MAPFRE



CONTENTS

1.	Introduction	3
2.1. 2.2. 2.3. 2.4.	Governance Board of Directors and delegate bodies Executive Committee and other governing committees Risk policies and frameworks Climate change training programs for employees Public commitments and objectives	5 6 9 12 13 14
3.1. 3.2. 3.3. 3.4.	Strategy Description of climate change risks and opportunities Definition of climate change horizons and scenarios to calculate the impact Impact of climate change risks on the business Sustainable strategies Participation in institutional organizations' working groups	15 17 20 21 25 27
4.1. 4.2.	Risk management Risk management governance Climate change risk identification and assessment procedure Management of climate change risks and opportunities	28 29 30 34
5.1. 5.2. 5.3. 5.4. 5.5.	Metrics and objectives Corporate objectives Underwriting portfolio metrics and objectives Investment portfolio metrics and objectives Internal operations metrics and objectives Internal carbon price Other metrics	35 36 37 38 39 43
6.	Financing a green economy	45
7 .	APPENDICES	48
8.	TCFD Index	53

NAVIGATION LEGEND:





page visited



page



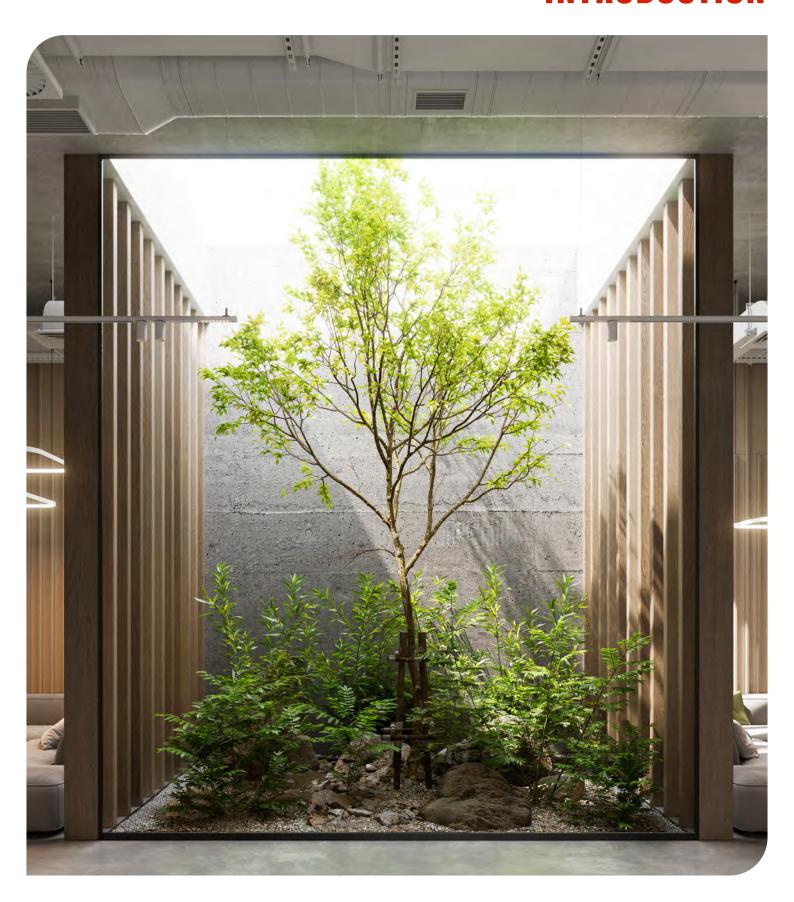






Search document

O1 Introduction



Climate change is one of the biggest problems facing the world today. Addressing it and transitioning toward a low-carbon economy is therefore a challenge that must be met.

At MAPFRE, for more than 85 years, we have been working with a strong commitment to society and pursuing a business model oriented toward sustainable development, focusing on the present while looking forward to the future.

In line with the Paris Agreement, and with the objective of keeping the increase in global temperature below 2° C, we have pledged to rapidly reduce our carbon footprint and disclose information related to climate change in a transparent manner.

We have therefore prepared this report on the company's climate change management, following the guidelines of the Task Force on Climate-related Financial Disclosures (TCFD), created by the Financial Stability Board. The report

is structured around four pillars, described in Figure 1: Governance, Strategy, Risk Management, and Metrics and Objectives. Using this structure proposed by the TCFD, MAPFRE discloses the risks and opportunities of climate change and their integration into the company's business and activities.

We are convinced of the importance of fully disclosing the overall trends that will influence our company's performance in the short, medium and long term. This will enable investors, customers, and other stakeholders to make informed decisions, promoting best business practices and helping to develop a better and more sustainable world.



Figure 1. TCFD Axes. Source: Financial Stability Board - TCFD

- **Governance:** The organization's governance of climate-related risks and opportunities.
- **Strategy:** The real and potential impacts of climate-related risks and opportunities on the business, strategy and financial planning of the organization.
- **Risk management:** The processes used by the organization to identify, assess and manage climate-related risks.
- Metrics and objectives: Metrics and objectives used to assess and manage relevant climaterelated risks and opportunities.

O2 **GOVERNANCE**



2.1. BOARD OF DIRECTORS AND DELEGATE BODIES

The structure, composition, and functions of the MAPFRE Group's governing bodies are defined in the Institutional, Business, and Organizational Principles, approved by the Board of Directors of MAPFRE S.A. ("MAPFRE" or the "Company"), together with its corporate bylaws and the Regulations of the Board of Directors.

The following outlines the main functions and responsibilities of the Company's governing bodies:

BOARD OF DIRECTORS

This body directs, manages, and represents the Company and its subsidiaries, and it has full powers of representation, regulation, and management. It is the MAPFRE Group's topmost decision-making and supervisory body, and it oversees all of its subsidiaries. In particular, the Company's Board of Directors is the body responsible for establishing and supervising the Group's sustainability policy and strategy.

In 2022 the Board of Directors addressed key issues concerning sustainability and climate change on four occasions. At these Board meetings, the Sustainability Plan 2022–2024 was approved and the Sustainability Policy and Strategic Plan were monitored, including sustainability indicators.

The responsibilities of MAPFRE's Board of Directors related to sustainability and specifically to climate change can be classified into strategic and monitoring functions:

Strategic functions

MAPFRE's Board of Directors is the body responsible for approving the Corporate Sustainability Policy and the Group's sustainability strategy. To this end, during fiscal year 2022, it reviewed key issues related to sustainability and climate change on several occasions. In particular, it approved the Sustainability Plan 2022–2024 as a roadmap for climate change management and the circular economy!

In addition, the MAPFRE Board of Directors is the ultimate body responsible for ensuring the efficiency of the Company's Risk Management System, establishing the risk profile and tolerance limits, and approving its key risk management strategies and policies, including sustainability risks.

In fiscal year 2022, it approved the Financial and Solvency Condition Report (SFCR), and the Own Risk and Solvency Assessment (ORSA), where the risks to which MAPFRE may be exposed, including emerging and sustainability risks—among them climate change—are evaluated.

Monitoring of objectives

MAPFRE's Board of Directors is the body responsible for monitoring the development and fulfillment of the Group's Sustainability Plan, for which purpose it is periodically informed of the progress and level of achievement of the Group's commitments under said Plan. In particular, it was informed of the degree of compliance with the Sustainability Plan 2022–2024, approved by the Board of Directors and focused on the major global and social challenges we face: climate change, the circular economy, inclusion and talent, financial and insurance education, the economics of aging, and the UN Agenda 2030. The objectives proposed by the Sustainability Plan 2022-2024 for the year 2022 were 99.6 percent achieved.

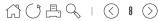
Furthermore, the Board of Directors is the body responsible for monitoring compliance with the limits set down in the Risk Appetite Policy, approved by the Board itself, which establishes the level of risk that the Group is willing to assume.

1 [Due to its transversal nature, multiple areas and bodies of the Group helped to develop the Sustainability Plan: the Corporate Environment, Risk, and Actuarial Offices, the Assistance, Global Risks, and Reinsurance Business Units, the Corporate Investment, Operations, Business and Clients, and People and Organization Areas, as well as the countries considered strategic for the company: Spain, Germany, Brazil, the United States, Mexico, Puerto Rico, Peru, Turkey.]



For these purposes, MAPFRE's governing bodies receive information regarding the quantification of the main risks to which the Group is exposed, as well as information on the capital resources available to provide the necessary coverage, and compliance with the established risk appetite limits. Among these risks are catastrophe risks, which could be affected by climate change.

Finally, MAPFRE is analyzing the different methodologies available for the application of climate change scenarios, with the aim of determining the impact on both insurance liabilities and the asset portfolio due to physical and transition risks, and identifying the necessary data for their application and its availability, analyzing the information sources and the content of the variables generated by the climate change scenarios. During the 2022 ORSA period, a climate change transition risk scenario was included for the Group's asset portfolios, based on the scenarios developed by EIOPA for the stress test for employment pension funds. A first scenario of climate change due to physical risk was also carried out on the damage portfolios of Portugal related to an increase in maximum rainfall in one day.



STEERING COMMITTEE AND DELEGATE COMMITTEES

MAPFRE's Board of Directors includes a Steering Committee and three Delegate Committees (Audit and Compliance Committee, Appointments and Remuneration Committee, and Risk and Sustainability Committee), and it establishes their roles as well as that of the Steering Committee.

Steering Committee

This is the Board of Directors' delegate body with responsibility for coordinating and permanently supervising the management of the Company and its subsidiaries and operations, so as to make the necessary decisions for its correct functioning. It holds a general decision-making capacity and has been expressly delegated all the powers that correspond to the Board of Directors, except for those that may not be delegated by legal imperative or, where applicable, by express provision in the Corporate Bylaws or in the Regulations of the Company's Board of Directors.

Audit and Compliance Committee

This body's functions include reporting to the Annual General Meeting on any issues that arise in relation to matters within its remit, overseeing the efficiency of internal control and the process for preparing and presenting financial and non-financial information. This includes all aspects associated with climate change. submitting proposals to the Board of Directors for the appointment of an external auditor and building an appropriate relationship with the latter, and ensuring the independence and efficiency of the Internal Audit function. It is also the body responsible for supervising the proper application of good governance standards and external and internal regulations at the Company and the Group, including all policies related to

MAPFRE SUPPORTS THE TRANSITION TO A LOW-CARBON, CLIMATE-FRIENDLY ECONOMY, IN LINE WITH THE PARIS CLIMATE OBJECTIVES

sustainability and climate change.

Appointments and Remuneration Committee

This body is responsible for coordinating the implementation of the assignment and remuneration policy for directors and senior executives of the Group.

Risk and Sustainability Committee

This delegate body of the Board of Directors supports and advises the Board when defining and evaluating the Group's risk management policies, when determining susceptibility to risk and the risk strategy, and when defining and supervising the corporate sustainability policy and sustainability strategy.

In particular, the Risk and Sustainability Committee has the following responsibilities:

- To support and advise the Board of Directors when defining and evaluating the Group's risk policies and when determining susceptibility to risk and the risk strategy.
- To assist the Board of Directors in overseeing the application of the risk strategy.
- To study and evaluate risk management methods and tools, carrying out monitoring on the models applied in terms of results and validation
- To support and advise the Board of Directors when defining and evaluating the Group's sustainability strategy and policy, ensuring that they are aimed at responding to the expectations of the company's stakeholders and value creation.
- To assist the Board of Directors in monitoring the company's performance in terms of sustainability.
- To promote, guide, and supervise the Group's principles, commitments, objectives, and strategy in terms of sustainability.
- Any other responsibilities which may be assigned by the Board of Directors or attributed to it in the Regulations of the said body.

For more information on the operating system, number of meetings and most important actions of the delegate bodies of the Board of Directors during fiscal year 2022, please consult the Integrated Report and the Annual Corporate Governance Report for fiscal year 2022, available on the company's website at www.mapfre.com.

2.2. EXECUTIVE COMMITTEE AND OTHER GOVERNING COMMITTEES

MAPFRE's business model is subject to strict control and supervision at all levels: local, regional, and global. In turn, it allows for broad delegation of the execution and development of the competencies allocated to the teams and their leaders, ensuring in any event that the most important decisions at all levels undergo in-depth analysis, before and after their execution, by all management teams.

Executive responsibilities in matters of sustainability and climate change are distributed among the senior management, the various committees, and the work groups that handle the different functions to be performed, enabling MAPFRE to meet its objectives in these matters:

EXECUTIVE COMMITTEE

This body, which reports to the Steering Committee, is responsible for developing and executing the Committee's decisions, preparing proposals for decisions and plans for approval by the latter, and adopting ordinary management decisions within its scope of responsibility at any given time, within the powers granted aimed at coordinated and synergistic management of the MAPFRE Group's day-to-day operations.

