

The power that shapes the future

2024 Sustainability Report





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About The Report

Since 1972, Kūmaş has been playing a sustainable and innovative role in the global market by delivering high-quality products manufactured at Türkiye's only vertically integrated refractory plant to more than 60 countries.



As Kūmaş, we were established in Kūtahya in 1972 and have been operating under OYAK since February 2021. We process magnesite and dolomite ore extracted from our rich mineral deposits and supply it to various industries, primarily the iron and steel, cement, and glass sectors, while also producing refractory solutions. Our products manufactured at Türkiye's only vertically integrated refractory plant primarily include sintered magnesia, sintered dolomite, calcined magnesia, küres, fused magnesia, refractory mortar and brick groups. We export our high-quality products, developed through R&D efforts that assess our environmental impact, to over 60 countries, and play an innovative role in the global market.

As Kūmaş, in parallel with OYAK's sustainability vision, we conduct our sustainability efforts under the leadership of our Senior Management and set goals aligned with our business strategy. Following the publication of our first sustainability report last year, covering the period 2021–2023, we are sharing our sustainability performance with our stakeholders this year as well, in the framework of the principle of transparency.

We have prepared our 2024 Sustainability Report covering the period "January 1, 2024 – December 31, 2024" in accordance with the GRI Sustainability Reporting Standards, and included our sustainability performance, sustainability strategy, and the sustainability targets we have set for the short, medium, and long term. The information we share within the framework of GRI Standards can be tracked in the "GRI Content Index" table of the report. Unless otherwise stated, the data and information shared in our report only covers our company Kūmaş and does not cover our subsidiary Yenilikçi Yapı Malzemeleri Yatırım Üretim Sanayi ve Ticaret A.Ş.

This report also includes the TSRS report prepared in accordance with the Turkish Sustainability Reporting Standards (TSRS), which were published in December 2023 and require companies to disclose how sustainability and climate-related risks affect their strategies, financing, and cash flows. TSRS is a reporting standard based on sustainability and climate-related reporting standards that are consistent with International Financial Reporting Standards (IFRS); it also ensures compliance with sector-based standards developed by the Sustainability Accounting Standards Board (SASB).



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Message from the Chairman

Kūmaş is a responsible refractory manufacturer that adds value from Türkiye to the world with its sustainability-focused integrated production capacity, innovative technologies, and vision that leads the way in low-carbon transformation.



Dear Stakeholders,

Kūmaş's journey, which began in 1972, has evolved into a globally competitive and environmentally responsible business model strengthened by OYAK's sustainability vision. As Türkiye's only vertically integrated refractory producer, our rich raw material resources create critical value not only for our country but also for the global iron and steel, cement, glass, lime, and heavy industry sectors that we serve. For this reason, sustainability is not merely a business objective for us, but a corporate responsibility that guides every aspect of our operations.

The year 2024 has been marked by rapid transformation in both global climate policies and regional regulations. The European Union's (EU) Carbon Border Adjustment Mechanism (CBAM) implementation, preparations for the Emissions Trading System (ETS) in Türkiye, rising sustainability expectations from financial institutions, and increasing demand from our customers for low-carbon products have created new competitive thresholds in our sector. This transformation has provided significant opportunities to further advance Kūmaş's strong mining infrastructure, broad product portfolio, R&D capacity, and innovative production approach.

In line with this context, we placed our sustainability priorities at the center of our strategy in 2024 and continued our comprehensive transformation journey. We systematically monitored our performance, set targets, and launched improvement programs across all key areas, including greenhouse gas management, energy efficiency, resource usage, water and waste management, biodiversity, and occupational health and safety. This report, which includes financial impacts as well as climate-related risk and opportunity analyses, reflects our strong commitment to transparency and accountability.

In 2024, Kūmaş actively applied all integrated management system certifications, including ISO 9001, ISO 14001, ISO 45001, ISO 50001, and ISO 27001, and renewed its corporate carbon and water footprint verifications. In addition, ISO 14067 aligned product carbon footprint studies across 18 product groups have made a critical contribution to strengthening our low-carbon product portfolio. Our Zero Waste to Landfill certification, the first of its kind globally in our sector, has further reinforced our leadership in sustainability.

In the field of energy, our ongoing investments in two solar power plants with a total capacity of 100 MWe in Sivas and Yozgat are expected to enable us to meet all our electricity consumption from renewable sources in the medium term. This investment is both a core component of our climate strategy and a key step toward optimizing production costs.

Alongside environmental performance, the health, safety, and development of our employees remain our top priorities in the area of social sustainability. In 2024, we strengthened our Occupational Health and Safety (OHS) practices, increased training hours, enhanced employee satisfaction and talent management programs, and took important steps to support an inclusive workplace culture.

Kūmaş's sustainability journey gains further strength through our close collaboration with stakeholders. Through our most recent materiality assessment conducted with participation from internal and external stakeholders, 31 topics were prioritized, helping us sharpen our strategic focus areas. Accordingly, we continue to invest in a sustainability approach that reduces our environmental and social impacts, ensures effective governance across the value chain, and drives innovation.

Today, Kūmaş remains committed to its vision of being not only Türkiye's but also a globally responsible and innovative refractory producer. Our strong corporate structure, experienced workforce, R&D center, global customer network, and the strategic support of OYAK constitute the key pillars of this transformation.

I would like to extend my gratitude to all our employees, business partners, customers, and valued stakeholders for their contributions to our sustainability performance. I hope that our 2024 Sustainability Report will serve as a valuable resource for our sector.

Sincerely,

Anil SÖNMEZ
Chairman of the Board of Directors



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Message from the General Manager

Kūmaş has taken significant steps in 2024 to transition to a resilient and innovative business model aligned with a low-carbon economy by enhancing its sustainability performance through an operational excellence approach.



Dear Stakeholders,

In 2024, as Kūmaş, we continued to manage our sustainability performance in full integration with our understanding of operational excellence. Through the modernization of our production technologies, the strength we derive from our mining reserves and operations, our sustainability-driven supply chain, and the technical services we provide to our customers, we maintained a holistic management approach. In this context, we, not only aligned with international sustainability standards, but also restructured our management model to meet the requirements of a low-carbon economy, implementing significant investments and improvement programs that will further advance our leadership in the sector.

This year, both the GRI Standards and our voluntarily prepared TSRS-compliant 2024 Sustainability Report demonstrate that we address all our processes, from governance to environmental performance, from the supply chain to human resources, with a technical and holistic perspective. Within the scope of TSRS, we significantly strengthened our administration capacity by closely monitoring value chain impacts, developing climate-related risk and opportunity analyses, assessing transition risks, and integrating our greenhouse gas reduction strategies into financial planning processes.

The sustainability strategy we reassessed in 2024 enabled us to set concrete objectives that minimize the environmental and social impacts of our operations while strengthening the resilience and innovative capacity of our business model. In this regard, setting a medium-term SBTi-aligned reduction target for our Scope 1 and 2 emissions and beginning to establish the technical roadmap for achieving net-zero Scope 1 and 2 emissions by 2050 has been a primary agenda item. Energy optimization, low-carbon product development, the use of recycled raw materials, and our renewable energy investments formed the key pillars of this roadmap.

In the area of social sustainability, the health, safety, and development of our employees remained our highest priority. In 2024, we increased OHS trainings, strengthened our risk-based occupational safety practices, and transformed the safety culture across all our facilities into a corporate structure. Through our talent management programs, employee well-being initiatives, and inclusive workplace approach, we took decisive steps to build a strong human capital foundation for sustainable growth.

Through our talent management programs, employee well-being initiatives, and inclusive approach, we have taken action to establish a solid foundation for the human resources structure required for sustainable growth.

Within our value chain management, we established systems that regularly evaluate the sustainability performance of our suppliers and monitor the environmental and social compliance of our critical suppliers. Our local supplier ratio, a high level of 94%, reflects our strong contribution to regional development.

In customer relations management, we increased our customer satisfaction rate to 91% in 2024 through engineering support, on-site services, and R&D collaborations that generate added value for both our global and local customers.

All these efforts mark significant progress toward our goal of positioning Kūmaş not only as a leader in product quality but also as one of the benchmark companies in sustainability performance within the sector. The year 2024 has been one in which we strengthened our technical infrastructure, advanced our operations through a data-driven management model, and consolidated our sustainability performance into an integrated structure.

Decarbonization, renewable energy investments, environmental performance improvements, supply chain compliance, product carbon footprint calculations, and technical value-added solutions for our customers will remain priority components of our strategy in the coming period.

We extend our gratitude to all our employees, customers, business partners, and stakeholders who have contributed to this journey, and we hope that our 2024 Sustainability Report serves as a valuable resource for all our stakeholders.

Sincerely,

Atila Adem AYDIN
General Manager



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As the market leader in Türkiye with its rich magnesite and dolomite resources, Kūmaş creates value on a global scale by delivering high-quality refractory solutions to over 60 countries.



As Kūmaş, we have been operating as one of the leading companies in Türkiye's refractory sector since our establishment as a publicly traded corporation in Kūtahya in 1972. In 2021, we joined the OYAK Group through Erdemir, and today we continue our mining and production activities under this structure. Kūmaş and our subsidiary Yenilikçi Yapı Malzemeleri Yatırım Üretim Sanayi ve Ticaret A.Ş. are owned (100%) by Ereğli Demir ve Çelik Fabrikaları Ticaret A.Ş.

With our rich magnesite and dolomite resources, we are the market leader in the refractory sector. We own rich mining areas in the provinces of Kūtahya, Eskişehir, Bursa, Erzincan, Çankırı, and Konya. We process the ore extracted from our mines at our facility to produce high-quality sintered magnesite, sintered dolomite, calcined magnesite and fused magnesite, as well as refractory mortar and bricks.

We export our high-quality products to more than 60 countries, primarily in the iron and steel, cement, and glass sectors, and continue to maintain our strong position in the industry. At the same time, thanks to vertical integration among OYAK Companies, we support the supply processes of the companies, aiming to achieve cost control and efficiency control.

By adapting to global and local expectations, we aim to achieve a leading position in the field of refractory solutions in Türkiye and worldwide. In line with this, we aim to add value to Türkiye's sustainability goals, the sector, and our stakeholders through our efforts.



