SUSTAINABILITY REPORT

2022







SUSTAINABILITY REPORT

2022 WORLDWIDE

LETTER TO STAKEHOLDERS



Veronica and Marco Squinzi co-CEOs

In 2022, we celebrated **85 years** of activity with a declaration of intent: "Building a present designed to have a future". We are convinced that only by committing ourselves today can we lay the foundations to ensure a future for the people and the planet.

Mapei takes this seriously and walks the talk. We started a long time ago with research and we have always backed our sustainability claims with data and certifications. We are proud to publish our seventh Sustainability Report and the first **Sustainability Report encompassing a global scope**.

This is a fundamental milestone in a virtuous path that began in 2016 when we published our first Sustainability Report, referring only to the Parent Company. In the following four years, we included in the reporting all the Group's Italian subsidiaries operating in our core business and last year we expanded it to cover the sustainability initiatives and commitment of our European subsidiaries. This year, confirming our intention to give the document an international scope, we decided to go even further and present the results of the entire Group worldwide, describing – clearly and transparently –

Mapei's operations in all the 57 countries in which the Group operates. Every day we work to implement sustainability both environmentally and socially, supported by a solid economic performance that enabled Mapei to reach €4 billion in sales in 2022.

Sustainability is one of Mapei's cornerstone. Mapei is a pioneer in the world of construction and we are making a concrete contribution to the fight against climate change by creating increasingly durable products with high quality and low environmental impact. We made a start by optimising our formulations.

Ten years ago, aware that we could do even more and with a view to reducing CO_2 emissions, we were the first to introduce Keraflex Maxi S1 Zero, our cementitious adhesive for ceramics, which has become one of the best-selling and most popular in the world. In 2022, we offered to the entire supply chain the first carbon neutral system for ceramic tile laying following our decision to include also our iconic Ultracolor Plus grout among the products fully offsetting CO_2 emissions over their entire life cycle. We therefore purchased certified environmental credits to encourage the implementation of renewable energy and reforestation projects.

The initiative took off in Italy and quickly extended to all subsidiaries globally, starting with some adhesives for ceramics and building concrete and will continue with the addition of more products.

To help the construction industry maintain high standards while reducing its carbon footprint, Mapei has developed an **integrated approach** based on specific hardware and software to overcome the difficulties involved in using cement with low clinker content and aggregates of varying quality throughout the various steps of production, transport and installation.

In 2022, we also carried out numerous energy efficiency upgrades of our production facilities. Subsidiaries around the world, from Europe to China and the United Arab Emirates, have installed **photovoltaic panels** that will enable the self-production of electricity from renewable sources, reducing greenhouse gas emissions generated at their sites.

None of this would be possible without almost **12,000 of our employees**, selected via the Mapei competence model to form a **winning team**. The quality of Mapei's policies and projects in the field of human resources management are of fundamental importance to the Group.

Our Company implements a meritocratic system that translates into equal opportunities, as evidenced by our position - for the third consecutive year - in the top part of the "Italy's Best Employers for Women*" ranking.

Mapei is committed to supporting culture, sports, social and solidarity initiatives to promote growth and development in the regions in which the Group operates.

We do this in our own way with passion and engagement because we are convinced that sustainability means exactly this: contributing to the development and support of local communities with an eye to the future.

We believe strongly in the value of training, especially for young talents. For this reason, **Mapei Academy** organises thousands of events, seminars, webinars and training courses at our premises or at the client's premises and in collaboration with Trade Associations. We contribute to facilitating the sharing of knowledge among the various professionals in the building industry, making our skills and tools available to them and raising their awareness of sustainability issues.

The green transition is taking place globally. It represents a lever of competitiveness and attractiveness of talents. This is why we invite you to discover the **seventh edition** of Mapei's Sustainability Report. It is a confirmation of our commitment to investing and growing responsibly: we want to embrace the circular economy, we care for people's well-being, we work towards increasing social inclusivity and we have adopted technologies that integrate and enhance human capabilities.

Enjoy your reading.

Veronica and Marco Squinzi

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^{*} A study carried out by the German Institute of Quality Institute ITQF and its Media Partner La Repubblica Affari&Finanza.



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SUSTAINABILITY FIGURES

All numbers refer to worldwide scope

approximately 3,900

MILLION EUROS OF VALUE DISTRIBUTED TO STAKEHOLDERS IN 2022

MILLION EUROS SPENT ON R&D IN 2022





69.168

TECHNICAL TRAINING HOURS

approximately 238,000 PARTICIPANTS

PARTICIPANTS IN 2022



CO₂ EMISSIONS LINKED TO THE PRODUCTION OF CERTAIN ADHESIVES AND MORTARS WORLDWIDE FULLY OFFSET BY PURCHASE OF CERTIFIED CREDITS TO PROMOTE THE DEVELOPMENT OF THE HYDROELECTRIC POWER STATION IN THE DAKRLAP DISTRICT IN VIETNAM AND THE CONSERVATION OF BIODIVERSITY OF THE RYMBARAYA FOREST IN INDONESIA





PURCHASED PRODUCTS (IN WEIGHT) SOURCED FROM LOCAL SUPPLIERS¹ IN 2022







EMPLOYMENT
TERMINATION RATE
IN 2022



IN THE INJURY FREQUENCY RATE IN 2022 VS 2021 93%

EMPLOYEES WITH A PERMANENT CONTRACT

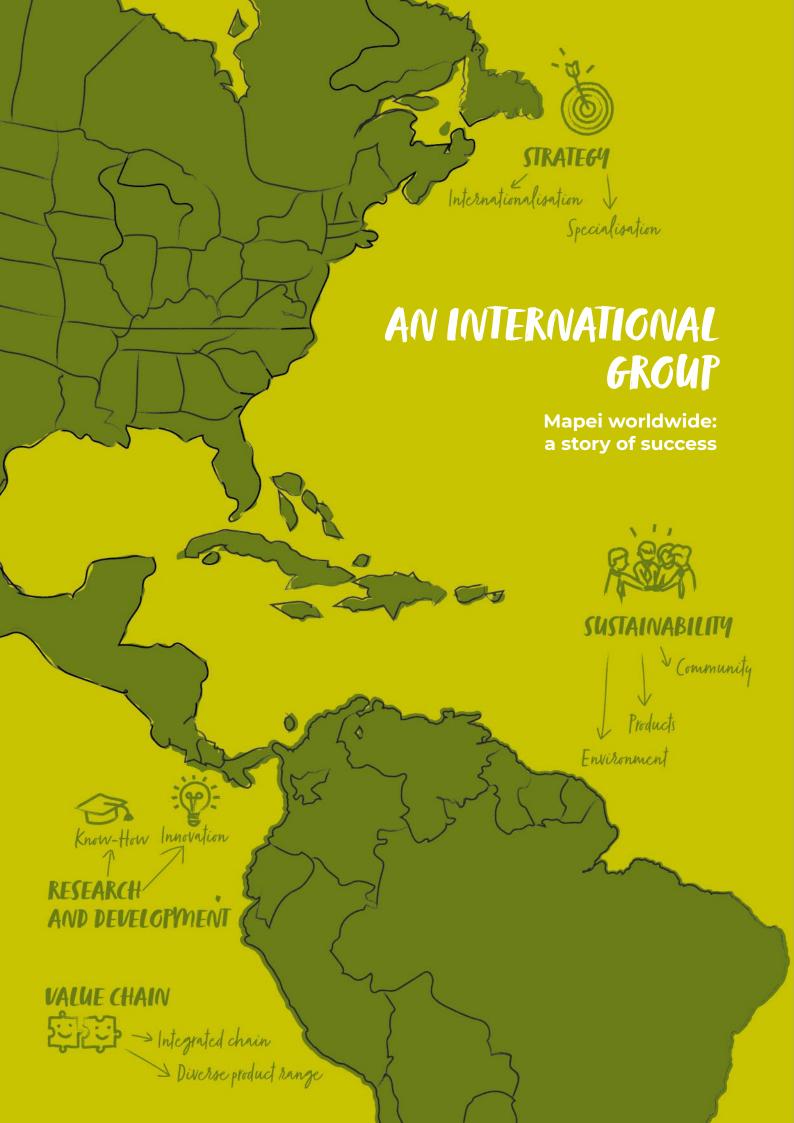






MEN CONTRIBUTIONS INVESTED IN SPORTS, CULTURAL AND SOCIAL INITIATIVES³

- 1 Local suppliers are suppliers located in the same geographical region as the subsidiaries of reference: Italy, Africa, Latin America, Asia, Western Europe, Eastern Europe, Middle East, North America and Oceania.
- 2 Note that this number differs from the figure published in the 2022 Consolidated Financial Statements (11,914) because it refers to headcount instead of FTEs and temporary workers are not included. Furthermore, the reporting scope of the two reports does not coincide, as better detailed in section 1.1 Our History: 85 Years of Success.
- 3 Note that the value reported here, amounting to €35.8 million, includes €23.3 million allocated by Mapei Group companies to U.S. Sassuolo Calcio to conduct its activities.





BUILDING AN INTERNATIONAL GROUP TOGETHER

The Mapei Group worldwide in 2022











¹Of which 7 are not operative.

²Of which 1 is not operative.

³Note that this number is the figure published in the 2022 Consolidated Financial Statements and differs from that reported in this Sustainability Report (11,438) which refers to headcount instead of FTEs and temporary workers are not included. Furthermore, the reporting scope of the two reports does not coincide, as better detailed in section 1.1 Our History: 85 Years of Success.



1.1 Our history: 85 years of success



The origins of the Mapei Group date back to 1937 when Rodolfo Squinzi and his wife Elsa Banfi founded Mapei (also the "Parent Company") in Via Cafiero in Milan, specialising in the production of protective wall finishes and materials for flooring and wall coverings. The all-Italian family business grew over time under the guidance of Giorgio Squinzi and his wife Adriana Spazzoli. The international expansion started 44 years ago with the first production plant in Laval, Canada (Mapei Inc.) and continued over the decades. This year, the Group celebrates 85 years of activities with 102 subsidiaries distributed in 57 countries globally.







Mapei's presence in the world































Mapei sites and plants

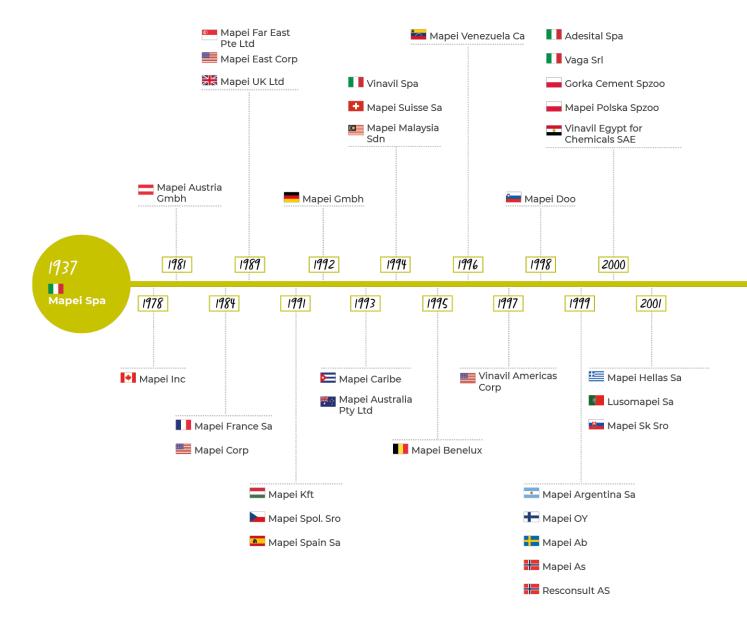
Research & Development Centres

Mapeiworld Specification Centres

- Mapei commercial branches
- Sites and plants of other Group companies
- O Commercial branches of other Group companies

Product quality and reliability have made it possible for the Group to play a leading role over time in developing numerous projects and initiatives in favour of communities around the world. The Group has participated in the refurbishment of iconic buildings, such as the Guggenheim Museum in New

York, the **Teatro alla Scala** in Milan and the **Colosseo** in Rome, and in the construction of large infrastructures such as the **Panama Canal**. Last but not least, the Group has also taken part in futuristic projects, such as the "**Arena del Futuro**", an innovative greenmobility project led by the A35 Brebemi,

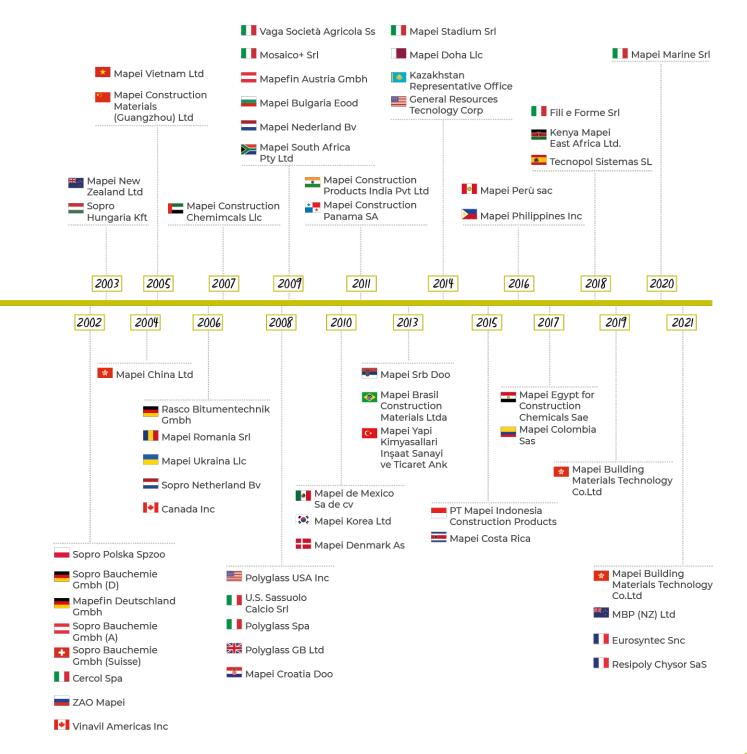




in Italy, and based on dynamic-induction electric recharging.

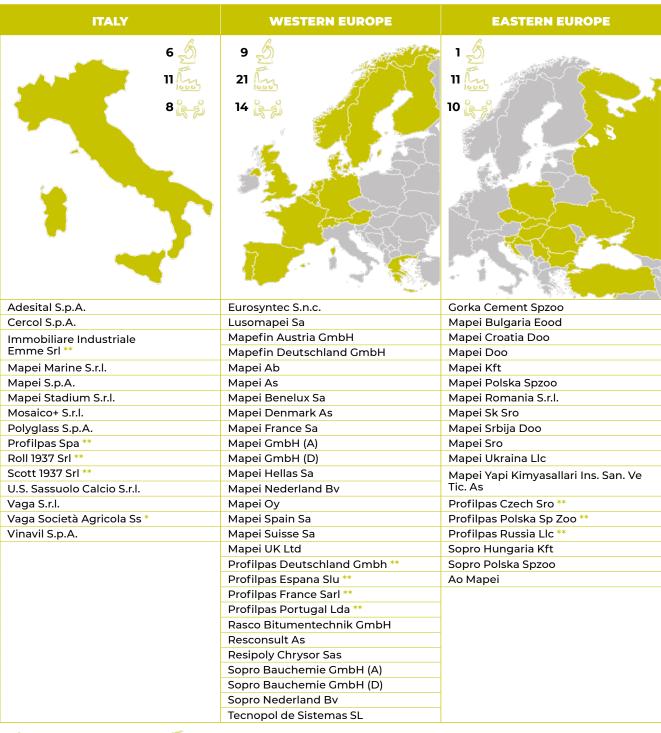
The celebration of eighty-five years is the expression of a great story of success, but Mapei, above all, looks to the future and is ready to face new challenges with

the unfailing commitment, passion, high specialisation and professionalism that have always distinguished the company and its people.











Research centres



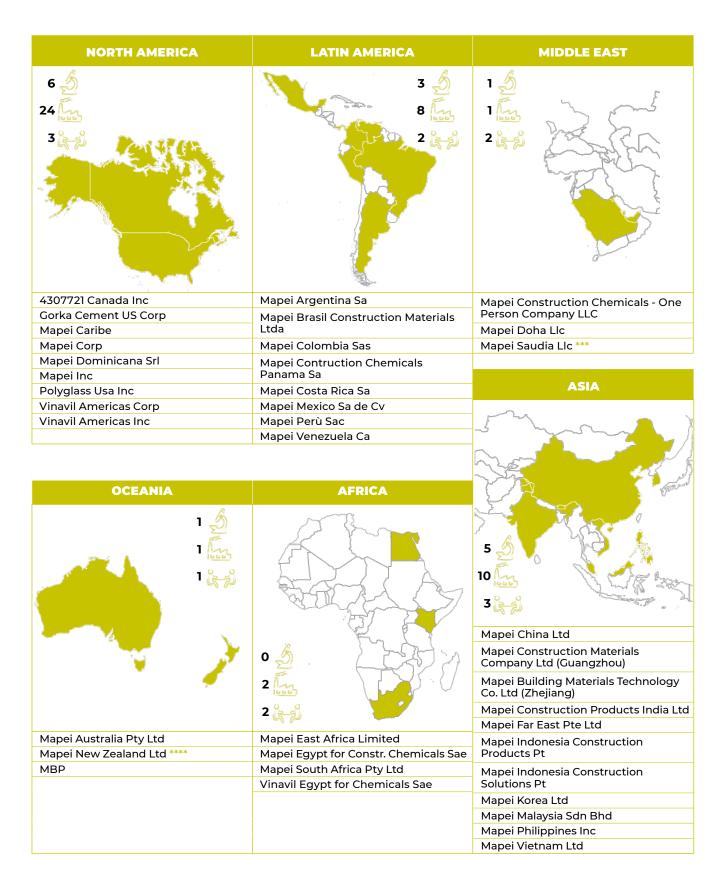
Production plants



Trading and service companies

- * Vaga Società Agricola Ss is excluded from the scope of consolidation due to insignificance. It is held 90%, through Vaga Srl, which is valued at cost.
- ** The company is included in the reporting scope of this Annual Report regarding economic and financial data, however, it is excluded from the reporting of environmental and social data, as it is consolidated in the second half of 2022.
- ***The company is included in the reporting scope of this Annual Report regarding economic and financial data, however, it is excluded from the reporting of environmental and social data, as it became operational during 2022.





^{****} The company is included in the reporting scope of this Annual Report regarding economic and financial data, however, it is excluded from the reporting of environmental and social data, as it was put into liquidation in May 2021.



1.1.1 A structured governance

The Mapei Group is controlled by a stable, family-led shareholder base which presides over and constitutes the Board of Directors. The Parent Company's Governance consists of the traditional corporate bodies, represented by the Shareholders' Meeting, the Board of Directors (BoD) and the Board of Statutory Auditors. The members of the Governance Bodies at the Group level are selected on the basis of their skills and expertise, assessing potential conflicts of interest and in compliance with procedures aimed at protecting the shareholders and guaranteeing the absence of discrimination based on gender, ethnicity or age. The Parent Company's Board of Directors, an executive body that meets periodically and is responsible for approving organisational strategies and developing a management policy, has four members (three of whom are female and one male): the co-CEOs Veronica and Marco Squinzi, Lawyer Laura Squinzi (Chairman) and Arch. Simona Giorgetta (Board Member).

The Board of Statutory Auditors, a governance and supervisory body appointed by Mapei S.p.A., is tasked with the supervision of compliance with the principles of correct administration of the Company and its subsidiaries, each of which has its own Board of Directors or Sole Director. In the operational management of the processes, the top management is supported by the Parent Company's Management, which supervises the operations of the Group's subsidiaries. In the Boards of the subsidiaries, the shareholders of the Parent Company are usually also supported by the local General Managers in order to guarantee their full involvement and responsibility in strategic and operational decisions.

Internal Control and Risk Management System

The Internal Control and Risk Management System (ICRMS) establishes the set of rules, procedures and organisational structures to enable the identification, measurement, management and monitoring of the main risks. The Mapei Group believes that the efficiency and effectiveness of the ICRMS are essential for the performance of the assigned activities in line with the values and principles defined in the Group's Code of Ethics, and the content of the other Group's policies.

In this regard, Mapei S.p.A.'s Management is supported by the *Corporate Internal Audit* in the achievement of the corporate objectives through the analysis and monitoring of the Internal Control and Risk Management System implemented at the Group level to assess its adequacy in terms of effectiveness and efficiency.

The Mapei Group's SCIGR includes the following control levels:

- The first level, managed by the process owners, defines the so-called line controls (concerning the operational processes);
- The second level is responsible for the management and monitoring of typical company risks (operational, financial, compliance, safety, etc.), and response to segregation criteria. Second level control departments are, for example, Corporate Quality Management, HSE Corporate, Corporate Finance and Controlling, and the local correspondents operating in the Quality, HSE, Management Control, etc. areas;



• The third level, headed by the Corporate Internal Audit function, is responsible for providing independent assurance on the adequacy of the design and operation of the ICRMS as a whole, all accompanied by improvement plans defined by the management.

The independence and autonomy of the Corporate Internal Audit function are guaranteed by its position in the organisation chart - centralised and reporting hierarchically to top management - and the absence of any direct operational involvement, which contributes to maintaining uncompromised its objectivity of judgement. Moreover, as a guideline for its activities, the Corporate Internal Audit function has defined and adopted its own Code of Conduct in accordance with the Institute of Internal Auditors, which reflects the principles of integrity, objectivity, confidentiality and professionalism in the performance of Internal Audit activities.

The Corporate IA establishes relations and exchange information with the corporate control bodies of other entities, such as the Supervisory Board, the Board of Statutory Auditors, the independent Auditors and any other function tasked with specific control or supervision activities in specific areas (e.g. HSE, Finance, HR, Legal, Quality, Operations, etc.). It also operates indiscriminately and crosswise over all Group companies, carrying out an activity of independent support and advice to the functions concerned at the local level, of individual Region or Corporate, enabling the realization of operational synergies and ensuring homogeneity in the activities of control.

The Group Code of Ethics

The excellent global reputation of the Mapei Group, recognised as a reliable, solid and

ethical partner, is accompanied by the values that have always guided the Company in its daily activities and business relations, such as integrity, transparency and loyalty. The Group operates globally and believes that transparency represents a driver for improving commercial results. For this reason, the Group takes social and ethical responsibility seriously at a global level. This is made evident by the adoption of the Group's Code of Ethics along with internal policies and rules, the express commitments of which are approved directly by the Board of Directors.

In particular, the Group's Code of Ethics represents a point of reference to emphasise the values and principles underlying the corporate culture and to orient employee conduct all over the world in the daily performance of operations. The Code of Ethics is applied by all companies of the Mapei Group and guarantees transparent and direct communication with its stakeholders, both internal and external. It is intended to prevent misconduct or behaviour inconsistent with the Company's directives. It outlines Mapei's approach to sustainable corporate practices (focused on the values and responsibilities of its people), contains the main guidelines on health, safety and the environment, and establishes the rules aimed at ensuring knowledge and application of the Code by all the Group's Companies. The General Managers of the subsidiaries are responsible for ensuring implementation and compliance with the Code. The Group's Code of Ethics is available in all Group languages and adapted locally to comply with any specific regulatory requirements.

The Mapei Group is also committed to the utmost integrity, honesty and correctness in all its internal and external relations in compliance with national and international laws and regulations. Particular attention is paid to unfailing compliance with the



anti-corruption regulations in the countries in which it operates. As confirmation of the Group's firm determination to combat any form of corruption, the Code of Ethics also provides indications concerning both the identification and the reporting of any unlawful conduct. The Group defines principles and guidelines for the appropriate management of relations between Mapei and its stakeholders in accordance with the fundamental values of transparency, integrity and loyalty.