MANAGEMENT COMMITTEES

Within the MAPFRE Group, there are numerous committees, areas, offices, and working groups with functions and responsibilities related to sustainability and climate change. These bodies are located in the different business units and countries; and among them are:

Sustainability Operating Committee

This body, which reports to MAPFRE's Executive Committee, is responsible for providing support in matters related to sustainability, formulating the appropriate proposals in this area, and supervising the correct execution of the agreements adopted in relation thereto. Its main functions include proposing the Group's sustainability strategy and Sustainability Plan to the Executive Committee for submission, where appropriate, to the corresponding governing bodies, and ensuring that said plan is oriented toward value creation.

It is also responsible for periodically assessing the Group's situation in terms of Sustainability; monitoring risks and opportunities associated with environmental, social, and corporate governance factors that may have an impact on the Group's business and investments; and monitoring the international sustainability initiatives and the commitments made by MAPFRE at any given time. Furthermore, where appropriate, it has the function of proposing adherence to any new initiatives related to this area of action that are relevant to the Group to the corresponding governing bodies.

Security and Environment Committee

This committee is responsible for ensuring that the Group's objectives and business needs are achieved by correctly managing security and environmental risks. At the same time, it guarantees that this function is considered as a constituent element of corporate business processes.

Underwriting Policy Committee

Together with the Global Business Committee, this committee is in charge of ensuring that the Underwriting Policy is correctly applied, analyzing and proposing the operating standards for ESG-related exclusions in the underwriting processes for the Group's insurance operations.

Among this Committee's functions is verifying the Group companies' compliance with the underwriting commitments.

Global Business Committee

This committee serves as the advisory body of the Executive Committee in all aspects related to the monitoring of MAPFRE's business and strategy for both new and existing operations, in which underwriting is implicit.



Investment Risk Committee

The Group's management company, MAPFRE Asset Management, S.G.I.I.C, S.A. (hereinafter MAPFRE AM), has a Risk Committee in place that analyzes the composition of portfolios and their alignment with the company's integration policy in terms of ESG. It also assesses any disputes that may arise as well as the application of the grounds for exclusion approved by MAPFRE.

Furthermore, once a year it evaluates the exercise of voting rights, carried out by MAPFRE AM given its fiduciary responsibility for the investments made, and reports the results to the management company's Board of Directors.

Finally, MAPFRE supports the transition toward a low-carbon and climate-friendly economy, in line with the Paris climate objectives. The company therefore wants to ensure that its activities and associated emissions help to reduce global warming.

Taking the environmental impact of its investments into account is part of MAPFRE's strategy to decrease its carbon footprint in all of its activities and areas of influence, including those related to its portfolio of assets. With that in mind, the progress of the Investment Carbon Footprint is presented to the Risk Committee, following the company's own methodology based on regulatory standards, which allows it to monitor the objectives set in MAPFRE's Sustainability Plan 2022-2024 with regard to reducing emissions.

CLIMATE CHANGE, COMMITMENT TO SUSTAINABILITY, ACTION REPORTS AND OTHER RELATED INFORMATION ARE PART OF **THE COMPANY'S USUAL CONTENT DIRECTED AT ALL ITS STAKEHOLDERS**

CORPORATE AREAS AND MANAGEMENT OFFICES

Addressing the aspects related to sustainability, and specifically climate change, requires the participation of multiple specialized areas that incorporate these aspects into the strategy and into appropriate risk management, while ensuring their correct integration into the business and the Company's internal operations.

The following are some of the areas and departments that perform functions related to climate change:

Group Sustainability Office

It is the area responsible for the operation, coordination, and design of the sustainability strategy. It participates in several internal committees, such as MAPFRE AM's Risk Management Committee, and in various internal and external working groups to address sustainability issues.

Group Risk Office

It is responsible for identifying and evaluating risks, including emerging and sustainability risks. Among other functions, it supervises and monitors the effectiveness of the Group's Risk Management and Internal Control systems. It also calculates the level of solvency and risk control and handles the monitoring and notification of risk exposure.

Group Security Office

This area defines the strategy and objectives, ensures legal compliance, and manages risks related to the environment and climate change in the short, medium, and long term in a transversal manner and in relation to the MAPFRE Group's operations.

Group Actuarial Office

The Group Actuarial Office is responsible for assessing the impact of climate change in relation to pricing, the calculation of technical provisions, and measurement of the insurance risk.

Corporate Investment Areas

It is responsible for the efficient management of the company's financial asset portfolio while ensuring compliance with the principles for responsible investment (PRI) established by the organization.



MAPFRE RE Natural Perils DepartmentE

MAPFRE RE has a technical area specialized in natural catastrophic risks that is responsible for identifying and evaluating the acute physical risks that affect it, as well as for providing support to the group in the evaluation of natural catastrophic risks in damage portfolios.

Corporate Strategy and M&A Area

The Corporate Strategy team identifies the key focal points and areas of opportunity in the countries where MAPFRE operates based on the work of each country's business units and main corporate areas, which analyze the environment and trends in their scope of action. This analysis serves as a basis to define its strategic priorities in the market.

The Corporate Areas (Internal Audit, Strategy and M&A, Finance and Resources, Investment, Business, Operations, People and Organization, External Relations and Communication, General Counsel and Legal Affairs, Operational Transformation, Technology and Operations) have competences, within their scope of action, for all MAPFRE companies worldwide in terms of developing, implementing, and monitoring global, regional, and local corporate policies.

WORK GROUPS

MAPFRE also has internal work groups to perform functions related to the Company's climate change risk management, such as the Eco-efficiency Work Group, the Investment Portfolio Carbon Footprint Work Group, the work group for the Implementation of TCFD Recommendations, or the Net-Zero Insurance Alliance Work Group.



2.3. RISK POLICIES AND FRAMEWORKS

MAPFRE has developed a series of policies on sustainability and climate change geared toward ensuring the success of its sustainability plans and objectives. The company has also needed to align its targets with climate change strategies, for which some of its existing policies have been modified. Further information can be found in the accompanying table.

Sustainability and climate change-related policies and frameworks

Sustainability and climate change-related plans

Corporate policies that incorporate sustainability and climate change-related aspects

Set of policies, frameworks and plans to further its sustainability and climate change relatedobjectives while ensuring alignment between its commitments and the Paris Agreement, described as follows: The Group policies and frameworks that have been adapted to include sustainability and climate change-related aspects include:

Sustainability Policy:

This establishes the reference framework for any MAPFRE Group company to develop and promote socially responsible behavior, including climate-related aspects. It includes more comprehensive criteria on ESG issues (including the consideration of climate change), international commitments, and the company's action strategy related to stakeholders.

Environmental Policy:

This policy oversees the integration of the environment in the business, the promotion of environmental responsibility, the preservation of biodiversity, the prevention of pollution, the efficient management of resources and the adaptation and mitigation of climate change.

Responsible Investment Framework:

This framework integrates ESG criteria (including the consideration of climate change) into all investment processes, both for own portfolios and those of third parties, considering the criteria defined by the applicable regulations and market trends. In 2021, the company began to apply these new responsible investment standards (exclusion of investment in certain industries, etc.).

Sustainability Plan 2022-2024:

Sustainability roadmap focused on the major global and social challenges: climate change, circular economy, inclusion and talent, financial and insurance education, the economics of aging, and the United Nations 2030 Agenda.

Environmental Footprint Plan 2021–2030:

This plan includes all the key lines of action to reduce the Group's carbon footprint by at least 50 percent by 2030.

These lines of action are grouped as follows: energy efficiency, sustainable buildings, carbon footprint, sustainable mobility, water management, circular economy, green procurement and natural capital management biodiversity preservation.

Procurement Rules:

The Company has a procurement policy in place that incorporates economic, environmental, social, and governance criteria, as well as mandatory compliance principles that must be upheld in all contracts concluded. The rules require providers to adhere to similar principles and values to those of the Group when conducting their business, and to comply with the laws and regulations of each country.

Expense Policy:

The company has an Expense Policy in place that was updated and reviewed in 2022, incorporating sustainability criteria into the management of travel and other expenses.

Investment Policy:

This policy serves as the main regulatory framework that regulates investment management processes and control of same. The MAPFRE Group's investment policy has been geared toward achieving sustainable development. Incorporating ESG and climate change criteria, it applies to both MAPFREowned investments and those comprising collective investment instruments for sale to third parties that are managed by MAPFRE.

Underwriting Policy:

This policy integrates ESG issues into the underwriting processes of the Group's insurance operations, and was approved by the Board of Directors.



2.4. CLIMATE CHANGE TRAINING PROGRAMS FOR EMPLOYEES

MAPFRE offers an employee training program on ESG factors, and specifically on mitigation and adaptation to climate change risks.

This program related to climate change offers the following courses:

- Members of the Board of Directors receive training on risk management. In 2022, 100 percent of the external directors received a total of 33 hours of training on regulatory, technological, operational, and reputational risks, including climate change risks.
- "A walk through corporate social responsibility," a course launched in 2018 and completed by 14.027 employees. The program explores topics such as the model for sustainable value creation, good governance, social and environmental responsibility, and contribution to society.
- "MAPFRE and the environment," a course launched in 2017 and completed to date by 11.546 employees. It is focused on topics related to the Group's Environmental Policy, integration of the environment into business, environmental management, climate change, and promoting environmental responsibility in society.

• ESG Training: CESGA Certification, aimed at training the Investment, Audit, Finance, and Sustainability teams to independently carry out evaluations and make investment decisions in which ESG criteria are applied. Between 2019 and 2022, 66 people were certified worldwide.

Elsewhere, with the aim of specializing investment teams and financial advisors, between 2019 and 2021, 538 financial advisors (employees) were certified in ESG Essentials, a certification granted by the European Federation of Financial Analysts Societies.

• The Group Actuarial Office offers monthly training webinars, geared toward teams, on measuring the impacts of climate change, the dissemination of actuarial studies related to climate change, and the implications that ESG factors will have for the actuarial profession.

MAPFRE manages this positioning internally through "Eureka," a shared knowledge platform where all employees worldwide can connect and share knowledge and best practices, including issues related to sustainability, the environment, and risks. It also uses other communication tools, such as the Global Intranet and apps for employees.

Externally, on the corporate website and in other Group publications, as well as in most of its public statements, climate change, the commitment to sustainability, activity reports, and other related information are part of the company's usual content addressed to all its stakeholders.

2.5. PUBLIC COMMITMENTS AND OBJECTIVES

Our company's strong commitment to climate change and sustainable development both internationally and locally is reflected in our voluntary compliance with benchmark global and local initiatives in this area, in which we actively participate.

In this regard, MAPFRE has signed up to the following initiatives and organizations:























For more information, please visit the section on Sustainability on MAPFRE's corporate website at https://www.mapfre.com/en/sustainability/international-commitments/or https://www.mapfre.com/en/sustainability/corporate-governance/transparency/

O3 Strategy



MAPFRE has integrated all considerations regarding climate change risks into its corporate strategy since the development and launch of the Sustainability Plan 2022–2024, which defines a responsible way of doing business in both underwriting and investment and is transversally aligned with the development of the Strategic Plan 2022–2024.

We are therefore working to adapt our financial planning to climate change, considering both the risks and the opportunities and taking the necessary action to transform ourselves into a low-carbon company, as well as to build and strengthen our resilience and adaptability to the risks of climate change and climate-related natural disasters.

The Company is reaffirming its commitment to sustainability across all areas of the organization and reinforcing its position as a business committed to social responsibility, the environment, and society in general, in addition to managing climate change risk.

The Company must address and manage the main climate change-related risks it faces, giving continuity to its business plan through the following mitigation actions:

- Appropriate modeling, which will help to define premiums and rates for reinsurance companies in order to address the increase in natural disasters due to climate change. MAPFRE operates in some countries that are highly prone to natural disasters (earthquakes, hurricanes, etc.), a type of risk requiring special treatment and ongoing management and mitigation measures:
 - Permanent review of the technical underwriting conditions, the pricing of risks with exposure to weather events, as well as reinsurance protection or programs.
 - Catastrophic exposure control and accumulation monitoring carried out by MAPFRE RE, which advises the Group's insurance companies on the treatment of these risks.

THE COMPANY REAFFIRMS ITS COMMITMENT TO SUSTAINABILITY IN ALL AREAS OF THE ORGANIZATION AND STRENGTHENS ITS POSITION AS A COMPANY **COMMITTED TO SOCIAL RESPONSIBILITY, THE ENVIRONMENT AND SOCIETY IN GENERAL,** IN ADDITION TO MANAGING CLIMATE CHANGE RISK

 Compilation of internal information on claims caused by natural risks (hail, flooding, wind storms, etc.) and the necessary market information for catastrophe risk modeling in order to adequately assess the climate change risk. Due to the constant, rapid change in profiles, habits, technologies, and services that consumers demand, including those related to aspects of climate change, we must also be capable of quickly adapting our range of products and services. We must therefore have the necessary resources to perform advanced data analytics.