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In 2024, we continued our steady growth, further advancing our production capacity, R&D focus, and human resources. With our innovative products, increased investment in education, and commitment to creating sustainable value, we strengthened our strong position both in the domestic market and on the global stage.

181
Million USD
Turnover

56.5
thousand USD
Export Volume

1.2
Million USD
R&D Investment

700
people
Employment

32,707
hours
Total Training Hours

1
product
Patented

ISO Top 500

- **Ranked 358th** in the Sales from Production Category,
- **Ranked 288th** in the Export Category





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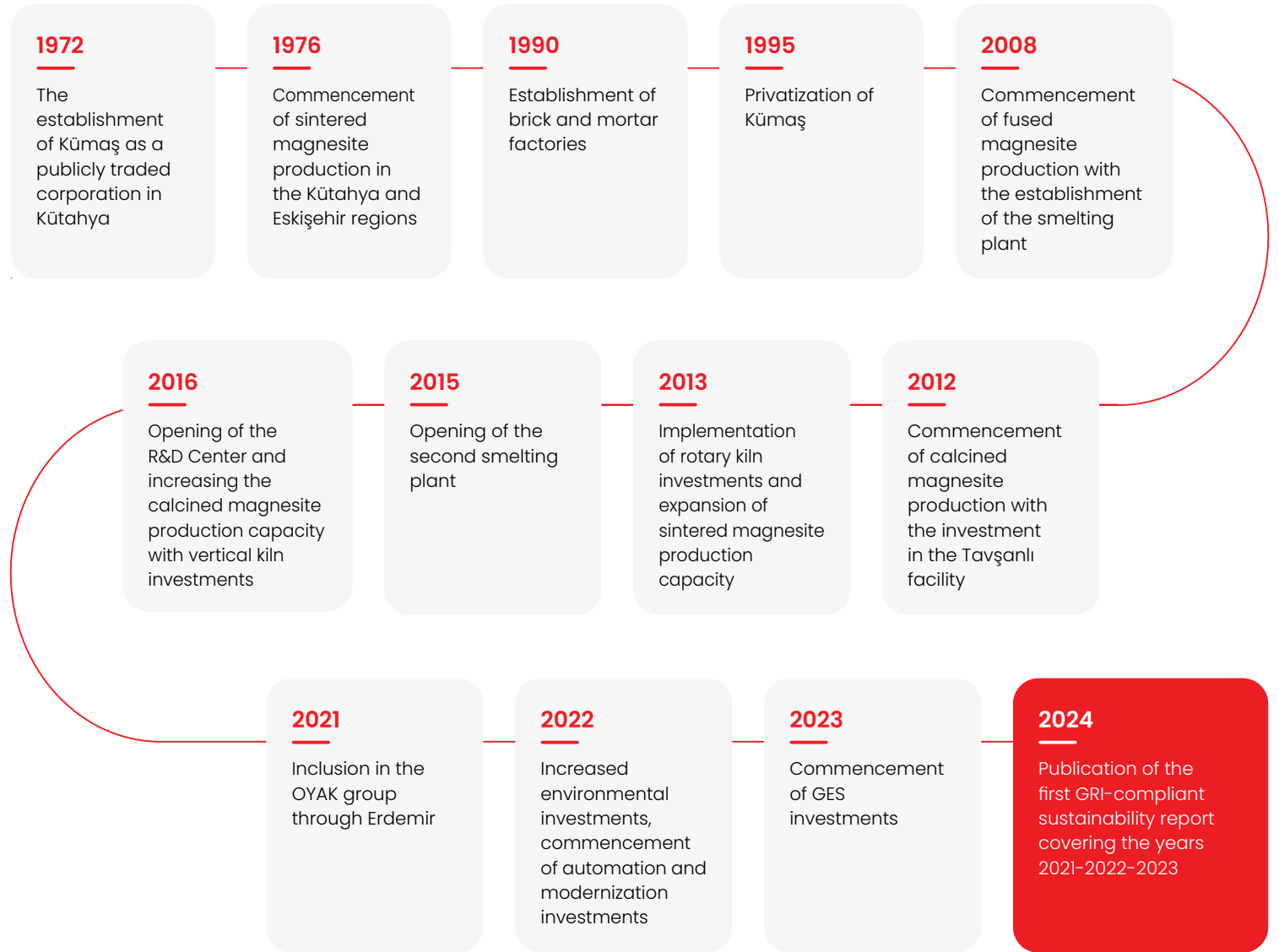
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Company History

Founded in 1972, Kūmaş is a well-established industrial powerhouse that has been continuously evolving for over half a century. With its extensive experience, it is a leader in the magnesite-based refractory sector, investing in modern technologies and placing sustainable production at the heart of its business model.





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Vision, Mission and Values

Vision

As a leading provider of refractory solutions in Türkiye and one of the foremost providers worldwide, we aim to be the preferred brand in the industry through our sustainable and innovative production methods.

Mission

By producing high-quality and sustainable magnesite and refractory products, we aim to ensure customer satisfaction and operational excellence; we strive to create added value for our employees, customers, suppliers, society, and all other stakeholders, thereby supporting the development of the national economy.

Corporate Values



We are competitive

- We offer quality-focused products and services.
- We ensure our position as the preferred business partner in the market.
- We consider competition a source of motivation and continuously improve ourselves.



We are pioneers

- We learn from our experience and continue to grow with our future vision, demonstrating a pioneering presence in the sector.
- With our strong R&D foundation, we shape the needs of the future today.
- We conduct our operations in a way that strengthens our leading and pioneering position in sustainability.



We are innovative

- We encourage the implementation of new ideas.
- We maintain our competitive advantage in the market through our innovative investments.
- We shape both today and tomorrow, not only through our products but also through how we do business.



We are agile

- We adapt quickly to changing conditions.
- We combine our integrated strength with agility, always striving for better.
- We operate with flexible and agile organizational structures.



We are trustworthy

- We place honesty, fairness, and mutual trust at the core of our company.
- We believe every employee is valuable, and provide safe working conditions.
- We adhere strictly to ethical principles and are sensitive to human rights and environmental values.



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Areas of Activity

As Kūmaş, with our rich magnesite and dolomite reserves, integrated production capacity, and advanced technology R&D efforts, we provide high-quality basic refractory solutions to over 60 countries; while adding value to industries with our low-carbon products, we lead the way in ensuring the sustainable use of natural resources for the future.



As Kūmaş, we rank among the world's leading producers of raw materials and basic refractories thanks to our rich magnesite and dolomite reserves and our integrated production structure. We process ores reflecting the richness of our country's diverse geographical regions in our extensive mines and high-capacity production facilities, supplying high-quality calcined and sintered magnesite to many sectors, including iron and steel, cement, glass, lime, paper, non-ferrous metals, hydrometallurgy, agriculture, livestock, fertilizer, and leather processing.

We are among the key suppliers to the iron and steel, cement, glass, and non-ferrous metal production industries with our magnesite-based basic shaped and unshaped refractory product groups. By exporting our products, such as sintered magnesite, calcined magnesite, fused magnesite, dolomite, refractory mortar, and bricks, to more than 60 countries, we enable the use of ores obtained from different regions of Türkiye all over the world.

We continue to bring innovative solutions to the industry through our R&D efforts, developed using the latest technologies. We strive to meet our customers' needs by enhancing the quality and variety of our products; we play an active role in ensuring today's resources are carried into the future by developing low-carbon products.



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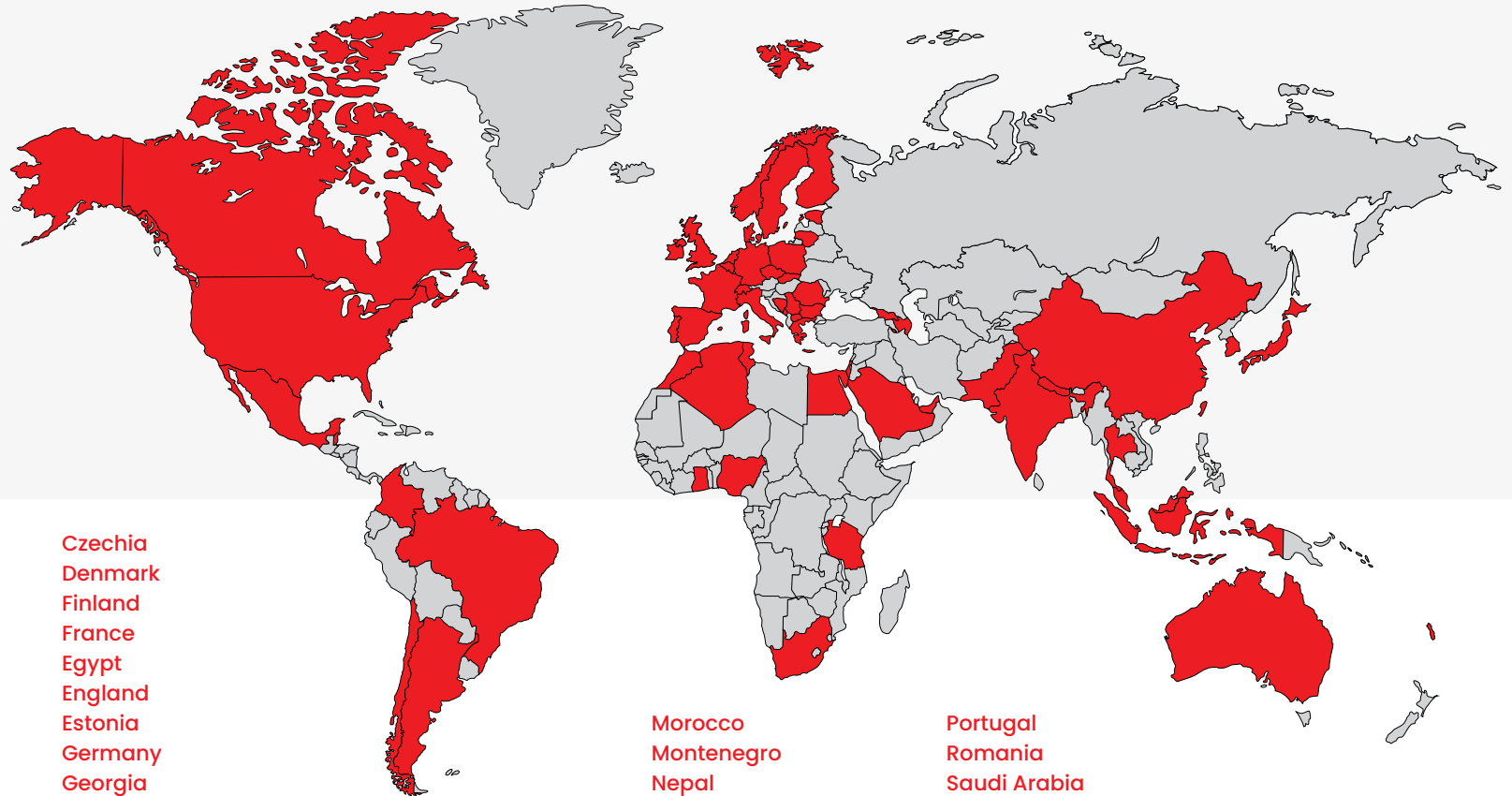
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Export Map