The Code of Ethics also makes explicit reference to aspects such as customer relations, supplier management, the Company's reputation and its relations with public institutions and the media. A specific section of the Code of Ethics is dedicated to conflicts of interest, where it is confirmed that all decisions on behalf of

the Mapei Group must be made exclusively in the best interests of the same Group. For this reason, all the addressees undertake to avoid interests that could interfere, even only apparently, with their ability to make decisions in the exclusive interest of the Company. For more details, reference should be made to the Code of Ethics published on the Mapei Group's website.

Another section of the Code of Ethics is dedicated to confidentiality and privacy and confirms the Group's commitment to treating personal data and confidential information that may be collected in compliance with the currently applicable laws in the matter. Over the years, process and service digitalisation has led to significant growth in the volume of data managed and, consequently, in the IT infrastructure. Numerous upgrade and



innovation projects have been completed in recent years, both at a local and corporate level, and numerous initiatives aimed at increasing security standards have been launched and successfully completed. In particular, the Mapei Group has designed and implemented an effective cybersecurity control system to cope with the increase in cyber-attacks, which could have negative consequences both financially and operationally. Individual behaviour plays a central role in protecting IT systems from any potential cyber-attack or improper use of data. For this reason, the Group has organised and is promoting targeted and awareness-raising training courses to support cultural change among the Group's employees.

Mapei is currently revising its Code of Ethics, both to reflect new policies and changes within the Group, and to emphasise its strong commitment to sustainable development, promoting and developing, for example, issues relating to human rights, diversity, and relations with local communities, climate change and circular economy.

Organisation, Management and Control Model

In Italy, the Group has prepared a specific **Organisation, Management and Control** Model (MOGC, or "Model 231"), pursuant to Italian Legislative Decree 231/01, for each of the Group's subsidiaries⁴. The Model 231 represents a set of principles, rules and provisions to regulate the diligent management of sensitive activities and aimed at preventing the commission of the offences referred to in Italian Legislative Decree 231/2001, and protect the Company itself.

The adoption of a MOGC (approved by the Board of Directors) and its effective

and constant implementation are also the expression of social responsibility by Mapei, resulting in benefits for all of its stakeholders, including the shareholders, the employees, creditors and all other subjects having interests linked to the Company. To guarantee the correctness and transparency of the management of corporate activities and in compliance with the applicable regulations, the Group appoints a **Supervisory Board** for each Italian company with a Model 231 tasked with the supervision and monitoring of the effective implementation of the MOGC. The Supervisory Board is a multi-member body, the chair of which is entrusted to external individuals. It always includes a Corporate Internal Audit function for all subsidiaries representing the parent company, which performs specific assessments and controls on sensitive activities on behalf of the Supervisory Board. One of the tasks of the Supervisory Board is to report to the Company's management on the implementation of the Model, any critical aspects identified and the need for changes. Reporting follows two main lines: direct to the CEOs, whenever the Supervisory Board deems it appropriate, and to the Board of Directors and the Board of Auditors⁵, on a periodic basis, at least every six months, by means of a written report.

The Model 231 is periodically updated in order to take into account any regulatory, organisational and operational amendments and significant corporate events. In 2022, of Mapei S.p.A. and U.S. Sassuolo Calcio proceeded with the updating of the Model 231, and Mapei Marine adopted it ex novo.

⁵ In 2022, no significant issues were reported.



⁴ Excluding Mapei Stadium; Mosaico+ adopted its own MOGC in March 2023.

Depending on the themes and types of supporting documents (Code of Ethics, Models 231, Policies), the Group communicates the commitments made through its policies internally via the corporate intranet or dedicated e-mailing integrated with specific induction and training on e-learning platforms. The commitments are communicated externally through the Group's website or, where necessary, regulated in contracts with third parties.

Whistleblowing channels

To offer all employees an opportunity to report unlawful conduct or conduct not in line with the provisions of the Group's Code of Ethics, the Group has made available a dedicated mailbox centrally managed at a global level by the Corporate Internal Audit and Corporate HR Department. In compliance with local regulations, Italian companies have access to a specific company online platform (the Whistleblowing Portal), which allows for anonymous reporting. All reports received on the portal are managed by the Supervisory Bodies of the individual companies and by the Group's Corporate Internal Audit. They verify the reliability of the reports based on the provisions of the

Whistleblowing Policy. As a result of a recent European Directive on the matter, in 2022 the Group conducted an assessment involving all European subsidiaries to measure the impacts introduced by this new legislation. Based on the outcomes of this analysis, a project was initiated with the aim of defining a global framework on Whistleblowing, as well as adopting a unique reporting platform for all Group's subsidiaries. The project, which involved the Internal Audit, HR and Legal Affairs functions, aims to facilitate a uniform and standardised management of this issue, taking into account the specific national regulations and in line with the recent implementation of the European Directive by the countries in which the Group's subsidiaries operate.

1.1.2 Transparent communication

The Mapei Group considers it fundamental to maintain a proactive exchange of information and dialogue with its stakeholders, also leveraging an honest and transparent management of its activities. The Group involves its stakeholders in different ways, including active participation in initiatives and discussion tables to explore various areas of interest for the Group. For instance, to

provide a solid contribution to the chemical and building sectors, the Group has joined a number of national and international **Trade**Associations.

To demonstrate the importance of transparency as a cornerstone of the Group's actions, Mapei regularly publishes technical data sheets, safety data sheets and





performance declarations for each product on its website, including all the characteristics, application methods and possible hazardous factors during use. Moreover, the potential environmental impacts associated with the production phases are also described with a series of indicators, such as the quantity of CO₂ emissions or the Global Warming Potential (GWP)⁶, and the Environmental Product Declarations (EPD), these last ones also available online.

In addition to the annual publication of the Consolidated Annual Report and the Sustainability Report, the Group communicates directly and promptly with its customers and stakeholders in various ways, including the website, social media, the Mapei App, and advertising in the main media. Mapei publishes newsletters and the "Realtà Mapei" magazine on a monthly basis. "Realtà Mapei International" is published in English and there are also another 14 different local versions. Moreover, keeping up with the times and to expedite prompt and effective communication of information, the Group has made the decision to rely predominantly on the digital channels for communication purposes.



⁶The global warming potential of a greenhouse gas compared to that of CO₂, characterised by a GWP of 1. GWP is a measure of the amount of energy that the emissions of one tonnes of a greenhouse gas absorb in a given time interval compared to the emissions of one tonnes of CO₂

1.1.3 The value chain

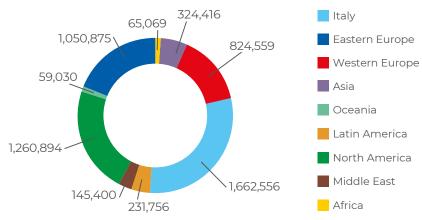
The Mapei Group's deep-rooted internationalisation strategy enables it to operate in all the major global markets, providing solutions suited to local needs while maintaining production and transport costs under control.

A quality chain of production

Mapei's success also stems from the organisation of its production cycle, which is based on a true integrated chain of production that includes a broad and differentiated portfolio of subsidiaries, upstream with strategic raw materials and downstream with the offer of a diversified range of more than 6,000 products and solutions. The subsidiaries acquired over the years play a central role in the supply chain. These are: Gorka Cement in Poland (cement plant), Rasco Bitumentechnik in Germany (producer of bituminous materials), Vinavil (strategic supplier operating in multiple sectors,

including food, textiles and wood), Polyglass (production and sale of self-adhesive and waterproofing membranes and synthetic roofing membranes), Tecnopol de Sistemas in Spain (development and production of liquid waterproofing membranes), and Vaga in Italy (a fine sand mining company that supplies quality aggregate). Between 2021 and 2022, the following acquisitions were completed: Resipoly in France with its subsidiary Eurosyntec (specialising in the design, production and application of synthetic resin-based solutions for flooring, waterproofing and surface protection) and the Profilpas' Group (a multinational company specialising in the production and sale of profiles for flooring and wall coverings and laying products).

Production by geographic area (tonnes)





⁷The Profilpas Group was not included in the reporting scope because the acquisition by the Mapei Group was completed in September 2022.

In 2022, total production of the Group's subsidiaries totalled approximately 5.6 million tonnes, in line with the values recorded in 2021. Geographically, the region with the highest production is Italy, that in 2022 accounted for 30% of the Group's total production with around 1.7 million tonnes.

The Corporate Quality Management function, in synergy with the Corporate HSE function, coordinates and supports subsidiaries globally in the implementation of management systems and the improvement of business processes. Activities carried out in 2022 included the launch of a specific analysis, mapping and digitisation procedure for multiple business processes with a view of simplification to expediting Group companies' response to new market. Also in 2022, activities continued for the updating and publication

of corporate procedures intended to promote implementation across subsidiaries and gap-assessment to align local processes with corporate ones.

In addition, it should be noted that the Group has a structured network of QC (Quality Control) laboratories, located at the Group's production sites, allowing for constant quality control starting from the incoming raw material and ending with the packaging of the finished product sold.

To reduce the environmental impact of its production process while maximising efficiency, the Group has adopted and certified fundamental management systems in the fields of quality (ISO 9001), health and safety (ISO 45001) and the environment (ISO 14001). In 2022, the Group progressed with the project designed to

Geographic representation of ISO 9001 and ISO 14001 certifications







optimise and rationalise ISO certification bodies, switching from local bodies to institutes already used at the Group level. This was meant to standardise third-party audit process approach.

In the environmental area, The Group's production plants currently certified according to ISO 14001 are 54⁸, accounting for 65% of all production facilities. In 2022, ISO 14001 certifications were completed for the production sites of Mapei Yapi (Turkey), Mapei Polska and Mapei Corp (for the West Chicago and Dalton G5 sites in North America). Mapei Construction Products India, Vaga and the German Group companies⁹ are currently undergoing certification.

In the quality area, 48 subsidiaries have implemented an ISO 9001 certified management system. These are mostly located in Europe (29, of which 8 in Italy). 7 are located in North and Latin America and a total of 12 are located between Asia, Australia and Africa. In 2022, Mapei Mexico and Mapei Indonesia Construction Products have completed the certification process while Mapei Philippines, Mosaico+, Tecnopol de Sistemas and the two new plants in North America are currently in the process of implementing the Quality Management System.

Procurement strategies

To complete its portfolio of subsidiaries making up the integrated supply chain, the Group has a substantial network of suppliers all over the world.

Despite its international vocation, the Group pursues local procurement strategies as much as possible. This is meant both to encourage the creation of value for the surrounding area and to facilitate a quick and efficient response to any needs, optimising overall management of the production process while reducing costs and the environmental impact.

At the Group level, the percentage spent on local suppliers¹⁰ totalled 73% in 2022, in line with the previous year. In terms of the weight of the materials purchased, the percentages grow further, with 93% purchased locally. Specifically, at the regional level, the percentages by weight are broken down as follows:

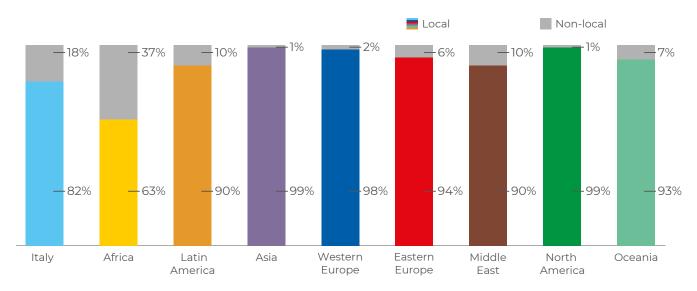
¹⁰ Local suppliers are suppliers located in the same geographic region in which the reference subsidiary operates (Italy, Europe, North America and Latin America, Middle East, Asia, Oceania and Africa).



⁸ Excluded from the count is the Kutno plant (Poland) of Profilpas Polska, which possesses a certified Environmental Management System ISO 14001 but it is not included in the scope of reporting of this document as the company was acquired by the Mapei Group in September 2022.

⁹ Mapei Germany, Rasco Bitumentechnik and Sopro Bauchemie.

Geographic distribution of material suppliers* by purchased volume (RM, PKG and FPP)



*Materials are: raw materials (RM), packaging materials (PKG) and finished products for procurement (FPP).

To define a common policy at the Group level for supplier selection and assessment, the Corporate Purchasing function is currently working on the drafting of common guidelines to be applied to all Group companies. The objective is to introduce an assessment checklist containing a section dedicated to sustainability aspects to be verified during audits (on-site and remote) conducted at suppliers' sites. At present, while waiting for a unified system, the Group subsidiaries adopt their own supplier selection and assessment procedures based on the specific local needs.

Comprehensively, 40% of the 964 new suppliers of raw materials, packaging materials and finished products for procurement activated in 2022 by Group companies were selected through a formalised procedure that also took into account voluntary quality aspects related to environmental and social issues, such as, for instance, the availability of ISO certifications or specific policies in these areas.

In terms of sourcing, despite the overall easing of pandemic-related restrictions, 2022 was still a challenging year due to the outbreak of the Russian-Ukrainian conflict, which had an impact on the availability and cost of raw materials, packaging materials and finished products for procurement. Despite this, consolidated industry-specific experience, consolidated relations with suppliers and strategic partners as well as diversification of supplies enabled the Mapei Group to prevent significant disruptions along the supply chain, react proactively to unforeseeable events and guarantee regular production and deliveries of finished products to customers.

The Corporate Purchasing function is responsible for the procurement of raw materials, packaging materials and finished products for procurement and defines globally applicable processes and procedures while centrally coordinating and supporting the daily work of local teams. The main guidelines shared with the individual



subsidiaries have been formalised in two specific procedures. The first concerns the procurement of so-called "stock materials", i.e. raw materials, packaging materials and finished products for procurement, and the second refers to the purchase of services and other types of materials than the ones mentioned above. For the purchase of goods and services, the Group subsidiaries can use the Microsoft Dynamics 365 management system (a migration project is currently underway for all the Group's subsidiaries). Moreover, the procurement process is mapped for each subsidiary with two tools:

- The responsibility matrixes, identifying roles and responsibilities in the area of procurement according to the principle of segregation of both;
- The so-called "delegation of authority", establishing powers and limits of expenditure for each purchase category, authorised by the boards of the Group's subsidiaries.

Due to the difficulties in sourcing raw materials, purchases decreased in 2022 - in line with production - by approximately 3% vs. 2021, totalling about 4.7 million tonnes, of which 93% consisted of raw materials (natural resources for transformation into

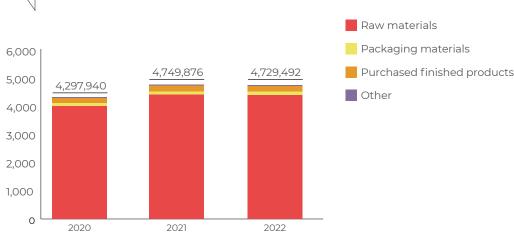
products and services), 4% of **finished** products for procurement and 3% of packaging materials.

Customers

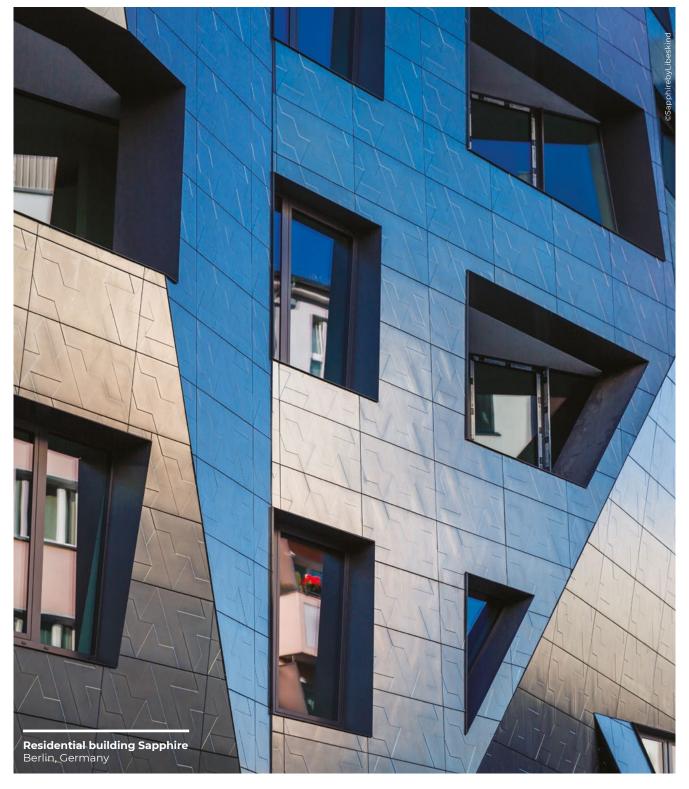
The high quality of the raw materials used and the diversified product range enabled the Mapei Group to develop a solid and constantly expanding customer base, which can be divided into two main macro-categories:

- direct customers, i.e. retailers of building materials, ceramic, resilient and wood coatings, as well as construction companies, ready-mixed and pre-cast manufactures of concrete products, cement factories and industrial and construction companies specialising in large-scale works;
- indirect customers, i.e. those who buy applicators and construction companies purchasing products from retailers to use them in their operations, users (owners or users of the asset) who commission the execution of the work by requesting Mapei products and designers, who define operations and give indications of the product brands in the specifications.

Consumption of materials (tonnes)



Given the highly specialised sectors in which Mapei operates and the diversified needs of its customers, the Group's challenge is to constantly offer versatile and safe products.



1.2 Our journey towards a sustainable **future**

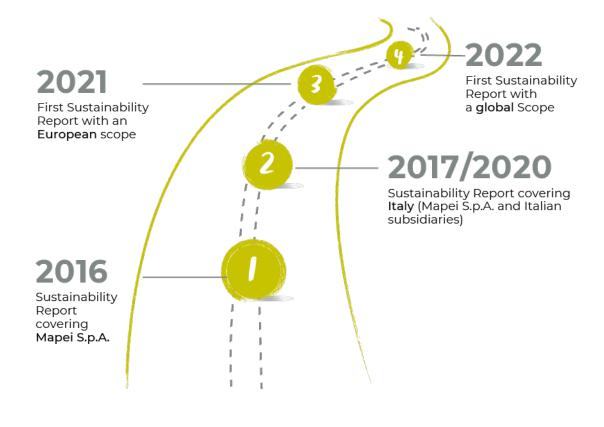
The Mapei Group published its first voluntary Sustainability Report in 2017 (2016 data) with a scope covering Mapei S.p.A.. Each year, Mapei sets specific key objectives to continue on this journey: maintaining direct and transparent communication with its stakeholders by providing a truthful representation of its values and environmental, social and economic performance; developing a comprehensive vision, and increasingly monitoring its sustainability-related impacts.

In 2018, and for the subsequent three years, Mapei expanded and consolidated the scope of its Sustainability Report to include all of the Group's Italian subsidiaries active in its core business ("a chemical company

for construction") and in 2022 Mapei's Sustainability report covered also all European subsidiaries (2021 data).

This year, to add a further milestone to its sustainability journey, Mapei presents its first Sustainability Report with a global scope. This means that all the Group's fully consolidated subsidiaries are included. This global scope is referred to in the document as "Mapei," "Group," or "Mapei Group."

Mapei's Sustainability Report 2022 has been drafted according to the new GRI (Global Reporting Initiative) Sustainability Reporting Standards 2021 and describes and analyses the main aspects related to social, environmental and economic issues that have characterised the company



on a global level, retracing the initiatives undertaken and the results achieved in the three-year period of reference.

A specifically dedicated working group was tasked with the constant monitoring of

activities relating to the design and drafting of the Company's Sustainability Report. The top management and numerous corporate functions were involved and collaborated in the project providing their contributions based on their respective expertise areas.

MAPELAMONG THE LEADERS OF SUSTAINABILITY 2022

In 2022, Mapei received once again an important recognition with its inclusion in the ranking of Italy's 200 most health- and environment-conscious companies.

Statista, a leading company in market research and business data analysis, in collaboration with Il Sole 24 Ore, examined the annual reports of more than 450 companies in Italy through the lens of more than 43 performance indicators representative of Corporate Social Responsibility (CSR) in order to identify the most virtuous companies in terms of economic, environmental and social sustainability.



Specifically, some of the indicators considered are CO₂ emissions and energy consumption (environmental area), the percentage of women on the boards of directors (social area), and financial stability and investment in research and development (economic area).

1.2.1 The materiality analysis

Based on the provisions of the new GRI Standards 2021, Mapei defined the process of updating the Group's materiality analysis and the subsequent identification of material topics in three steps:

- Analysis of the context in which the Mapei Group operates and identification of the current and potential negative and positive impacts of the Group on the environment, the population (including human rights) and the economy throughout its value chain;
- Assessment of the relevance of the impacts and their prioritisation;
- 3. Identification of material topics associated with the impacts identified in the previous steps.

More specifically, a desk analysis of the Group's activities and its business relationships was conducted to gather information useful for the identification of the impacts generated (or potentially caused) by the Group and its value chain



externally, with particular reference to the environment, the population and the economy. Subsequently, the main regulatory references, the global and chemical/ construction-sector-related sustainability trends, the sustainability reporting of companies operating in the same sector as the Group, and the reports and articles published in the media concerning the Mapei Group were analysed. This analysis resulted in the identification of 21 positive or negative impacts that the Group has or could have along its value chain".

The relevance of the impacts was then determined through a separate analysis based on type. In particular, the relevance of a negative impact was determined by its level of severity, while the relevance of a potential negative impact took into account not only its level of severity but also its likelihood of occurrence. Based on the GRI standards, the following items were considered to determine the level of severity:

- Scale: how grave the impact is;
- Scope: how widespread the impact is;
- Irremediable character: how hard it is to counteract or make good the resulting harm.

Conversely, the severity of a positive impact was determined by taking into account only the parameters relating to scale and scope, in addition to likelihood of occurrence in the case of potential impacts.

The level of severity and, where applicable, the likelihood of occurrence resulted in the definition of the materiality of each impact. All impacts that were found to have moderate or high relevance, and were therefore above a specific identified materiality threshold, were grouped together in order to define a list of material topics associated with them, which was subsequently submitted for approval to the Company's top management and CEOs.

The table in the next page shows the material topics identified along the Group's value chain and how they were managed by Mapei. It should be noted that, as a result of the analyses carried out based on the new GRI methodology, last year's topics have been confirmed except for new items emerged as a consequence of the global extension of the reporting scope. These are water management, Respect and protection of human rights, and Soil protection and biodiversity.

The Group's top management is responsible for the management of the Group's impacts on the economy, the environment and the people.