In addition, the finance sector is one of the industries most impacted by regulations at national and international level. For this reason, we must rigorously monitor the publication of new regulations; furthermore, regulations in the ESG field, including those related to climate change, have taken on increased importance in recent years.

MAPFRE is currently exposed to regulations that govern both the disclosure of information and the activities performed by its business units in the area of sustainability management:

- Regarding the disclosure of non-financial information, the EU Non-Financial Reporting Directive (NFRD) 2014/95, and its transposition in Spain into Law 11/2018, promotes transparency by requiring companies to provide homogeneous data on sustainability and environmental aspects. MAPFRE has therefore included information on these topics in its reports since 2018, in order to meet these requirements.
- The new EU regulation 2019/2088 on sustainability-related disclosures in the financial services sector (SFDR) impacts MAPFRE's assets and their management. Investment products have been impacted by the new regulation, and MAPFRE AM has therefore created several specific funds that meet the new European requirements for sustainable finance disclosure.



- Additionally, the company is exposed to Regulation (EU) 2020/852 (Taxonomy) on the establishment of a framework to facilitate sustainable investment, which amends Regulation (EU) 2019/2088, as reported in section 5.3. Investment portfolio metrics and objectives.
- Furthermore, EIOPA has published numerous sets of guidelines and analyses in recent years on how companies must integrate climate change risks into their current processes, such as the *Opinion on the supervision of the use of climate change risk scenarios in ORSA*, dated April 19, 2021.

3.1. DESCRIPTION OF CLIMATE CHANGE RISKS AND OPPORTUNITIES

MAPFRE constantly analyzes elements that, should they arise, could impact its business. This analysis considers ESG factors, as these enable additional information to be gathered on social movements and transformations, and the expectations of stakeholders and the market that affect the organization.

A proper analysis of ESG factors, and how they might affect the business in the short, medium and long term, will show their relationship to the company and possible inclusion in the list of risks drawn up by the company and in the adoption of prevention and mitigation measures.

Climate change risk arises from the long-term change in the average weather patterns that have shaped local, regional, and global climates around the world. This risk would be mainly reflected in extreme weather events (tropical cyclones,

flooding, forest fires, etc.), in economic uncertainty due to various changes (regulatory, technological, social, etc.), in the transition to a low-carbon economy, and in environmental liability claims when climate change risks are not prevented, mitigated, or disclosed.

Climate change risks fall into two broad categories: physical risks and transition risks. Based on the above-mentioned categories, the accompanying table details some of the climate change risks identified by MAPFRE.



RISKS

	Insurance underwriting portfolio	Insurance underwriting portfolio	Investment portfolio (Asset owner)	Investment portfolio (Asset manager)
List of risks	Acute physical risk: Increase in severity and frequency of extreme weather events.	Current regulatory risk: Mandates and regulation of existing products and services.	Reputational risk: Changes in consumer preferences.	Market Risk: Reduced risk of stranded assets considered when making investment decisions.
Time horizon	Medium term	Medium term	Medium term	Medium term
Main potential financial impact	Increase in liability for insurance claims.	Decrease in revenue due to reduced demand for products and services.	Decrease in asset value or useful life, leading to depreciation, asset impairment, or early divestment of existing assets.	Decrease in asset value or useful life, leading to depreciation, asset impairment, or early divestment of existing assets.
Impact magnitude	Medium	Medium	Medium	Medium
Probability	Very likely	Very likely	Probable	Very likely
Details	As a global insurance company, MAPFRE and its customers around the world are exposed to the physical risks that climate change may generate. Changes in the physical parameters of the atmosphere increase the probability and severity of damage caused by extreme weather events. As MAPFRE operates in countries where the possibility of catastrophes (flooding, tropical cyclones, snowfall, etc.) is high, it must pay particular attention to these risks. Damage caused by natural disasters leads to the payment of compensation by MAPFRE to its customers, which, depending on its amount, may have a significant impact on its balance sheet. In addition, MAPFRE has buildings, offices, and employees all over the world that may also be affected by the increased frequency and intensity of natural disasters.	The decarbonization of the economy, following on from the Paris Agreement, could change our way of life in Europe due to the development of ambitious and greener strategies such as the European Green Deal, the EU Taxonomy for Sustainable Investments, the regulation on Circular Economy, disclosures related to Natural Capital, etc. In Spain, the Climate Change and Energy Transition Law seeks to transform the use of private vehicles to boost green mobility. This regulation will be decisive in furthering urgent changes in mobility with the aim of electrifying it. Under these "new mobility" standards, certain journeys will be banned, such as driving polluting vehicles into large city centers. These changes are prompting customers to change their ways of moving around and purchasing goods and services.	The number of sustainable products on the market has multiplied in recent years, and the growth of green assets has increased significantly. Sustainable value considers ESG factors that are attractive to investors. One of MAPFRE's objectives from a financial perspective is to manage its assets in accordance with its commitments and risks assumed. To this end, it applies the Principles of Responsible Investment in the management of its real estate portfolio, with consideration for energy efficiency and environmental sustainability criteria. This principle is reflected and permanently promoted in the management of the Group's real estate assets and new real estate investments, through sustainable building certifications and management systems under ISO standards (ISO 14001 and ISO 50001).	Meeting the objective of limiting global warming to less than two degrees would require us to keep a large proportion of existing fossil fuel reserves in the ground. It is estimated that one-third of oil reserves, half of gas reserves, and more than 80 percent of known coal reserves would need to remain unused to meet global temperature targets under the Paris Agreement. The value of "stranded assets" may not be fully reflected in the value of companies that extract, distribute, or rely heavily on fossil fuels, which could result in a sudden drop if this risk is factored in. A variety of factors could lead to assets being stranded. They include new governance regulations limiting the use of fossil fuels (such as the carbon price); a change in demand (for example, a shift to renewable energy due to lower energy costs), or even legal action. MAPFRE, as an investor and insurer, is exposed to these stranded asset risks.



Just as climate change may generate risks and negative impacts for MAPFRE, there is the possibility that these changes will be leveraged and represent an opportunity for the company, leading to a positive financial impact, which is presented in the accompanying table.

OPPORTUNITIES

	Insurance underwriting portfolio	Investment portfolio (Asset owner)	Insurance underwriting portfolio	Investment portfolio (Asset manager)
List of opportunities	Products and services: Development and/or expansion of low-emissions goods and services.	Products and services: Change in consumer preferences.	Products and services: Development of new products or services through R+D+i.	Market: Improved financial performance of investee companies due to being able to access new markets and develop new products to meet consumer demand.
Time horizon	Short term	Shortterm	Medium term	Short term
Main potential financial impact	Increase in revenue by offering products and services adapted to market requirements and needs.	Increase in revenue through access to new markets.	Increase in revenue due to higher demand for products and services.	Increase in revenue due to higher demand for products and services.
Impact magnitude	Medium-High	Medium	Medium	Medium
Probability	Very likely	Very likely	Probable	Probable
Details	Spain's commitment to the European Union regarding the decarbonization of the economy with a view to 2050 has already materialized in a draft law on Climate Change and Energy Transition. One of the keys to this law is the transition toward sustainable mobility based on clean energy in transport, which could lead to net zero emissions from passenger cars by 2050. The Climate Change Law will also require the establishment of low-emissions zones in Spanish municipalities with more than 50,000 people by 2023. As MAPFRE is firmly and resolutely committed to sustainable mobility, it has worked to develop products and services focused on hybrid and electric vehicles with the aim of positioning itself strategically in the short term. Policies that reward the most sustainable driving style are also being developed. Various countries are applying similar regulations that could affect the marketing of products for the MAPFRE companies operating in those regions	MAPFRE considers it crucial to be close to the customer, adapting to their needs. For this reason, thanks to its business model and strategy, MAPFRE is capable of tackling global challenges by developing innovative products and services, aimed at offering a wider variety of solutions to the growing and changing demands of customers and the society in which it operates. One of MAPFRE's objectives from a financial perspective is to manage its assets in accordance with its commitments and risks assumed. To this end, it applies the Principles of Responsible Investment in the management of its real estate portfolio, with consideration for energy efficiency and environmental sustainability criteria.	Concerns about climate change and the need to disclose performance to stakeholders in a transparent manner are inarguably on the rise. For MAPFRE, there is a risk that clients will change their criteria for selecting insurance companies, and that they will demand policies for adaptation and mitigation in the fight against climate change when taking out insurance policies. Sustainable innovation is therefore an important business opportunity. For this reason, MAPFRE continues working to design sustainable solutions, analyzing market options and moving toward new business models and solutions that arise from digital and technological changes. It does so with the ultimate aim of offering the best solutions and services to current and future customers while helping to build a more sustainable society.	The universe of sustainable investment assets continues to grow exponentially, and the number of available investment products is multiplying. Assets in ESG funds have doubled in the last two years. Sustainable investment considers ESG factors in portfolio management and makes its own investment case, which is attractive to investors. According to a Bank of America study (2021), in the next two to three decades, between 15 and 20 trillion USD will be invested in ESG investments (in the US), which will cause the stock market to double. MAPFRE is committed to developing a range of Socially Responsible Investment (SRI) products that, in addition to being profitable for the client, have a positive impact on society.

3.2. DEFINITION OF CLIMATE CHANGE HORIZONS AND SCENARIOS TO CALCULATE THE IMPACT

To analyze and assess the impact generated by climate change risks and opportunities, the Company uses the time horizons defined by EIOPA in the document Methodological principles of insurance stress testing - climate change component. However, these horizons will be adapted to reflect any requirements and recommendations that the supervisory bodies announce.

MAPFRE is in the process of developing and analyzing different climate change scenarios, which will allow it to assess the potential losses arising from climate change risks. MAPFRE's objective is to prepare for the consequences of

climate change by identifying the associated risks and taking measures to mitigate the resulting impacts.

Methodological principles of insurance stress testing - climate change component





3.3.IMPACT OF CLIMATE CHANGE RISKS ON THE BUSINESS

MAPFRE's business model and strategy are an example of how the company faces global challenges in terms of sustainability, manages ESG risks, and innovates through the development of insurance products and solutions for the benefit of its customers and the community.

Climate change risk management helps it to make important decisions affecting underwriting, acquisitions, investments, innovation in products and services, and reputation management, essential to earn the trust of our stakeholders and adapt MAPFRE's financial planning process to climate change. MAPFRE is fully committed to responsible investment initiatives and has launched an entire range of products that encompass its ESG criteria.

UNDERWRITING AND REINSURANCE

One climate change risk whose impact is potentially more relevant is the increase in natural disasters due to climate change. Climate change is expected to cause an unusual concentration of catastrophic or extreme weather events that could lead to an increase in claims, as well as the resources and capacities necessary to manage them. As MAPFRE operates in countries where the possibility of catastrophes (flooding, tropical cyclones, snowfall, etc.) is high, it must pay particular attention to these risks. Damage caused by natural disasters leads to the payment of compensation by MAPFRE to its customers, which, depending on its amount, could have a significant impact on its balance sheet. MAPFRE identifies natural risks as significant criteria when defining its underwriting strategies, using methods based on technical rigor, such as risk screening, accumulation control, and the adaptation of rates.

 The underwriting of catastrophic risks is based on specialized catastrophe exposure reports, which estimate the magnitude of losses in the event of a catastrophe. In addition, the Group has systems of procedures and limits that allow it to control the level of concentrated insurance risk. MAPFRE determines the overall catastrophic capacity that it allocates to each region on an annual basis. It establishes its maximum underwriting capacities per risk and event, performing stress tests and scenario analyses according to the sector and the countries in which it operates. MAPFRE's framework for catastrophic risk management includes several functions; among them are:

- Accumulation control: addressing all catastrophic exposures that the companies face and that may be affected by a natural disaster. In this area, the ExpoCat tool was implemented at the corporate level in 2021 for the reporting and geo-referencing of MAPFRE companies' catastrophic exposures for their damage portfolios, also including their map display with different dashboards to improve control and streamline management of this information. The coded data includes characteristics of the exposures that can make them more resilient to the impact of catastrophic risks. such as the year and type of construction or its height, among others.
- Catastrophic risk modeling: knowing all the information about exposures, estimating probabilistic loss scenarios to calculate the possible financial impact of natural disasters. Climate change can be an incremental factor in catastrophic risk depending on the type of scenario and the time horizon. Therefore, it should be included in these estimates to the extent that the predictive models used allow this variable to be incorporated. Likewise, the ExpoCat tool will allow companies to

formulate deterministic loss scenarios with precise maps in the event of a catastrophic event, identifying potentially affected exposures and allowing more agile decision-making. The Board of Directors of MAPFRE S.A. establishes the risk level that the Group is prepared to assume in order to meet its business objectives without any significant deviations, even in adverse situations. This strategy enables MAPFRE to manage risk and adapt its financial planning process to climate change.