Algeria
Argentina
Australia
Azerbaijan
BAE
Bahrain
Belgium
Belize
Brazil
Bosnia and Herzegovina
Bulgaria
Canada
China
Chile
Colombia

Czechia
Denmark
Finland
France
Egypt
England
Estonia
Germany
Georgia
Ghana
Greece
Ireland
Indonesia
India
Israel

Italy
Japan
Lithuania
Macedonia
Malaysia
Mexico

Morocco
Montenegro
Nepal
Netherlands
New Caledonia
Nigeria
Norway
Pakistan
Poland

Portugal
Romania
Saudi Arabia
Serbia
Slovakia
South Africa
South Korea
Spain
Sweden

Switzerland
Taiwan
Tanzania
Thailand
Tunisia
USA



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Product Groups

With our strong reserves and high production capacity, we transform magnesite and dolomite ores into 18 product groups; we serve the Turkish and global markets with our extensive portfolio ranging from calcined magnesite to sintered mortar and refractory bricks.



With our high-quality raw material reserves and strong production capacity, we offer a wide range of products. By processing the magnesite and dolomite ores obtained from our own mining sites, we produce 18 different product groups, including calcined magnesite, sintered magnesite, dolomite, refractory mortar, and bricks. We produce calcined magnesite in our vertical kilns, sintered magnesite in our rotary kilns, and fused magnesite in our electric arc furnace. We complete our final product portfolio with high-performance refractory mortar and brick solutions. At Kūmaş, our extensive product range serves the aforementioned industries both in Türkiye and abroad.

Our main products;

Enriched Magnesite

Enriched Dolomite

Sintered Magnesite

Sintered Dolomite

Calcined Magnesite

Briquette

Fused Magnesite

Küres

Neutral Mortar

Granular Sintered Magnesite

Additive Mortar + Dolomite Mortar

Additive-Free Mortar

Fired Magnesite Brick

Fired Spinel Brick

Fired Chromite Brick

Mag-Carbon Brick

Al-Mag-Carbon Brick

Dolomite Brick



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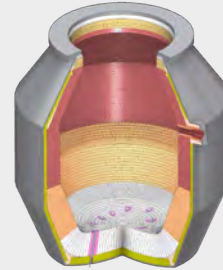
Iron & Steel Sector

As Kūmaş, the iron and steel sector is at the forefront of the industries we primarily offer our services to. With our shaped and unshaped magnesite-based products, we provide high-performance refractory solutions for the core equipment of the steel industry. Our products and services reinforce the structure of equipment such as Basic Oxygen Furnaces (BOF), Electric Arc Furnaces (EAF), liquid steel ladles, tundishes, and induction furnaces, ensuring their high-quality performance.

The Carbon Border Adjustment Mechanism (CBAM), which came into effect in 2023, has imposed reporting and monitoring obligations on energy-intensive sectors such as iron and steel, accelerating the transition to low-carbon and less energy-intensive products and technologies. Efforts related to Türkiye's Emissions Trading System (ETS) have further driven transformation in the iron and steel and refractory sectors. These developments increase the demand for low-emission refractory products from the iron and steel industry we supply, creating significant opportunities for our company.

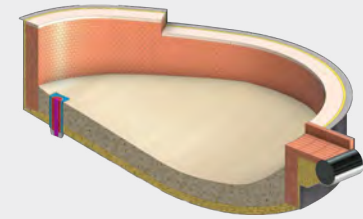
Within this framework, as Kūmaş, we take into account the needs and potential opportunities of both our customers and our company. With our technical expertise and flexible production capacity, we offer products across different quality ranges and prioritize the development of low-carbon products through our R&D efforts. We measure the carbon footprint of our products annually in accordance with the ISO 14067 standard.

In addition to our low-carbon products, our portfolio includes shaped refractories based on Magnesite-Carbon, Alumina-Magnesite-Carbon, Magnesite-Alumina-Carbon, and Fired Magnesite, as well as unshaped magnesite-based refractory solutions in the form of gunning, castable, ramming, and filler types.



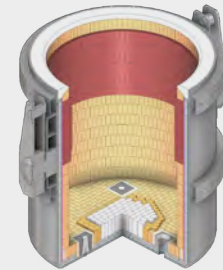
Basic Oxygen Furnace (BOF)

- BOF Working Lining
- BOF Safety Lining
- BOF Spraying Materials
- BOF Bottom Stirring



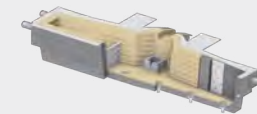
Electric Arc Furnace (EAF)

- EAF Working Linings
- EAF Safety Linings
- EAF Bottom Mortars
- EAF Gunning Repair Mortars

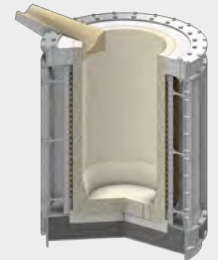


EAF - EBT Bricks

- Liquid Steel Ladle
- Working Lining
- Gunning Materials
- Ramming and Filler Materials



Tundish Refractories



Induction Furnaces

- Neutral Mortar



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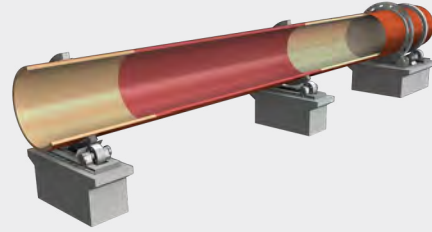
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Other Industries

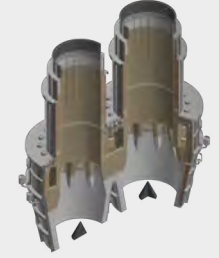
Our products and services also add value to the cement, lime, non-ferrous metals, and glass industries. Our shaped and unshaped magnesite-based refractory products are designed to meet the cost, variety, process compatibility, and quality expectations of furnaces in these sectors. Through our design work and post-mortem analyses, as well as our engineering processes and technical training services, we provide customized solutions for our customers.

In the cement industry in particular, we provide effective solutions with shaped refractory products selected according to the rotary kiln zones, fuel type, and process conditions, including high- and low-Spinel series, energy-efficient, low-porosity, hybrid, and chromium and chromium-free bricks. In the lime, non-ferrous metals, and glass industries, leveraging our many years of experience, we offer shaped refractories based on Magnesite-Carbon, Pitch-Impregnated, Magnesite, Low-Spinel, Magnesite-Chrome, Fused Magnesite, and Zirconia-Magnesite, as well as unshaped magnesite-based products.

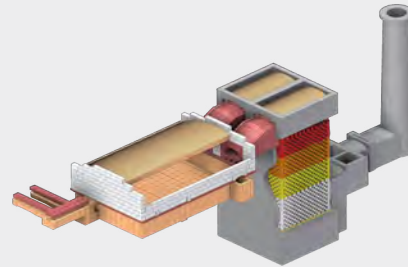


Cement

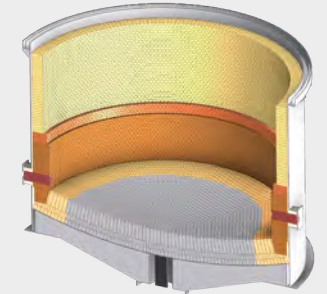
- Chromium Series
- Chromium Free Series
- Hybrid Spinel Series
- Low-Porosity Series
- Energy-Efficient Series
- Low-Spinel Series
- High-Spinel Series



Lime



Glass



Non-Ferrous



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Raw Materials and Semi-Finished Products

With our flexible production capacity, as Kūmaş we are able to develop solutions tailored to the specific needs of each customer. By processing the high-quality ore obtained from our magnesite mines, which have a cryptocrystalline structure, at our integrated facilities, we produce dead burnt magnesite (DBM), Caustic Calcined Magnesite (CCM), and Fused Magnesite (FM) products in various qualities and fractions for global industries such as Refractory, Agriculture and Livestock, Hydrometallurgy, Welding, Chemical, Construction, and Resistance sectors. In this way, we provide high-quality and reliable solutions that meet the sector-specific needs of our customers.

Our DBM, CCM, and FM products stand out for their high density and superior durability. Due to their low porosity and minimal impurities, they provide long-lasting and reliable performance across various industries:



Refractory Industry

Our DBM and FM products are preferred in all industries using basic bricks, especially cement, thanks to their ideal CaO/SiO₂ ratio.



Agriculture and Livestock

Our magnesite ore, sourced from natural reserves and calcined, is used in the production of fertilizers and feed additives.



Heating Resistance Industry

Our DBM and FM products with low Fe₂O₃ content are applied as filling materials providing electrical insulation between heating wires and stainless-steel pipes.



Construction Industry

Through the use of magnesium oxide (MgO) and MgO board production, we offer safe and sustainable solutions for insulation, coating, and fire-resistant applications.



Other Industries

Our DBM, CCM, and FM products are widely used in various sectors, including chemicals and ceramics.



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Awards and Achievements

We are leading the industry with our awards, R&D and patent strength, environmentally focused initiatives, and our position in the ISO 500. We are adding value to the future with our innovative investments.

2004

→ TSE Quality Award

2010

→ Capital500 (Türkiye's 500 Largest Private Companies Survey) - The Company with the Highest Increase in Profit

2010 – 2012

→ Plaque of Appreciation for "Paying Premiums on Time" by the Provincial Directorate of Social Security

2015

→ Included in the TURQUALITY Support Program
→ InovaLIG – 2nd place in the Innovation Organization and Culture category.