MATERIAL TOPICS	DESCRIPTION OF THE ASSOCIATED IMPACTS	AREA
Focus on employees and their professional development	The Mapei Group strongly believes in the importance of employee training and professional development. This is testified by the number and broad array of courses organised annually, both inperson and through e-learning platforms. Moreover, the periodic meetings with trade union representatives and the numerous initiatives implemented enable the Group to generate a positive impact on its people in terms of well-being with welfare measures and a fair work/life balance that result in a welcoming and stimulating workplace.	Social
Consumption of raw materials	The chemical-construction industry uses large quantities of raw materials, the exploitation of which contributes to reducing their overall availability. To mitigate this impact, Mapei has always adopted a circular economy approach, striving to reduce the consumption of virgin raw materials and use more recycled materials for its production.	Environment
Creation and distribution of the economic value in the territory and the local communities, including sponsorships	The Mapei Group makes an active and positive contribution to the development of the local communities in which it operates, keeping its ties with the territory alive also through the organisation and sponsorship of cultural, sports and solidarity initiatives and events.	Social / Governance
Energy efficiency and combating climate change	Activities in the chemical-construction industry are typically energy-intensive. This generates emissions of climate-altering gases that represent the main cause of climate change. To mitigate its impact in this area, in addition to a global QHSE Policy that contains a set of guidelines for reducing and optimising energy consumption, the Mapei Group regularly implements energy efficiency measures in all of its production sites. The Group also constantly searches for new low environmental impact solutions and maintains a steady monitoring based on the LCA (Life Cycle Assessment) methodology.	Environment
Emissions into the atmosphere	In the chemical industry, production activities generate emissions of pollutants (e.g., NOx, dust and VOCs) that are harmful both to the environment and to human health and other living organisms. To mitigate this impact, all of the Group's plants operate in compliance with internal standards and the requirements of local regulations, where applicable, and implement periodic monitoring activities.	Environment / Social
Responsible supply chain management	The selection and evaluation of suppliers based on environmental and social criteria enables companies to contribute to the development of a sustainable supply chain. To date, each Mapei Group subsidiary has locally applicable supplier selection and assessment procedures. However, the Group is currently working on the definition of common guidelines for all subsidiaries that would include a section dedicated to sustainability aspects in the checklist.	Environment / Social / Governance
Waste management	Production processes and the disposal of products at the end of their life cycle generate waste. When materials are not recycled/reused/recovered but sent to landfills, this results in the occupation and pollution of the soil. To mitigate this impact, the Mapei Group pays a great deal of attention to efficient waste management. For example, the Group promotes activities that are based on recovery and reuse, thus favouring the circularity of materials.	Environment



MATERIAL TOPICS	DESCRIPTION OF THE ASSOCIATED IMPACTS	AREA
Water management	The management of water withdrawal and consumption activities along the value chain, especially in water-stressed areas, affects the increasingly limited availability of this resource if not conducted responsibly. Within the Mapei Group, the use of water mainly relates to residential use and the production activities of individual subsidiaries. Within the Group water withdrawal takes place mainly through wells, which ensures a lower impact on the ecosystem compared with an alternative scenario from a surface water body.	Environment
Equal opportunities and gender diversity	The Group's Code of Ethics ratifies the adoption of fair employee treatment by Mapei, both during the process of hiring and during professional training. This is meant to mitigate the risk of generating discrimination of any kind (gender, age, religion, political opinion, ethnic origin, etc.).	Social
Respect and protection of human rights	Any inadequate control of the working conditions along the entire value chain could result in negative impacts on the population with consequent violation of their fundamental rights. To mitigate this risk, Mapei's Code of Ethics ratifies the corporate values and principles that guide all relationships internally and externally.	Social / Governance
Occupational health and safety	The adoption of a global QHSE Policy and procedures aimed at safeguarding employees' health and safety along the entire value chain responds to the Mapei Group's intention to create an effective safety culture to prevent accidents and damage to the health of employees and contractors. In addition, several of the Group's production sites have an ISO 45001-certified management model and other certifications are in the pipeline.	Social
Innovative development of products and technologies to promote greater sustainability in the construction industry	Through its R&D activities and collaboration with the scientific community, the Mapei Group offers quality solutions characterised by durability and circularity. These are designed to increase the energy performance of the buildings, reducing the environmental impacts of the infrastructure, and ensuring comfort and safety for the people living there and the users.	Environment / Social
Soil protection and biodiversity	The exploitation of raw materials, the production sites and the construction of infrastructures negatively affect biodiversity with an impact on animal and plant life. The Group is aware of its impacts on the ecosystems and applies the LCA methodology to measure the environmental effects of its products, including eutrophication and acidification potentials.	Environment



To manage its significant impacts, the Mapei Group relies on the Sustainable Development Goals defined in 2015 by the United Nations with the approval of the 2030 Agenda. The SDGs (Sustainable Development Goals) include 17 goals and 169 sub-goals that outline common targets on a set of important issues for sustainable development, such as fighting poverty, promoting peace and combating climate change.

True to its values and aware of its role in this global challenge, Mapei is actively responding to the call to action and has identified six goals. The Group perceives that it can contribute significantly in line with the material topics identified. The six goals are SDG 3, SDG 4, SDG 9, SDG 11, SDG 12 and **SDG 13.**



To pursue its business objectives, the Group needs to take into account stakeholders' expectations. The Group's stakeholders are subjects that can influence the Group's activities and/or can be influenced by them. For the purpose of updating the mapping of the main stakeholders, the Group resumed the analyses conducted in previous years concerning the corporate structure, its



Solutions for comfort and health

In addition to promoting healthy and safe workplaces for its employees, **Mapei** is committed to developing solutions to preserve the indoor air quality of buildings, ensuring a high level of internal comfort and ensuring the well-being of installers and end users.



Sustainability education

Through training courses, conferences and webinars, Mapei enhances the human capital of the company and its stakeholders, providing them with suitable skills and growth tools and raising their awareness of sustainability issues.



Innovative and quality products

Mapei is committed to the research and development of innovative, quality and durable products that contribute to producing sustainable works.



Eco-sustainable construction

Mapei supports the development of local communities and areas and creates products that help increase the sustainability of buildings by meeting the most common sustainable building protocols, such as **LEED** (Leadership for Energy and Environmental Design), and **BREEAM** (BRE Environmental Assessment Method).



Circular economy

Mapei adopts a circular process and product approach by reducing waste generated through recovery and reuse, limiting the consumption of incoming virgin raw materials and promoting the use of recycled materials in formulations.



Reduction of process and product impacts

Mapei measures and monitors greenhouse gas emissions from its activities to increasingly support the fight against climate change. Furthermore, through the LCA methodology it also measures emissions related to its products and undertakes to constantly reduce them.





activities (not only business activities) and the entire value chain.

Below is a description of the **stakeholder** categories identified as priorities following the outcome of the aforementioned analyses, and their respective modes of engagement and communication. It

should be noted that given the extension of the reporting scope to the global level, the stakeholder category identified as "Branches and non-European subsidiaries" in the previous Sustainability Report has been removed while all other categories have been confirmed.

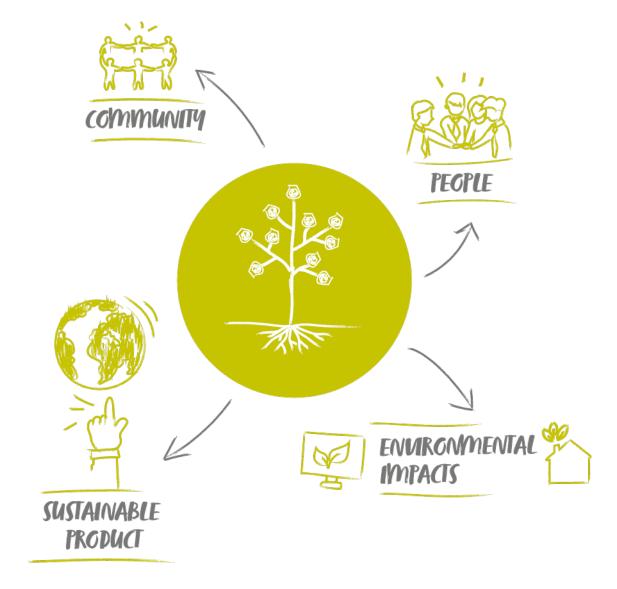
STAKEHOLDER	MODE OF ENGAGEMENT
Employees	 Code of Ethics Continuous dialogue, including through regular dedicated meetings Performance valuation process Internal communications, "Realtà Mapei" house organ, website and social media Sporting and cultural events sponsored by the Company Training courses
Suppliers	 Code of Ethics Dialogue through periodic technical update meetings Qualification process
Local communities	 Support with the organisation and participation in cultural, sporting and solidarity events/projects Realtà Mapei, website, social network and newsletters Interaction with citizens and their representative bodies Corporate disclosure Press releases
Customers and end-users	 Code of Ethics Pre and post-sale technical assistance (including through site insepctions) and mobile laboratories Seminars and training courses Fairs, conferences, sporting and cultural events Realtà Mapei, website, social network and newsletters Product technical documentation, user manuals, design guides and dedicated softwares
R&D Partners	 Code of Ethics Collaborations with the scientific community, training institutes and University research centres Fairs, conferences and events Realtà Mapei, website, social network and newsletters Scientific congresses
Other business operators	Participation in working groups within trade associations
Legislator, P.A. and regulatory bodies	 Institutional documentation and conferences of services in the field of IEA (Integrated Environmental Authorisation) Code of Ethics



1.2.2 Mapei's cornerstones of sustainability

Sustainability is a distinctive element and an added value for the Mapei Group's corporate governance model, which integrates the environmental, social and economic dimensions in a synergistic and virtuous manner. These three guidelines drive a responsible development strategy that enables the Group's growth to generate

benefits both for its stakeholders and the industry. As described in this Sustainability Report, this is confirmed by the Group's adoption of four cornerstones: sharing value with **communities**, making increasingly sustainable **products**, paying attention to impacts on the **environment**, and caring for the **people** who are part of the Mapei family.





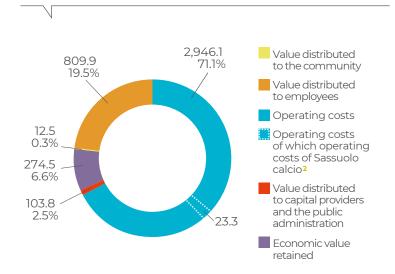


BUILDING A RESPONSIBLE COMMUNITY TOGETHER

The Mapei Group is aware of the central role it plays in the development of the communities in which it operates as a result of its size and presence in five continents. For this reason, the Group is constantly committed to increasing the well-being of these communities through the implementation of initiatives and

investments targeting the development of sports, cultural, charity and regional activities. In 2022, the economic value¹ generated by Mapei amounted to €4.1 billion, up vs 2021 (+22%). Of these, 93.4% (equal to about €3.9 billion) was distributed to the stakeholders as shown in the graph below.

Breakdown of the economic value generated in 2022 (in MLNs and percentage)



¹The economic value generated and its distribution to the stakeholders were calculated on the basis of the GRI Standards and values used for the Group's consolidated financial statements.

²The value reported here refers to € 23.3 million allocated by Mapei Group companies to U.S. Sassuolo Calcio S.r.l. to conduct its activities.



In 2022, the Mapei Group allocated \in 12.5 million to communities around the world and \in 23.3 million to U.S. Sassuolo Calcio S.r.l. as support for its activities, for a total of \in 35.8 million. The Group's commitment is aimed at implementing projects related to the world of sports, promoting art and culture,

and participating in charity initiatives, with a special focus on increasing the visibility of countries in which it operates. Mapei is also committed to the scientific community, contributing to innovation and progress in the countries in which it operates.





A community that gathers around 2.1 sport

Passion for sports has always been part of the Mapei Group's corporate philosophy, confirmed by the Group's participation in a multitude of sports initiatives and competitions, to which it applies the same engagement and determination as its daily business activities.

Team sports, in which Mapei invests enthusiastically every year, represent a means of sharing some of the company's core values such as collaboration, a sense of belonging, and the ability to face new challenges with a high level of commitment. The best-known investment is Sassuolo Calcio. After becoming the Main Sponsor of the football club in 2002, Mapei acquired the club in 2003. Thanks to the additional support of its other Italian subsidiaries (Cercol, Adesital and Polyglass), the club has grown to become one of the main Italian football teams, stably playing in Serie A. The targets achieved and the future ones are the expression of careful management in line

with the key principles of the Mapei Group's Code of Ethics: honesty, loyalty, fairness and respect for laws and regulations.

These principles are also reflected in numerous initiatives, including "Generazione S – Per diventare grandi ci vuole passione" (Generation S - It takes passion to become great), a project launched in 2021 to promote the ethical and educational values of football among young people. In 2022, Mapei celebrated the first anniversary of the initiative with an event at the Mapei Stadium in Reggio Emilia. During the event, the Group presented the excellent results achieved with 80 clubs involved from all over Italy in various initiatives. These include "Tutti al Mapei Stadium con Generazione S" (Everyone at the Mapei Stadium with Generation S), a project that enabled young athletes to attend Sassuolo's Seria A home matches as spectators. A party was also organised on the occasion of the last match against Udinese with various games and activities.





MAPEI STADIUM - CITTÀ DEL TRICOLORE

Sassuolo Calcio's home matches are held at Mapei Stadium – Città del Tricolore, the sports stadium of the city of Reggio Emilia that has been under concession to Mapei since 2014. In these almost ten years of management, the Group has made major investments to modernise and improve the facility, making it one of the most appreciated in the Italian football scene, so much so that it has also hosted several matches of the Italian national team.

Numerous interventions were made in 2022, when the roofs of the East and West stands were refurbished, state-of-the-art automated turnstiles were installed to facilitate the flow of fans, and the playing field was renovated. These improvements were also made with a view to facilitating future inspection and maintenance activities, thus extending the useful life of the infrastructure

for the benefit of the environment and the local community. In the latter's support and with a view to a circular economy, about 300 secondary plywood beams removed during the restyling were partly donated to **Remida**, a Reggio Emilia-based association that collects waste for disposal to make it available to schools, associations and non-profit organisations for social-educational or cultural projects.

The refurbishment and restyling of the facility will increase the potential of the stadium to embrace not only sports competitions but also cultural and social events. The stadium is therefore evolving into an aggregation space to foster the development of bonds in the community by leveraging both social and educational aspects.

Always speaking about football, at the European level, Mapei Bulgaria signed a new partnership with FC Dunav Ruse, the local football club, in January 2022. This is evidence of the close bond that Group companies forge with the local communities in which they operate. The team is very successful both on the sporting level and in terms of young talent training. The FC Dunav Ruse Academy currently has more than 300 youth and children enrolled coming from the surrounding areas.

Mapei Argentina established a partnership with Club Atlético Lanùs, the local football club, since 2020. The club is among the most important Argentine football teams and is currently playing in the top division of the local league. Club Atlético Lanùs can boast several successes both nationally and internationally, including the prestigious Copa Libertadores de América won in 2017. Football is very popular in Argentina and



through it the Group conveys its corporate values of teamwork and determination to face new challenges to a very large portion of the local population.

Passion for team sports is not limited to football. In Canada, for example, Mapei Inc. sponsors two hockey youth teams: Kelowna Rockets and Gatineau Olympiques, playing in Canada's most important youth tournament.



Mapei Hellas (Greece) is another example, since they sponsor **BC Irodotos**, a Heraklionbased basketball team in Crete. The club is very successful in conveying the message of love and passion for sports by involving many players, especially young ones, acting as an element of aggregation and a reference point for the local community.

The Group also cares about many other sports, all of which promote healthy competitiveness, the spirit of sacrifice and the determination to overcome personal limits. Every year, Mapei confirms its support for cycling through the implementation of a range of national and international initiatives. These include the sponsorship of the Road World Championships organised by the International Cycling Union, of which it has been a Main Partner since 2008. This event was held in Wollongong (Australia) from September 18th to September 25th and broadcast on the main television channels in all five continents. The event fits in perfectly with the ideals that characterise the Group's corporate culture and generated a great return in terms of visibility thanks in part to the Hospitality Area set up by Mapei Australia 200 metres from the finish line. Cadel Evans, the former world-renowned champion, also participated in the event.



In the UK, Mapei UK is the Main Sponsor of the **Halesowen Cycling Club**, a famous cycling club founded in 1937 in Birmingham which owns the Manor Abbey Stadium: here, major cycling competitions are held every year. The club regularly wins competitions, particularly at the youth level, and recently two of its athletes received major national awards

In the American continent, Mapei Caribe (Puerto Rico) sponsored the Pan-American Union Racing Mountain Bike Team, a non-profit organisation founded in 2017 with the goal of participating in the most important mountain bike races on the international stage. After years of hard work, the Caribbean team managed to be the first in Puerto Rico to take part in the most important professional-level competitions organised by the International Cycling Union.



Mapei has always endorsed ambitious projects that pose great challenges to participants with the ambition of leading them to overcome their limits. An example is its participation as Global Sponsor in the first Italian ocean sailing project "Alla Grande," which allowed Ambrogio Beccaria, one of the most important Italian ocean sailors, to participate in the Route du Rhum 2022, the most famous solo transatlantic





offshore regatta. The regatta, which saw the participation of a total of 137 sailing boats, started on November 6th from Saint Malo in France and ended in Pointeà-Pitre, Guadeloupe (Caribbean archipelago) after 14 days and 3,542 miles sailing in the Atlantic Ocean. Beccaria ended second on a last-generation Class 40 sailing boat designed by an Italian

designer with the collaboration of Ambrogio and built in an Italian shipyard. The boat was developed with careful attention to sustainability: energy on board is produced entirely from renewable sources and some products come from the Mapei Marine line. Mapei also supported Beccaria in the physical preparation phase: the Mapei Sport Research Centre, set up in 1996 to support the athletes of the Mapei professional cycling team with scientific rationality and a correct ethical approach, was made available to Beccaria. Today, the Research Centre represents technical-scientific excellence that provides assistance to athletes of all levels, not only professionals but also amateurs, to help them improve their performance through training programmes and multi-sectoral assistance. Among the athletes followed by the Research Centre, there are also the teams and athletes supported by Mapei.

Golf is another sport in which the Mapei Group invests time and resources. In November 2022, for example, Mapei Construction Chemicals (Dubai) organised the "Mapei Golf Day," a friendly competition that involved more than a hundred guests,

including professionals, customers and Mapei employees, for a day dedicated to the values underlying golf: respect, integrity, honesty and self-control. The same subsidiary also sponsored the "BMF Golf DAY" charity event to raise funds for the local Al Tawam Hospital and "Friends of Cancer Patients" (FOCP), a local non-profit organisation that supports cancer patients and their families during their treatment path.



Last but not least, Mapei France sponsors many sports clubs, including the Club De Ski Nordique De La Feclaz, one of France's traditional and most important skiing clubs. The club currently has about 550 members; more than half are young people under the age of 18. Moreover, the club has distinguished itself over the years for its commitment to disabled athletes, being officially awarded the title "Sports and handicap: for a sport together" by the French Ministry of Sports.

A community that promotes 2.2 culture

The Mapei Group's focus on culture has been in the company's DNA for 85 years, giving inspiration to several initiatives in support of art-related activities implemented by its subsidiaries around the world.

In 2022 Mapei celebrated the milestone of 30 years of **Guggenheim Intrapresae**, the first and most important Corporate Membership project of an Italian museum, gathering some of Italy's best-known companies. To celebrate the event, Mapei joined the special communication campaign "1992 - 2022: 30 years of Guggenheim Intrapresae under the banner of art, creativity and business". Veronica Squinzi was the testimonial of the campaign and hosted the annual meeting of member companies at the Mapei headquarters. The Group joined the project in 2008, when it was involved in the refurbishment of the Guggenheim Museum in New York, supplying products and expertise. Since then, Mapei has enthusiastically participated in several initiatives every year. These include the supply of products for the renovation of the façades of Palazzo Vernier, home of the

Il supporto alla cultura è una costante nella storia di Mapei. Veronica Squinzi CEO 🕲 MAPEI guggenhein

Peggy Guggenheim Collection in Venice (2009), the sponsorship of several exhibitions, such as "Ciclismo, cubo-futurismo e la quarta dimensione 'Al velodromo" (Cycling, Cubo-Futurism and the 4th Dimension. Jean Metzinger's At the Cycle-Race Track) by Jean Metzinger (2012) and participation in the purchase of a next-generation optical microscope for the restoration of artworks (2019), giving the museum the possibility to operate directly in its own laboratory without the need for outsourcing activities.

From a cultural and artistic standpoint, the Mapei Group has developed a very strong bond over the years with the city of Milan. Several initiatives and events have followed year after year to make this bond grow stronger and stronger. In 2022, the Parent Company participated in the "Adotta una



The initiative offers the opportunity for donor companies to contribute to the restoration of a work of art and temporarily put it on display at their headquarters. Since December 15th, the entrance of the Viale Jenner headquarters has been enriched by the fascinating sculpture of "David con l'arpa" (David with the Harp), made in the first half of the 16th century by a Lombard sculptor of the Veneranda Fabbrica del Duomo school.

In 2022, the Parent Company sponsored "Maddalena. Il mistero e l'immagine" (Magdalene. Mistery And Image), an exhibition organised at the San Domenico Museum in Forlì and promoted by the Fondazione Cassa dei Risparmi of Forlì in collaboration with the city municipality. The exhibition was the result of a partnership between the Group and the Museum that has continued since 2016. It remained open to visitors from March to July, presenting some of the most precious and fascinating works related to Mary Magdalene by artists such as Masaccio, Bellini, Perugino, Tiziano, Veronese, Tintoretto, Canova, Hayez, De Chirico and Guttuso.



In the musical sphere, in addition to continuing its collaboration with the Teatro alla Scala di Milano, of which Mapei is a Founding Member and where it organised five evening events for its guests in 2022, the Mapei Group also renewed its support for the Accademia Nazionale di Santa Cecilia for the 2022/2023 season. Also in this case. Mapei is one of the Founding Members and in 2022 supported the concert conducted by the Maestro Daniele Gatti on February 24th and that by the Maestro Jaap van Zweden on May 26th as sole partner.



At the European level, Mapei Polska has been a sponsor of FORMA, the national festival of sung poetry organised by the municipality of Barcin, since 2018. The threeday event involves both young singers and musicians from all over the country and renowned Polish actors and artists who perform in plays and evening events.

Mapei Suisse is Silver-Partner of the "Space Eye" project, an event designed by Mario Botta, one of the leading architects in Europe and the world. The project, scheduled for completion in 2023 in Gantrisch Nature Park near Bern, involves the creation of an astronomy-themed sensory experience that provides a first-hand view of the universe and aerospace technology, suitable for visitors of all ages.

Globally, since 2018 Mapei Australia has been one of the sponsors of the Queensland Performing Arts Centre, which has been operating in the South Brisbane area for more than 35 years. It includes several venues: the Lyric Theatre, the Concert Hall, the Playhouse and the Cremorne Theatre. The centre is an artistic and cultural landmark for the entire area and hosts more than 1.5 million spectators each year with more than 1,200 performances.

In the world of cinema, Mapei Inc. (Canada) is one of the Major Sponsors of the "Italian Contemporary Film Festival" (ICFF), the largest festival of Italian films outside the country's borders. The festival, first held in 2012, takes place annually in June during the "Italian Heritage Month," which is celebrated in Ontario and extends to several Canadian cities, including Toronto, Vaughan, Niagara, Hamilton, Montreal, and Quebec City.





2.3 A community that encourages sharing and solidarity

The Mapei Group firmly believes that a company must play a precise role in society, taking responsibility for ethical, scientific, human and cultural values. As in past years, this approach resulted in the development of several initiatives in 2022, including not only sports- and art-related projects but also solidarity and charity activities.

The Group has been supporting the AIRC
Foundation for cancer research for many
years. This collaboration also included the
establishment of a three-year scholarship
named after Giorgio and Adriana Squinzi.
In 2022, the winner was Dr. Andrea
Costamagna of the University of Turin,
who, under the supervision of Professor
Paola Defilippi, is carrying out scientific
research on the role of the pl30cas protein
in pancreatic cancer, a serious disease that
affects more than 14,000 people every year,
making it the fourth cause of cancer death
in Italy.





The Parent Company contributed to and sponsored the fundraising project organised by the Buzzi Foundation to create Italy's first Paediatric Total Body Magnetic Resonance Imaging centre at the Children's Hospital of Milan. The purpose of the initiative is to improve the diagnosis and clinical management of oncological children or children suffering from serious multi-organ diseases by avoiding radiation techniques. Mapei's contribution made it possible to purchase some important software and hardware components for the new tomograph equipment at the hospital. This will enable the Buzzi Hospital's paediatric radiologists and neuroradiologists to perform some of the applications included in the project.

In 2022, the Italian subsidiary Vinavil funded the GSH Sempione 82 Amateur Sports Association, composed of athletes with physical and intellectual or relational disabilities. In addition to offering sports opportunities, such as athletics, downhill skiing, Nordic skiing, swimming, tennis and curling, the Association is involved in numerous social projects aimed at



increasing the inclusivity and integration of individuals with disabilities. One example is "Fuori casa, dentro l'amicizia" a series of hikes organised by the Association. The project gave athletes and other guests the opportunity to practise hiking while discovering nature with the ultimate aim of increasing their safety and autonomy while always under the watchful eye of the expert hiking guides of the SAFG group and the Domodossola mountain rescue group.