- MAPFRE RE (the Group's reinsurance company) is responsible for advising and placement of reinsurance protection and the retrocession of the Group's catastrophic and severe risks. It is common practice to use reinsurance contracts to mitigate the insurance risk derived from a concentration or accumulation of covers that exceed the maximum acceptance levels. This helps to guarantee the Group's ability to sustain losses derived from catastrophic events, ensuring that the occurrence of catastrophic events does not compromise MAPFRE's solvency or liquidity. It is also necessary to supervise and manage the credit risk that the Group is exposed to through reinsurance placements, as well as the liquidity risk that it could be exposed to.
- Continuity plans: in the case of a catastrophic event, MAPFRE's ability to continue serving its clients becomes critical. For this reason, business continuity plans are developed, implemented, tested, updated and certified, aimed at guaranteeing, in addition to the personal safety of employees and collaborators, the operational resilience of the companies; thus fulfilling its obligations to clients and other stakeholders.

To carry out these actions, MAPFRE has specific capabilities that allow a consistent and adequate response to requirements at any time and anywhere. The activation of the plans makes it possible for each company to resume its operations in a period of time that does not compromise its continuity and that allows the services required by its clients to be provided, making these operations resilient.

In addition, MAPFRE's Group Actuarial Office is developing a study on the possible health impacts of climate change, considering different scenarios, and the corresponding impact on Life insurance products. MAPFRE presented the results of this study at the European Congress of

Actuaries held in Madrid in June 2022. The event was an opportunity to exchange knowledge and experiences on actuarial matters with colleagues in the sector and to receive useful feedback for adjusting assumptions and methods as part of the continual improvement process. This study constitutes another line of work where progress is currently being made to measure the impact on insurance and reinsurance products.

INVESTMENT

MAPFRE's vision is to be "the trusted insurance company" for its investors as well. In this regard, a growing number of investors are basing their investment decisions on environmental, social, and governance (ESG) criteria in addition to financial factors. The carbon footprint or reducing greenhouse gas emissions may become one of the most important factors in terms of investors' selection criteria in the future.

Together with a specialized company, MAPFRE is developing its own methodology for ESG investment and product research for our investment strategy.

The company is implementing the Sustainable Investment Policy with a dual approach:

- "A posteriori" approach. The objective is to have a tool in order to start applying ESG criteria. This approach has two main stages: first, we examine the ESG scores of all portfolios, and then our Risk Committee discusses whether it is necessary to move any of them to improve the ESG rating, or to sell assets whose score is too low.
- "A priori" approach. We incorporate ESG criteria when researching potential investments. The methodology, which is currently being developed and disseminated, uses the Comprehensive Value Approach of the French manager La Financière Responsible, a MAPFRE partner.

As investment managers, we focus on aspects of ESG risks and opportunities that are of particular importance in our process with the aim of developing our own understanding of these issues.



All of the above tools are among the actions outlined in the MAPFRE Sustainability Plan 2022–2024, which includes a specific chapter on responsible investment. Its main observations concern:

- Integrating ESG criteria into MAPFRE's investment processes, ensuring that said investments continue to be profitable or are limited to parameters that may have a subjective component. An investment's reputational risk is also incorporated into the process.
- Revising the assessment methodology for listed companies.
- Improving MAPFRE's assessment model for evaluating listed companies, incorporating both financial and non-financial (ESG) components.

The plan suggests the following actions:

• A specific training course for MAPFRE professionals, mainly in the Investment Area, at a global level.

- Collaboration with the leading universities around the world specialized in ESG issues to carry out specific studies for MAPFRE.
- Dissemination of content that positions MAPFRE in this area.
- Creation of ad-hoc products that incorporate ESG criteria.
- United Nations Principles for Responsible Investment (UNPRI) 2017.

PRODUCTS

Underwriting

Sustainable innovation is an important business opportunity. For this reason, MAPFRE designs sustainable solutions, analyzing market options and moving toward new business models and products and services that arise from digital and technological changes. It does so with the ultimate aim of offering the best solutions and services to current and future customers while helping to build a more sustainable society.



MAPFRE offers a wide range of sustainable insurance products in the different parts of the world where it operates. Environmental products and services are classified according to the impact they generate and are grouped as follows: sustainable mobility, renewable energy, circular economy, avoid and/or repair damage caused to the environment, low-carbon agriculture and energy efficiency in facilities. For more information on MAPFRE's underwriting products, see section 3.3.2 Business Sustainability of the MAPFRE Group Integrated Report 2022.

Investment

MAPFRE is committed to developing a range of sustainable products that complement existing products.

MAPFRE AM, MAPFRE's asset manager, has two sustainable funds, which are classified under the SRI Label promoted by the French Ministry of Finance and as Article 8 funds under the

new European Sustainable Finance Disclosure Regulation (SFDR). They also take into account Main Adverse Incidents.

For the selection of companies, it has developed its own analysis methodology, with academic support from renowned institutions, as well as the experience of La Financière Responsable, which MAPFRE has shares in. These products are aligned with the Principles for Responsible Investment, to which the Group has adhered.

Specifically, the MAPFRE AM - Inclusión Responsable fund seeks to make a social impact on disability without losing sight of the criterion of financial profitability. And the MAPFRE AM -Capital Responsable fund seeks to preserve capital while investing in companies that integrate their sustainability strategies the most consistently.

In addition, as a sign of this commitment, the company markets other sustainable investment products, such as the infrastructure fund launched with Abante or investments in renewable energy with Iberdrola.

MAPFRE has placed special emphasis on providing communication and information on sustainable funds to (current and potential) specialist clients and society in a different way, in accordance with the values that these funds, responsible investment and its contribution to sustainable development represent to the company. To do so, it generates specific informational content through interviews, participation in conferences and events, reference articles in specialized media and value-added videos on the MAPFRE corporate website.

In addition, since 2019 MAPFRE has been part of Spainsif (https://www.spainsif.es/), a benchmark meeting platform for sustainable and responsible investment in Spain, and is also a member of its board of directors.

For more information on MAPFRE investment products, see section 3.3.2 Business Sustainability of the MAPFRE Group Integrated Report 2022.

3.4. SUSTAINABLE STRATEGIES

Alignment of underwriting with the 1.5 °C scenario

In 2019, MAPFRE incorporated a series of environmental commitments into its Underwriting Policy to align its underwriting activities with the Paris Agreement scenario.

We are therefore accelerating the deployment of our climate strategy, and in 2022 we reinforced and modified our environmental commitments in the underwriting business, playing our part to contribute to the transition to a low-carbon economy and reinforcing our commitment to be a zero-emissions company by 2050.

For more details on the MAPFRE Group's environmental commitments in underwriting, please consult:

https://www.mapfre.com/media/ ENVIRONMENTAL-COMMITMENTS-IN-INVESTMENT-AND-UNDERWRITING.pdf

Alignment of investment with the Principles for Responsible Investment

The United Nations PRI coexist with the obligation assumed by the company as custodian of customer savings and investments and the solidity of its own balance sheet. Prudent investment criteria are therefore applied, seeking long-term value creation and incorporating ESG factors alongside traditional information.

In 2022, we reinforced and modified our environmental commitments in the investment business, playing our part to further the transition to a low-carbon economy and reinforcing our commitment to be a zero-emission company by 2050.

For more details on the MAPFRE Group's environmental commitments in investment, please consult:

https://www.mapfre.com/media/ ENVIRONMENTAL-COMMITMENTS-IN-INVESTMENT-AND-UNDERWRITING.pdf



The Corporate Investment Area is the guarantor of compliance with the established responsible investment principles at the organization and must report annually on their fulfillment to the Sustainability Committee. MAPFRE AM also has a Risk Committee that analyzes portfolio composition on a regular basis, assesses ESG concerns, resolves any disputes that may arise, and applies grounds for exclusion approved by MAPFRE.

To monitor and manage ESG risks in investments, MAPFRE created its own analysis framework, which is reviewed periodically to incorporate best practices in this area. The investment team is responsible for implementing the methodologies included in the above framework, always looking for opportunities and avoiding risks. MAPFRE also has an Investment Policy in place that is applicable to all insurance and reinsurance companies, and a series of policies that complement its commitment to sustainable investment, such as the Sustainability Risk Integration Policy.

With regard to sustainability strategies, MAPFRE is in favor of transversally applying an approach of integration and a policy of long-term shareholder involvement through the exercise of voting rights, which applies to all the assets it manages.

As defined in the Responsible Investment Framework and in the MAPFRE AM Integration Policy, environmental, social and good governance criteria are integrated into all investment processes, in both own and third-party portfolios,

based on the criteria defined by the applicable regulations and market trends, among others.

Exclusion criteria focused mainly on environmental issues, which promote the achievement of the aforementioned objectives, are also incorporated into investment decision-making and sustainability risk management.

Furthermore, progress is being made in establishing dialog processes with companies as a mechanism to influence their performance in terms of sustainability.

Therefore, MAPFRE has fiduciary responsibility for the investments made through voting and dialog.

With regard to voting, it aims to influence the company's governance and help to promote greater transparency and better performance in terms of sustainability. With regard to dialog, the objective is to access companies directly or collectively, also seeking to contribute to better sustainability performance.

Likewise, it extends the philosophy of socially responsible investment to the Group's entire balance sheet.

Real estate investment is fully aligned with these principles and the governance system described above. Additionally, specific strategies have been defined to ensure compliance with the objectives set, within the framework of the Sustainability Plan and the Environmental Footprint Plan.

THE GROUP HAS AN INVESTMENT POLICY IN PLACE THAT IS APPLICABLE TO ALL INSURANCE AND REINSURANCE COMPANIES, AS WELL AS A SERIES OF POLICIES THAT **COMPLEMENT THIS COMMITMENT TO SUSTAINABLE INVESTMENT,** SUCH AS THE **SUSTAINABILITY RISK INTEGRATION POLICY**

3.5. PARTICIPATION IN INSTITUTIONAL ORGANIZATIONS' WORKING GROUPS



Among the responsibilities assumed at MAPFRE, we are working to respond to climate change risks, and we therefore participate in a variety of specialized initiatives to further the analyses of the possible impacts:

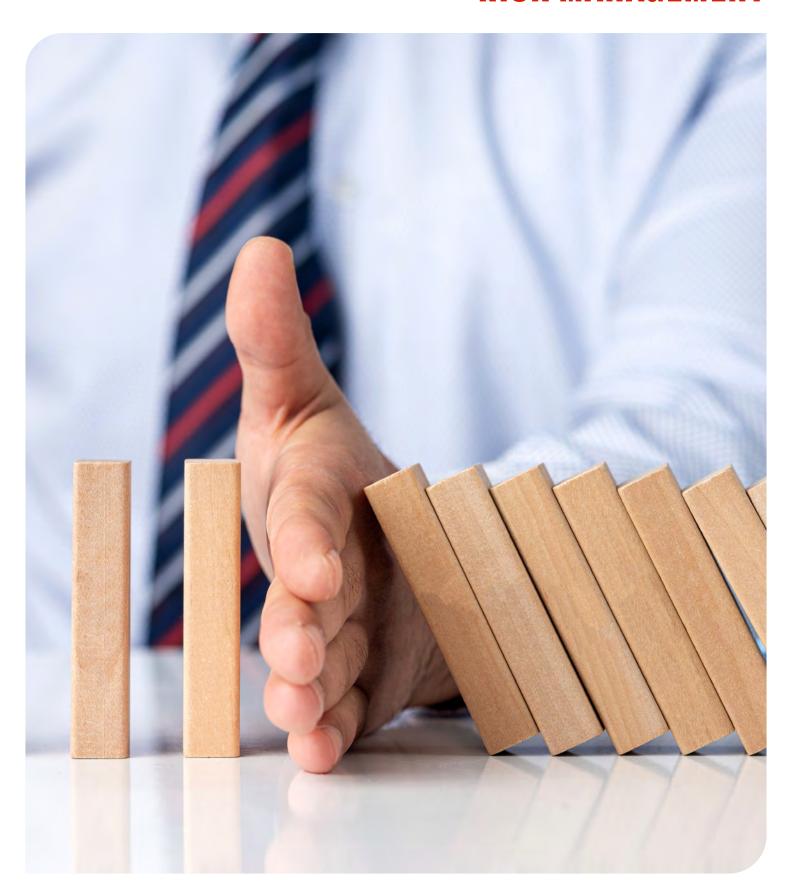
- The Pan-European Insurance Forum (PEIF): Sustainable finance Working Group
- European Insurance CFO Forum: Sustainable Reporting Working Group
- European Financial Services Round Table: Sustainable finance Working Group
- Geneva Association: Climate Change & Environmental Topics Working Group; Evolving liabilities Working Group
- Institute of International Finance: Sustainable Finance Working Group
- Insurance Europe: Sustainability Working Group; Long Term Investments & Sustainable Finance
 Project Group, Corporate Reporting Working Group
- Unespa: Sustainability Working Group; Sustainability Statistics; Sustainable Finance.