2016

→ A first in the sector - KÜMAŞ R&D Center Opening

2021

→ Provincial Directorate of Environment, Urbanization and Climate Change
– Plaque of Appreciation for Environmental Activities.
→ Kütahya Provincial Directorate of Environment, Urbanization and Climate Change and Kütahya Regional Directorate of Forestry – Certificate of Appreciation for Care Shown to the Environment and Forest Areas.
→ Patent Registration - "Method of Production of High Purity MgO and Mg(OH)₂ Products and Derivatives from Magnesium-Containing Products"

2022

→ Turkishtime Türkiye's 500 Largest R&D Centers Survey - 262nd place.
→ ISO 500 Türkiye's 500 Largest Industrial Enterprises - 257th place.
→ İMMİB 2022 Export Awards - 3rd place in the "Industrial Minerals" category.

2023

→ ISO 500 Türkiye's 500 Largest Industrial Enterprises - 427th place
→ İMMİB 2023 Export Awards - 3rd place in the "Industrial Minerals" category.
→ Registration Application - "Carbon Modified Melted Magnesite Refractory Raw Material" and "Magnesite Based Chemically Bonded Basic Refractory Brick and Production Method" inventions.
→ Five Solar Power Plant (SPP) projects with a total capacity of 100 MWe in the provinces of Sivas and Yozgat.



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- Publication of the first Sustainability Report
- Participation in the Responsible® Program under the Green Deal Compliance Project supported by the Ministry of Trade of the Republic of Türkiye.
- ISO 500 – Ranked 358th in the “Sales from Production” category and 288th in the “Export” category on Türkiye’s Top 500 Industrial Enterprises list.
- Turkishtime – Ranked 327th in the Türkiye’s Top 500 R&D Centers research.
- Our patent numbered 2021/022226 titled “Production Method of High-Purity MgO and Mg(OH)₂ Products and Derivatives from Magnesium-Containing Products” was registered on 21.08.2024.
- Patent application numbered 2024/020774 titled “MgO Raw Material Compounds with Enhanced Infiltration Resistance and Improved Thermodynamic Properties” was filed in 2024.
- As part of our participation in the EFRS Symposium, we presented our “more value with fewer resources” approach and our sustainable, eco-friendly production practices in line with the expectations of the iron and steel industry toward refractory suppliers. We aim to contribute to the industry’s decarbonization journey with our high-performance, energy-efficient refractory solutions, supported by verified carbon footprint and transparent life cycle assessment (LCA) data.



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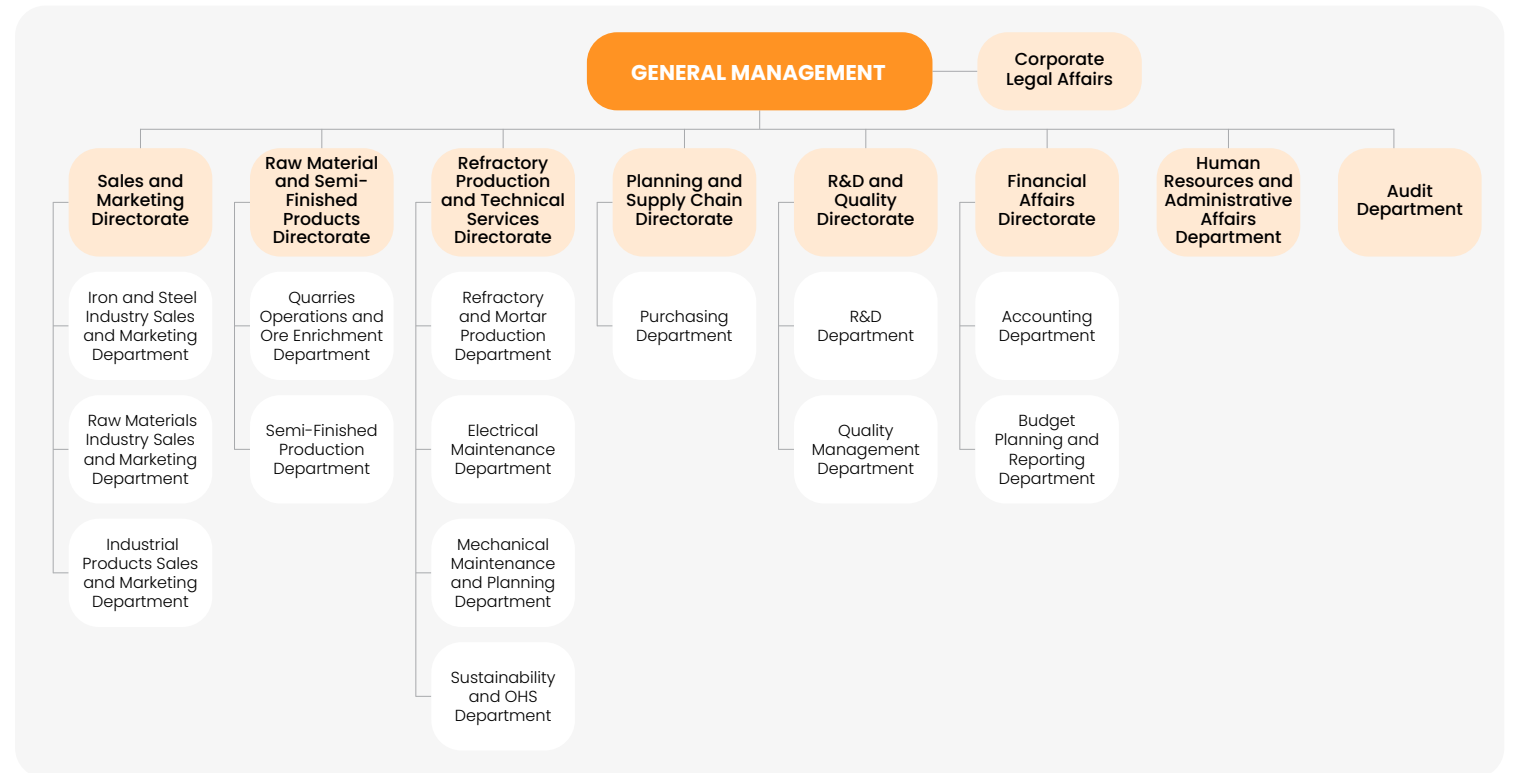
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Organizational Structure

As Kūmaş, we build our corporate governance approach on the principles of transparency, accountability, fairness, and responsibility. In line with this commitment, we build our organizational model to support effective decision-making mechanisms that align with our strategic objectives. Under the leadership of our Board of Directors, we conduct our operations in a manner that holistically enhances our environmental, social, and governance performance. Our organizational structure, shaped under the General Management, consists of eight core functions: Sales and Marketing Directorate, Raw Material and Semi-Finished Products Directorate, Refractory Production and Technical Services Directorate, Planning and Supply Chain Directorate, R&D and Quality Directorate, Financial Affairs Directorate, Human Resources and Administrative Affairs Department and Audit Department.

Production and Technical Services Directorate, Planning and Supply Chain Directorate, R&D and Quality Directorate, Financial Affairs Directorate, Human Resources and Administrative Affairs Department and Audit Department.

Through this robust organizational structure, we ensure effective coordination across our processes and manage our decision-making and implementation mechanisms efficiently. This structure enables us to monitor our sustainability performance at the senior management level, identify areas for improvement, and shape our strategic objectives accordingly.





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Board of Directors

Under the leadership of our Board of Directors, we conduct our decision-making processes in alignment with our sustainability priorities. Through the quarterly meetings of our Sustainability Committee, which operates under the Board's oversight, we monitor progress on the implementation of our sustainability strategy.

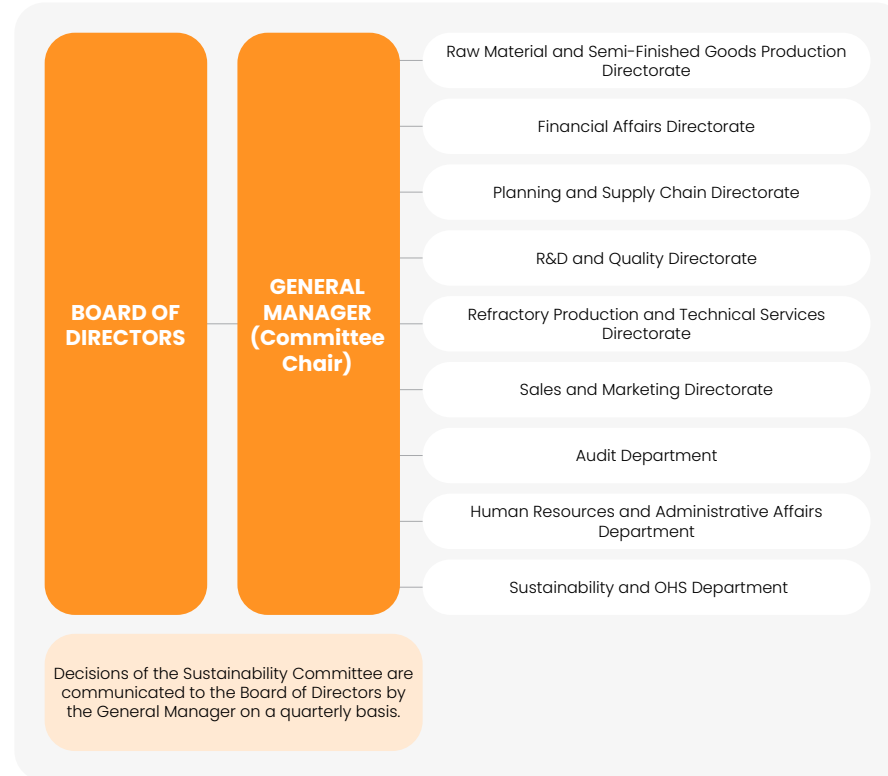
Sustainability Committee

The monitoring and coordination of our company's sustainability activities are carried out under our Sustainability and OHS Department Led by our General Manager, our Sustainability Committee and its working groups address sustainability topics through a holistic and integrated approach.