The Group's solidarity initiatives are not limited to the Parent Company and its Italian subsidiaries but extend worldwide. For example, at the European level, Mapei Srbija supports Okular, a non-governmental and non-profit organisation that carries out projects dedicated to young people. In 2022, the subsidiary donated materials for the refurbishment of the facilities located in Ćićevac, in southern Serbia.

Many of the Group's subsidiaries took action to respond to the needs generated by the conflict that characterised the European political landscape: among them, in particular Gorka Cement, located in Poland, participated in numerous initiatives, such as donations to associations involved in bringing basic necessities to Ukraine, hospitality for some refugee families, enrolment of Ukrainian children in local schools and a contribution to the organisation of the "Picnic for Ukraine".

Mapei Brasil Construction Materials

donated some of the products needed for the replacement, renovation and waterproof covering of the floor of the Santa Terezinha Continuing Care Unit of the Pequeno Cotolengo, a foundation established in Curitiba in 1965 and dedicated to assisting people with severe disabilities who have suffered traumatic events during their lives. Currently, the organisation takes care of 230 people free of charge, providing them

with basic education in addition to daily sustenance.

In the area of research, Mapei Corp (USA) has long supported the activities of the American Cancer Society, which, with its more than 250 offices, represents one of the most important associations operating in the battle against cancer worldwide. The numerous initiatives in which Mapei has participated include the "Breast Cancer Walk" to which, during 2022, Mapei Corp (USA) made a donation as it did the previous year.





The U.S. subsidiary also participated in other charity initiatives, including the Gary Sinise Foundation's "R.I.S.E." project, with the supply of building materials for the construction of six houses designed to meet the needs of severely injured war veterans.



Mapei Corp. also supports SWAG (Social Work Action Group), which works to support, educate and guide marginalised individuals and families in Riverside, California toward sustainable independence based on the motto "Restoring humanity, one person at a time". For the success of these projects, it is fundamental to have the support of the community and the companies operating in the same region as Mapei. In 2022, Mapei contributed with donations and collections of food, clothing and basic necessities.

In Asia, Mapei Vietnam awarded the "Best Students Scholarship" to five students in need, who have achieved outstanding academic results in the "Materials Technology" course delivered at the Ho Chi Minh City University of Technology. This initiative not only supports young people in the pursuit of their dreams but also has a major impact on the education of a future generation of construction engineers.

The Group is also active in Africa, where Mapei South Africa collaborates with Amcare, a non-profit organisation that assists the most vulnerable people, such as those living in poverty, individuals with HIV/AIDS or victims of domestic violence. In particular, in addition to donating products to Amcare for the renovation and refurbishment of its facilities, in 2022 the subsidiary participated in the "adopt a car" project. This initiative makes a car available every day for the transportation of women in need to and from hospitals.

In spite of the reduced impact of the Covid-19 pandemic compared to the previous two years, 2022 was still marked by the effects of the pandemic, which remained particularly present in some areas of the world. One of the hardest hit countries in the year was China. Mapei Construction Materials, the Group's Chinese subsidiary, implemented several initiatives in support of the people of Shanghai (one of the country's largest outbreaks), donating food, face masks and other basic necessities.



2.4 A community that promotes quality and sustainability for the local areas

Mapei has always paid great attention to the territories in which it operates. The Mapei Group holds a position of leadership in the chemical construction industry and, therefore, it actively contributes to their improvement from a technical, aesthetic and sustainability standpoint thanks to the broad range of products and expertise it offers.

Vinavil participated in one of the main initiatives to protect the national artistic heritage by providing concrete and important support to the Municipality of Villadossola for the restoration project of the Church of Santa Maria Assunta del Piaggio and the area in front of it. The completion of the work, begun in 2020, was inaugurated on 30th October 2022. The ancient frescoes and the crypt dating back to the 10th century were opened to the public. The project was a great success, as confirmed by the

enthusiastic participation of the local community (including Vinavil employees) in the inauguration event, during which the mayor of Villadossola announced that the square in front of the Church would be named after Giorgio Squinzi.

At Cambiago, in Milan Municipality, the Group contributed with the supply of flooring products for the Museo La Collezione Ernesto Colnago (The Ernesto Colnago Collection Museum) displaying the historical bicycles made by the famous manufacturer and with which several champions of the Mapei team performed great feats during the years of the Mapei professional cycling team, collecting over 654 international victories. The exhibition was previewed at the event "La Collezione" (The Collection), held at the Ibm Studios in Milan.





Still in Milan Municipality, the new Galeazzi-Sant'Ambrogio hospital hub, one of the cornerstones of the future ecosystem of research, innovation and care within the MIND (Milano Innovation District) area at Rho Fiera, opened on August 22nd, 2022. Mapei participated in the design of the infrastructure, extending over a surface of almost 180,000 m² and built according to the most innovative standards in terms of environmental sustainability, energy efficiency and functionality. In particular, the materials chosen are low-impact and healthy, with smog-absorbing capacity through atmospheric purification and selfcleaning technologies.



As customary, in 2022 Mapei took part in the "Cresco Award - Sustainable Cities" project promoted by the Sodalitas Foundation. The award was dedicated to the "Sustainable systems for the preservation and restoration of buildings of historical and architectural value through the use of innovative limebased materials and technologies" and given to the Municipality of Prato for the Bastione delle Forche redevelopment project. The motivation for the award was the ability to respond to the need for restoration and renovation of historic buildings with high-quality, environmentally sustainable and durable works for the ultimate goal of returning them to the community.

At the European level, in 2022, the Group participated in the construction of the new UCI Rainbow Stripes, a rainbow cycling track that welcomes visitors to the **UCI World Cycling Centre (WCC) in Aigle** (Switzerland). This project consists of a tribute to the UCI headquarters that, for 20 years, has been training and accompanying talented young athletes from all over the world. Part of the Tour de France 2022, this area features the colours of the iris - the symbol of the UCI World Championships - made with MAPECOAT TNS technology, which ensures comfort and safety thanks to its grip properties.



Still in Switzerland, Mapei Suisse participated in the renovation of the Olten High School. The work, for which the subsidiary provided products and technical support, began in 2016 and was completed in 2022. It was carried out with the intention of disrupting school activities as little as possible and included the modernisation of the fire-fighting system, anti-seismic construction, accessibility standards for individuals with disabilities, and energy efficiency technologies.

The Group pays great attention to providing support for communities facing emergencies. For example, in July 2021 a devastating flood hit the province of Liège, causing dozens of casualties and forcing

more than 10.000 residents to abandon their destroyed and no longer safe homes. In 2022, Mapei Benelux (Belgium) stepped in to support the reconstruction of the areas affected by the adverse weather event and offered free products from the Mape-Antique line to renovate damaged homes, in particular in the village of Trooz.

In Latin America, Mapei Perù participated in the "Valora Nuestro Barrio" programme launched by the Colegio de Arquitectos del Perù of the Lima Region, which selected 21 projects concerning the renovation of urban spaces, environmental efficiency and the restoration of cultural heritage. The programme aims to improve the quality of life in local neighbourhoods with a view to developing inclusive and sustainable cities. The programme's online platform offers stakeholders the opportunity to establish



contacts to collaborate and facilitate fundraising. In 2021, the Group's Peruvian subsidiary donated products (e.g. Mapecoat TNS Blue and Yellow paint) and sustained the freight costs of useful materials for the implementation of various projects.

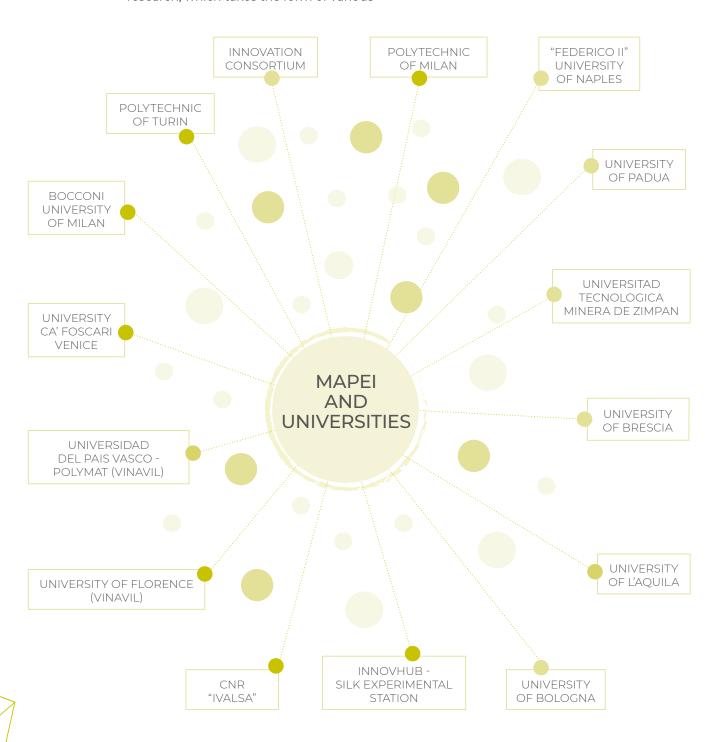
Finally, as regards projects related to environmental issues, Mapei Far East (Singapore) participated in the "One Million Trees Movement" initiative, organised by the National Parks of Singapore. The project was launched in 2020 with the goal of planting one million trees in the city over ten years so as to increase the city's resilience to climate change. In 2022, Mapei took part in the activities with a team of 32 participants, who helped plant 16 trees donated by the company. In 2022, another similar initiative was organised by Mapei Croatia with 2,000 trees planted in the capital, Zagreb.





2.5 A community that collaborates in favour of scientific progress

In line with Giorgio Squinzi's philosophy, the Group pays a great deal of attention to research, which takes the form of various initiatives and activities in support of the scientific community and universities.



In 2022, the Group invested approximately €214,976 to universities and research institutes.

These include – among others – the research project with the University of Brescia regarding fibre-reinforced concrete (ensuring greater ductility, strength and durability) for the MIND (Milano Innovation District) area, a district in Milan that aims to become a centre of scientific excellence at the Italian and international level. In Italy and in relation to sustainability, Mapei has been participating for many years in the GEO, a group for Green and Circular Economy monitoring and analysis chaired by the Bocconi University of Milan.

Moreover, Mapei is a member of the **Innovandi Global Cement and Concrete** Research Network, a global consortium of 42 scientific institutions and 34 companies operating in the cement and concrete industry, including manufacturers, admixture specialists, and suppliers of equipment and technology. The consortium was established in 2020 to create a bridge between industry and scientific research and promote an evolution in the industry toward the implementation of increasingly sustainable products and processes. Mapei plays a prominent role in the organization and participates in several working groups. In addition, Mapei is an industrial mentor of "Core Project 11", a project that deals with LCCA and LCA studies and frameworks to identify the best technologies for the recycling of concrete.

At the international level, the subsidiary Vinavil collaborates with Polymat, a research centre founded by the Universidad del Pais Vasco (Spain) that is involved in the study of polymers to find innovative solutions that can respond to the challenges of the 21st century, such as energy efficiency, health and sustainability. In particular, one

of the projects to which Vinavil provides its contribution concerns the reduction of volatile organic compounds (VOCs) - the main and most dangerous pollutants - in the acrylic systems.

Vinavil is also providing its contribution to the INNOVHUB – Silk Experimental Station, a research and service organisation specialising in the textile and clothing sector, for a project that aims to replace fluorocarbon resins, which are water repellent and composed of bioaccumulative materials that linger in the environment. One of the challenges of the textile industry is to replace these resins with materials with a different chemical composition but still maintaining the same functions, in order to prevent damage to the environment or human health.



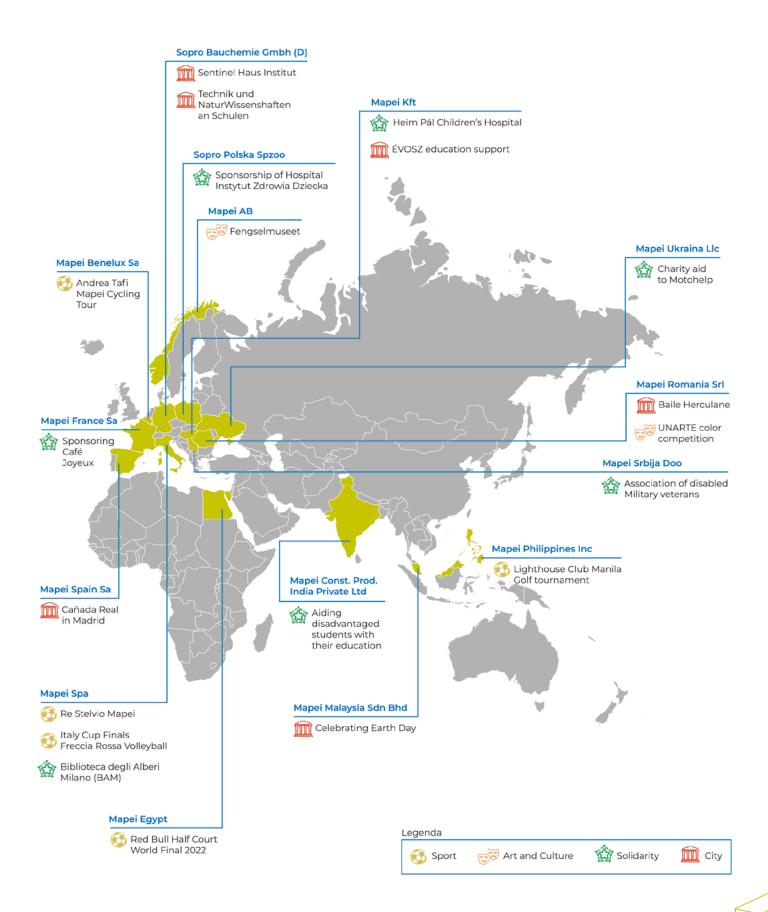


Other Mapei Group initiatives at Global level

In addition to the initiatives described above, below are some of the projects developed in 2022 by the Group's subsidiaries at the global level.







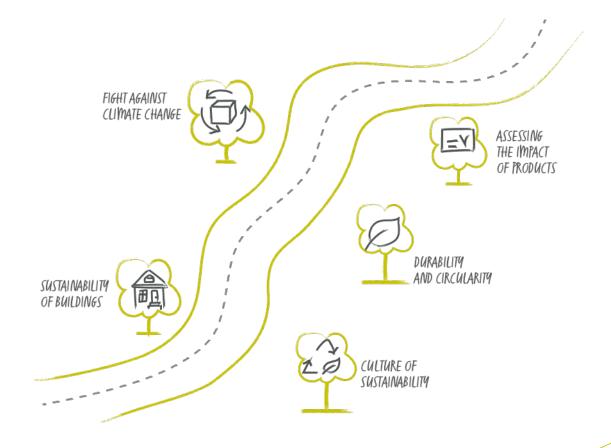




BUILDING INNOVATIVE SOLUTIONS TOGETHER

Mapei is strongly committed to offering excellent and innovative solutions for sustainable construction. This requires responsibility and a capacity to take concrete decisions that will provide designers, contractors, users and companies with products with low environmental impact that are safe and durable. To pursue

this goal, Mapei considers environmental protection and human health as priorities. This is why the Group promotes research and development and relies on the value of its **expertise accrued** in the most important construction sites around the world. Mapei produces products that are designed to reduce energy consumption and with

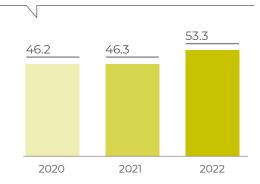


low VOC emissions, thus contributing to **sustainable**, **quality construction** and spreading a "**culture of sustainability**" in the industry.

In 2022, as evidence of the Group's excellent performance on these issues, Mapei received the Green Star of sustainability for the second consecutive year, winning first position in the "chemical" section from among the 300 companies selected by the German Institute of Quality and Finance - ITQF and La Repubblica Affari&Finanza out of a total sample of 2,000 companies. The ranking was based on the social listening methodology, i.e., the monitoring of the company's web footprints. Mapei counted more than one million online mentions regarding sustainability. The survey investigated a total of thirty aspects, including environmental, economic and social sustainability, and innovation and technology. These are all elements that contribute to building a company's online reputation for sustainability.

The credit for the results achieved derives from the tireless activity developed by the Group's Research and Development (R&D) division that leverages state-of-the-art equipment for the development of functional and environmental solutions focused on continuous improvement. In line with its goal of customer satisfaction, Mapei collaborates with universities and scientific and industrial research centres to stimulate reciprocal exchange regarding the latest technologies while consolidating

Research & Development costs (in € millions)



its network. At present, Mapei's R&D counts on professionals distributed in 32 research centres around the world, coordinated by the Corporate Research Centre in Milan. These professionals play a fundamental role in ensuring complete support for Customer

in ensuring complete support for Customer Care so that customers can benefit as fully as possible from the solutions offered.

In 2022 alone, €53 million¹ were allocated to R&D activities. This allowed the Group to continue the development of about 5,200 modified and/or newly created formulations and the implementation of more than 560 raw materials.



¹These expenses include R&D personnel costs, consulting services, equipment depreciation and the costs for the materials used in the laboratories

32 Mapei research centres in the world

ITALY

Milan – Italy Villadossola - Italy Ponte di Piave - Italy Fiorano Modenese - Italy Sassuolo - Italy San Cesaro sul Panaro - Italy

WESTERN EUROPE

Sagstua - Norway Wiesbaden - Germany Augustdorf - Germany Feldbach - Austria Langenwang - Austria Sorens - Switzerland Saint Alban - France Villeneuve le Roy - France Barcelona - Spain

EASTERN EUROPE

Trzebinia - Poland

NORTH AMERICA

Laval - Canada Deerfield Beach 1 - United States Deerfield Beach 2 - United States Garland - United States Eagan - United States Dalton- United States

■ LATIN AMERICA

Zimapan - Mexico Buenos Aires - Argentina Medellin - Colombia

MIDDLE EAST

Dubai – United Arab Emirates

ASIA

Baroda - India Singapore - Singapore Rawang Nilai – Malaysia Guangzhou Canton - China Cheonan - Korea

OCEANIA

Wacol – Australia







Admixtures for cement and 3.1 concrete: Mapei's solution to combat climate change

With its 4.1 billion tonnes of production in 2022, **cement** is an indispensable material in the construction industry, a primary component in the production of concrete. It is an indispensable element for urban development but it is also responsible for nearly 7% of global CO₂ emissions. This is due to the firing process (reaching 1,400°C with a decarbonation phase of limestone) and, to a lesser extent, the energy required for processing. Therefore, it is clear that this material gives durability and mechanical strength to buildings but has a high environmental impact.

Thanks to several European initiatives and a constantly growing awareness of environmental issues, the cement industry is increasing its commitment to progressively mitigating its impacts. Many of these efforts focus on reducing clinker, a CO₂intensive component because it is obtained through a high-temperature firing process that requires considerable consumption of fossil fuels. Cement durability and strength depend on the clinker content and its concentration is subject to strict regulations that also cover the proportion of secondary components. In Europe, the new standard EN 197-5² was introduced in May 2021 to facilitate the replacement of clinker with lower-impact materials. This new standard expanded the type of marketable cements by introducing two new cement formulas containing up to 50% less clinker and allowing for its replacement with second choice materials, also called secondary cementitious materials (SCMs), which contain, among other materials, limestone,

slag, ash, and pozzolan, part of the cement mixtures³.

The limited global availability of SCMs is not sufficient to cover the entire clinker requirement though. For this reason, Mapei also uses Limestone Calcined Clay Cements (LC3), which require a lower firing temperature (600-900°C) with a lesser consumption of fossil fuels and, consequently, lower CO₂.

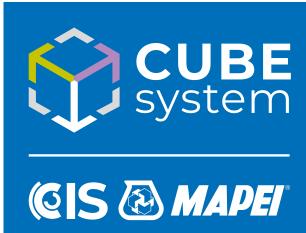
However, using these new materials brings new challenges. These are reduced workability, high water demand and lower initial strengths. Mapei has addressed these new challenges through the technological innovations developed by its R&D Group, implementing admixtures that redress these disadvantages to align the products more closely to traditional cements. In addition, Mapei has developed tools that enable monitoring of the quality of the material.

- ²Compared to EN 197-1, which defines composition, specifications and conformity criteria for common cements, EN 197-5 also specifies the properties of CEM II/C-M composite Portland cement and a different type of CEM VI composite cement used in the preparation of concrete, mortar, etc.
- ³Cements are classified according to their composition materials. Traditional cement (CEM I) consists of 95% clinker and 5% gypsum. Cement mixtures have a smaller percentage of clinker that is replaced by other materials, for example: CEM II/B-L: clinker 68%, gypsum 4%, limestone 28%; CEM III/A: clinker 50%, gypsum 4%, slag 46%.



Mapei's solutions include an integrated approach that is called the CUBE System. This is meant to help the industry maintain the highest standards while reducing the climate impact. The CUBE System includes the following areas:

- supply of next-generation superfluidising admixtures: the DYNAMON CUBE line uses polymers to improve the workability of cement mixtures (e.g., CEM III, CEM IV and CEM V), ensuring low viscosity without setting delays. These new cements are therefore more attractive to the market, encouraging the distribution of lowerimpact products in terms of emissions;
- offering strength enhancers for new cements with reduced clinker content: the MAPECUBE line contains strength enhancers that, as the name implies, increase the mechanical strengths of the material with which they are mixed, making the performance of reducedemission cements closer to that of traditional cements:
- development of new grinding additives for cement production: the grinding additives of the MA.P.E./C-C (Cement to Concrete) line improve the mechanical strength performance while reducing the water demand of new cements with reduced clinker content and also reduces the energy requirements associated with the production process. These characteristics make the products included in this line more suitable for modern concrete mix-designs;
- concrete quality monitoring and control through specific hardware and software programmes: Mapei aims to develop, produce and transport sustainable concrete mix-designs4 using the Mapei CIS (Concrete Industry Solutions) tools. Some of these tools have been developed



in collaboration with Elettrondata and are designed to collect data through sensors placed at critical points in the production chain, from the mix of raw materials to the finished product conveyed to the construction site. The data collected is then analysed through dedicated software programmes. Real-time data allows the improvement of Quality Control and the confidence of concrete producers and end users in implementing new and more sustainable mixtures.

⁴The mix-design is the composition calculation methodology for concrete in terms of quantity of cement, water and inerts per m³ of concrete.



SUSTAINABLE PROJECTS TO OFFSET CO₂ EMISSIONS

Mapei is committed to reducing the greenhouse gases emissions generated by its products while also researching sustainability projects to offset the portion that cannot be avoided.

In continuity with 2021, the Group has purchased certified credits to offset the CO₂ emissions generated⁵ with the production of KERAFLEX MAXI S1 ZERO in Italy, and ULTRACOLOR PLUS worldwide. As a result of its commitment to extending its CO₂ emissions offsetting project, the Group engaged in the purchasing of credits, including at least one adhesive for each subsidiary globally. Currently, the certified credits have been purchased for a few adhesives for ceramics and building mortars produced in Italy⁶, one in North America⁷ and four in Germany and Austria⁸.

In total, in 2022, Mapei thus offset 60,000 tonnes of CO2 through two sustainable projects that contributed to the development and preservation of ecosystems in two developing countries, namely Vietnam and Indonesia. In Vietnam, Mapei participated in the construction of the hydroelectric power plant in DakrLap district,



in the Dak Nong province. The dam will produce over 630,000 MWh per year with an installed capacity of 144 MW. The plant has also created new job opportunities for local people and improved air quality in the area by replacing pre-existing coal-fired power plants. In Indonesia, Mapei has supported the creation of the RymbaRaya **Forest Reserve** on the island of Borneo to prevent the transformation of the area into a palm oil estate. The forest, extending over a surface of approximately 47,000 hectares, can now continue its CO₂ absorption activity.