In addition, 2021 saw the publication of a report prepared by the Group, coordinated by the United Nations UNEP-FI (PSI-TCFD-final-report.pdf (unepfi.org)), of which MAPFRE is a part, that analyzes scenarios allowing financial metrics and models to be developed with the aim of adequately estimating the potential repercussions of climate change on the business.

Also, MAPFRE's Group Head of Actuarial Office is the director of the Spanish Actuarial Research Center, part of the Spanish Institute of Actuaries. This Institute is working on various climate change-related initiatives, such as the creation of an actuarial climate index for Spain.

In 2022, within the framework of the Net-Zero Insurance Alliance, MAPFRE was part of the work groups formed to create methodologies, protocols, etc.

O4 RISK MANAGEMENT



Due to the group's global nature, and as a result of climate change risk along with other external factors, MAPFRE has implemented processes and an effective risk management system that complies with local regulations. It promotes actions for risk governance, the identification of emerging risks, and training and dissemination of the risk culture in the organization.

4.1. RISK MANAGEMENT GOVERNANCE

The responsibilities of the MAPFRE Risk Management System are integrated into the organizational structure in accordance with the three lines of defense model, which establishes:

- A first line of defense: it consists of employees, management, and the business and supporting operating areas responsible for maintaining effective control over the activities carried out as an inherent part of their work. Therefore, they are the ones who assume the risks, and they are responsible for designing and applying the necessary control mechanisms to mitigate the risks associated with the processes they carry out, guaranteeing that the risks do not exceed the established limits.
- A second line of defense: it is made up of the key risk management, actuarial, and compliance functions, as well as other assurance functions that ensure the correct functioning of the Risk Management System.
- A third line of defense: consisting of Internal Audit, it performs independent assessments of the suitability, adequacy, and effectiveness of the Risk Management System, reporting any shortcomings to the parties responsible for applying corrective measures, including directors and the governing bodies.



4.2. CLIMATE CHANGE RISK IDENTIFICATION AND ASSESSMENT PROCEDURE

MAPFRE establishes a procedure for mitigating and adapting to the risks that arise from climate change. This procedure consists of the processes of identification and evaluation of these risks:

CLIMATE CHANGE RISK IDENTIFICATION PROCESS

The Group constantly analyzes factors that, should they arise, can or could impact business (referring to investment and underwriting). This analysis considers environmental, social and governance (ESG) factors, as these enable additional information to be gathered on social movements and transformations, and the expectations of stakeholders and the market that affect the organization.

A proper analysis of ESG factors, and how they might affect the business in the short, medium and long term, will show their relationship to the company and possible inclusion in the list of risks drawn up by the company, and how they will be considered in the adoption of prevention and mitigation measures.

In addition, the Group Risk Office leads an annual exercise to identify material risks that, in 2022, saw the participation of more than 300 key risk management employees from 25 different countries. The managers were able to identify the perceived risks, including sustainability and climate change risks, that may affect the Group's results as it implements its business plan, and that could materialize beyond its business plan.

MAPFRE has internal control processes and an effective risk management system that complies with local regulations. It promotes actions for risk governance, the identification and evaluation of risks, including emerging and sustainability risks, as well as training and dissemination of the risk culture in the organization. This system is based on

the ongoing, integrated management of each and every business process, and on the adaptation of risk levels to the strategic objectives.

Subsequently, materiality analyses are performed to assess risks, including climate change risks, based on their relevance to the participating stakeholders (employees, providers, customers, and experts) and according to the impact of these issues on MAPFRE. This analysis identifies potential risks for the company and establishes the appropriate prevention and mitigation measures.

RISK ASSESSMENT PROCESS RELATED TO CLIMATE CHANGE

The Own Risk and Solvency Assessment (ORSA), part of the risk management system, uses mechanisms to identify, measure, monitor, manage, and report the short, medium, and long-term risks identified by the Group, as well as to determine the adequacy of its capital resources based on the knowledge of its real solvency needs. On an annual basis, the Group Risk Office coordinates the preparation of the ORSA report, which is submitted to the Board of Directors for approval.

MAPFRE analyzes not only factors that may have a negative impact on the business, but also those whose impact is potentially positive, both financially and in terms of ESG factors. Thus, as a global insurance company, MAPFRE has an important role to play in helping society to identify risks and opportunities to develop sustainable products and services that contribute to the transition to a low-carbon economy.



The evaluation of climate change risks is a priority for the finance sector. By doing this, MAPFRE aims to increase its understanding of climate change risks and their potential impact on the company.

A work group is currently set up to implement a procedure for identifying and prioritizing risks associated with climate change. This process will make it possible to identify the Group's combinations in terms of country/exposure/line of business/most material hazards. At a later stage, different methodologies will be analyzed to calculate the impact of climate change risk scenarios for physical and transition risks for the most relevant combinations. These scenarios and their impact will be considered in the ORSA report.

At MAPFRE, we have tools that allow us to compare exposure maps for geolocated damage portfolios with maps of climate change variables. This allows us to identify which damage exposures may be most impacted by the hazards most linked to future variations in weather patterns.

INTEGRATION OF CLIMATE CHANGE RISK INTO OTHER GENERAL RISK CATEGORIES

ESG risks are naturally integrated into traditional risk categories during the management and control processes, using the Risk Management System and a taxonomy that incorporates climate change risks.

Furthermore, on an annual basis, the MAPFRE Group Risk Office creates the Risk Map for the Group, based on the answers to assessment questionnaires, in order to identify material risks that could impact the different companies.

These questionnaires are used to gather data on the probability of occurrence and the impact of the risks as classified in the following general risk categories, in which climate change risks must be considered:

- Insurance risk:
 - Natural or man-made disasters: Events caused by climate change (extreme weather, water crisis, food scarcity) or the ineffectiveness of measures against climate change.

- Increase in diseases: Emergence of infectious diseases related to climate change.
- Financial and credit risk:
 - Macro-economic situation: Transition risks-changes in the price of financial assets caused by climate change.
- Strategic and corporate governance risks
 - Goodwill impairment: Appearance of contingencies in areas such as the environment.
- Operational risk:
 - Regulatory changes: Civil and criminal liability for actions that have caused climate change.
 - Damage to tangible assets: Damage to assets due to natural disasters related to climate change (flooding, storms, hail, hurricanes, etc.).

Similarly, data is gathered on the potential impact of the risks that could materialize in the next five years, including the following climate change risks

- 1.Increase in events and natural disasters associated with climate change.
- 2.Need to adapt catastrophic risk coverage programs and underwriting policies and to continuously update risk profiles by area/ activity and reinsurance restrictions.

THE GROUP AVAILS OF **SPECIALIZED CATASTROPHIC EXPOSURE ANALYSIS TOOLS** THAT ESTIMATE THE EXTENT OF LOSSES IN THE EVENT OF A CATASTROPHIC EVENT

AGGREGATE EXPOSURE AND LOSSES ATTRIBUTABLE TO CATASTROPHE RISK

The Group uses specialized analytics for catastrophic exposure to estimate the scope of the losses when catastrophic events occur and periodically conducts stress tests and analytics of scenarios in which the potential impact of this risk for the Group is evaluated.

Taking action during natural disasters requires an appropriate forecast of these events and a correct assessment of the losses they can cause, which are essential to managing an insurance company. The economic impact that the company will have to manage as well as the response that it will be able to give its clients depend on this, and management of this action is inherent in its operations.

MAPFRE RE offers reinsurance services and capacity, providing all kinds of treaty and facultative reinsurance solutions for all Life and Non-Life branches. The Reinsurance business also includes the Global Risks Unit, which is a specialist within the MAPFRE Group in managing global insurance programs for large multinationals (underwriting policies that cover aviation, nuclear, energy, civil liability, fire, engineering and transportation).

In the reinsurance business, premiums in 2022 increased by 13.6 percent over the same period of the previous year, essentially as a result of a general rise in rates within an environment conducive to increasing participation in the programs of some ceding companies, as well as the impact due of currency exchange rates.

The result has been positive despite the increase in the number of medium-intensity catastrophic events in the Reinsurance Unit's portfolio.

In 2022, in relation to relevant claims, MAPFRE RE was affected by the significant droughts in the Paraná river basin in Brazil and Paraguay. The effect of this incident on the attributable result of the Group represents an impact of 30.2 million euros.

There have also been various catastrophic claims for a smaller amount (storm Eunice, floods in Australia and South Africa, hailstorms in France and Hurricane Ian in the United States).

MAPFRE's framework for catastrophic risk management provides for the modeling of catastrophic risks. Based on exposure information, these models are used to estimate probabilistic loss scenarios and subsequently calculate the potential financial impact of natural disasters.





TOOLS USED IN RISK ASSESSMENT

For underwriting global risks, MAPFRE has developed an internal ESG evaluation process that, based on specialized tools, evaluates and rates the environmental, social, and governance impact of the activity carried out by third parties, considering the sector and the countries where it operates.

The process assigns a reputational risk level to the business group, which is linked to the level of authorization required to underwrite the operation. The approval of the Management Committee of the Major Risks Unit may be required and, where appropriate, the additional authorization of the CEO. In this case, if the operation is authorized, with the corresponding mitigation measures, the Group Sustainability Office is informed and a plan of mitigation measures for said risk may be required.

The assigned ESG ratings are updated for all new clients and every six months for portfolio clients, and data is submitted to the Management Committee regarding the management of this information. This procedure makes it possible to centralize information on third parties while guaranteeing that all global clients have a homogenized and quality rating, in addition to improving risk control for the MAPFRE brand. During 2022, MAPFRE RE, Spain and Brazil were incorporated into this process.



4.3. MANAGEMENT OF CLIMATE CHANGE RISKS AND OPPORTUNITIES

Sustainability in the insurance industry is based on the appropriate management of the risks faced by the organization. This is put into practice at MAPFRE through responsible risk assumption and management, considering emerging and sustainability risks.

MAPFRE's internal control processes and Risk Management System are based on the continual, integrated management of all business processes and on adapting the risk level to its strategic objectives.

Climate change risk management essentially focuses on increasing our understanding of the greater catastrophic hazards derived from climate change and improving our management of exposures through:

1

The integration of climate change into decision-making for our sales strategy.

2

Detailed knowledge of the insured risks (such as their geolocation and the characteristics of their assets), in order to provide appropriate coverage and catastrophic protection.

3

Suitable accumulation control and management to optimize the use of capital. 4

Maximum collaboration and transparency between the insured party and the insurer to guarantee the best assessment and pricing.

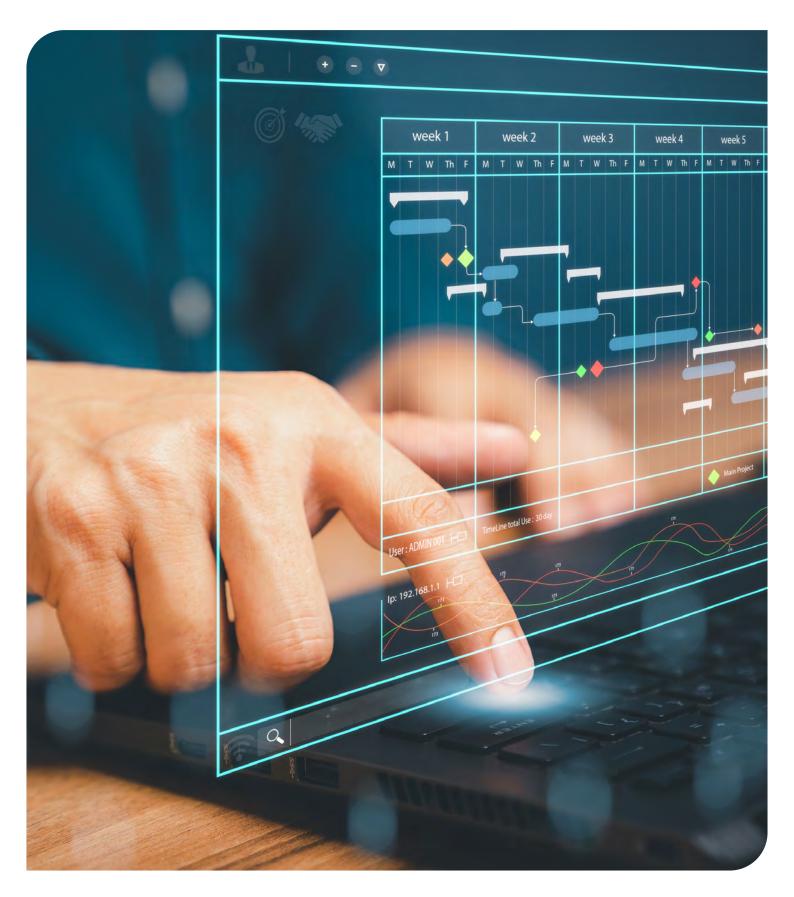
5

The provision of reinsurance coverage.