The Committee convenes at the end of each quarter to review our short-, medium-, and long-term sustainability roadmap and to evaluate progress in line with our corporate sustainability strategy. Additionally, we regularly monitor our environmental, social, and governance impacts, risks and opportunities, and sustainability metrics, and we report our findings and progress to the Board of Directors.

Across the organization, we promote the dissemination of sustainability awareness and culture through the work of our Sustainability Committee, encouraging all employees to contribute to our sustainability objectives. To strengthen this structure, sustainability representatives selected from each department facilitate information flow and ensure that sustainability-related data are collected regularly and in a coordinated manner. At the same time, we prioritize effective and structured engagement with our stakeholders within the framework of sustainability.

In line with this approach, we foster company-wide ownership of our sustainability efforts and build an inclusive, transparent, and impact-oriented sustainability governance structure that considers stakeholder expectations. Through collaboration with our stakeholders, we aim to achieve continuous improvement across environmental, social, and governance areas.





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Corporate Risk Management

Kūmaş manages financial, operational, legal, and climate-related risks holistically through its corporate risk management approach; it secures its long-term sustainability by strengthening its strategic decisions with proactive measures.

At Kūmaş, we assess risks and opportunities within the framework of corporate risk management to effectively manage our business model and value chain. Within our risk management process, we identify risks by considering environmental, social, and governance factors and manage them in an integrated and holistic framework alongside financial, operational, legal, and reputational risks through our corporate risk management system. We evaluate identified risks based on their impact and likelihood, and enrich our risk assessment processes through scenario analyses supported by risk matrices and risk maps, as well as stakeholder analyses and SWOT analyses.

Following the evaluation process, we prioritize risks and determine strategic and improvement-oriented actions covering our entire value chain, taking into account the perspectives of departmental representatives who serve on the Sustainability Committee. We continuously monitor our risk management practices and regularly update them to enhance their effectiveness. Through this holistic approach, we integrate sustainability- and climate-related risks into our corporate risk management system, anticipate potential impacts on our strategy, operations, and value chain, and take proactive measures; thereby strengthening our long-term resilience.

Management of Climate-Related Risks

At Kūmaş, we manage risks and opportunities arising from climate change through a holistic approach to ensure the long-term sustainability of our operations. We assess climate-related risks under two main categories: physical risks and transition risks. To manage these risks, we create an extensive long list and evaluate them during risk and opportunity workshops conducted with the participation of the Sustainability Committee and relevant departments.

Among the physical risks assessed within this long list are heatwaves, sudden rainfall, floods, and overflows.



Transition risks include developments in global and national climate policies, carbon pricing mechanisms such as the Emissions Trading System (ETS) planned to be implemented in Türkiye in the near future, reporting obligations, and cost risks associated with the transition to a low-carbon economy. Through this process, we evaluate the potential impacts of climate-related risks across our entire value chain, including upstream, direct operations, and downstream activities.

The climate-related risks prioritized as highly significant are disclosed in our 2024 Carbon Disclosure Project (CDP) reporting and under the Strategy section of the TSRS report provided in the Appendices.



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Information Security Management

Kūmaş prioritizes data integrity and information security in its digitalization processes; it manages risks in line with ISO 27001 standards and ensures system continuity by maintaining stakeholder trust.



As we advance our digitalization processes, we place great importance on maintaining data integrity and protecting the confidentiality of our information assets. We view information security not merely as a technical requirement but also as a reflection of the trust our stakeholders place in us. With this understanding, we carry out all information security activities in line with our Integrated Management System Policy and the ISO 27001 Information Security Management System standard.

Under ISO 27001, we set annual information security objectives and regularly monitor and assess information security risks. We evaluate the performance and risk monitoring activities under this framework during Management Review meetings, and report the outcomes to our Board of Directors annually.

We manage our processes in accordance with international standards, ensuring data integrity and confidentiality during the access, storage, and sharing phases. To ensure system continuity, we conduct regular risk analyses and take preventive measures against cyber threats.

In 2024, no confirmed information security incidents occurred, including unauthorized access or privacy breaches.



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Business Ethics and Legal Compliance

Kūmaş operates in accordance with ethical values and legal compliance principles; it is committed to combatting against corruption and provides a transparent and reliable business environment for all its stakeholders by effectively implementing internal control processes.

Within the framework of our Code of Ethics and Working Principles Procedure, we act with a commitment to ethical values and full compliance with applicable legislation, considering stakeholder expectations and sustainability principles in all our decisions. This procedure is implemented under the approval and oversight of the Board of Directors. The Ethics Committee operates under the chairmanship of the Chair of the Board of Directors (or their delegate), and assessments related to business ethics and legal compliance are reported to the Board. Any concerns, observations, or reports regarding ethical issues can be submitted to our Ethics Hotline at etikhat@kumasref.com.

Anti-Corruption

In our Materiality Analysis, "Anti-Corruption" is identified as one of the high-priority topics. As Kūmaş, we have zero tolerance for corruption, bribery, conflicts of interest, fraud, money laundering, and all similar forms of misconduct.

We conduct all activities in full compliance with national legislation and international accounting standards, and maintain our commercial records in a transparent, accurate, and auditable manner. Suspicious transactions or unethical situations are immediately reported to our Ethics and Disciplinary Committee, and necessary investigation processes are carried out with diligence. The Committee conducts an independent assessment in such cases and ensures that appropriate actions are taken. We are committed to ensuring the secure collection, processing, and storage of all commercial and personal information belonging to our customers, suppliers, and stakeholders. Within the scope of ISO 27001, we implement technical and administrative security controls to prevent risks such as unauthorized access, data breaches, and misuse.

We expect full adherence to these ethical standards from all employees and business partners. We require our suppliers, contractors, and all stakeholders with whom we collaborate to embrace our principles of integrity, legal compliance, and ethical conduct. Through regular awareness initiatives, trainings, and internal audits, we reinforce a culture of anti-corruption across the entire organization.



Internal Audit

Internal audit, an integral component of our corporate governance approach, is carried out by the Audit Department, which operates under the authority of the Board of Directors. Within this framework, we audit all operational areas at regular intervals, evaluating the effectiveness of our processes, their legal compliance, and the functioning of our internal control systems.

Anti-corruption and adherence to ethical principles form the foundation of our audit approach. In every audit we conduct, we assess corruption and misconduct risks, identify potential risk areas, and develop preventive measures accordingly. No cases of corruption were identified in 2024.

Following each audit, we work with the relevant departments to establish action plans and implementation timelines. We regularly monitor the completion of corrective actions related to audit findings and report the results to senior management. Through this process, we continuously improve our operations, enhance the effectiveness of our internal control system, and proactively manage our corporate risks.

As Kūmaş, we have zero tolerance for child labor and precarious employment practices across all our operations. We require our subcontractors, business partners, customers, and other stakeholders to comply with these standards and to apply human resources policies in accordance with the ILO Conventions ratified by Türkiye.



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Management Systems and Certifications

We manage quality, environment, occupational health, energy, and information security holistically through management systems; we adopt a continuous improvement and sustainability-focused approach.

We conduct our operations through integrated management systems based on international standards. With the certifications we hold in areas such as quality, environment, occupational health and safety, energy, information security, and greenhouse gas management, we continuously enhance our processes and aim to meet stakeholder expectations.

At Kumaş, we effectively implement the ISO 9001 Quality Management System, ISO 14001 Environmental Management System, ISO 45001 Occupational Health and Safety Management System, ISO 50001 Energy Management System, and ISO 27001 Information Security Management System. Through these systems, we ensure quality in our production processes, reduce our environmental impacts, protect the health and safety of our employees, improve our energy efficiency, and safeguard the integrity of our information assets.

Additionally, to contribute to combating climate change, we implement the ISO 14064 Greenhouse Gas Emissions Verification, ISO 14067 Product Carbon Footprint, and ISO 14046 Water Footprint standards. In our laboratories, we operate under the ISO 17025 Testing and Calibration Laboratory Accreditation System to ensure quality assurance.

All of these management systems form the foundation of our continuous improvement approach. Through our integrated system perspective, we manage our quality, environmental, energy, and safety performance as a whole, maintaining a measurable, auditable, and traceable structure to achieve our sustainability goals.





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ISO 9001: 2015 Quality Management System

Initial Certification Date: May 9th, 1997
Valid Until: May 9th, 2027

ISO 14001: 2015 Environmental Management System

Initial Certification Date: November 23rd, 2011
Valid Until: November 23rd, 2026

ISO 45001: 2018 Occupational Health and Safety Management System

Initial Certification Date: September 11th, 2015
Valid Until: September 11th, 2027

ISO 50001: 2018 Energy Management System

Initial Certification Date: June 4th, 2018
Valid Until: June 4th, 2027

ISO 27001: 2022 Information Security Management System

Initial Certification Date: January 6th, 2017
Valid Until: January 6th, 2026

ISO 14064-1: 2018 Carbon Footprint Verification Standard

We certified our 2022–2024 greenhouse gas emission data in accordance with the ISO 14064 standard, which is based on international principles for calculating, reporting, and monitoring greenhouse gas emissions.

ISO 14046: 2014 Water Footprint Verification Standard

We certified our 2024 water data in accordance with the ISO 14046 standard, which outlines international requirements for calculating, reporting, and monitoring water footprint.

ISO 14067: 2018 Product Carbon Footprint Standard

In 2022, 2023, and 2024 we certified the carbon footprints of 18 different product groups in accordance with the ISO 14067 standard.

TS EN ISO/IEC 17025:2017 – General Requirements for the Competence of Testing and Calibration Laboratories

Since 4 November 2016, our laboratory—where we conduct comprehensive chemical analyses—has been accredited and certified in accordance with the TS EN ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories. Valid date: November 3rd, 2028

Authorized Legal Entity Competency Certificate

Initial Certification Date: December 30th, 2016
Valid Until: January 1st, 2027

Zero Waste to Landfill

Initial Certification Date: April 15th, 2025
Valid Until: April 14th, 2028



GREENHOUSE GAS PROTOCOL

GHG Protocol: Corporate Accounting and Reporting Standard

We certified our 2024 data in line with the Greenhouse Gas Protocol, an internationally recognized standard for calculating, reporting, and monitoring greenhouse gas emissions.