⁵ Measured in compliance with EN 15804 "Sustainability of construction works - Environmental product declarations - Product category rules".

⁶ Keraflex Easy S1 Zero, Keraflex Extra S1 Zero, Ultralite S1 Flex Zero, , Mapefill Zero, Mapegrout 430 Zero, Mapegrout Hi-Flow Zero, Mapegrout Easy Flow Zero, Mapegrout Thixotropic Zero, Mapegrout Easy Repair Zero, Planitop Smooth & Repair Zero, Planitop Smooth & Repair R4 Zero.

⁷ Ultralite Mortar Zero.

⁸ Keraflex Maxi S1 Zero, Keraflex Extra S1 Zero, Mapestone Maxi S1 Zero, Ultralite S1 Flex Zero.

Assessing the impacts of products

Product production, packaging, use, and disposal generate impacts on the environment. For this reason, Mapei, always very sensitive to environmental issues, monitors the impacts of its products through the LCA (Life Cycle Assessment)9 approach and draws up voluntary EPDs (Environmental Product Declarations) in compliance with the international ISO 14025 and EN 15804 standards, for the verification and issuance of which it obtained the certification by Certiquality in 2016. The EPDs of Mapei are published on the platform of The International EPD System.

In 2022, the Environmental Sustainability function developed 20 new product-specific EPDs, reaching a total of 95 EPDs at the Group level, certifying a total of 235 products (about 13% more than in 2021).

The many efforts of the **Environmental** Sustainability function resulted in important achievements, such as the Gorka Cement (Poland) site, which obtained 2 EPDs for 4 alumina cements, the first cement plant in Poland with such declarations. Vaga has also developed several EPDs for its products, and sands and gravels that other subsidiaries use as components for more elaborate products. In turn, Vinavil (Italy), in addition to an EPD on a finished product, is currently developing several LCA studies on polymer and latex powders to give a fair representation of the environmental impacts of these materials.

Moreover, Mapei has a significant number of EPD models¹⁰ issued by the European associations FEICA and EFCA¹¹, for a total of 415 at 31st December 2022, up 11% year-onyear.

Mapei S.p.A.'s product certificates are published on the Company's portal (Product Certifications Portal), which is based on PIM - Product Information Management, i.e., an evolved repository developed internally by Mapei's IT department. The repository makes it possible to keep track of the expiry dates of the certificates, facilitate consultation and sharing internally, and the selection of the certificates that can also be distributed externally. All subsidiaries have access to the certificates in the portal but only a few can upload them. In 2022, Mapei Spain, Mapei Polska and the North American subsidiaries received the authorization to upload their certificates for the first time. In 2023, Mapei will extend this possibility to almost all the European subsidiaries.

¹¹ FEICA - Association of the European Adhesive & Sealant Industry e EFCA - The European Federation of Concrete Admixtures.



⁹ Product life cycle analysis, from raw material extraction to disposal of demolition waste, using a "cradle-to-grave" approach.

¹⁰ EPDs cover all products within a given range of chemical compositions and applications. Issued by European associations, EPDs can be used by members as long as they can demonstrate that their products reflect the appropriate EPD

PRODUCT CERTIFICATIONS IN NORTH AMERICA

Product certifications play an important role all over the world and not only in Europe. In particular, in 2022, Mapei Corp (USA) issued 2 specific EPDs and had 27 products certified by Industry-Wide **EPDs**. These EPDs are issued by industry associations that do not certify a specific product but the average product of several companies in a clearly defined sector and/ or geographic area. In addition, Mapei Corp has Manufacturer Inventories (MI)¹² drawn up for 87 products. These documents include a transparent report of the components of each product and any associated risks to protect users' health in line with the chemical audits required by current regulations. Finally, the U.S. subsidiary has obtained the following certifications:



• Green Squared¹³ is a trademark that identifies products that comply with ANSI A138.1, a standard for ceramic and glass tiles and their installation material. These materials meet the applicable regulations on the assessment, validation and reporting of impacts on human health and the environment (6 products certified in 2022);



• CRI Green Label Plus¹⁴ is a voluntary testing program for carpet, cushions and adhesives with low chemical emissions to ensure healthy and green interiors (18 products certified in 2022);



 SCS Global Services Indoor Advantage **Gold**¹⁵ is a certification for building and furniture materials with low emissions of volatile organic compounds to ensure indoor air quality (409 products certified in 2022).

Concerning the potential impacts of Mapei products on human health and on the environment, the Group conducts a compliance assessment based on the product safety regulations applicable in the countries in which they are manufactured and marketed. Moreover, Mapei carries out periodic controls of its product formulations. The Corporate Product Safety function is specifically responsible for analysing currently applicable international regulations, such as REACH and CLP (Regulation No. 1272/2008), and enforcing them through detailed audits on the chemical/physical properties and health and environmental impacts, so as to make available complete information on the safe use of the products.

- ¹² Analysis of the list of all materials contained in the product. Any material harmful to human health would be reported by the certifying body.
- ¹³ Trademark developed by the Green Initiative Committe of TCNA - The Council of North America and ANSI - American National Standard Specifications ASC - Accredited Standards Committee A108, representing manufacturers, distributors, installers and green building professionals.
- 14 Testing programmes created by CRI Carpet and Rug Institute to establish higher standards for indoor air quality.
- ¹⁵ A standard recognised by the EPA -Environmental Protection Agency and qualified for many building rating systems, including LEED, BREEAM and WELL. See section 3.4 Mapei's role in the sustainable construction



In 2022, the Group continued its efforts to apply the CE marking voluntarily on building insulation systems, structural reinforcement systems and concrete admixtures through the development of several EADs (European Assessment Documents) 16 and ETAs (European Technical Assessments)17,

which are expected to be completed in 2023. Further efforts were concentrated on obtaining the new certifications required by the United Kingdom as a result of Brexit. From 1st January 2025, the European CE marking will no longer be accepted on most new products marketed in the UK. For this reason, Mapei is currently in the process of obtaining and applying the UKCA (UK Conformity Assessment)18 trademark on more than a hundred products.

Moreover, Mapei pays a great deal of attention to reports received from customers on possible side effects resulting from contact with the products and is committed to identifying the necessary improvements to avoid the recurrence of such cases and protect human health.

When assessing the severity of complaints based on the Corporate Complaints Procedure CP POQ07, Mapei also takes into account the potential related environmental risk. The Customer Complaint Management (CCM) team under the Corporate Quality function carries out controls using the **Complaint Management System (CMS),** a corporate platform implemented in 2011. The system relies on an approval cycle that involves all functions affected by the complaint to find solutions to any issues. In 2022, the software was extended to 58 subsidiaries, five more than in the previous year. Local in-person or online training was provided to learn how to use the platform in order to monitor risk situations and seize opportunities to improve products and services. In particular, special attention was

paid to orders, ensuring the timely recording of any discrepancy reported by customers and subsidiaries in order to improve processes related to customer service.

¹⁸New conformity trademark for the UK market.



¹⁶The European Assessment Document (EAD) is a unified technical standard for construction products, developed by the European Organisation for Technical Assessment (EOTA) for cases where a product is not fully covered by regulations. EADs are the basis for obtaining ETAs, the European Technical Assessments.

¹⁷The European Technical Assessment (ETA) is a document that provides information on the performance assessment of construction products. The procedure is set out in the Construction Products Regulation and enables manufacturers to draw up the declaration of performance and apply the European CE conformity marking.

3.3 Durable and circular products

Mapei's R&D team is dedicated to creating durable, circular products and solutions that, as a result of their quality and durability in applications, allow for reduced maintenance and less waste of materials. These characteristics represent key elements of the circular economy model that Mapei intends to pursue both directly and through its production chain.

To reduce the consumption of virgin raw materials both for products and formulations, as well as packaging, Mapei has increased the use of **recycled materials**¹⁹, which reached 3.4% of total purchases²⁰ in 2022, slightly above the value recorded in 2021 (1.7%).

In line with this commitment, individual subsidiaries are taking steps to reduce and/or replace virgin materials in their products. In Europe, Gorka Cement (Poland) stipulated a collaboration with the Institute of Refractory Materials in Gliwice to test the possibility of applying waste material from the food industry (egg shells) as a substitute for virgin material and an alternative source of Calcium Oxide (Quicklime). Laboratory analyses confirmed the high chemical purity of the material and the first industrial tests are planned for 2023.

In Italy, particularly relevant are the initiatives pursued by Vaga which, in 2022, launched a research project on concrete aimed at developing new formulas with a recycled content of more than 6% by total weight. The recycled material may come from the recovery of waste from waste-to-energy sources and/or steelmaking activities, and will make it possible to reduce the environmental impacts associated with virgin material use and waste disposal.

The purchase of recycled material to replace virgin materials is particularly relevant in packaging, especially for recycled plastic, paper, and cardboard. In 2022, 5,777 tonnes of recycled plastic and 10,102 tonnes of recycled paper and cardboard were purchased by the Group for packaging, up from 2021 values of 2,945 tonnes and 7,939 tonnes, respectively.

Finally, in 2022, Mapei also made progress on the **QRcode** project. The application of the QRcode on packaging will provide access to all product information with a simple click.



¹⁹ To calculate this percentage, Mapei took into account the quantity of incoming recycled material for specific categories (e.g. slag, microsilica, and glass).

²⁰ Intercompany purchases of materials are not considered.



Mapei's role in the sustainable 3.4 construction industry

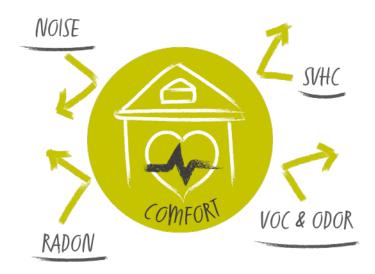
The solutions offered by Mapei stand out for their quality and reduced environmental impact. These characteristics can contribute significantly to the sustainability of the buildings in which they are used, improving, for example, their energy performance. The Mapei product range comprises many energy-efficiency products such as MAPETHERM SYSTEM Mapei. This system for laying brick, clinker and small porcelain tiles offers excellent thermal insulation. Other applications include heating floors with high thermal performance, thermally insulated systems, and coatings with high solar reflectance and thermal emissivity.

In addition, the Group is constantly striving to find solutions to increase the level of safety and well-being within living spaces, offering formulations that enable soundproofing, counter the spread of radon and provide fire-fighting, seismic strengthening and reduced air pollution.

To ensure high air quality indoors, Mapei is constantly committed to obtaining dedicated voluntary certifications such as, for example, the certifications issued by GEV21, with the "EMICODE ECIPLUS" trademark that also guarantees a low level of VOC (Volatile Organic Compound) emissions of products. In 2022, the Group had as many as 639 GEV licences, up 11% from the 574 recorded in 2021.



In addition, at the end of 2022, Mapei had 45 "Der Blaue Engel" licences (41 in 2021), a German eco-label that, in addition to guaranteeing low VOC emissions, requires compliance with specific criteria related to safety and environmental protection, including the content of hazardous substances.



²¹GEV Gemeinschaft Emissionskontrollierte Verlegewerkstoffe Klebstoffe und Bauprodukte e.V. is the German association for emission control of flooring products, adhesives and building materials and the developer of the EMICODE label, which neutrally and noncompetitively certifies building products by classifying them on the basis of their VOC emissions. This certification is therefore a guarantee of quality and health protection in indoor environments, in accordance with the relevant standards (ISO 16000 and EN 16516).



Mapei Germany obtained both the EMICODE EC1PLUS and Der Blaue Engel certifications for several products, including the ULTRABOND ECO VS60. This is an adhesive for resilient and textile flooring developed in 2022. In addition to meeting the quality characteristics required by these two brands, the product complies with DIBt - Deutsches Institut für Bautechnik, the German regulatory system for construction products and technologies, envisaging also specific restrictions on safety and environmental protection. Mapei Germany has obtained this certification thanks to the integration of sustainability into its business strategy, resulting in unique and immediately recognizable products.

By complying with the voluntary certifications listed above, Mapei products also meet international sustainable building certification protocols such as LEED (Leadership in Energy and Environmental Design), BREEAM (Building Research Establishment Environmental Assessment Method), BREEAM-Nor (specific to Norway) and WELL (WELL Building Standard). These give access to credits, the sum of which corresponds to an increased level of certification and, consequently, increased sustainability of the building or designed indoor environment.

Mapei Construction Chemicals (United Arab Emirates) is a shining example in terms of certification. From 2016 to 2020, the subsidiary obtained the LEED certification for 121 permanent buildings at Expo 2020 Dubai, where it supplied waterproofers, sealants, resins and primers. The certification of these buildings by the US Green Building Council was released not only in relation to the 2020 event but also because of the value the site for District 2020. District 2020 is a people-friendly, sustainable smart city, the objective of which is the redevelopment of 80% of the

Expo site. Work began in April 2022 with seven buildings over a total area of 4.38 km², including the UAE Pavilion, Terra - The Sustainability Pavilion and ENOC's Future Service Station. These buildings received the "Platinum" certification, the highest possible LEED rating. Of the 121 LEED-certified buildings, 103 are LEED Gold and nine LEED Silver.



Another project aiming to achieve LEED Gold certification is the **Sydney Football** Stadium (SFS), where Mapei Australia contributed by supplying products for ceramic tile installation and waterproofing of indoor and outdoor areas. Designed by COX Architecture, the stadium will be inaugurated in August 2023 after a four-year design phase. The stadium will host matches but also a series of cultural and community events, becoming a city landmark.

The Group also participates in prominent construction projects in China. Mapei Construction Materials (China) has collaborated in the development of Future City, a large urban complex in Shenzhen extending over a surface of over three million m² built by the Zhongzhou Group, which was awarded the BREEAM Green Building Prize. This living space of the future strictly follows the BREEAM standards with



PIKES PEAK, "AMERICA'S MOUNTAIN"

Pikes Peak is a global icon and a major tourist destination in the state of Colorado. The construction of the Visitor Centre on the summit of the peak was an opportunity for Mapei Corp (USA) to participate in a very special project. The Visitor Centre is an environmentally friendly infrastructure built on one of the highest peaks in North

America. The subsidiary was contacted by the Municipality of Colorado Springs to assist in the selection of sustainable products that met the **Living Building Challenge** (LBC)²² and LEED Platinum requirements. A variety of Mapei products were used in the project, both for interiors and exteriors. The centre was opened to the public in June 2021.

nearly 40,000 m² of terrace and 3,000 m² of walls built with Mapei's cementitious adhesives. Mapei Construction Materials (China) also supplied low-dust, safe, pollutant-free artificial paste materials for stone to support crowd flows in the mall.

E Future City

THE ORBIT ATHENS is another relevant project, where Mapei Hellas (Greece) contributed to the construction of a ninestorey office building with a total surface area of 40,000 m². The construction took from 2018 to 2021 and was awarded at the Commercial Property Awards with the highest LEED Platinum recognition in the New Projects section and LEED Gold recognition in the Best New Development - Offices category.

In Italy, Mapei provided products for the construction of high energy-efficiency buildings with low environmental impact. For example, in 2022, Mapei was involved in 4 construction sites in Milan:

In Europe, Mapei Germany is once again worthy of mention for the renovation of the warehouses of a former slaughterhouse in Berlin (DSTRCT – Berlin), which was awarded the DGNB²³ Gold and WELL Gold certification. For this project, including the construction of approximately 40,000 m² of office space, Mapei Germany was involved in the preparation of the surfaces and the subsequent fixing of textile tiles and the bonding of wood and flooring.

- Programme developed by the International Living Future Institute (ILFI) organised into seven performance areas: Place, Water, Energy, Heath + Happiness, Materials, Equity and Beauty.
- Depending on the type of building, DGNB

 Deutsche Gesellschaft für Nachhaltiges
 Bauen (German Sustainable Building Council)
 certification assessments can include up to 40
 sustainability criteria all regularly re-assessed
 and revised by a panel of independent experts.



- the office complex in Corso Italia 23 owned by Allianz Real Estate, expected to be completed by 2023. This is an urban campus that maintains a continuity of dialogue with the original design from the 1950s, meeting LEED and WELL standards;
- the new BRACCO offices: this is an ecosustainable and innovative smart building featuring high standards in terms of energy efficiency, choice of materials and low-impact quality of the interiors. The project will be LEED Gold certified thanks to construction and plant solutions that are strongly oriented to low environmental impact and the containment of energy consumption. The project includes the use of materials with a high percentage of recycled content, solutions based on renewable sources, geothermal and solar energy, and responsible use of water resources;
- the Teatro delle terme in San Siro is part of the larger project for the redevelopment and regeneration of abandoned and degraded urban areas carried out by the Municipality of Milan. In 2022, the project included the Art Nouveau complex of the De Montel Stables, built between 1915 and 1918. Mapei made its contribution to the preservation of the historic buildings while enhancing the potential offered by the presence of thermal waters underground. In addition to the thermal baths in the former stables, which extend over an area of about 16,000 m², a large urban park will also be built. The installation of photovoltaic and solar thermal panels will create on-site energy generation and make the complex self-sufficient in terms of energy and water consumption;

• the Ospedale Maggiore Policlinico Mangiagalli e Regina Elena. The construction of the New Polyclinic in Milan will provide an open and accessible hospital area not only for patients and their families but also for the city community. The New Polyclinic will be the largest and most modern hospital in the heart of the city, built using high-quality technologies and materials. The highlights of the project include the construction of a pedestrian gallery with services and shops, and a raised park built on the roof of the building, which will form a green area as large as the Milan Cathedral.





3.5 The "culture of sustainability" for the construction development

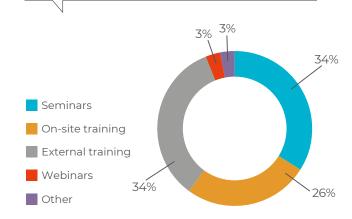
The sharing of knowledge between players has become critical to progress in the building sector, given its continual evolution. For this reason, the Group collaborates with designers, contractors, users, manufacturers and companies to provide them with adequate assistance and guarantee optimal use of Mapei products in order to avoid compromising their performance in terms of quality, durability and sustainability.

The Mapei Academy was established to emphasise the Company's commitment to creating a culture of sustainability. The Academy is a service arising from the Company's determination to share with its customers the wealth of expertise that the Group has accrued in over 85 years of activity thanks to the professionalism of Customer Care and the Mapei Specialists. The Company has organised and holds

periodically a multitude of events dedicated to technical and topical themes for the building and design sectors in various Mapei Training and Specification Centres in Italy, all over the world, and also at customers' premises and Trade Associations.

In Italy, Mapei S.p.A. is also registered as a **Third-Party Training Body** with the *Consiglio Nazionale dell'Ordine degli Architetti Pianificatori Paesaggisti e Conservatori*. On the strength of this authorization, the Company can carry out training activities and issue professional training credits (CFPs), as of the Law on **Compulsory Continuous Training** (Presidential Decree No. 137/2012).

Hours of technical training in 2022





In 2022, the Group provided a total of 69,168 hours of technical training as follows: workshops (23,470 hours), on-site courses (17,736 hours), off-site courses for customers (23,550 hours) and webinars (2,229 hours) with approximately 238,000 participants. Other training hours not included in the above categories refer to congresses, conventions, trade shows or local initiatives, such as the Mapei Tour. These are mobile training centres in various countries that advertise and provide knowledge about the correct application of Mapei products.

In addition to technical training focused on providing specific knowledge on product specifications, the Group provides customers, both direct and indirect, with access to its mobile laboratories and product technical and safety data sheets that can be consulted and downloaded free of charge from the Company's portal. Other such resources comprise product specifications and calculation software programmes for designers, enabling them to quantify the amount of product required for any specific project or to verify the soundproofing



properties of buildings. Finally, yet importantly, the Group provides access to 3D BIM (Building Information Modelling), which allows analysis and integration of all product information at every step of the project.





ENVIRONMENTAL

IMPACTS

Health and Safety

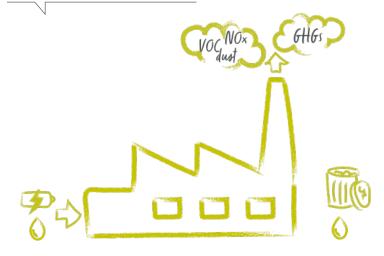


BUILDING A SUSTAINABLE FUTURE TOGETHER

The Group, aware of its environmental and social impacts, has implemented a QHSE (Quality, Health, Safety and Environment) policy that applies to all its subsidiaries in the world. The Policy testifies to and formalises the Group's attention to aspects such as the quality of its products, the health and safety of its employees, collaborators and all other interested parties (citizens, customers, users, etc.) and environmental protection along the entire value chain. All the Group's subsidiaries are committed to complying with this Policy and are free to integrate it according to local needs and regulatory requirements.

Specifically, the Corporate Energy function is responsible for managing the environmental impact generated by the Group's operations as regards energy consumption (and resulting greenhouse gas emissions) and the Corporate HSE function as regards waste production, water consumption and emissions of pollutants into the atmosphere. For continuous improvement purposes, the functions share best practices to increase awareness and provide support to the subsidiaries. To this end, Mapei is constantly committed to updating and upgrading the HSE database with a view to collecting and monitoring environmental data concerning the Group's activities.

The Group's environmental impacts





4.1 Energy and GHG emissions

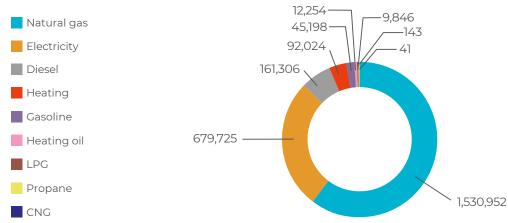
At a global level, the Corporate Energy function is responsible for monitoring the energy consumption of the subsidiaries. The function centralises the collection of data and performs specific analyses to identify any criticalities and later to share good practices in terms of energy supply, management and use. The QHSE policy formalises the Group's commitment to **reducing** and **optimising** energy consumption. These objectives are reached both through ongoing activities to raise operators' awareness and audits extended to all subsidiaries worldwide. In this respect, Mapei implements numerous energy efficiency initiatives every year (for further information refer to the "The Mapei Group and Energy Efficiency" section).

Overall, the Group's **energy consumption** in 2022 amounted to 2.5 million GJ, in line with the previous year. The larger part (87%) is attributable to electricity and natural gas, used to power production processes and lighting in factories and offices. Other energy

sources include diesel oil, gasoline and LPG, used to power both internal handling vehicles and company cars. In addition, Mapei is currently extending the installation of photovoltaic systems to various sites to reduce the use of traditional energy sources.

In this regard, it is worth mentioning the Parent Company's Robbiano di Mediglia and Latina sites, which have been relying on PV generation for several years now (in 2022 they produced and used 963,354 kWh and 826,796 kWh, respectively) and the U.S. Sassuolo Calcio, which in 2022 selfproduced 18,822 kWh from its photovoltaic system. In addition to these, at the European level, Mapei UK, Mapei Nederland and Mapei Benelux (Belgium, from 2021) make use of PV energy (94,407 kWh, 43,467 kWh and 30,370 kWh produced and consumed, respectively, in 2022). Also in 2022, work was approved to install photovoltaic systems at other Group sites around the world (for more details refer to the "The Mapei Group and Energy Efficiency" section).

Energy consumption in 2022 [GJ]



The Mapei Group and energy efficiency

Below is a description of the main energy efficiency measures (and consequent reduction of climatealtering emissions) implemented in 2022 by the Group's subsidiaries, or planned and still in the process of fine-tuning in 2023.

Mapei Inc

Site: Laval Initiative: Replacement of

central refrigeration plant.

Estimated savings: 300 MWh per year of electricity.

Mapei Suisse

Site: Sorens Initiative: Installation of 380 kWp photovoltaic system, 400,000 kWh per Planned start-up in

the first half of 2023.

