 57, 60, 107, 110).



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