GMP+

Initial Certification Date: January 13th, 2017
Valid Until: November 22nd, 2028



INTERNATIONAL EPD SYSTEM

Environmental Product Declaration – EPD

We have completed EPD certification for semi-finished and final products categorized under 17 distinct groups.



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Value Chain Management

Kūmaş manages its value chain with a focus on sustainability, taking environmental and social impacts into account.

At Kūmaş, we approach our business model and value chain holistically, not only in terms of operational processes but also from a sustainability perspective. We evaluate our upstream and downstream activities in mining, production, and usage stages, encompassing the life cycle of our products and waste management processes. In this context, we consider our environmental and social impacts at every step, from ore extraction to product recycling, and manage our stakeholder relationships in line with our sustainable business model and value chain.

Within the scope of the TSRS study conducted during the 2024 reporting period, we created our value chain mapping to assess climate-related risks and opportunities. Accordingly, we classify our activities into three main categories within the value chain: upstream, direct operations, and downstream.

As part of our upstream activities, we collaborate with energy producers and transmission and distribution companies, equipment and machinery manufacturers and distributors, chemical producers, and packaging manufacturers, in addition to exploration, licensing, and mining operations.

Our direct operations include calcination, sintering, smelting, and refractory product manufacturing. We also carry out quality and process control, waste management, and by-product recovery, as well as sales and marketing activities.

Our downstream activities include engineering and field application services, as well as services for iron and steel, cement, glass, and other heavy industries. These also encompass logistics and export activities.

You can access our value chain table under the [Value Chain Overview](#) section of the TSRS Report included in the Appendices.



Supply Chain Management

Our relationship with our suppliers is of strategic importance for managing our value chain effectively and in line with sustainability principles. To strengthen our sustainable business model, we continuously enhance our collaboration with suppliers and adopt a working approach based on responsibility, trust, and continuous improvement.

Accordingly, we expect our key suppliers, from whom we make high-volume purchases, to comply with environmental, social, and governance criteria aligned with local and international standards. We encourage our suppliers to continuously improve their sustainability performance, covering key areas such as greenhouse gas emissions management, waste management, human rights, occupational health and safety, and ethics. In this regard, we consider not only environmental criteria but also standards such as quality, delivery time, commercial comparison, and ISO certifications when selecting suppliers.



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In our supply chain, we ensure that our business partners comply with the Sustainability, Environment, and OHS Supplier Assessment Procedure in line with sustainability principles, and we procure goods and services from suppliers meeting these criteria. This procedure evaluates suppliers' climate change and sustainability performance, compliance with legal and regulatory frameworks, the presence of potential serious legal or regulatory violations, sustainability-related activities, and the environmental aspects of on-site and production operations.

Based on the assessment results, we classify our suppliers into three risk groups according to the scores they receive (Green: 100–71 points; Yellow: 70–41 points; Red: 40–0 points) and determine the actions to be taken in our business relationships accordingly.

If non-compliance is identified as a result of our assessments, we define the corrective actions expected from the suppliers and monitor the implementation of these actions.

In 2024, our total number of suppliers was 917, with 94% of them being local suppliers. Our domestic procurement accounts for approximately 66% of the total procurement value.

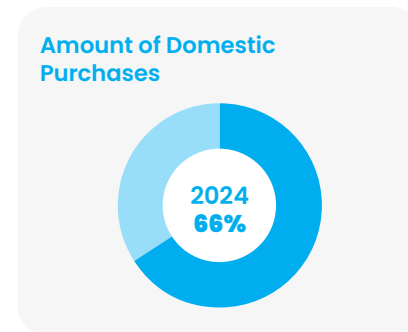
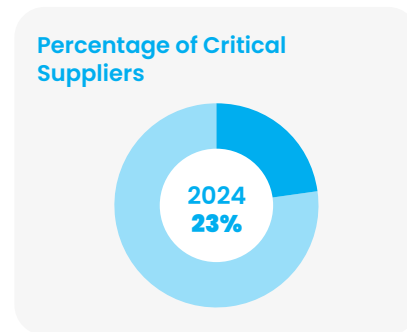
We evaluate the sustainability performance of our critical suppliers, who make up 23% of our total supplier base, and provide them with feedback.

In line with our sustainability strategy, we aim to enhance our supplier assessments in the social sustainability dimension and plan to conduct long-term human rights due diligence within our supply chain.

Supplier Metrics

Suppliers	Unit	2022	2023	2024
Total Number of Suppliers	Number	872	814	917
Total Number of Local Suppliers	Number	831	769	863
Total Number of Foreign / Global Suppliers	Number	41	45	54
Total Number of New Suppliers	Number	41	39	45
Percentage of Local Suppliers	%	95	95	94

	Unit	2022	2023	2024
Number of Critical Suppliers	Number	183	205	216





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Customer Relations Management

Our customers form an integral part of our value chain, serving as stakeholders who guide us on our sustainability journey through their feedback and regulatory actions. At Kūmaş, we continuously enhance our services and customer relationships to provide solutions that best meet the needs and expectations of our customers.

The services we provide to our customers include the supply of high-quality refractories, engineering-supported design and planning tailored to customer requirements, and on-site installation services in accordance with project specifications. In addition, we support our customers in achieving stabilized operations, increased productivity, and reduced costs through demand-driven design engineering and 3D design services, supervisor support during field installations, periodic on-site inspections conducted by our service team, and technical service providing on-site solutions in emergencies. Furthermore, refractory application machines that enable flexible and rapid installation, enhancing service quality and efficiency, are also part of the services we offer.

To effectively evaluate customer feedback, we maintain regular communication with our customers through various channels, including factory visits and inspections, satisfaction surveys, symposiums, conferences, trade fairs, and social media platforms.

As a result of the surveys conducted with our customers in 2024, our customer satisfaction rate was measured at %91.





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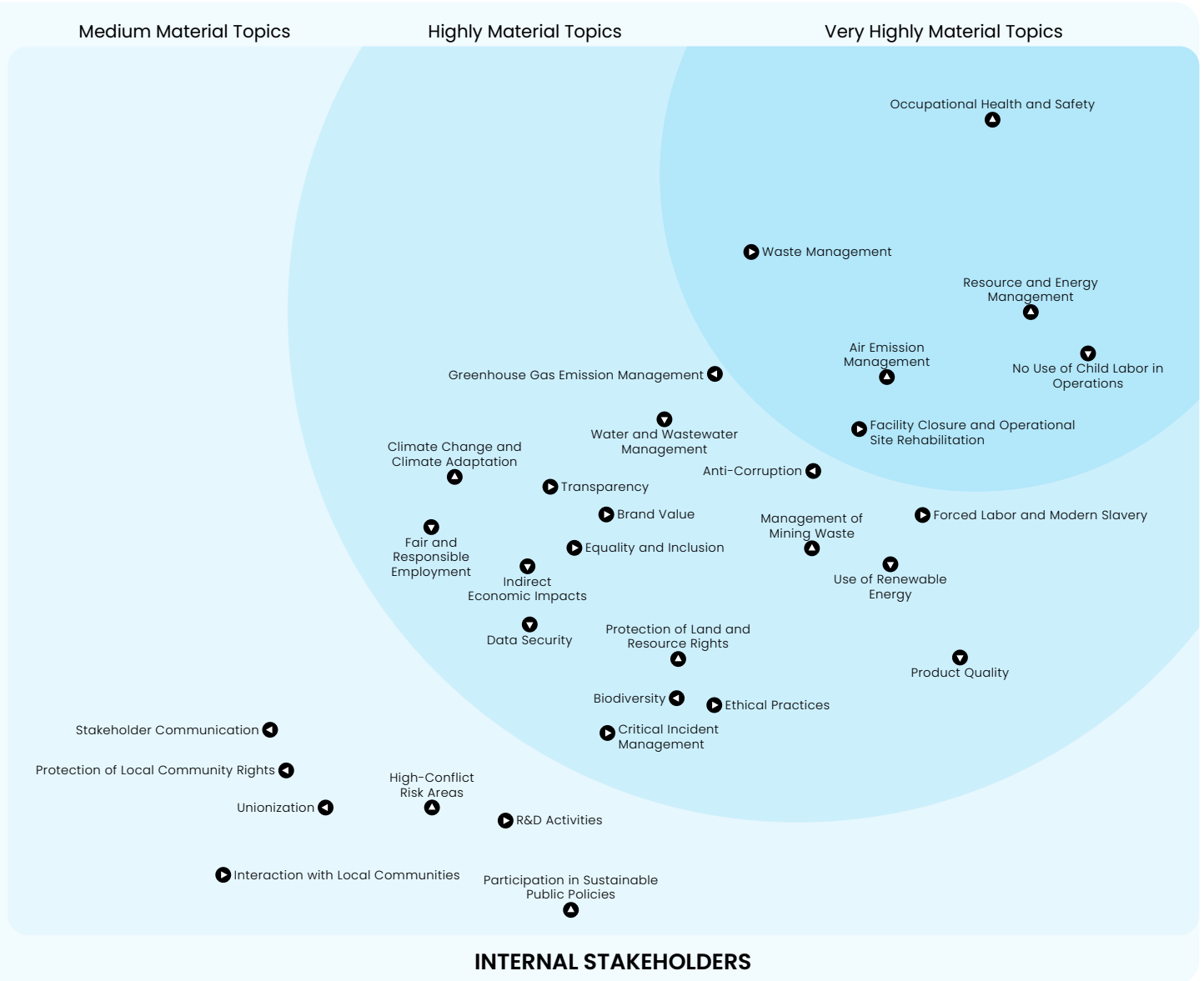
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Stakeholder Engagement

At the core of our sustainability approach, which forms the foundation of our sustainable business model, are the perspectives of our stakeholders who guide our strategy. In this regard, we conducted a stakeholder engagement study to enable our stakeholders to evaluate our business processes, activities, and our impact on the environment and society.

As a result of this study, we identified the material sustainability issues for Kūmaş and created a materiality matrix by classifying these issues according to their level of importance. In line with the identified priority issues, we shaped our sustainability strategy and clarified our focus areas for the future.

EXTERNAL STAKEHOLDERS



INTERNAL STAKEHOLDERS



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Sustainability Strategy

We aim to create long-term sustainable value by managing our environmental, social, and governance impacts through our strategic focus areas, determined in light of stakeholder views and materiality issues.