Mapei Gmbh Austria

Site: Nussdorf Initiative: Installation of 315 kWp photovoltaic system, 330,000 kWh per year. Planned start-up in the first half of 2023.

Polyglass S.p.A.

Site: Ponte di Piave Initiative: Installation of the 2,700 kWe trigenerator. Active from January 2023.

Mapei Building Materials Technology

Site: Huzhou Initiative: Installation of 818 kWp photovoltaic system, 1 million kWh per year.

Mapei Corp

Site: West Chicago **Initiative:** Replacement of central refrigeration unit.

Estimated savings: 700 MWh per year of electricity.

Mapei S.p.A.

Site: Latina

Initiative: Installation of variablespeed compressors and creation of low-pressure networks. Active from February 2023.

Estimated savings: 380 MWh per

year of electricity.

Site: San Cesario sul Panaro Initiative: Installation of 417 kWp trigenerator, 480,000 kWh per year. Active from February 2023.

Mapei Construction Chemicals Llc

Site: Dubai Initiative: Installation of 500 kWp photovoltaic system, 820,000 kWh per year. Planned start-up in the first half of 2023.



Initiatives outside Italy include the creation of the "Power Saving Team" at Vinavil Egypt for Chemicals to increase efficiency and reduce the consumption of electricity, natural gas and water.

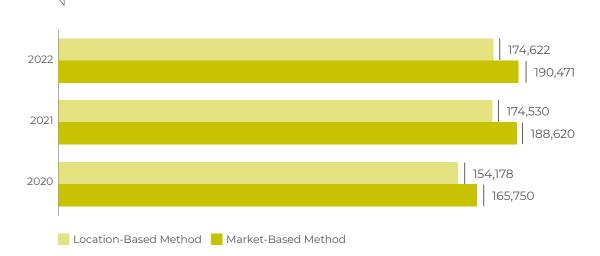
In October 2022, the team launched a study to implement new energy solutions. A number of projects have already been completed, such as the replacement of traditional lamps with low-consumption LED alternatives and the operation of a system to control the switch-on time of some energy-intensive machines (such as the high-pressure water pump) in order to reduce the incidence of peak consumption.

As a direct consequence of energy consumption and a cause of the climate change we are currently experiencing, greenhouse gas (GHG) emissions represent an impact that the Group monitors constantly. In 2022, Scope 1¹ (direct emissions) amounted to 103,446 tonCO_{2eq} and were mainly attributable to methane gas consumption (approximately 84% of total

direct GHG emissions) and diesel oil and gasoline (14%).

Scope 2² emissions (indirect emissions) refer to the purchase of electricity from the grid and from steam. They are calculated according to the *Location-Based* (71,176 tonnes of CO₂ in 2022) and *Market-Based* (87,025 tonnes of CO₂ in 2022) approaches. The emissions of Scope 1 and Scope 2 are substantially aligned with the previous year despite the increase in turnover generated by the Group. The most virtuous examples contributing to the reduction of Scope 2 emissions according to the Market-Based approach are Mapei Spain, Rasco Bitumentecknik (Germany) and the Parent Company's Cafiero site.

Total GHG emissions (tCO_{2eq}) (Scope 1 + Scope 2)





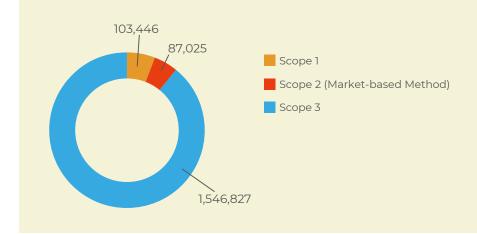
¹ Scope 1 emissions derive from proprietary emission sources or sources under the Group's direct control

² Scope 2 emissions derive from energy generation (electricity or thermal energy) that the Group purchases from third parties.

SCOPE 3 INDIRECT GHG EMISSIONS

To obtain an increasingly accurate and detailed picture of its carbon footprint, in 2022 Mapei launched a project to quantify and monitor its **Scope 3** indirect GHG emissions, i.e. emissions generated along the Company's value chain. In particular, the Group has calculated the emissions linked to the production of raw materials purchased globally during the year (such as grey and white Portland cement,

calcium and magnesium carbonates, sands and quartzes, bitumen, and resins) and belonging to the "Purchased goods and services" category as defined by the GHG Protocol³. As shown in the graph below, amounting to 1,546,827 tonnes of CO₂, emissions in this category account for about 89% of the total generated and calculated by the Group in 2022.



These sites purchase part (approximately 98.6% for the Spanish subsidiary) or all of their electricity from the Guarantee of Origin (GO) certified grid.

Mapei's commitment to reducing its energy consumption and, consequently, its GHG emissions, is testified by the Group's investments in implementing energy-efficient measures in its production sites. These include the installation of cogeneration systems (in the Italian subsidiaries of Vinavil, Polyglass and Vaga) and photovoltaic systems. In 2022, the Group self-produced and used 1.98 million

kWhs generated by the PV systems installed with approximately 883 tonnes of CO₂ saved.



³The GHG Protocol Corporate Accounting and Reporting Standard, developed by the World Resources Institute (WRI) and the World Business Council on Sustainable Development (WBCSD), represents the most common international standard for calculating and reporting Scope 3 GHG emissions.

4.2 Waste

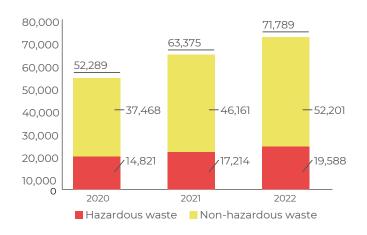
In 2022, the Group produced approximately 71.8 thousand tonnes of waste, up 13% year-on-year. This increase is partly attributable to the diversification of the production mix compared to the previous year and partly to increased production in some Group subsidiaries – e.g. Mapei Corp (USA), which produced about 20% of the total.

Of this amount, nearly 73% is **non-hazardous** waste and the remaining 27% is **hazardous** waste, as shown in the graph.

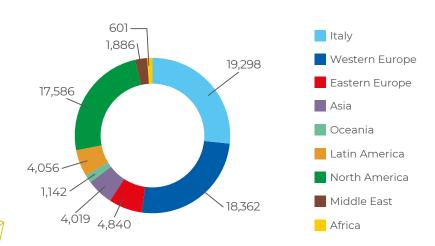
The main waste treatment methods are:

- recovery/recycle, accounting for approximately 37% of total waste in 2022;
- disposal in landfills or incineration, for the remaining 63% of the Group's waste in the period (energy recovery included).

Total waste (tonnes)



Total waste (tonnes) by geographical area, 2022



Biodiversity

In addition to the environmental impacts described above, the Mapei Group also has an impact on biodiversity. This impact is reflected along its entire value chain, from the supply of raw materials to the presence of production sites in areas with a high biodiversity value. Moreover, the construction of building infrastructures can negatively affect the diversity of natural ecosystems, along with the animal and plant species that inhabit them.

In this area too, aware of its actual and potential carbon footprint on ecosystems,

Mapei constantly measures the environmental effects of its operations and products. The following figure shows the Group's production sites located in protected areas or areas with a high biodiversity⁴ value.

⁴The WWF tool 'WWF Risk Filter Suite' was used to determine the areas at risk for biodiversity, considering a minimum risk threshold of 3 as "Moderate risk".





High risk

Medium risk

Ocuntries where Mapei's production sites are located in areas of medium, high and very high biodiversity risk

Countries where Mapei's production sites are located in areas of low biodiversity risk



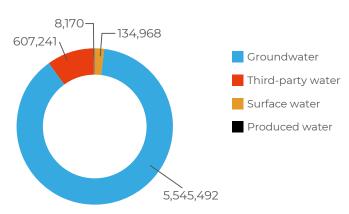
4.4 Other environmental impacts: water resources and polluting emissions

In its sites, the Group constantly monitors water consumption, which is mainly used for sanitary purposes and industrial activities, such as cooling plants and feeding production processes. In 2022, the quantity of water used by the Group amounted to approximately 6.3 million m³, most of which (88%) was drawn from wells. Water drawn from wells has a lower impact on ecosystems and biodiversity than water drawn from surface water bodies (used by the Group for the 2% of its total water drawns). The remaining portion (nearly 10%) comes from public aqueducts or third-party water resources.

This quantity mainly refers to the special activities carried out at the Villadossola plant, which are water-intensive not only for the cooling of equipment but also for the dilution of the finished products. Vinavil has implemented several efficiency measures to reduce its intensive and known amount of water used. For example, these initiatives include the installation of thermostatic valves on the vapor lines and the installation of a well pump regulation system.

It should be noted that Vinavil⁵ alone accounted for about 86% of all water used by the Group with a consumption of 5.4 million m³ in 2022, down 21% year-on-year.

Water consumption (m³) by source



⁵ Vinavil (Italy) and Vinavil Egypt for Chemicals.

In line with consumption amounts, industrial water discharges⁶ show a decreasing trend over the three-year period. In 2022, the volume of water discharged by the Group totalled about 5.7 million m³. Almost all process wastewater, which is mainly used to cool the equipment⁷, is discharged into surface water bodies (5.3 million m³, 93%), and only a small part ends up in sewage systems (380,599 m³) or groundwater (2,551 m³).

As mentioned above, Mapei is committed to monitoring the quantity of water discharged and periodically examines the quality of its discharges, even when this is not strictly required by the relevant environmental authorisations.

Direct emissions above certain thresholds of pollutants into the atmosphere can potentially cause harmful effects on the local area and on the health of the people and other living organisms. These emissions differ from climate-altering emissions, which are responsible for the so-called "greenhouse effect" and the resulting rise in temperature.

There are several types of emissions generated by industrial operations and they mainly depend on the type of product manufactured. In the case of Mapei, these emissions are mainly composed of NO_v, dust and volatile organic compounds (VOC).

In compliance with specific local regulations and to comply with the limits imposed by the environmental authorisations to the individual plants, the Group is committed to constantly measuring all emissions of pollutants at individual emission points. In particular, it should be noted that the emissions of dust and VOCs into the atmosphere strongly depend on the type of product processed and the climate conditions at the time of sampling. The results so far have always been below the regulatory limits.



⁶ Rainwater and sanitary water were not

⁷ It should be noted that this use does not affect the chemical-physical parameters of the discharged water. In this case, water returns to the receiving water body with the same characteristics, except for the temperature, which is necessarily higher than the initial temperature, but always within the regulatory





BUILDING A WINNING TEAM TOGETHER



- O Italy 2.682
- Western Europe 2,488
- Eastern Europe 1,838
- North America 2,381
- Latin America 655
- Middle East 169
- Asia 836
- Oceania 128
- O Africa 261



Mapei Group's global success is the result of several factors. One of the most important is undoubtedly its people¹, who contribute to making the Group's subsidiaries achieve their goals, leveraging their expertise.

The Mapei Group has always stood out for the attention dedicated to its personnel, implementing a human resources management method inspired by the "Mapei Family" concept. This translates into investments and initiatives that the Group develops every year to protect the emotional and psychophysical wellbeing of its employees. Mapei employees have access to training courses covering a broad variety of

¹Note that the numbers relating to personnel reported in this chapter differ from those published in the 2022 Consolidated Financial Statements because they refer to headcount instead of FTE and temporary workers are not included. Furthermore, the reporting scope of the two reports does not coincide, as better detailed in section 1.1 Our history: 85 years of success.



requirements, including health and safety to minimise the risk of injuries in the workplace and professional illnesses. Moreover, in line with the **spirit of unity** that characterises families in periods of crisis, Mapei has dedicated time to listening to the needs of its people in all of its subsidiaries around the world, guaranteeing unfailing presence and support where necessary. Based on this philosophy, the Group has significantly increased the corporate benefits dedicated to its employees to give them extra help to cope with difficult economic situations, including increased energy costs, growing inflation, the difficult political situation and the continuation, albeit in a reduced form, of the effects of the pandemic in this period.

The effective coordination of a Group like Mapei in terms of size and geographical extension is by no means easy, since the Group employs today more than 11,000 people worldwide. The Corporate HR function has adopted an efficient approach to managing the personnel in all the subsidiaries. On the one hand, it provides assistance and guidance to the local HR functions and, on the other, it leaves them autonomy and responsibility in implementing initiatives that respond to local necessities.

With the aim of helping the subsidiaries in their operations, carefully guide them in their choices and harmonise processes throughout the Group, the Corporate HR function has introduced over the years two formalised procedures related to human resources management, which, in compliance with the minimum requirements valid worldwide, the individual local realities must implement them and adapt them to the context in which they operate.

The first defines the guidelines for the management of HR processes, including recruitment. This process was revised in

2022. To reduce the risk of discriminatory practices, the process now includes a very detailed profiling of the candidates selected, based on their skills and suitability for the position and without the influence of external factors. More information is requested regarding, for example, potential conflicts of interest. When present, these must be analysed and approved by the Corporate HR function. During the process, many subsidiaries carry out an additional assessment to evaluate the candidate's potential for growth within the Group, building on their initial expertise and technical skills. The revision of the procedure also resulted in the integration of a special paragraph taken from the most recent version of the Group's Code of Ethics (in the process of updating in 2023) to emphasise Mapei's commitment to social sustainability issues, including diversity and inclusion (D&I). Both represent key elements around which the subsidiaries are developing targeted training and awareness-raising activities for their employees, often in collaboration with specialised external associations. For example, in France and the UK, structured analyses have been carried out on the Gender Pay Gap, with a view to taking a snapshot of the current situation and identifying possible alerts for future activities to reduce any pay inequalities as far as possible.

The second focuses on the management of work-related expense at the Group level. This procedure will be updated in 2023 after the implementation of a new system for automated expense reporting and simplification in 2022. This action is part of the overall framework of activities implemented by the Corporate HR function for continuous improvement of processes and their standardisation worldwide.

The two procedures described above define a common framework for the entire



THE MAPEI SKILLS MODEL

Mapei considers **employees' skills**, i.e. "the combination of knowledge, abilities and attitudes that an individual has, expressed through their conduct and necessary to achieve business objectives", to be one of the pillars of its organisation.

The skills matrix created by the HR Corporate & Organisation function has been circulated globally, adopted by individual subsidiaries and adapted to local needs and work culture. Mapei's **globally** valid model includes 16 categories divided into 4 clusters:

- Green cluster, comprising interpersonal skills necessary for interaction and development of relationships with other people;
- Red cluster, comprising skills related to strategies and targeting the achievement of objectives;
- Yellow cluster, focusing on skills related to innovation and change management;
- Blue cluster, covering emotional skills, personal growth and self-awareness.

For managers, in addition to these 4 clusters, there is also the ability to manage and accompany the growth of other Mapei professionals.

In 2022, with a view to better organising and strengthening the monitoring of these aspects, the Italian HR Department and Italy Organization from alised the "Mapei Skills Model" within its procedure. This model was designed in 2015 and consists of a methodology broken down into four steps: definition of the list of skills, development of ideal profiles, assessment of the identified skills, and analysis of the outcomes. This model will have a very positive impact on the management of Mapei's human capital and can be beneficial for many HR processes, such as recruitment, definition of organisational roles, identification of training needs, performance development and evaluation, and reorganisation. The procedure has consequently been revised to include a section Skills dedicated to the model, integrating and updating the sections dedicated to the Organisation, Talent Acquisition, Inclusion into the Company and Training to align them to the changing environment in which the Group operates.

Group. They can be supplemented by the subsidiaries to meet local regulations and requirements, always with the support of, and under the supervision of, the Corporate HR function.

Every year, the Corporate HR function organises working tables with the Group subsidiaries. This is an opportunity to identify and discuss critical issues related to human resources or business processes, share locally developed best practices and develop improvement strategies at the global level. Specifically, seven seminars

were held in 2022 involving the HR functions of the European and Latin American subsidiaries on D&I issues, well-being and remote working, Corporate HR policies, budget commentary, skills development, onboarding process management, internal and external branding and interaction between HR functions at the Group level. The topics discussed have become part of Mapei's strategy. For example, regarding onboarding, the subsidiaries identified the need to revise the process to facilitate the introduction of new recruits and enable them to participate in the family spirit of



REVERSE MENTORING **PROGRAMME**

The seminars are also an opportunity to present and share best practices and innovative solutions for HR process management. For example, the Brazilian subsidiary Mapei Brazil Construction Materials presented a Reverse Mentoring project. This is an alternative approach to traditional mentoring, in which a senior profile assists a younger or junior employee. The programme came about after a number of assessments carried out among employees to respond to the need to adapt to an increasingly complex and ever changing environment from a technological standpoint. This requires the adoption of new tools to develop skills and share knowledge within the organisation. Reverse Mentoring can be applied to address different issues, including D&I, generational difference management, digital skills upgrading and leadership development. The programme focuses on disseminating skills and knowledge, and enables the development of a Learning Culture across all profiles in the organization while fostering the development of strong interpersonal relationships and improved communication.

> the Group. To meet this need, the Corporate HR function launched the project of revision starting from the development of a presentation dedicated to new hires. The presentation contains information on the Group's history, its operations, products, and commitment to sustainability, as well as its Code of Ethics. In 2023, the presentation will be circulated by the Corporate HR function to all subsidiaries in English. Each subsidiary is responsible for having it translated into the local language, integrating it into the onboarding process and distributing it to all employees.

Every year, the dialogue between the Group's subsidiaries and local trade unions has continued actively and constructively. Workers' wellbeing and protection has

always been a priority along with specific topics relating to digital transformation and inclusivity. In 2022, several trade union agreements were signed by numerous Group subsidiaries, including Mapei France, Mapei Polska and Mapei Italy. The latter signed an agreement in June 2022 for the renewal of the Italian collective bargaining agreement (CCNL), expected to remain in force from July 2022 to June 2025 and covering all Mapei employees in Italy. As a result of the close cooperation with the national trade unions, the Agreement included several new features and, specifically, two sections. One is dedicated to **Digital Transformation** and the other to **Social Inclusivity and Gender Equality.** The former is a no-miss and necessary process for competitiveness and employment, leading to improved professionalism, safety and general working conditions. For this reason, the digitisation of business processes and technological innovation represent a strategic objective in the Agreement to improve the effectiveness and efficiency of business processes while also increasing environmental sustainability. Guidelines have been defined for social inclusivity and gender equality to foster professional development without distinction of gender, orientation and nationality while strengthening inclusion through training and non-work projects and reducing the gender gap in terms of pay.



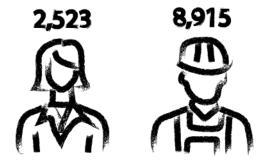
5.1 A team that is open and inclusive

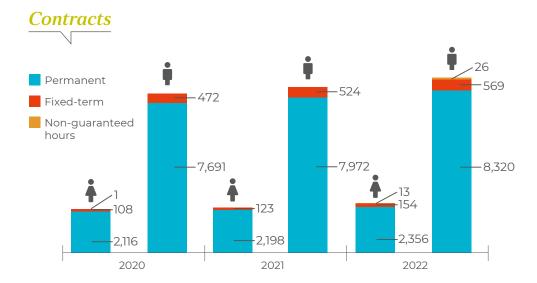
The Mapei Team includes 11,438 employees worldwide with an increasing trend for the 2020-2022 three-year period (+10% vs 2020 and +6% vs 2021). In addition, there are 1,586 non-employee workers², who make an indispensable contribution to the Group's global success.

The Company operates in a male-dominated sector. For this reason, women represent 22% of Mapei's employees, slightly up vs. 2020 and 2021 (21% in both years). These mainly hold white-collar and middle management positions.

In terms of **professional categories**, in 2022, white-collar workers represented 45% of the total, blue-collar workers 38%, managers 12% and executives 3%. The remaining 2% refers to sports professionals, such as footballers, coaches and masseurs, belonging to the U.S. Sassuolo Calcio.









Only a small percentage of employees have a part-time contract (3%). These are mainly women (55%). Moreover, the majority of the Group's employees have a permanent contract (93%), which perfectly reflects Mapei's concept of "family spirit" in the management of human resources oriented towards establishing long-lasting relations. 6% have a fixed-term employment contract. The remainder are on non-guaranteed contracts³ (39 individuals in 2022), referring only to the subsidiaries Mapei Inc (Canada) and Resypoly Chrysor (France).

The quality of the policies and initiatives implemented by the Group in personnel management are recognised and rewarded. For example, for the second consecutive year, Mapei has been included in the "Italy's Best Employers" ranking, winning third position in the "Production and Transformation of Manufacturing and Construction Materials" category.

³ Workers on a non-guaranteed hourly contract are employees of the organisation, whose contract does not define any minimum or fixed number of working hours.

The ranking, which gathers Italy's 400 best-rated employers, assessed by their employees on the basis of satisfaction level and well-being, was developed by Statista in collaboration with Corriere della Sera. An anonymous survey was sent out to 22,500 employees in over 4,500 companies (with at least 250 employees) in Italy. The Group also won the first position in the "Top Job -Italy's Best Employers" ranking confirming that Mapei has consolidated practices. The award was assigned by the German Institute for Quality ITQF in partnership with La Repubblica Affari&Finanza, involving over 2,000 employers and analysing aspects such as work climate, professional development, growth prospects and sustainability.

The Group also hit the top positions (second among chemical companies) in the "Italy's Best Employers for Women" ranking, testifying to the special attention paid to the participation of women in the team, to whom numerous initiatives and activities are addressed. The award was assigned by the German Institute for Quality ITQF in partnership with La Repubblica Affari&Finanza and identifies the 360 best employers for women in Italy selected from

SPAZIO APERTO SOCIAL COOPERATIVE



In 2022, the parent company renewed its collaboration with the social cooperative Spazio Aperto - Articolo 14, which envisages the presence of personnel from the cooperative at the Mediglia plant to provide assistance to people with disabilities. In addition, a contract was signed in the period to extend the service to include the cleaning of outdoor areas as of March 2023. Given the success of the initiative, the cooperation was also profitably extended to Polyglass and an evaluation to include Vinavil in the project is underway.

a cluster of 2,000 companies. The survey includes the collection of opinions expressed by employees on open-access Internet pages and takes into account various parameters, including corporate culture, professional training and equal opportunities.

As already mentioned, Mapei pays a great deal of attention to the process of recruitment. The quality of the process can influence the Company's ability to build a team capable of responding to its needs while supporting the Group's growth. Growth must be in line with the principles of the Group's Code of Ethics, relentlessly ensuring fair and non-discriminatory treatment of candidates. A key stage in this process is the search for personnel. To this end, Mapei uses various channels including online digital tools, for example the "Work with us" section on the Group's website has seen an increased use after the Covid-19 pandemic. In Italy, the Company returned to face-to-face job interviews in order to favour direct contact with the candidates. This has been the case with specialised operators to be hired in production lines, for whom 100% of interviews were conducted in person. The individual subsidiaries can adapt their recruiting process to local needs and characteristics under the Parent Company's supervision and coordination. For example, Polyglass (Italy) has implemented an innovative "Job Mobility" approach for the recruitment of specialised operators for the Ponte di Piave (Treviso) plant, given the scarcity of qualified personnel available in the North-East area. In cooperation with specialised companies, the search for personnel was extended to the regions of Sicily and Puglia, providing for the permanent relocation of the operators identified and subsequently selected. The project was a great success and resulted in 19 specialists hired from March to May



2022. These were subject to the traditional onboarding activities, were offered concrete support in finding accommodation and orientation locally and in becoming a part of the local community.

Overall, globally, in 2022 there were 2,240 hires, a sharp increase compared to 2021 (1,830) and 2020 (1,221). There were 1,722 terminations, 8% of which (equal to 137) referred to sports professionals of the U.S. Sassuolo Calcio team. North America is the region recording the highest mobility rate, both in terms of new hires, accounting for



SCHOOL-WORK ALTERNATION

In 2022, as a result of the gradual easing of the Covid-19 health restrictions, Mapei resumed its **school-work alternation project**, which had been discontinued for two years. This project is dedicated to the new generations and has been implemented by several Group subsidiaries. It represents both an opportunity for them to show proximity and attention to the local communities in which they operate, and an opportunity to bring the students closer to Mapei and its knowhow while laying the foundations for future recruiting activities.