6

Application
of scenarios
for country/
exposure/line of
business/hazard
combinations that
are material

METRICS AND OBJECTIVES



5.1. CORPORATE OBJECTIVES

MAPFRE is aware of the climate emergency, and in its role, with the aim of contributing to climate change mitigation and adaptation, it is taking action in the different Group businesses.

Through underwriting, it seeks to accompany clients in the transition to a low-carbon economy, establishing insurance objectives for projects and companies in the most carbon-intensive sectors. To learn more about underwriting objectives, see section Alignment of underwriting with the 1.5 °C scenario under the heading 3.4. Sustainable strategies

Within the investment framework, the company has revised its environmental commitments,

defining new commitments that are applicable from January 2022. The objectives are explained in detail in section Products under the heading 3.3 Impact of climate change risks on the business.

On the operational side, MAPFRE has set the objective of slashing GHG emissions 50 percent by 2030 (compared to 2019 emissions). To do so, it has planned a series of actions included in the Corporate Environmental Footprint Plan 2021–2030.

UNDERWRITING Net Zero in 2050

NET-ZERO INSURANCE ALLIANCE (NZIA)

INVESTMENTS Net Zero in 2050

NET-ZERO ASSET OWNER ALLIANCE (NZAOA)

OPERATIONAL PART

50 percent reduction in carbon footprint by 2030.
Neutral company in 2030

CORPORATE ENVIRONMENTAL FOOTPRINT PLAN



5.2. UNDERWRITING PORTFOLIO METRICS AND OBJECTIVES

UNDERWRITING ACTIVITY METRICS

MAPFRE's experience as an insurance company enables us to manage risks and develop solutions for a sustainable future, adding value through dialog with stakeholders and sharing its experience to improve general awareness of risk and mitigation in the sector through sustainable products and services. These include environment-related insurance products or services, aimed at specifically adapting and/or mitigating an environmental risk or opportunity and/or related to climate change.

MAPFRE constantly analyzes factors that, should they arise, can or could impact business. This analysis considers ESG factors, as these enable additional information to be gathered on social movements and transformations, and the expectations of stakeholders and the market that affect the organization. A proper analysis of these factors, and how they might affect the business in the short, medium and long term, will show their relationship to the company and possible inclusion in the list of risks drawn up by the company and in the adoption of prevention and mitigation measures

MAPFRE HAS DEVELOPED AN INTERNAL ESG EVALUATION PROCESS THAT **EVALUATES AND QUANTIFIES THE ENVIRONMENTAL, SOCIAL AND GOVERNANCE IMPACT OF THE BUSINESS GROUP'S ACTIVITY,** TAKING INTO ACCOUNT THE SECTOR AND THE COUNTRIES IN WHICH IT OPERATES

In accordance with the established model, at the close of 2022, 77 percent of the underwriting portfolio has been analyzed with environmental, social and good governance (ESG) criteria.

To comply with the EU Taxonomy standard, Regulation (EU) 2020/852 of the European Parliament and of the Council of June 18, 2020, on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088, MAPFRE reports activities that contribute to the European Union's environmental objectives. For more information, see section 3.3.2 Business Sustainability of the MAPFRE Group Integrated Report 2022.

UNDERWRITING PORTFOLIO OBJECTIVES

MAPFRE supports the transition toward a low-carbon and climate-friendly economy, in line with the Paris climate objectives. The company therefore wants to ensure that the activities of its underwriting portfolio and the associated emissions contribute to the shared objective of limiting the global temperature rise to 1.5 °C.

Therefore, in April 2022, MAPFRE joined the Net-Zero Insurance Alliance (NZIA) with the aim of being a net-zero company in its insurance and reinsurance underwriting portfolios by 2050.

This commitment has made MAPFRE even more demanding when it comes to sustainability, as the company must establish underwriting criteria to make a significant impact in terms of emissions while defining decarbonization commitments with its most important clients. It must pursue agreements and develop products and services that promote the reduction of greenhouse gas emissions in its portfolio.

MAPFRE has developed an internal ESG evaluation process that is based on specialized tools, evaluating and quantifying the environmental, social, and governance impact of the activity carried out by a business group, considering the sector and the countries where it operates.

Among its objectives, the Sustainability Plan 2022-2024 provides for the expansion of the ESG analysis model to the underwriting portfolios of Spain, Brazil, and Facultative Reinsurance.



5.3. INVESTMENT PORTFOLIO METRICS AND OBJECTIVES

INVESTMENT ACTIVITY METRICS

Applying the commitments of the Sustainability Risk Integration Policy, at fiscal year-end 2022, 100 percent of the investment portfolio managed by MAPFRE AM is analyzed with ESG parameters, corresponding to an investment of more than 30.7 billion euros. Of the total portfolio, more than 93 percent of the assets are rated using ESG criteria, of which 95 percent have a high rating, above the minimum required threshold established by the company.

Additionally, and based on the Due Diligence Policies Statement in relation to the Main Adverse Incidents at the corporate level, MAPFRE AM has prepared a voluntary report analyzing environmental indicators, such as carbon footprint, emissions intensity, non-renewable energy consumption, or portfolio exposure to companies active in fossil fuels, which was published on the website in June 2022. With regard to the mandatory report that will be prepared to cover the 6-30-2022 to 6-30-2023 period, the company has decided to contract an external provider of first-level ESG data to support us in obtaining information in order to adapt the report to the regulatory technical standards (RTS).

CO, intensity of investment portfolios

As a sign of MAPFRE's commitment, we have carried out the measurement of the impact of climate change on our portfolio, in order to set decarbonization objectives and guide our decision-making. MAPFRE has calculated the carbon footprint of its investment portfolio using its own methodology and the Partnership for Carbon Accounting Financials (PCAF) methodology, measuring the emissions of the portfolio of equities, corporate debt, and governance fixed income.

In line with its commitment to the United Nations 2030 Agenda, MAPFRE collaborates with the University of Siena to measure the impact of its investment portfolio on the Sustainable Development Goals. In 2022, we again measured the impact of our balance-sheet portfolios on the SDGs, using the methodology developed in 2019 with the University of Siena, tailored to the sector in which MAPFRE conducts business and based on Harvard University's IWAI methodology. Work continues to expand the methodology and integrate it with the other tools used for investing with ESG criteria.

INVESTMENT PORTFOLIO

MAPFRE's investment portfolio is aligned with the Paris Agreement, targeting investments that allow global warming to be limited to around 1.5 °C through commitments not to invest in certain companies that contribute to global warming (see section Alignment of investment with the Principles for Responsible Investment of item 3.4. Sustainable Strategies By 2024, 90 percent of the global investment portfolio will be classified using ESG criteria.

Under the Sustainability Plan 22–24, the following objectives have been established:

- 90 percent of the investment portfolio rated with ESG criteria at the global level by 2024.
- Reduction of investment portfolio emissions by 10 percent by the end of 2024 (baseline year 2019²).

In December 2022, MAPFRE joined the Net-Zero Asset Owner Alliance (NZAOA) with the aim of being a net-zero company in its investment portfolios by 2050.

	2020	2021	2022
Total carbon footprint (MTCO ₂ e)	5,112,513.24	4,266,833.45	3,354,390.96
Carbon footprint per €M invested (MTCO ₂ e/€M)	196.61	153.47	138.71

² Using the carbon footprint indicator: (metric tons of CO2e/€million euros invested)

5.4. NTERNAL OPERATIONS METRICS AND OBJECTIVES

INTERNAL OPERATIONS METRICS

Scope 1, 2, 3 Emissions

The following chart shows the evolution of the MAPFRE Group's carbon footprint since 2019, broken down by scope.

EVOLUTION OF THE MAPFRE CARBON FOOTPRINT (tCO,e)

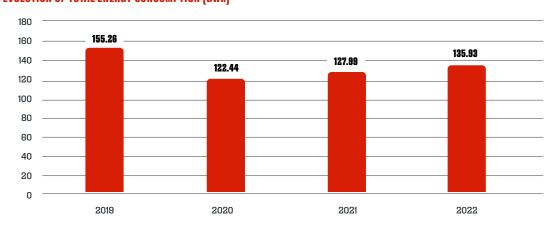


For more information on the breakdown of emissions metrics, please see Appendix I.

Energy, water, and waste management metrics

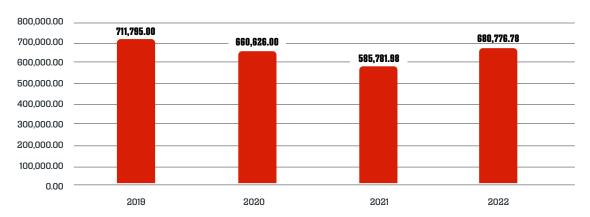
The MAPFRE Group's total energy consumption since 2019 has evolved as follows:

EVOLUTION OF TOTAL ENERGY CONSUMPTION (GWh)



The MAPFRE Group's total water consumption since 2019 has evolved as follows:

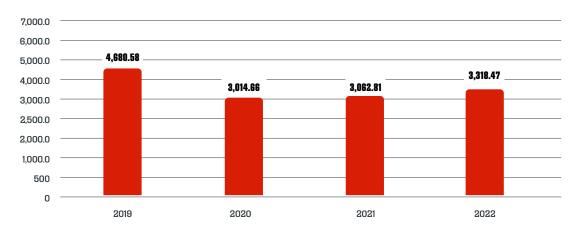
EVOLUTION OF WATER CONSUMPTION (m³)



The MAPFRE Group's waste generated since 2019 has evolved as follows:

For more information on the breakdown of environmental metrics, please see Appendix I and the MAPFRE Group Integrated Report 2022.

EVOLUTION OF WASTE GENERATION (T)



INTERNAL OPERATIONS OBJECTIVES

The MAPFRE Group is committed to the fight against climate change and to limiting the increase in temperature to 1.5 °C. The Corporate Environmental Footprint Plan 2021–2030 establishes the objective of reducing the Group's carbon footprint 50 percent by 2030 compared to the 2019 baseline.

This commitment, together with the reduction achieved between 2013 and 2020 through the previous Energy Efficiency and Climate Change Plan 2014–2020, represents an emissions reduction target of 62 percent compared to 2013.

This ambitious commitment to reducing the carbon footprint is based on the following strategic objectives:

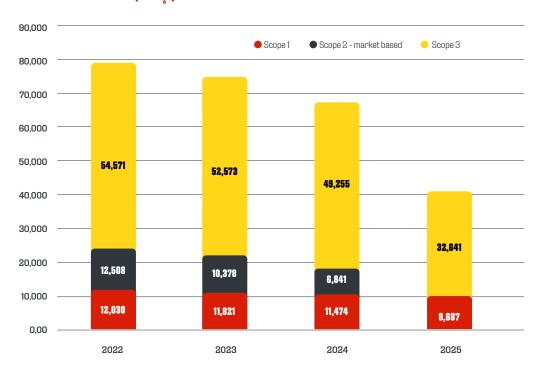
- Purchase of 84.7 percent renewable electricity by the end of 2024 and 100 percent by the end of 2030.
- Minimization of the use of fossil fuels in heating systems.

- Reducing total energy consumption 16 percent by 2024 and 40 percent by 2030 compared to the 2019 baseline through energy efficiency, solar power for own use, the promotion of remote working and eco-friendly fleet conversion.
- Promotion of sustainable mobility for employee commuting and business travel (by plane, train and car). The MAPFRE Group establishes a commitment to reduce its mobility carbon footprint 14 percent by 2024 and 34 percent by 2030 by promoting remote working, reducing business travel emissions 20 percent and achieving 100 percent eco-friendly fleets by 2030.

Furthermore, the variable remuneration of MAPFRE's senior management is linked to the fulfillment of ESG objectives, which include carbon neutrality in the MAPFRE Group's main countries (approved in March 2022 at the Annual General Meeting).