We shaped our sustainability strategy based on the strategic focus areas identified through the findings from our stakeholder engagement process and the materiality topics determined. In this process, we take a holistic approach to the environmental, social, and governance impacts of our activities, aiming to create long-term value.

Our strategic focus areas include Greenhouse Gas Management, Energy Management, Air Emission Management, Water Management, Waste Management, Biodiversity, Customer Relationship Management, Occupational Health and Safety, Community Engagement, Diversity, Equity and Inclusion, Human Rights, Talent Management, Ethics, Value Chain, Collaboration, Sustainability Management System, R&D, and Innovation.

We have set our sustainability targets within this framework for the short term (1–3 years), medium term (4–6 years), and long term (7+ years), aligned with the Sustainable Development Goals (SDGs). To ensure the applicability and effectiveness of our targets, we have established Key Performance Indicators (KPIs) and defined the actions to be taken.



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Sustainability Goals

	Focus Areas	Material Topics	Time Horizon	Unit to Be Monitored	KPI	Actions	SDG
ENVIRONMENT	Greenhouse Gas Management	Greenhouse Gas Emission Management	Short Term (1-3 Years)	%	Conducting a decarbonization study to commit to a science-based medium-term reduction target for Scope 1 and Scope 2 emissions in line with the 1.5 °C mitigation scenario	<ul style="list-style-type: none"> → Developing a climate transition plan and assessment of the strategic alignment of future emission targets → Assessing SBTi-aligned targets → Increasing the use of recycled raw materials → Energy efficiency improvements → Transitioning to renewable energy sources. → Implementing carbon capture (CCU) technologies. → Evaluating fuel substitutions in production processes → Developing refractory products produced at lower temperatures. → Optimizing logistics processes in the supply chain → Increasing the thermal efficiency of furnaces → Reducing downtime rates in the production process → Waste heat (flue gas heat) recovery → Establishing an internal carbon pricing mechanism by 2027 → Prioritizing decarbonization in investment evaluations → Measuring and reporting the financial contribution of emission reduction projects. → Making the carbon footprint accessible through a product QR system 	
			Medium Term (4-6 Years)	% (tCO ₂ e/revenue)	Reduction of Scope 1 and 2 emissions by 90% by 2050 compared to the 2022 base year, in line with SBTi		
			Long Term (7+ Years)	%	Reduction of Scope 1 and 2 emissions by 90% by 2050, using 2022 as the baseline		
				-	Achieving net zero Scope 1 and 2 emissions by 2050		



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	Focus Areas	Material Topics	Time Horizon	Unit to Be Monitored	KPI	Actions	SDG
ENVIRONMENT	Greenhouse Gas Management	Climate Change and Climate Adaptation	Short Term (1-3 Years)	-	Annual assessment and reporting of climate-related risks and opportunities	<ul style="list-style-type: none"> → Conducting voluntary TSRS reporting → Analyzing physical and transition risks for Kūmaş production lines, mining sites, and energy investments → Reporting the results of risk and opportunity analyses to the Sustainability Committee and senior management → Defining measurement methods for climate-related indicators (emissions, energy, water, waste performance, etc.) → Establishing a data collection and reporting system → Conducting annual performance verification by the Sustainability Committee and integrating the results into the senior management compensation system 	  
				-	Establishment of an internal carbon pricing mechanism by 2027	<ul style="list-style-type: none"> → Creating an internal carbon pricing mechanism 	
				-	Improving current scores in sustainability indices such as CDP and EcoVadis	<ul style="list-style-type: none"> → Carrying out initiatives to improve sustainability performance. → Monitoring current methodologies and conducting transparent reporting in accordance with these methods. → Maintaining participation in the CDP Climate Change Program and improving the score. → Achieving Gold/Platinum level in environmental, labor, ethics, and supply chain areas in the EcoVadis assessment → Improving energy efficiency and carbon reduction performance according to the criteria of sustainability indices such as CDP and EcoVadis 	
				-	Ensuring that all priority suppliers' compliance with climate-related criteria is assessed within the procurement processes by 2026	<ul style="list-style-type: none"> → Integrating feedback from the indices into annual action plans. → Preparing a "Sustainability Scorecard" annually and incorporating it into management performance → Integrating carbon and energy performance criteria into the supplier evaluation system → Developing a system for collecting annual emissions and energy data from suppliers → Integrating compliance scoring in procurement decision processes. → Preparing improvement plans for suppliers with areas for improvement 	



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	Focus Areas	Material Topics	Time Horizon	Unit to Be Monitored	KPI	Actions	SDG
ENVIRONMENT	Energy Management	Resource and Energy Management	Short Term (1-3 Years)	%	Increasing the share of renewable/low-carbon energy in total electricity consumption to 100%	<ul style="list-style-type: none"> → Increasing annual renewable energy production through the commissioning of planned solar power plants projects in Yozgat and Sivas (total ~100 MW capacity) → Using high-efficiency motors in energy-intensive equipment → Implementing waste heat recovery systems in furnaces and utilizing the recovered heat for process preheating or electricity generation → Continuing energy efficiency studies and determining energy intensity indicators (EnPI) per product for each production line → Detecting leaks in compressed air, fan, and pump systems and operating automatic pressure control systems → Tracking energy usage intensity by product in production planning processes → Certifying renewable energy production and consumption with I-REC certificates → Increasing energy source diversity → Measuring and reporting financial contribution and associated emission reductions of energy-saving projects. 	
			Long Term (7+ Years)	MWh	Producing 207,200 MWh of renewable energy annually		
	Air Emissions Management	Air Emission Management (NO _x , SO _x , particulates, etc.)	Short Term (1-3 Years)	%	Reducing energy consumption per revenue by %5 by 2035		<ul style="list-style-type: none"> → Reducing SO_x and NO_x emissions by %10 by 2027 using 2022 as the baseline



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	Focus Areas	Material Topics	Time Horizon	Unit to Be Monitored	KPI	Actions	SDG
ENVIRONMENT	Water Management	Water and Wastewater Management	Short Term (1-3 Years)	%	Reducing water withdrawal per revenue by %25 by 2027, using 2022 as the baseline	<ul style="list-style-type: none"> → Commissioning closed-loop cooling systems and gradually phasing out open-loop systems → Reclaiming wastewater for reuse as process water through wastewater recovery systems and achieving zero wastewater discharge → Collecting and reusing rainwater and condensate water for non-process purposes (green areas, cleaning) → Linking water performance to production volumes and financial indicators (m³/revenue) → Monitoring water intensity indicators and comparing them with annual targets → Initiating the transition process to the ISO 46001 Water Efficiency Management System → Providing annual technical training to employees on water efficiency practices → Measuring and reporting the financial benefits of water conservation and reuse projects 	
	Waste Management	Waste Management	Short Term (1-3 Years)	% (tonne)	Recycling 30% of the waste generated during the production of brick groups	<ul style="list-style-type: none"> → Conducting material efficiency analyses on production lines and developing reduction plans by identifying root causes in processes with high waste rates → Separating waste at source across all facilities and recovering at least 95% of non-hazardous waste → Continuing pilot projects for the reuse of ground refractory materials as process inputs → Providing at least one annual training session for employees and contractors on waste segregation and recycling → Disclosing waste performance indicators on an annual basis in the sustainability report 	
		Medium (4-6 Years)	% (tonne)	Increasing the use of secondary raw materials (scrap and by-products) in production processes by 15% by 2030			
	Management of Mining Waste	Short Term (1-3 Years)	tonne/ revenue	Amount of material recovered through the processing of waste rock	<ul style="list-style-type: none"> → Identifying opportunities for improvement by regularly reporting the impact of recycling on total production costs 		
Biodiversity	Biodiversity	Short Term (1-3 Years)	Pieces	Planting 35,000 saplings by 2027	<ul style="list-style-type: none"> → Choosing areas of application, periodic monitoring, and reporting 		



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Focus Areas	Material Topics	Time Horizon	Unit to Be Monitored	KPI	Actions	SDG	
SOCIAL	Customer Relations Management	Customer Satisfaction	Short Term (1-3 Years)	%	Increasing the customer satisfaction rate to 95% by 2027	→ Developing the customer feedback system	
	Occupational Health and Safety	Occupational Health and Safety	Medium (4-6 Years)	%	Reducing the accident severity rate by 50% by 2030, using 2022 as the baseline	<ul style="list-style-type: none"> → Systematic implementation of post-incident root cause analyses → Implementing engineering controls (protective equipment, automation, sensor systems) for recurring accident types → Strengthening the work permit system for high-risk activities 	
					Reducing the lost time injury frequency rate by 75% by 2030, using 2022 as the baseline	<ul style="list-style-type: none"> → Increasing behavior-based field observations to at least three per person, per year → Monitoring all occupational health and safety findings through a digital system 	
					Integrating AI-based camera systems into the Occupational Health and Safety (OHS) management system	→ Establishing field-based data entry modules and implementing automated reporting and analysis dashboards	
	Community Relations	Interaction with Local Communities	Short Term (1-3 Years)	Number hour	Establishing an AFAD-accredited light search and rescue team and expanding disaster awareness training to company employees and local communities by 2027 to increase the disaster preparedness capacity of local communities	<ul style="list-style-type: none"> → Completing the accreditation process of the light search and rescue team in coordination with AFAD, ensuring the team's operational readiness through regular drills, and positioning it to support local communities during disasters → Supporting environmental education and disaster resilience projects in schools 	
				Number	Offering internship opportunities at the Kūmaş R&D center to three university students each year	<ul style="list-style-type: none"> → Strengthening university-industry collaborations → Establishing mentorship and project support programs at the R&D center 	



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SOCIAL	Diversity, Equity, and Inclusion	Equality and Inclusion	Short Term (1-3 Years)	-	Establishing a Human Rights Due Diligence process for all operations and supply chains by 2027	→ Including conditions that support the Human Rights Due Diligence process in specifications/contracts with critical suppliers	
			Medium (4-6 Years)	%	Increasing the proportion of female employees to 6% by 2028 compared to the 2022 base year	→ Implementing women's leadership mentoring program, preparation of targeted recruitment and promotion plans	
			Long Term (7+Years)	%	-	→ Preparing policies and commitments to increase compliance with sustainability indices	
			Medium (4-6 Years)	-	Increasing the proportion of white-collar female employees to 30% by 2030 compared to the 2022 as the baseline	<ul style="list-style-type: none"> → Adopting an equality-based and inclusive perspective in recruitment processes → Implementing physical and psychological support programs aimed at improving employee well-being → Testing hybrid working models in priority pilot units to measure their effectiveness in ensuring work-life balance for employees → Creating a workplace environment where employees feel valued, can fulfill their potential, and where ethical values are applied with sensitivity, thereby becoming the region's preferred employer (Great Place to Work) 	