For example, in 2022, Mapei Italy launched a number of projects addressed to students attending vocational chemistry schools in the Lombardy region. "Project Work" is one of these initiatives and involved a class of students from the **CAT** (Construction, Environment, Territory) **course** of a Bergamo-based school. Mapei presented its products and technical solutions applicable to different lines along with the corresponding application methods to masonry buildings. In addition to in-class activities, Mapei also engaged students in practical activities in its in-house laboratories including visits to the production plants, in particular the Mediglia plant.

31% of the Group's total, and terminations, equal to 32% of the total. This phenomenon is mainly related to the USA subsidiaries, where the labour market is historically very flexible, thus favouring high employee turnover rates. Conversely, 11% of total recruitments were based in Italy. In this respect, 2022 was a record year with 2384 new hires including the Parent Company and its subsidiaries, up sharply from 179 of the previous year. The selected candidates who join the Italian subsidiaries receive special economic treatment. A newly hired full-time employee in the D3 job category receives an 8% higher TEM3 than the CCNL TEM5 for the same job category.



⁵ Minimum wage (Trattamento Economico Minimo)



⁴ There were also 168 hires at U.S. Sassuolo Calcio, for a total of 406 new hires in 2022.

5.2 A team that promotes professional growth and development

Training and professional development activities for employees represent a further cornerstone of Mapei's human resources management. The Group's HR policy contains a dedicated section and, every year, investments are made to guarantee an offer in line with the needs of the market and the employees. In 2022, 241,491 hours of training were provided, corresponding to an average of approximately 21 hours per capita, in line with 2021.

Every year Mapei offers a broad array of training topics to its employees. In 2022, the Group organised courses focusing on specialised and managerial skills (29%), health and safety (25%), technical training (16%) and foreign languages (10%). Globally, Latin America, the Middle East and Eastern Europe (with 47, 34 and 33 hours per capita), were the regions that provided the highest number of training hours per capita, making for about 40% of the total of training hours at the Group level.

To ensure participants' safety, in the threeyear period, courses were delivered almost exclusively in web-based mode using a dedicated platform. In 2022, and especially in the second half of the year, as a result of the

gradual easing of the Covid-19 restrictions, the Group resumed in-person training activities. For 2023, Mapei expects to return to a situation similar to the pre-pandemic period with most of the courses delivered in class. Mapei also intends to continue the digital transformation process that envisages the use of e-learning as a complementary modality along with in-person training. In 2021, feedback obtained by the local HR functions during seminars indicate a desire for more investments in digitalisation. For this reason, the Group extended the scope of use of the e-learning platform from a few subsidiaries (e.g. Europe, the United States, Canada and Latin America) to a global level⁶.

Average hours of training per employee





⁶ The extension led to a significant increase in the number of users (+22%) and corresponding registrations (+129%). Currently only AO Mapei (Russia), Mapei Ukraina, Mapei Vietnam, Mapei Construction Products India and the Sopro Group are excluded from the platform.

TRAINING IN ITALY

With regard to the Italian subsidiaries and the Parent Company, training activities continued as customary, making use of the funds provided by the inter-professional funds for **continuous training** (Fondimpresa and Fondirigenti) and, based on the excellent results obtained in 2021, training needs were mapped again in 2022 through a **dedicated management system**, which proved to be perfectly suited to Mapei.

The training offer for 2022 was enriched further with a new three-tool course dedicated to the so-called **People Manager**: employee management, managerial feedback and delegation. These topics represent the "toolbox", i.e. the fundamental tools that managers must possess to manage effectively the growth and development of the employees reporting to them. In addition to these main courses, others were added on situation-specific topics or related to market needs. These included:

- multigenerational team management: this course analyses in depth how best to respond to the multiple needs and different cultural patterns of team members belonging to different generations;
- change management: this course guides change based on three pillars: the individual, the team and the project;
- leaders' styles: this course analyses the use of different managerial styles according
 to the organisational context, the specific situation and the people involved in the
 interaction.

Mapei has developed a training catalogue for both managers and the Mapei People. The main topics are: "My approach to change", this course is a continuation of the training delivered to the People Managers and aims to help employees understand how change is experienced, what are the automated mechanisms triggered when an individual faces new situations and what are the skills necessary for making the change successful based on the organisational context; and "6 thinking caps", this course expands on the development of lateral thinking to assess events from different standpoints while encouraging people to try out unusual roles and styles of thinking, e.g. thinking outside the box, opening up to new solutions.

Lastly, both People Managers and the Mapei People participated in a training project focusing on the management of emotions at work. This testifies to the importance of wellbeing and relationship building in Mapei's strategies. Acknowledging your emotions is fundamental for acting sustainably for yourself and for others. Knowing how to transform emotions into resources becomes a strong point for improving the quality and efficacy of your work and relationships at work.



The Corporate HR function aims to create a global infrastructure to deliver training - spanning from technical topics to soft skills - as suggested by the subsidiaries. A specific activity was dedicated to nearly 140 local managers to make them familiar with the platform at the local level, enjoy all its functionalities and manage e-learning projects autonomously.

Mapei considers it fundamental, both for the improvement of the Company's results and for the professional development of its people, to periodically assess employee performance. To this end, the Corporate HR function has defined guidelines and objectives at the global level to emphasise the importance of this process and increase employee awareness of this issue from the top management of all the subsidiaries to all baseline workers.

In 2022, all employees of the Italian subsidiaries and the Parent Company,

regardless of their role, have been assessed by their supervisors based on quantifiable objective data collected in a 4-step assessment grid. The findings were then also used to define Rewarding/Compensation proposals for employees with the best scores, who could also obtain a change in their qualification/classification with consequent career advancement. In line with the Group's digitalisation strategy applied to HR, the compensation software was tested in 2021 on Polyglass and adopted by some functions at the Parent Company. Given the excellent results, the implementation of the programme was extended to all the Italian Group subsidiaries.



5.3 A team that cares about health, safety and well-being in the workplace

The Mapei Group pays a great deal of attention to the health and safety of all of its stakeholders. To this end, in 2020, Mapei drafted the QHSE (Quality, Health and Safety, Environment) policy underscoring the Group's commitment to spreading a health and safety-oriented culture among its subsidiaries in compliance with currently applicable regulations. The declared goal is the pursuit of continuous improvement of processes and products and the constant implementation of the Occupational Health and Safety Management System (ISO 45001). In 2022, another five companies obtained

the certification - Mapei Yapi (Turkey), Mapei Polska, Mapei Malaysia, Mapei Corp (USA) and Polyglass (Italy), resulting in 40 ISO 45001 certified plants (48% of the total).

In addition, the Group issued operational guidelines regarding health and safety at the Corporate level, adopted by all the subsidiaries around the world. These include risk assessment, the correct use of PPE, conduct in emergencies, the safe operation of machinery and the safety measures specific for dangerous areas.

MAPEI QHSE TOOLS

The Group's culture puts great emphasis on the delivery of the right tools with which to manage activities properly on an ongoing basis in order to guarantee the best possible results. To this end, Mapei has made significant investments. These include investments for the development and implementation of software programmes for the management of quality, health and safety issues, in particular a tool for reporting events concerning quality, injuries, near misses and improvement activities and for the management of quality, health and safety audits. The tool was implemented in 2020 in Italy and later extended to the United States (2021). Given the positive results, it was also implemented in Canada (2022).

In 2022, a guideline for the use of a specific Group software programme was drafted and circulated to all subsidiaries in order to launch a dedicated pilot project that could be gradually extended globally in 2023. The tool makes it possible to manage the maintenance of equipment and machinery, including options such as scheduling, documentation repository, and the recording and filing of ordinary and extraordinary audits.

Lastly, it should be noted that **a new software programme** was developed for **PPE** (Personal Protecting Equipment) **coding**. The project will be completed and gradually implemented in 2023 and will enable the creation of unique codes globally.



Globally, in 2022, Mapei recorded 110 injuries to employees in the workplace⁷, down versus 2021 (135 injuries) and 2020 (158 injuries). Moreover, none of the injuries reported in 2022 had high-consequences⁸. In 2022, the injury frequency rate was 6.3, also down compared to the two previous years (8.1 in 2021 and 10.1 in 2020). These figures demonstrate the quality of the Group's

health and safety policies and actions.

Injury frequency rate 10.1 8.1 6.3 2020 2021 2022 → Injury rate

Mapei takes care of the safety of its employees and non-employee workers. In 2022 (and also in 2020), 17 injuries were recorded for the latter, none with high-consequences. Again, this shows a decreasing trend compared to 2021, when 22 injuries were reported.

Both in 2022 and 2021, there were no cases of occupational diseases (6 in 2020). Last but not least, it should be noted that in the three-year reporting period, there were no deaths due to occupational diseases or injuries occurring in the workplace.

Despite the easing of the Covid-19 restrictions in almost all the countries in the world and the gradual loosening of corporate policies and measures targeting the containment of the virus in the workplace, Mapei maintained a high level of attention to guarantee employees' safety. To this end, it distributed all the PPE required in compliance with the applicable local provisions from time to time. In Italy, the **General Safety Protocol** defined by the Parent Company in 2020 was maintained but, in line with the improved situation, it was revised to adjust controls and obligations.



⁷ Injury at work means an accident in the workplace that results in one of the following: fatality, days absent from work, limitation of work duties or transfer to another duty, medical treatment beyond first aid or unconsciousness, serious injury. Accidents while travelling are excluded.

⁸ "High-consequences" means injuries that may cause permanent irreversible harm to the injured person or injuries that result in an absence from work of more than 180 days.

⁹ Injury frequency rate: (Number of injuries at work/worked hours) x 1,000,000.

A DAY DEDICATED TO HEALTH AND SAFETY IN THE WORKPLACE

On April 28th, **Mapei Far East (Singapore)** subsidiary dedicated a day to the safety of its personnel. During the event, the General Manager and the Regional Director of the Mapei Group's Asia region emphasised the company's constant and unfailing commitment to the health, safety and wellbeing of its employees and stakeholders. During the meeting, the employees were given a broad overview of the company's procedures regarding safety, how to report injuries and how to keep the work environment clean.

In terms of work organization, the outbreak of the Covid-19 pandemic led to the compulsory introduction of remote working. During the most acute phases with the greatest restrictions, this work modality proved to be necessary to maintain operations. In 2022, because of the easing of restrictions, Mapei - in line with other similar companies - decided to maintain and offer its employees this option. In this regard, the Group carried out a **survey** in November involving the employees of 59 countries. The findings revealed that in 40 countries in which the Group operates, remote working is allowed for an average of two or three days a week. The survey also showed that 78% of respondents were satisfied with the company's approach to agile working. Based on these results, Mapei decided to leave full autonomy to its subsidiaries, allowing them to decide whether to maintain agile working, how many days a week, or whether

to return 100% to the in-person working mode. The only obligation imposed by the Parent Company, in addition to compliance with local laws, is to formalise the choice through an *ad hoc* policy to protect all employees. In Italy, for example, in April 2022 a 12-month individual agreement was signed on a voluntary basis by employees to have access to a maximum of two days a week of remote working, if authorised by their HR Department and Italy Organization managers.

Finally, with a view to introducing new forms of corporate welfare and guaranteeing the emotional and psychophysical wellbeing of their employees, some subsidiaries periodically conduct internal climate analyses to measure the satisfaction level among their population, trying to identify potential needs or improvement areas and, consequently, relevant actions.



THE IMPORTANCE OF CORPORATE WELFARE

One of the main issues in 2022 was the cost of living resulting from the staggering increase in energy costs and inflation rate. This has become also one of the key issues for the Group's welfare policies. In implementing the guidelines defined by the Corporate HR function, many subsidiaries adopted *ad hoc* tools to support their employees. An example is Mapei Yapi (Turkey), which developed a portal through which its employees can access a **Flexible Benefit** platform.

The Flexible Benefits are also one of the measures discussed in relation to the Italian Trade Union Agreement renewed in June and effective for the 2022-2024 two-year period. The Agreement includes the guidelines of the new CCNL agreement consolidating several measures that Mapei has already offered. In particular, the Flexible Benefits enable employees with the qualification of middle managers, white-collar and blue-collar workers to have access to an annual predefined budget to spend on the platform. The Corporate Benefits have also been confirmed, with which the Group has reserved for all employees a portal of exclusive company conventions, such as discounts and personalised offers on a wide range of products and services. Furthermore, given the severe situation, in November 2022, the Group distributed a fuel voucher, valid for one year, to all of its employees in Italy, excluding executives and company car holders. Also confirmed in the agreement were the so-called "Ferie Solidali", introduced in 2018, which offer the possibility of voluntarily giving up holidays to the "Banca Ore Etica" fund. This is meant to offer concrete support to authorised Mapei employees who can take extra days (or hours) off to care for minor children in need.





APPENDIX KPI TABLES

2022

KPI Tables

Building an international Group together

Procurement practices | GRI 204-1: Proportion of spending on local suppliers¹

	2020	2021	2022
Percentage of procurement budget spent on local suppliers	79 %	74 %	73 %

Supplier environmental assessment | GRI 308-1:

New suppliers that were screened using environmental criteria

	2020	2021	2022
Percentage of new suppliers screened using environmental criteria	40%	35%	41%

Supplier social assessment | GRI 414-1:

New suppliers that were screened using social criteria

	2020	2021	2022
Percentage of new suppliers screened using social criteria	34%	32%	38%

Building a responsible community together

Economic performance | GRI 201-1: Direct economic value generated and distributed

	ИОМ	2020	2021	2022
Economic value generated	€	2,829,389,180	3,393,830,276	4,146,820,302
Economic value distributed	€	2,525,572,805	3,095,916,926	3,872,328,201
Operating costs ²	€	1,770,389,429	2,268,167,635	2,946,123,725
Employee salaries and benefits	€	654,942,200	723,779,244	809,852,045
Payments to capital providers	€	16,110,122	18,479,628	24,283,229
Payments to the Public Administration	€	73,180,021	74,403,076	79,545,465
Investments in the community	€	10,951,033	11,087,343	12,523,737
Economic value retained	€	303,816,375	297,913,350	274,492,102

¹Local suppliers means suppliers located in the same geographical area as the relevant subsidiaries (Italy, Western Europe, Eastern Europe, North America, Latin America, Middle East, Asia, Oceania).

² Note that this value includes a portion allocated by other Mapei Group companies to U.S. Sassuolo Calcio S.r.l. to conduct its activities.



Building a sustainable future together Energy | GRI 302-1: Energy consumption within the organisation

CONSUMPTION OF FUEL FROM NON-RENEWABLE SOURCES	UOM	2020	2021	2022
Natural gas	m^3	38,341,927	43,819,432	42,874,213
Diesel	1	3,750,685	4,413,037	4,476,081
Petrol	1	794,762	1,103,890	1,364,542
LPG	t	171	206	214
Heating oil	t	202	205	279
Compressed natural gas (CNG)	kg	326	523	915
Propane	I	10,538	11,106	5,990
INDIRECT ENERGY CONSUMPTION	ИОМ	2020	2021	2022
Consumption of electricity purchased	kWh	164,548,715	181,228,898	186,831,905
of which purchased with certificates of guarantee of origin (GO)	kWh	1,394,152	1,477,373	2,250,385
Thermal energy (steam) purchased	kWh	25,191,223	24,582,570	25,105,435
ENERGY PRODUCED	иом	2020	2021	2022
Electricity from renewable sources produced and consumed (photovoltaic)	kWh	1,957,788	1,964,689	1,977,216
Thermal energy produced from renewable sources (geothermal)	kWh	799,338	636,404	456,659
ENERGY CONSUMED	иом	2020	2021	2022
Natural gas	GJ	1,371,170	1,570,484	1,530,952
Diesel	GJ	134,909	158,896	161,306
Petrol	GJ	26,084	36,563	45,198
LPG	GJ	7,869	9,444	9,846
Heating oil	GJ	8,871	8,992	12,254
Compressed natural gas (CNG)	GJ	15	24	41
Propane	GJ	252	265	143
Electricity purchased	GJ	592,375	652,424	672,595
Electricity self-produced from renewable sources (photovoltaic)	GJ	7,053	7,129	7,130
Thermal energy (steam) purchased	GJ	90,688	88,497	90,380
Thermal energy produced from renewable sources (geothermal)	GJ	2,878	2,291	1,644
Total energy consumed	GJ	2,242,164	2,535,010	2,531,490

Water and Effluents | GRI 303-3: Water withdrawal

	ИОМ	2020	2021	2022
Total water withdrawal	m³	7,947,063	7,394,881	6,295,871
Total withdrawal from surface water (e.g. rivers, lakes,)	m³	170,955	167,992	134,968
Total withdrawal from groundwater	m³	7,269,121	6,606,616	5,545,492
Total withdrawal from third party water (e.g. public aqueduct)	m³	496,476	611,707	607,241
Total withdrawal from produced water	m³	10,551	8,566	8,170

Water and Effluents | GRI 303-4: Water discharge

	ИОМ	2020	2021	2022
Total water discharge	m³	7,252,667	6,948,158	5,667,372
Water discharge to surface water (rivers, lakes, etc.)	m³	6,932,486	6,576,110	5,284,222
Water discharge to groundwater	m³	2,228	2,365	2,551
Water discharge to third-party water (e.g. municipal sewer)	m³	317,953	369,683	380,599

Emissions | GRI 305-1: Direct (Scope 1) GHG emissions

SOURCE	UOM	2020	2021	2022
Natural gas	tCO _{2e}	77,553	88,574	86,606
Diesel	tCO _{2e}	10,077	11,897	11,450
Petrol	tCO _{2e}	1,840	2,583	3,193
LPG	tCO _{2e}	503	604	630
Heating oil	tCO _{2e}	651	649	883
Compressed natural gas (CNG)	tCO _{2e}	0.8	1.3	2.3
Propane	tCO _{2e}	16.3	17.1	9.2
Refrigerant gas leaks	tCO _{2e}	1,164	1,396	672
Total Scope 1 emissions	tCO _{2e}	91,805	105,722	103,446

Emissions | GRI 305-2: Energy indirect (Scope 2) GHG emissions

SOURCE	UOM	2020	2021	2022
Electricity purchased, Location-Based Method	tCO ₂	57,887	64,502	66,811
Electricity purchased, Market-Based Method	tCO _{2e}	69,459	78,592	82,661
Thermal energy (steam) purchased	tCO _{2e}	4,486	4,306	4,364
Total Scope 2 emissions, Location-Based Method	tCO _{2e}	62,374	68,808	71,176
Total Scope 2 emissions, Market-Based Method	tCO _{2e}	73,945	82,898	87,025

Waste | GRI 306-4,5: Waste diverted from disposal and directed to disposal

	ИОМ	2020	2021	2022
Waste diverted from disposal	t	16,893	23,981	26,526
Waste directed to disposal	t	35,396	39,394	45,263
Total waste produced	t	52,289	63,375	71,789

Building a winning team together

General disclosure | GRI 2-7: Employees

NUMBER OF EMPLOYEES BY EMPLOYMENT CONTRACT AND GENDER					
TYPE OF EMPLOYMENT CONTRACT	GENDER	2020	2021	2022	
	Female	2,116	2,198	2,356	
Permanent	Male	7,691	7,972	8,320	
	Total	9,807	10,170	10,676	
	Female	108	123	154	
Fixed-term	Male	472	524	569	
	Total	580	647	723	
	Female	1	0	13	
Non-guaranteed hours	Male	0	0	26	
	Total	1	0	39	
Total		10,388	10,817	11,438	



NUMBER OF EMPLOYEES BY EMPLOYMENT CONTRACT AND GEOGRAPHICAL AREA							
TYPE OF EMPLOYMENT CONTRACT	GEOGRAPHICAL AREA	2020	2021	2022			
	Italy	2,295	2,320	2,407			
	Western Europe	2,165	2,248	2,384			
	Eastern Europe	1,591	1,647	1,683			
	North America	2,157	2,239	2,380			
	Latin America	568	598	625			
Permanent	Middle East	145	152	169			
	Asia	581	637	695			
	Oceania	114	123	127			
	Africa	191	206	206			
	Total	9,807	10,170	10,676			
	Italy	199	224	275			
	Western Europe	76	67	66			
	Eastern Europe	114	145	155			
	North America	0	4	0			
	Latin America	33	33	30			
Fixed-term	Middle East	0	0	0			
	Asia	99	122	141			
	Oceania	1	1	1			
	Africa	58	51	55			
	Total	580	647	723			
	Italy	0	0	0			
	Western Europe	0	0	38			
	Eastern Europe	0	0	0			
	North America	1	0	1			
Non-guaranteed hours	Latin America	0	0	0			
	Middle East	0	0	0			
	Asia	0	0	0			
	Oceania	0	0	0			
	Africa	0	0	0			
	Total	1	0	39			
Total		10,388	10,817	11,438			

NUMBER OF EMPLOYEES BY EMPLOYMENT CONTRACT AND GENDER								
TYPE OF EMPLOYMENT	GENDER	2020	2021	2022				
	Women	2,053	2,147	2,356				
Full-time	Men	8,062	8,378	8,777				
	Total	10,115	10,525	11,133				
	Women	172	174	167				
Part-time	Men	101	118	138				
	Total	273	292	305				
Total		10,388	10,817	11,438				

General disclosure | GRI 2-8: Workers who are not employees

NUMBER OF OTHER WORKERS BY EMPLOYMENT CONTRACT								
TYPE OF EMPLOYMENT	2020	2021	2022					
Interns	35	55	69					
Temporary agency workers	364	429	962					
Cleaning services contractors	33	36	73					
Canteen services contractors	3	6	434					
Agents	17	16	44					
Other types of employment	72	78	4					
Total	524	620	1,586					

General disclosure | GRI 2-30: Collective bargaining agreements

	2020	2021	2022
Percentage of employees covered by collective bargaining agreements	39%	38%	39%



Employment | GRI 401-1: New employee hires and employee turnover

TOTAL NUMBER AND RATE OF NEW HIRES BY AGE GROUP AND GENDER								
CENDED	ACE	20	20	2021		2022		
GENDER	AGE	N.	%	N.	%	N.	%	
	< 30	76	6	105	6	208	9	
Female	Between 30 and 50	155	13	230	13	271	12	
	> 50	19	2	34	2	39	2	
	Total	250	20	369	20	518	23	
	< 30	318	26	482	26	592	26	
Mala	Between 30 and 50	545	45	811	44	956	43	
Male	> 50	108	9	168	9	174	8	
		971	80	1,461	80	1,722	77	
Total hires		1,221	100	1,830	100	2,240	100	

TOTAL NUMBER AND RATE OF NEW HIRES BY GEOGRAPHICAL AREA							
GEOGRAPHICAL AREA	2020		2021		2022		
	N.	%	N.	%	N.	%	
Italy	212	17	310	17	406	18	
Western Europe	215	18	291	16	389	17	
Eastern Europe	186	15	262	14	257	11	
North America	320	26	518	28	687	31	
Latin America	116	10	175	10	191	9	
Middle East	7	1	18	1	29	1	
Asia	114	9	195	11	229	10	
Oceania	24	2	34	2	27	1	
Africa	27	2	27	1	25	1	
Total hires	1,221	100	1,830	100	2,240	100	





TOTAL NUMBER AND RATE OF TERMINATIONS BY AGE GROUP AND GENDER							
GENDER	4.05	20	20	20	21	2022	
GENDER	AGE	N.	%	N.	%	N.	%
	< 30	38	3	65	5	86	5
Famala	Between 30 and 50	154	13	150	11	211	12
Female	> 50	45	4	65	5	49	3
	Total	237	20	280	20	346	20
	< 30	225	19	286	20	368	21
Mala	Between 30 and 50	497	42	565	40	742	43
Male	> 50	222	19	270	19	266	15
	Total	944	80	1,121	80	1,376	80
Total terminations		1,181	100	1,401	100	1,722	100