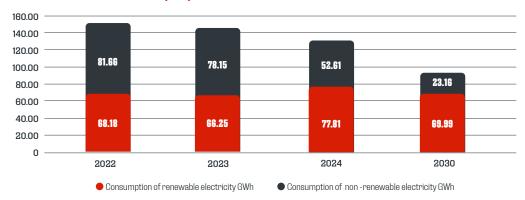
These objectives will allow the MAPFRE Group's carbon footprint to evolve as follows by 2030:

OBJECTIVES: CARBON FOOTPRINT (Tmco,e)



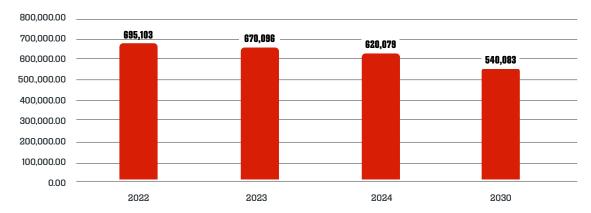
The objectives set for total energy consumption until 2030 are shown in the following chart:

OBJECTIVE: TOTAL ENERGY CONSUMPTION (GWh)



The 2030 Environmental Footprint Plan also establishes targets to reduce water consumption 25 percent by 2030 compared to the 2019 baseline. As a result of these objectives, the MAPFRE Group's water consumption until 2030 will evolve as follows:

OBJECTIVES: WATER CONSUMPTION (m3)



The transition to a circular economy is a major global challenge. Therefore, the Environmental Footprint Plan defines the objective of recovering 84 percent of the waste generated in the Group's operations globally by 2024 and 90 percent by 2030, as well as expanding the zero-waste management model.

For more information on the established objectives, please see Section 5.2 Corporate Environmental Footprint Plan of the MAPFRE Group Integrated Report 2022.

5.5. INTERNAL CARBON PRICE

In 2019, the MAPFRE Group incorporated for the first time the internal carbon price to foster a change in business behavior that would reinforce actions to reduce greenhouse gases derived from its operational footprint, in accordance with the neutrality commitments publicly defined by the Group for 2021, 2024 and 2030.

This price, which is expressly internalized in the Corporate Greenhouse Gas Compensation Strategy approved in 2021, defines the minimum price that the company has to pay in euros for each ton of CO2e not avoided, being applicable to the entire Group. It includes a permanent upward revision in order to have a greater impact on the company

that strengthens best practices. This revision is also conditioned by price developments in voluntary compensation markets.

In addition to this internal carbon price, MAPFRE also includes the valuation of other key environmental aspects in the fight against climate change, such as the preservation of biodiversity and natural capital. Thus, the aforementioned strategy establishes an assessment matrix for selecting compensation projects that best meet internal requirements, both environmental and social.

5.6. OTHER METRICS

NATURAL CAPITAL

MAPFRE, in its climate strategy, establishes projects to offset the company's operational carbon footprint in accordance with the objectives set in the short, medium and long term (year 2030). In addition, through our volunteer activities, reforestation projects are carried out to create carbon sinks.

The actions to compensate the operational footprint maintain the scope defined in 2021 for the Group's operations in Spain and Portugal, in

which the following green and gray infrastructure projects were executed over the course of 2022:

- Reforestation and creation of new complete forest mass ecosystems in the burned area of Cerdedo cotobade in Pontevedra (Spain). With this project, MAPFRE was directly involved in the creation of forest wealth by planting 4,874 trees, in addition to generating local employment in rural areas and boosting the economy, tourism and development of the area. This action has supposed the compensation of 3,000 tons of CO₂e.³
- Reforestation with 1,667 trees in areas of Lisbon and Viseu (Portugal) for the conservation and preservation of native flora and autochthonous fauna. This action has supposed the compensation of 1,000 tons of CO₂e.⁴



YEAR 2022:

8,699 Trees planted

19,404
METRIC TONS OF CO₂
COMPENSATED

- 3 [Compensation of the carbon footprint of the MAPFRE Group inSpain in 2022]
- $4\ [\text{Compensation of the carbon footprint of the MAPFRE}\ Group in Portugal in 2021]$
- 5 [Compensation of the carbon footprint of the MAPFRE Group inSpain in 2021]

• Compensation of 15,404 tons of CO2e through the purchase of verified credits in a wind energy project located in Oaxaca (Mexico) that includes carrying out activities to generate a positive impact on the communities and biodiversity near the facilities.⁵

Regarding the creation of carbon sinks without footprint compensation, during 2022, a total of 12 activities were carried out in eight countries in which the company is present, and in which a total of 2,158 trees were planted in degraded areas to favor the recovery of local ecosystems and preserve their biodiversity.

CONTRIBUTION TO THE SDGS

Our activity and investments contribute to the achievement of the goals of the United Nations Sustainable Development Goals and support the Paris Agreement.

Our climate strategy and our objective of being a Net Zero company by 2050 directly help to achieve the goals established in the United Nations SDGs 7 and 13.

SDG



We fight climate change by reducing our own carbon footprint while helping our clients transition to a low carbon economy.

We are a member of the Net Zero Insurance Alliance (NZIA) and the Net Zero Asset Owner Alliance (NZAOA)

Goals to which the MAPFRE Group contributes:

- 13.1 Strengthen resilience and adaptive capacity to climate-related risks and natural disasters in all countriess
- 13.2 Incorporate climate change measures into national policies, strategies and plans
- 13.3 Improve education, awareness and human and institutional capacity regarding climate change mitigation, adaptation to it, reduction of its effects and early warning



We insure and finance renewable energy and energy efficiency projects.

We were the first insurer to join the Spanish Hydrogen Association. Being part of this large multisectoral network will accelerate the consolidation of this chemical element as an energy vector, marking the path toward sustainability and caring for the planet.

Goals to which the MAPFRE Group contributes:

- 7.1 By 2030, ensure universal access to affordable, reliable and modern energy services
- 7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
- 7.3 By 2030, double the global rate of improvement in energy efficiency

FINANCING A GREEN ECONOMY



MAPFRE is committed to developing a range of socially responsible financial and investment products that, in addition to being profitable for the client, have a positive impact on society.

To this end, it develops its proprietary analysis methodology, with academic support from renowned institutions, as well as the experience of the French fund manager La Financière Responsable, in which MAPFRE holds a stake.

MAPFRE AM, MAPFRE's asset manager, has several specific funds adapted to the new European Sustainable Finance Disclosure Regulation (SFDR).

MAPFRE has placed special emphasis on providing communication and information on SRI funds to (current and potential) specialist clients and society in a different way, in accordance with the values that these funds, responsible investment and its contribution to sustainable development represent to the company. To do so, it generates specific informational content through interviews, participation in conferences and events, reference articles in specialized media and value-added videos on the MAPFRE corporate website.

In addition, since 2019 MAPFRE has been part of Spainsif (a benchmark meeting platform for sustainable and responsible investment in Spain) and is also a member of its board of directors.

OTHER INVESTMENT PRODUCTS:

In addition, as a sign of this commitment to the energy transition and the green economy to further the recovery of industry, benefit employees and transform the industrial fabric, the company has decided to commit to other sustainable investment products:

Real estate assets

MAPFRE premiered in the real estate market in 2018 with GLL, from the Macquarie Group, through a co-investment vehicle to invest in prime office spaces in the main European markets. MAPFRE entered into the agreement with a 50 percent stake and a total of 100 million euros committed. This alliance, formed to invest up to 300 million, has acquired six high-quality office buildings in the main European capitals, such as Luxembourg, Paris and the former headquarters of BBC Radio in the Fitzrovia district in the heart of London, among others.

In March 2021, they acquired a 6,000 m2 prime office building in the central St. Georg district of Hamburg. The building, which previously belonged to Allianz Real Estate, has the DGNB Gold sustainability seal that assesses economic, environmental, comfort and quality aspects.

Furthermore, in mid-2019, the Group reached an agreement with Swiss Life to create an investment vehicle in the real estate market. In this way, MAPFRE, with half of the ownership interest and disbursing more than 100 million euros, decided to invest in prime office buildings in Paris.

More recently, at the end of April 2021, MAPFRE gave this alliance a boost by creating a joint venture, a pan-European co-investment vehicle with an initial asset volume valued at 400 million euros, with the objective of investing mainly in the Spanish and Italian real estate markets. Between the second and third quarter of 2022, the fund acquired three new buildings, two in Madrid and one in Brussels.

In April 2022, MAPFRE, Munich Re and MEAG, the Munich Re Group asset manager, launched a new European real estate investment fund. This alternative investment fund based in Luxembourg focuses on high-quality office properties in prime locations in the top European cities. MAPFRE and Munich RE have partnered as initial investors of the fund, for which they contributed to the initial portfolio of assets that they already own in Spain and Germany, respectively.

The fund takes into account environmental and social factors as an integral part of its investment strategy. It meets the requirements established in Article 8 of the SFDR (Sustainable Finance Disclosure Regulation) as a sustainable investment product, and it focuses on decarbonization through greater energy efficiency and a lower carbon footprint, in accordance with the Paris Agreement. It also emphasizes the sustainability objectives of Munich Re, MEAG and MAPFRE and meets the growing demand for sustainable investment products in the institutional segment.

SINCE 2019, MAPFRE HAS BEEN PART OF SPAINSIF (THE BENCHMARK FORUM ON SUSTAINABLE AND RESPONSIBLE INVESTMENT IN SPAIN), AND IS ALSO A MEMBER OF ITS MANAGEMENT BOARD

After the initial phase, the fund will acquire other European office properties across the continent in order to create a pan-European portfolio. The fund is expected to reach approximately 500 million euros in 2023. In 2024, it will open to other institutional investors in Germany and Europe, highlighting MEAG's aspirations to further expand its business in the institutional client segment. In this way, the fund will increase to 1 billion euros in 2025.

In mid-2022, a new fund was created with Macquarie, SIEREF 2, as a continuation of the fund created in 2018. On this occasion, the size of the fund may reach up to 500 million euros, with the contribution of the MAPFRE Group exceeding 150 million euros.

Infrastructures

In developing their strategic alliance, formed three years ago, MAPFRE and Abante launched in 2020 an infrastructure fund that reached 324 million euros together with the Australian financial services group Macquarie. MAPFRE undertook to contribute an initial capital of 50 million euros in accordance with environmental, social, and governance (ESG) criteria, although that figure has increased to 103 million.

This fund of funds, which has attracted the interest of institutional and private banking investors and is underpinned by several Macquarie Infrastructure and Real Assets (MIRA) strategies, offers investors an opportunity to access a type of asset that allowed them to diversify their portfolios in a low interest rate environment.

Sustainable Investments

The other pillar of the insurance group in alternative investments is the agreement reached with Iberdrola to jointly invest in renewable energy in Spain through the promotion of an investment vehicle managed by Kobus Partners. MAPFRE has a commitment of 220 million euros. This partnership involves the creation of a pioneering co-investment vehicle between an energy company and an insurance company.

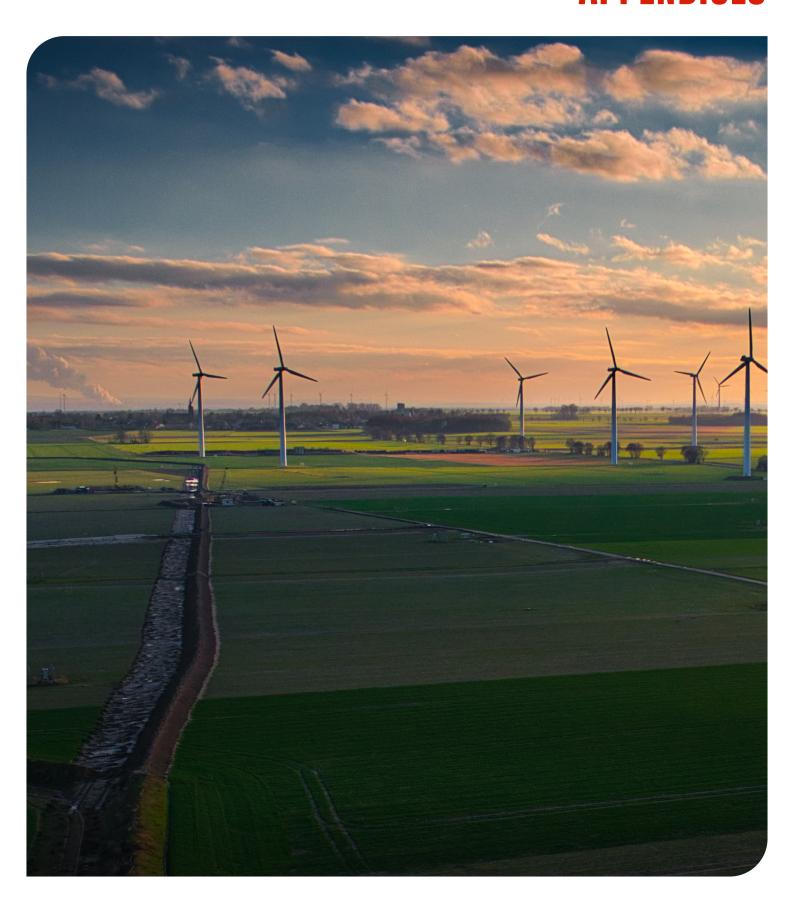
The joint venture, which has 298 MW in projects to date, is focused on production of renewable wind energy in the energy company's asset portfolio. This agreement also provides for the incorporation of other operating assets, as well as new renewable energy development projects in solar and wind technology, and aims to reach 1,000 MW.

Likewise, within the framework of the diversification of alternative assets, the additional objective of this partnership is for third-party institutional investors to be able to co-invest in this clean energy vehicle in which around 800 million euros will be invested jointly.

Soil decontamination:

In June 2021, MAPFRE allocated a total investment of 15 million euros to the initiative of the Edmond de Rothschild management firm, whose strategy is based on the decontamination and recovery of lands previously used for industrial purposes (thermal power plants, ceramic material factories, etc.). Due to the growth of large cities, such lands are located in central areas but cannot actually be used, having a significant degree of pollution that makes them unfit for any other purpose. Through Ginkgo III, MAPFRE's investment collaborates in the recovery of these lands, giving them a new life after decontamination, since the strategy combines this recovery with property development for administrative, business, residential and institutional use.

O7 APPENDICES



I. ADVANCED METRICS AND OBJECTIVES

CARBON FOOTPRINT

METRICS

	Units	2019	2020	2021	2022
Scope 1	MTCO ₂ e	12,239.26	8,400.45	10,035.33	9,939.46
Scope 2 – market based	MTCO ₂ e	14,639.01	11,197.17	11,144.46	11,830.17
Scope 3	MTCO ₂ e	56,569.26	24,732.78	29,276.65	39,957.48
Total GHG emissions (scope 1 + 2 (market based))	MTCO ₂ e	26,878.27	19,597.62	21,179.80	21,769.63
Total GHG emissions (scope 1 + 2 (market) + 3)	MTCO ₂ e	83,447.53	44,330.40	50,456.44	61,727.10
Emissions per employee	MTCO ₂ e employee	2.58	1.39	1.61	2.04
Emissions per premium	MTCO ₂ e/premium (millions€)	3.69	2.19	2.28	2.22
Business travel (air, train bus)	MTCO ₂ e	13,642.90	2,970.87	2,494.41	3,028.42
Business travel (vehicles)	MTCO ₂ e	1,699.56	844.47	1,118.66	1,976.81
Commuting	MTCO ₂ e	39,509.90	18,374.88	24,150.04	33,648.59

OBJECTIVES

	Unidades	2022	2023	2024	2030
Scope 1	MTCO ₂ e	12,030	11,821	11.474	8.687
Scope 2 (market based)	MTCO ₂ e	12,508	10,378	6.841	-
Scope 1 + Scope 2 (market based)	MTCO ₂ e	24,538	22,199	18.315	8.687
Scope 3	MTCO ₂ e	54,571	18,315	49.255	32.641
Total GHG emissions (scope 1 + 2 (market based) + 3)	MTCO ₂ e	79,109	52,573	67.570	41.327
Emissions per employee	MTCO ₂ e/employee	2.49	2.39	2.11	1.28
Emissions per premium	MTCO ₂ e/premiums (€millions)	3.50	3.35	3.10	2.90



ENERGY

METRICS

	Units	2019	2020	2021	2022
Total energy consumption	GWh	155.26	122.44	127.99	135.93
Electricity consumption	GWh	112.93	91.44	92.18	96.80
Consumption of renewable electricity	%	59.18 %	62.90 %	65.51%	65.02 %

METRICS

	Units	2022	2023	2024	2030
Total energy consumption	GWh	144.83	138.93	130.42	93.16
Electricity consumption	GWh	107.65	102.37	91.81	69.99
Consumption of renewable electricity	%	63.29 %	64.72 %	87.63 %	100.00 %
Consumption of non- renewable energy	GWh	76.70	72.68	49.97	23.17

WATER

METRICS

	Units	2019	2020	2021	2022
Total water consumption	m³	711,795.00	660,626.00	585,781.98	680,776.78

OBJECTIVES

	Units	2022	2023	2024	2030
Total water consumption	m ³	695,103	670,095	620,079	540,083



WASTE

METRICS

	Units	2019	2020	2021	2022
Paper	MT	929.05	427.40	453.70	599.39
Toner	MT	9.61	7.23	7.90	8.97
Electric appliances	MT	33.14	44.80	52.10	67.66
Donated electrical appliances	MT	16.24	13.49	41.10	24.75
Batteries	MT	1.69	1.57	6.20	14.65
Bulbs and fluorescent lights	MT	2.26	1.54	2.34	1.54
Organic waste	MT	N/A	N/A	N/A	150.31
Cardboard	MT	N/A	N/A	N/A	66.52
Packaging	MT	N/A	N/A	N/A	119.89
Glass	MTt	N/A	N/A	N/A	42.74
Other recyclable solid waste	MT	706.62	813.60	547.84	186.94
Non-recyclable urban solid waste	MT	1,242.51	476.91	116.43	210.16
Sanitary waste	MT	3.57	8.98	23.02	24.91
Expired medications	MT	0.09	0.14	0.21	0.61
Recycled hazardous waste derived from repair shop activity	MTt	1,699.14	1,215.00	1,800.17	76.50
Recycled non-hazardous waste derived from repair shop activity	MT	N/A	N/A	N/A	1,709.02**
Non-recycled hazardous waste derived from repair shop activity	MT	36.66	4.00	11.80	4.07
Non-recycled non-hazardous waste	MT	N/A	N/A	N/A	3.88
Recycled hazardous waste derived from facility maintenance	MT	N/A	N/A	N/A	1.55
Recycled non-hazardous waste derived from facility maintenance	MT	N/A	N/A	N/A	2.34
Non-recycled hazardous waste derived from facility maintenance	MT	N/A	N/A	N/A	2.08
Non-recycled non-hazardous waste derived from facility maintenance	MT	N/A	N/A	N/A	0.00
TOTAL WASTE GENERATED	MT	4,680.58	3,014.66	3,062.81	3,318.47**
TOTAL HAZARDOUS WASTE	MT	1,792.79	1,289.52	1,936.94	218.31
TOTAL NON-HAZARDOUS WASTE	MT	2,887.79	1,725.14	1,125.87	3,100.16**
TOTAL WASTE RECYCLED/REUSED	MT	3,397.84	2,524.63	2,911.35	3,071.97**
TOTAL WASTE ELIMINATED	MT	1,282.74	490.04	151.46	246.50**
Dump	MT	1,279.39	476.40	128.02	241.72**
*Incinerated with energy recovery	MT	0.00	0.00	137.00	131.36
Incinerated without energy recovery	MT	1.21	4.85	0.64	3.51
Other removal processes	MT	2.83	8.79	22.80	1.26
TOTAL WASTE GENERATED BY EMPLOYEES	Kg/employee	0.14	0.09	0.09	0.11**

^{*}This data corresponds to a waste recovery process, since energy is extracted through organic remains, therefore it is not included in the total amount of waste eliminated.

METRICS	Unidades	2019	2020	2021	2022
% Waste treated	%	72.59	83.75	95.05	92.57
OBJECTIVES	Unidades	2019	2020	2021	2022
Waste treated	0/0	80 %	83 %	84 %	90 %

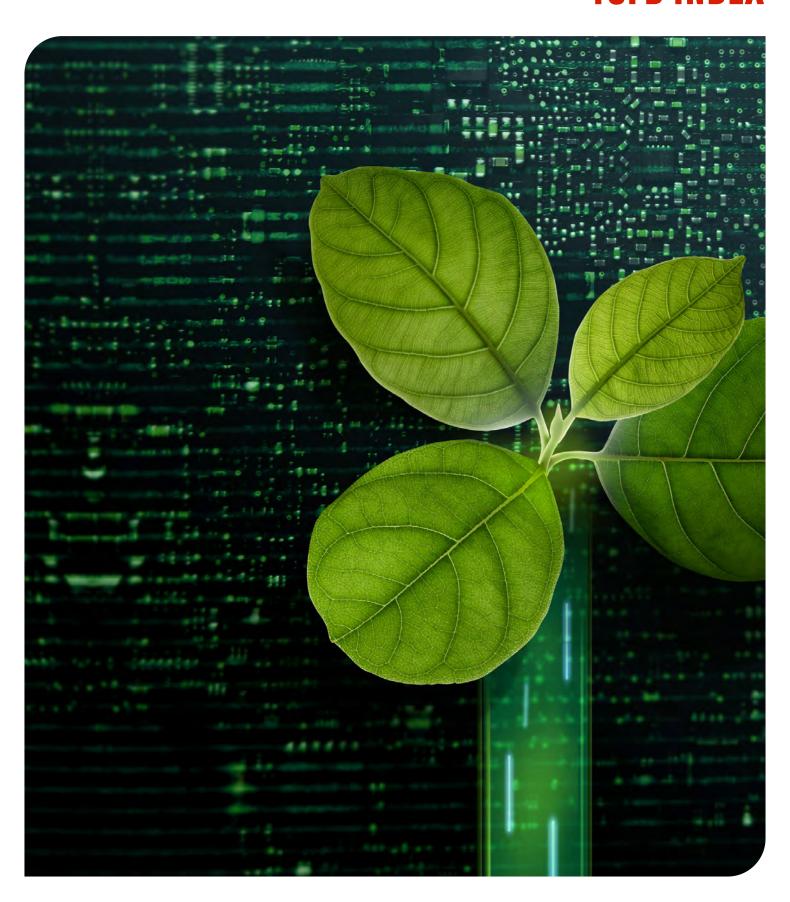
For more information see the MAPFRE Group 2022 Integrated Report.

**Errata:

The errata contained in the MAPFRE, S.A. Group's Integrated Report 2022 published on the corporate website (www.mapfre.com) are identified below. Note 13. Environmental indicators Table V. Consumption of resources - Waste

2022	Data Erroneous	Data corrected
Recycled non-hazardous waste derived from repair shop activity	4,856.68	1,709.02
2022	Data Erroneous	Data corrected
Total waste generated	6,468.13	3,318.47
2022	Data Erroneous	Data corrected
Total non-hazardous waste	6,249.82	3,100.16
2022	Data Erroneous	Data corrected
Total waste recycled/refused	6,431.79	3,071.97
2022	Data Erroneous	Data corrected
Total waste generated by employees	0.21	0.11
2022	Data Erroneous	Data corrected
Total waste eliminated	36.34	246.50
	5 5	
2022	Data Erroneous	Data corrected
Dump	31.56	241.72

O8 TCFD INDEX



	TCFD Recommendation	Reference chapter	
	a) Describe the role of the administration in assessing and managing climate-related risks and opportunities.	Governance Board of Directors and Delegate Bodies	
GOVERNANCE	b) Describe the control of the board of directors over climate-related risks and opportunities.	Government 2.2 Executive Committee and other Governing Committees	
	a) Describe the climate-related risks and opportunities identified by the organization in the short, medium and long term	Strategy S.1 Description of climate change risks and opportunities	
STRATEGY	b) Describe the impact of climate-related risks and opportunities on the business, strategy and financial planning of the organization.	3. Strategy 3.3 Impact of climate change risks on the business	
	c) Describir la resiliencia de la estrategia de la organización, teniendo en cuenta los diferentes escenarios relacionados con el clima, como un escenario con 2 ºC o menos.	3. Strategy 3.4 Sustainable strategies	
RISK MANAGEMEN	a) Describe the organization's processes to identify and assess climate-related risks.		
	b) Describe the organization's processes for managing climate-related risks.	4.2 Climate change risk identification and assessment procedure 4.3 Management of climate change risks and opportunities	
	c) Describe how the processes for identifying, assessing and managing climate-related risks are integrated into the general risk management of the organization.		
	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in accordance with its strategy and risk management process.		
METRICS AND OBJECTIVES	b) Disclose Scope 1, Scope 2 and, if applicable, Scope 3 greenhouse gas (GHG) emissions and their related risks.	 5. Metrics and objectives 5.1 Corporate objectives 5.2 Underwriting portfolio metrics and objectives 5.3 Investment portfolio metrics and objectives 5.4 Internal operations metrics and objectives 	
	c) Describe the objectives used by the organization to manage risks and opportunities related to climate and performance compared to objectives.		