TOTAL NUMBER AND RATE OF TERMINATIONS BY GEOGRAPHICAL AREA							
GEOGRAPHICAL AREA	2020		2021		2022		
	N.	%	N.	%	N.	%	
Italy	203	17	260	19	268	16	
Western Europe	195	17	217	15	301	17	
Eastern Europe	165	14	175	12	210	12	
North America	349	30	433	31	549	32	
Latin America	134	11	145	10	167	10	
Middle East	6	1	11	1	12	1	
Asia	91	8	116	8	165	10	
Oceania	17	1	25	2	29	2	
Africa	21	2	19	1	21	1	
Total terminations	1,181	100	1,401	100	1,722	100	

Occupational health and safety | GRI 403-9: Work-related injuries

EMPLOYEES	ИОМ	2020	2021	2022
Hours worked	Hours/000	15,717	16,601	17,382
Total number of work-related injuries	n.	158	135	110
of which with high-consequence (absence from work for more than 6 months or that caused permanent irreversible damage to the injured person), excluding fatalities	n.	1	2	0
of which fatalities	n.	0	0	0
Commuting injuries (in cases where the transport was organised by the Group itself)	n.	9	10	1
Rate of recordable work-related injuries	-	10.1	8.1	6.3
Rate of work-related injuries with high- consequence	-	0.06	0.12	0
Rate of fatality	-	0	0	0

OTHER WORKERS WHO ARE NOT EMPLOYEES	ИОМ	2020	2021	2022
Hours worked	Hours/000	352	416	707
Total number of work-related injuries	n.	17	22	17
of which with high-consequence (absence from work for more than 6 months or that caused permanent irreversible damage to the injured person), excluding fatalities	n.	0	0	0
of which fatalities	n.	0	0	0
Commuting injuries (in cases where the transport was organised by the Group itself)	n.	0	0	0
Rate of recordable work-related injuries	-	48.3	52.9	24.0
Rate of work-related injuries with high- consequence	-	0	0	O
Rate of fatality	-	0	0	0

Training and education | GRI 404-1: Average hours of training per year per employee

HOURS OF TRAINING BY EMPLOYMENT CATEGORY	UОМ	2020	2021	2022
Average hours of training provided to executives	Hours	18.6	28.2	21.8
Average hours of training provided to managers	Hours	21.2	28.5	25.2
Average hours of training provided to white- collars	Hours	18.8	24.4	24.9
Average hours of training provided to blue- collars	Hours	13.5	14.9	16.1
Average hours of training provided to sports professionals	Hours	0.7	0.7	0.9
Average hours of training provided to employees	Hours	16.8	21.2	21.1

AVERAGE HOURS OF TRAINING BY GENDER	UOM	2020	2021	2022
Average hours of training provided to women	Hours	18.2	24.7	26.4
Average hours of training provided to men	Hours	16.5	20.2	19.6
Average hours of training provided to employees	Hours	16.8	21.2	21.1

Diversity and equal opportunity | GRI 405-1: Diversity of governance bodies³ and employees

	2020	2021	2022
PROFESSIONAL CATEGORY AND GENDER	%	%	%
Executives	3.6	3.7	3.5
Female	15.1	15.2	16.3
Male	84.9	84.8	83.7
Managers	12.1	12.2	12.3
Female	21.0	21.7	22.6
Male	79.0	78.3	77.4
White-collars	45.4	45.0	44.7
Female	35.5	35.9	36.6
Male	64.5	64.1	63.4
Blue-collars	37.6	37.9	37.8
Female	5.7	5.4	5.4
Male	94.3	94.6	94.6
Sports professionals	1.3	1.2	1.6
Female	5.1	5.3	20.2
Male	94.9	94.7	79.8

³ For the diversity of governance bodies (Board of Directors), please refer to Chapter 1.1.1 – A structured governance.



	2020	2021	2022
PROFESSIONAL CATEGORY AND GENDER	%	%	%
Executives	3.6	3.7	3.5
< 30	3.5	6.1	5.7
Between 30 and 50	48.2	45.2	41.2
> 50	48.2	48.7	53.1
Managers	12.1	12.2	12.3
< 30	1.5	1.3	1.3
Between 30 and 50	61.7	60.5	59.4
> 50	36.8	38.2	39.3
White-collars	45.4	45.0	44.7
< 30	11.3	10.7	11.0
Between 30 and 50	66.1	65.9	64.8
> 50	22.6	23.3	24.2
Blue-collars	37.6	37.9	37.8
< 30	15.7	16.0	17.5
Between 30 and 50	59.3	60.4	59.1
> 50	25.1	23.6	23.4
Sports professionals	1.3	1.2	1.6
< 30	39.4	36.8	50.5
Between 30 and 50	47.4	52.6	37.8
> 50	13.1	10.5	11.7



METHODOLOGICAL NOTE AND CONTENT INDEX

2022

Methodological note

This **Sustainability Report** is Mapei's seventh edition and relates to the 2022 financial year (from 1st January to 31st December). This document is prepared on an annual basis and was published on the Group's website in July 2023. Its reporting scope extends to the parent company Mapei S.p.A. and all subsidiaries, unless otherwise indicated1. For the complete list of companies included in the scope, please refer to paragraph 1.1 Our history: 85 years of success.

The document also contains, where available, performance data for the three-year period 2020-2022 to provide a comparison with previous years.

Mapei adopted the GRI Sustainability Reporting Standards 2021 (in its most recent version) to prepare the Sustainability Report, according to the *In accordance* option.

Mapei S.p.A. has its registered office in Milan at Via Cafiero 22; the site details for Companies included in the scope of this Sustainability Report are given in the introductory chapter.

This document has not been audited by an independent third-party company.

The Financial consolidated statements is audited by EY S.p.A., subject entrusted with the statutory audit of this document, as well as all local Reports are audited by local external auditors, in compliance with the relevant regulations.

At the date of publication of this Report, there are no known significant events that occurred in 2023 relevant for the purposes of the sustainability disclosure.



¹Note that the 2021 Sustainability Report had as its reporting scope the parent company Mapei S.p.A. and all Italian and European subsidiaries, with the exception of Polyglass Gb Ltd, Eurosyntec and Resipoly Chrysor Sas.

Material topics

In accordance with the GRI standards 2021, the contents of the Report derive from the updated materiality analysis in light of the new methodology, as described in the introductory chapter in paragraph 1.2.1 The materiality analysis.

The table below lists the material topics for Mapei and the corresponding GRI aspects (GRI Topics).

MATERIAL TOPICS FOR MAPEI	GRI ASPECTS
Focus on employees and their professional development	GRI 401: Employment GRI 404: Training and education
Consumption of raw materials	GRI 301: Materials
Creation and distribution of the economic value in the territory and the local communities, including sponsorships	GRI 201: Economic performance GRI 205: Anti-corruption GRI 413: Local communities
Energy efficiency and combating climate change	GRI 302: Energy GRI 305: Emissions
Emissions into the atmosphere	Non GRI: Emissions into the atmosphere
Responsible supply chain management	GRI 204: Procurement practices GRI 308: Supplier environmental assessment GRI 414: Supplier social assessment
Waste management	GRI 306: Waste
Water management	GRI 303: Water and effluents
Equal opportunities and gender diversity	GRI 405: Diversity and equal opportunity
Respect and protection of human rights	GRI 405: Diversity and equal opportunity GRI 414: Supplier social assessment
Occupational health and safety	GRI 403: Occupational health and safety
Innovative development of products and technologies to promote greater sustainability in the construction industry	GRI 416: Customer health and safety GRI 417: Marketing and labelling Non GRI: Building sustainability and certifications Non GRI: Innovation and Research and Development
Soil protection and biodiversity	GRI 304: Biodiversity



The principles for defining the contents and for ensuring the quality of the Report

The principles used to define the quality and the correct presentation of the information reported in this Report are the Reporting Principles defined by the Standard GRI 1: Foundation 2021 (accuracy, balance, clarity, comparability, completeness, sustainability context, timeliness and verifiability).

The reporting process and calculation methodologies

The contents of this Sustainability Report have been defined on the basis of the materiality analysis. Qualitative and quantitative data of a social, environmental, and economic-financial nature was collected annually through special data collection forms and interviews with the active involvement of the Parent Company's functions, having a Corporate or Regional role.

Below are the main calculation methods and assumptions for the performance indicators presented in this Report, in addition to what is already indicated in the text.

 Greenhouse gas emissions are reported according to the guidelines defined by the main internationally recognized standards. In particular, reference is made to the GHG Protocol Corporate Accounting and Reporting Standard developed by the World Resource Institute (WRI) and the World Business Council on Sustainable Development (WBCSD). The calculation used the following formula: activity data (cubic meters of methane, liters of diesel, liters of petrol, tons of LPG, tons of fuel oil, kilograms of compressed natural gas (CNG), liters of propane, kWh of steam purchased) multiplied by the respective emission factor. The refrigerant gas losses (kg) multiplied by the respective GWP (Global Warming Potential) were also considered.

- The emission factors and GWPs used to calculate GHG emissions are as follows:
 - Scope I emissions: both the aforementioned fuel emission factors and the specific GWPs of each refrigerant gas are taken from the Defra (*Department for Environment, Food and Rural Affairs*) database, which is updated annually.
 - Scope 2 emissions: to calculate emissions related to thermal energy purchased (steam), the emission factors taken from the Defra database were applied; for electricity purchased from the national electricity grid, emissions were calculated according to two methods:



- Location-based approach², using the emission factors taken from Terna's international comparisons on Enerdata data for each country where the Group operates. These emission factors, updated periodically, were used in their most recent version (2019) to calculate indirect emissions in the three-year period 2020-2022;
- Market-based approach³, using the factors reported in the "European Residual Mixes" document published by the Association of Issuing Bodies (AIB), annually updated. For countries for which a specific residual mix factor is not available, the location-based emission factor taken from Terna's international comparisons on Enerdata data was used conservatively.
- Scope 3 emissions: the sources of the emission factors used derived from the SPHERA database, the Ecoinvent 3.9 database and the Environmental Product Declarations (EPDs) issued by the European Federation of Concrete Admixtures Associations (EFCA).
- To calculate GHG emissions and energy consumption, the conversion factors used are obtained from the Defra database (Department for Environment, Food and Rural Affairs) database, which is updated annually.
- When processing quantitative data on water discharges, note that civil wastewater discharges and rainwater were not taken into account.
- Conservative estimation approaches were used for environmental data (including energy data), where not available, which led to selecting the hypotheses associated with the least positive environmental performance for the Group.

Note that the amount of waste reported on pages 82 and 106 and the data referring to water withdrawals and discharges reported on page 84, 85 and 105 do not include the following subsidiaries, none of which have production plants and therefore have limited relevance to the aggregated data: Eurosyntec Snc, Mapefin Deutschland Gmbh, Mapei Brasil Construction Materials Ltda, Mapei China Ltd, Mapei Costa Rica Sa, Mapei Croatia Doo, Mapei Doha Llc, Mapei Doo, Mapei East Africa Limited, Mapei Egypt for Constr. Chemicals Sae, Mapei Nederland Bv, Mapei Oy, Mapei Philippines Inc, Mapei Srbija Doo, Mapei Stadium Srl, Mapei Ukraina Llc, MBP (NZ) Ltd, Sopro Hungaria Kft, Sopro Nederland Bv, U.S. Sassuolo Calcio Srl.

Finally, note that the number of hours worked, the number of injuries reported (of employees and non-employees) and the number of professional illnesses (of employees) reported on pages 99 and 111 do not include the following subsidiaries: Eurosyntec Snc, Mapei Ab, Maper Brasil Construction Materials Ltda, Mapei Costa Rica Sa, Mapei Doo, Mapei East Africa Limited, Mapei Egypt for Construction Chemicals Sae, Mapei Mexico Sa de Cv (limited to the number of non-employee accidents), Mapei Nederland Bv, Mapei Oy, Mapei Philippines Inc, Mapei Ukraina Llc, MBP (NZ) Ltd, Sopro Hungaria Kft, Sopro Nederland By and U.S. Sassuolo Calcio.

For information and further insight on this document, please contact: Mapei S.p.A. mapei@mapei.it

- ²A *location-based method* reflects the average emissions intensity grids on which energy
- ³ A market-based method reflects emissions from electricity that companies have purposefully chosen (e.g. use of contractual instruments such as Renewable Energy Certificates (RECs) or Guarantees of Origin (GOs)).



GRI Content index

STATEMENT OF USE	Mapei Group has reported in accordance with the GRI Standards for the period 01/01/2022 – 31/12/20222
GRI 1 USED	GRI 1: Foundation 2021
APPLICABLE GRI SECTOR STANDARD(S)	N/A

	GRI	DISCLOSIDES	LOCATION	OMISSION			
STANDARDS REQUIREMENT(S) OMITTED REASON EXPLANATION	STANDARDS	DISCLOSURES			REASON	EXPLANATION	

GENERAL DISCLOSURES GRI 2: 2-1 Organizational details 12-13; 16-17; 115 General **Disclosures** 2022 Consolidated 2021 Financial 2-2 Entities included in the organization's Statement; 2022 sustainability reporting Sustainability Report (Pages 16-17). 2-3 Reporting period, frequency and 115; 118 contact point There are no versions prior to 2-4 Restatements of information this Sustainability Report with the same scope 2-5 External assurance 115 2-6 Activities, value chain and other 10-14; 24-29 business relationships 2-7 Employees 87; 91-92; 106-108 91-92; 108 2-8 Workers who are not employees 2-9 Governance structure and 18 composition 2-10 Nomination and selection of the 18 highest governance body The role of Chairman of the BoD does not 2-11 Chair of the highest governance body cumulate with management positions currently covered. 2-12 Role of the highest governance body in overseeing the management of 18; 32 impacts 2-13 Delegation of responsibility for 18; 32 managing impacts 2-14 Role of the highest governance body 32 in sustainability reporting 2-15 Conflicts of interest 18; 20

GRI	DISCLOSURES		OMISSION			
STANDARDS	DISCLOSURES	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
GRI 2: General	2-16 Communication of critical concerns	21				
Disclosures 2021	2-17 Collective knowledge of the highest governance body	21				
	2-18 Evalutation of the performance of the highest governance body		2-18	Confiden- tiality con- straints	The Group considered the information required to cover the indicators as confidential and therefore did not proceed with publication for this reporting year.	
	2-19 Remuneration policies		2-19, 2-20, Confidentiality constraints		The Group considered the information re- quired to cover	
	2-20 Process to determine remuneration				the indicators as confidential and therefore did not proceed	
	2-21 Annual total compensation ratio				with publica- tion for this reporting year.	
	2-22 Statement on sustainable development	2; 3				
	2-23 Policy commitments	19-22; 36				
	2-24 Embedding policy commitments	19-22; 36				
	2-25 Processes to remediate negative impacts	33-34				
	2-26 Mechanisms for seeking advice and raising concerns	22				
	2-27 Compliance with laws and regulations	In the three-year reference period (2020-2022), there were no known cases of non-compliance with laws and regulations and there were not paid significant fines in any of the companies withing the scope of this Sustainability Report.				
	2-28 Membership asssociations	22-23				
	2-29 Approach to stakeholder engagement	35-36				
	2-30 Collective bargaining agreements	108				



GRI				OMISSION	
STANDARDS	DISCLOSURES	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION
MATERIAL TO	PICS				
GRI 3:	3-1 Process to determine material topics	31-34; 115-116			
Material Topics 2021	3-2 List of material topics	31-34; 116			
ECONOMIC PER	FORMANCE				
GRI 3: Material Topics 2021	3-3 Management of material topics	31-34; 39-40; 116-117			
GRI 201: Economic performance 2016	201-1 Direct economic value generated and distributed	39-40; 103			
PROCUREMENT	PRACTICES				
GRI 3: Material Topics 2021	3-3 Management of material topics	26-27; 31-34; 116-117			
GRI 204: Procurement practices 2016	204-1 Portion of spending on local suppliers	26-27; 103			
ANTI-CORRUPTI	ON				
GRI 3: Material Topics 2021	3-3 Management of material topics	18; 31-34; 116-117			
GRI 205: Anti-corruption 2016	205-3 Confirmed incidents of corruption and actions taken	In the three-year reference period (2020-2022), there were no known cases of corruption in any of the companies within the scope of this Sustainability Report.			
MATERIALS					
GRI 3: Material Topics 2021	3-3 Management of material topics	28; 31-34; 116-117			
GRI 301: Materials 2016	301-1 Materials used by weight or volume	28			
ENERGY					
GRI 3: Material Topics 2021	3-3 Management of material topics	31-34; 78; 116-117			
GRI 302: Energy 2016	302-1 Energy consumption within the organization	78-79; 104			



METHODOLOGICAL NOTE AND CONTENT INDEX

GRI		LOCATION		OMISSIO	N
STANDARDS	DISCLOSURES	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION
WATER AND EFF	LUENTS				
GRI 3: Material Topics 2021	3-3 Management of material topics	31-34; 84-85; 116-117			
	303-1 Interaction with water as a shared resource	84-85			
GRI 303: Water and	303-2 Management of water discharge- related impacts	85			
Effluents 2018	303-3 Water withdrawal	84; 105			
	303-4 Water discharge	85;105			
BIODIVERSITY					
GRI 3: Material Topics 2021	3-3 Management of material topics	31-34; 83; 116-117			
GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	83			
EMISSIONS					
GRI 3: Material Topics 2021	3-3 Management of material topics	31-34; 80-81; 116-117			
GRI 305:	305-1 Direct (Scope 1) GHG emissions	80-81; 105			
Emissions 2016	305-2 Energy indirect (Scope 2) GHG emissions	80-81; 106			
WASTE					
GRI 3: Material Topics 2021	3-3 Management of material topics	31-34; 82; 116-117			
	306-1: Waste generation and significant waste-related impacts	31-34; 82			
	306-2: Management of significant wasterelated impacts	31-34; 82			
GRI 306: Waste 2020	306-3: Waste generated	82; 106			
	306-4: Waste diverted from disposal	82; 106			
	306-5: Waste directed to disposal	82; 106			



DISCLOSURES		OMISSION		
	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION
ONMENTAL ASSESSMENT				
3-3 Management of material topics	27; 31-34; 116-117			
308-1 New suppliers that were screened using environmental criteria	27; 103			
3-3 Management of material topics	31-34; 93; 116-117			
401-1 New employee hires and employee turnover	93-94; 109-110			
HEALTH AND SAFETY				
3-3 Management of material topics	31-34; 98-99; 116-117			
403-1 Occupational health and safety management system	25; 98-99			
403-2 Hazard identification, risk assessment and incident investigation	98-99			
403-3 Occupational health services	98-99			
403-4 Worker participation, consultation, and communication on occupational health and safety	36; 98-99			
403-5 Worker training on occupational health and safety	88; 95			
403-6 Promotion of worker health	98-99			
403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	34; 98-99			
403-9 Work-related injuries	99; 111			
DUCATION				
3-3 Management of material topics	31-34; 95; 116-117			
404-1 Average hours of training per year per employee	95; 112			
	3-3 Management of material topics 308-1 New suppliers that were screened using environmental criteria 3-3 Management of material topics 401-1 New employee hires and employee turnover HEALTH AND SAFETY 3-3 Management of material topics 403-1 Occupational health and safety management system 403-2 Hazard identification, risk assessment and incident investigation 403-3 Occupational health services 403-4 Worker participation, consultation, and communication on occupational health and safety 403-5 Worker training on occupational health and safety 403-6 Promotion of worker health 403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships 403-9 Work-related injuries DUCATION 3-3 Management of material topics	3-3 Management of material topics 27; 31-34; 116-117 308-1 New suppliers that were screened using environmental criteria 27; 103 3-3 Management of material topics 31-34; 93; 116-117 401-1 New employee hires and employee turnover 93-94; 109-110 HEALTH AND SAFETY 3-3 Management of material topics 31-34; 98-99; 116-117 403-1 Occupational health and safety management system 25; 98-99 403-2 Hazard identification, risk assessment and incident investigation 98-99 403-3 Occupational health services 98-99 403-4 Worker participation, consultation, and communication on occupational health and safety 403-5 Worker training on occupational health and safety 403-6 Promotion of worker health 98-99 403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships 403-9 Work-related injuries 99; 111 DUCATION 3-3 Management of material topics 31-34; 95; 116-117	3-3 Management of material topics 27; 31-34; 116-117 308-1 New suppliers that were screened using environmental criteria 27; 103 3-3 Management of material topics 31-34; 93; 116-117 401-1 New employee hires and employee turnover HEALTH AND SAFETY 3-3 Management of material topics 31-34; 98-99; 116-117 403-1 Occupational health and safety management system 403-2 Hazard identification, risk assessment and incident investigation 403-3 Occupational health services 403-4 Worker participation, consultation, and communication on occupational health and safety 403-5 Worker training on occupational health and safety 403-6 Promotion of worker health 403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships 403-9 Work-related injuries 99; 111 DUCATION 3-3 Management of material topics 31-34; 95; 116-117	3-3 Management of material topics 27; 31-34; 116-117 27; 103 27; 103 3-3 Management of material topics 31-34; 93; 116-117 401-1 New employee hires and employee turnover 401-1 New employee hires and employee turnover HEALTH AND SAFETY 3-3 Management of material topics 31-34; 98-99; 116-117 403-1 Occupational health and safety management system 403-2 Hazard identification, risk assessment and incident investigation 403-3 Occupational health services 403-4 Worker participation, consultation, and communication on occupational health and safety 403-5 Worker training on occupational health and safety 403-6 Promotion of worker health 403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships 403-9 Work-related injuries 99; 111 DUCATION 3-3 Management of material topics 31-34; 95; 116-117



METHODOLOGICAL NOTE AND CONTENT INDEX

GRI				OMISSIO	N
STANDARDS	DISCLOSURES	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION
DIVERSITY AND	EQUAL OPPORTUNITY				
GRI 3: Material Topics 2021	3-3 Management of material topics	31-34; 116-117			
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	91; 112-113			
LOCAL COMMUN	NITIES				
GRI 3: Material Topics 2021	3-3 Management of material topics	31-34; 39; 116-117			
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessment, and development programs	36; 39-40; 56-57			
SUPPLIER SOCIAL ASSESSMENT					
GRI 3: Material Topics 2021	3-3 Management of material topics	27; 31-34; 116-117			
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screen using social criteria	27; 103			
CUSTOMER HEA	LTH AND SAFETY				
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GRI 3: Material Topics 2021	3-3 Management of material topics	31-34; 65-67; 116-117			
GRI 417: Marketing and Labeling 2016	417-1 Requirements for product and service information and labeling	65-67			



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STANDARDS	DISCLOSURES	LOCATION	REQUIREMENT(S) OMITTED	REASON	EXPLANATION
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AIR POLLUTANT	EMISSIONS				
GRI 3: Material Topics 2021	3-3 Management of material topics	31-34; 85; 116-117			
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Development





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Prepared by

Mapei S.p.A., Communication and Image Department

The following company functions collaborated in creating this report:

- · Administration, Finance and Control;
- · Central Production;
- · Central Purchasing;
- Central Warehouse & Inventory;
- Corporate Environmental Sustainability;
- · Corporate Finance & Controlling;
- · Corporate Internal Audit;
- · Corporate Operations;
- · Corporate Product Safety;
- · Corporate Quality Management;
- Corporate R&D;
- Plant managers;
- · HR Department and Italy Organisation;
- · Corporate HR and Organisation;
- Corporate Operational Marketing;
- · Energy Manager;
- · General Manager;
- · HSE Corporate;
- · Strategic Planning.

Graphic Design

Jack Blutharsky

Photos

Mapei S.p.A. photographic archive

Printing

Euroteam - the green soul printing

Milan, July 2023