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SOCIAL	Diversity, Equity, and Inclusion	Fair and Responsible Employment	Medium (4-6 Years)	% Employee	Increasing the proportion of sustainability-focused (green-collar) employment to %3 by 2030	<ul style="list-style-type: none"> → Creating job descriptions for green-collar roles → Providing sustainability training → Integrating sustainability skills and targets into employees' KPIs 	
	Human Rights	Forced Labor and Modern Slavery	Short Term (1-3 Years)	%, Piece	Including contractual commitment clauses by 2027 in agreements with 100% of critical suppliers to ensure the fulfillment of human rights due diligence obligations	<ul style="list-style-type: none"> → Including the Supplier Code of Conduct in all contracts → Collecting annual supplier declarations 	
	Talent Management	Employee Development	Short Term (1-3 Years) Medium (4-6 Years)	hour/person, %	Increasing the average annual employee training hours to 30 hours by 2026 and to 36 hours by 2030	<ul style="list-style-type: none"> → Delivering technical, digital, and sustainability modules according to an annual plan → Establishing/developing an e-learning infrastructure → Measuring learning effectiveness through pre- and post-assessments → Defining company values and prioritizing talent attraction and retention within the corporate culture 	
GOVERNANCE	Ethics	Ethical Practices	Short Term (1-3 Years)	%	Providing a response to ethical reports within three business days	<ul style="list-style-type: none"> → Disclosing the confidentiality principle of the Ethics Line → Conducting e-learning ethics training covering 100% of employees 	
		Anti-Corruption	Short Term (1-3 Years)	%, day	Ensuring that 100% of employees complete anti-corruption training	<ul style="list-style-type: none"> → Developing an e-learning anti-corruption module 	



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GOVERNANCE	Ethics	Data Security	Short Term (1-3 Years)	Day, number	Providing at least one hour of data security training to all employees annually	<ul style="list-style-type: none"> → Providing training to all employees under ISO 27001 → Raising employee awareness against cyberattacks and phishing 	
	Value Chain Management	Stakeholder Communication	Short Term (1-3 Years)	%, period	Achieving a 90% stakeholder satisfaction rate through the Stakeholder Engagement Survey by 2030	<ul style="list-style-type: none"> → Conducting stakeholder engagement within the scope of the double materiality analysis 	
	Partnerships	Participation in Sustainable Public Policies	Short Term (1-3 Years)	Person, Number	Providing internship opportunities at Kūmaş to seven university students each year	<ul style="list-style-type: none"> → Strengthening university–industry collaborations → Establishing mentorship and project support programs at the R&D center 	
			Short Term (1-3 Years)	-	Becoming a signatory of the United Nations Global Compact (UNGC) by 2026	<ul style="list-style-type: none"> → Becoming a signatory of the United Nations Global Compact (UNGC) → Publicly disclosing the commitment 	
	Sustainability Governance System	Indirect Economic Impacts	Medium (4-6 Years)	%, ₺	Increasing the share of procurement spending from local suppliers to 80% by 2032	<ul style="list-style-type: none"> → Annual reporting of the share of local expenditures 	
			Short Term (1-3 Years)	-	Making the sustainability policy framework publicly available by 2026 and reviewing annually	<ul style="list-style-type: none"> → Publishing sustainability policies on the corporate website → Monitoring current TSRS reporting requirements 	



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GOVERNANCE	Sustainability Governance System	Transparency	Short Term (1-3 Years)	%	Integrating sustainability-related metrics into senior management performance evaluation with a minimum weighting of 10%	→ Ensuring that at least 10% of senior management performance indicators consist of sustainability-related metrics by 2027 and integrating these metrics into the corporate performance management system	
			Medium (4-6 Years)	% CAPEX	Analysis and financial reporting of activities that provide environmental benefits.	→ Prioritizing investments in energy efficiency, electrification, waste heat recovery, and renewable energy projects → Establishing an investment evaluation system based on internal carbon pricing criteria → Conducting studies to determine EU Taxonomy alignment, Green Taxonomy compliance, and the green asset ratio	
	R&D and Innovation	R&D Activities	Short Term (1-3 Years)	%	Achieving an R&D investment ratio of 1% within the total investment amount by 2025	→ Aligning R&D investment planning with the company's sustainability strategy → Developing projects focused on low-energy-consumption processes and alternative raw materials → Planning the investment budget with a 3-5-year perspective, analyzing financing sources (TÜBİTAK, KOSGEB, EU, Green Deal funds, etc.), and submitting the plan for management approval	
			Medium (4-6 Years)	%	Increasing the share of low- and zero-carbon refractories in our total product portfolio in the iron and steel sector to 10% by 2030	→ Continuing the development of refractory products with a low environmental footprint → Preparation of EPD/LCA documents → Designing solutions for customers that provide energy savings	
				%	Increasing the share of secondary raw materials (by-products and scrap) used in production to 15% by 2030	→ Reintegrating bricks that are not classified as final products into production processes as raw materials → Sourcing secondary raw materials from external suppliers → Developing recycling and reuse projects → Increasing the share of secondary raw materials used in production processes	



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Economic Performance

While strengthening our economic resilience through our sustainable growth-oriented business model, we continue to create long-term value through our production, exports, and industry partnerships.



As Kūmaş, since 2021 we have been operating within OYAK through Erdemir. By pursuing a business model that supports sustainable growth, we aim to strengthen our economic performance while creating long-term value for all our stakeholders. In line with the principles of transparency, accountability, and legal compliance, we fulfill our tax obligations and contribute to the national economy by managing all tax processes fairly, accurately, and on time.

In 2024, we recorded a net sales performance of ₺5,854,772,002 and a production-based sales performance of ₺5,832,418,508 on the ISO 500 list. We maintained our presence in international markets with an export volume of USD 56,459,000, ranking 288th among Türkiye's largest exporters and strengthening our position in the industry.

In line with our goal of supporting local development and the growth of the industry, we continue our membership with the Turkish Ceramic Federation. We steadfastly continue our journey toward sustainable growth by reinforcing our economic performance through our production capacity, export capabilities, and industry collaborations.



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R&D and Innovation

Through our investments in R&D and innovation, we enhance our product quality and sustainable production capacity, and lead the sector's transformation with low-carbon solutions and new technologies.



As KÜMAŞ, we continue to enhance the quality and diversity of our products through continuously updated technology and R&D efforts. While providing solutions tailored to the needs of the industry and our customers, we also manage our environmental impacts to ensure resource and energy efficiency. In this way, we aim to create sustainable economic value and play a decisive role in the sector as an effective player on a global scale.

In 2016, we opened our R&D Center, a first in the refractory sector, and in the same year, we increased our calcined magnesite production capacity with our vertical kiln investment. In 2022, we ranked 262nd in the Türkiye's Top 500 R&D Centers research published by Turkishtime. With these achievements, we have once again demonstrated the importance we attach to R&D at KÜMAŞ.

In 2024, we incorporated our R&D and innovation objectives into our sustainability strategy. Within the scope of our R&D and innovation focus area and under our priority topic titled "R&D Activities," we defined our medium-term KPIs and the corresponding actions to be taken:

Among the actions we will take to achieve an R&D investment ratio of 1% within the total investment amount by the end of 2025 are;

- Aligning R&D investment planning with the company's sustainability strategy ,
- Developing projects focused on low-energy-consumption processes and alternative raw materials
- Planning the investment budget with a 3–5-year perspective, analyzing financing sources (TÜBİTAK, KOSGEB, EU, Green Deal funds, etc.), and submitting the plan for management approval

Within the scope of increasing the share of low- and zero-carbon refractories in our iron and steel sector product group to 10% by 2030:

- Continuing the development of refractory products with a low environmental footprint,
- Preparing EPD/LCA documents,
- Designing solutions that provide energy savings for customers.

Within the scope of increasing the share of secondary raw materials (by-products and scrap) used in production to 15% by 2030

- Reintegrating bricks that are not classified as final products into production processes as raw materials,
- Sourcing secondary raw materials from external suppliers,
- Developing recycling and reuse projects,
- Increasing the share of secondary raw materials used in production processes.



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As part of our R&D and innovation efforts, we strengthen knowledge and experience sharing by collaborating with research centers and end users. In 2024, we established partnerships with Eskişehir Technical University and Dumlupınar University.

In addition, we effectively utilize innovation support by benefiting from TÜBİTAK and European Union projects, and we continue to expand and modernize our laboratory infrastructure in line with new product needs.

Through customer-focused R&D processes, we provide fast and effective responses to needs and develop innovative solutions by leveraging technology. We commercialize new products in line with target market trends and increase our market share. In 2024, we developed 14 new products across the MgO-C, AMC, Dolomite Brick Group, Mortars, and Fired Brick Group categories. We also continued to safeguard our innovative advantages by protecting intellectual property rights in our differentiated products and production processes.

In 2024, we made a total R&D investment of USD 1,207,000.

We continue to develop innovative and sustainable solutions in the industry through our ongoing projects. Our key projects include the following:

Dry Tundish Mortar New Product Development:

We developed an environmentally friendly product that offers high durability, enhanced mechanical properties, and thermal performance in industrial applications while reducing water usage.

High-Temperature Resistant Filler Powder: We produced a durable filler powder with high electrical insulation properties that ensures the safe operation of electronic components.

Development of Energy-Saving MgO-Spinel Brick for Cement Rotary Kilns: Through the new microstructure we developed, we reduced heat loss in rotary kilns. The brick designed within the scope of this project improved rotary kiln efficiency and enabled energy savings, thereby reducing fuel consumption and lowering carbon emissions.

Energy-Efficient Brick for Cement Rotary Kilns Operating with Waste Fuel and Harsh Alkali Conditions: We developed a series of bricks with enhanced infiltration resistance specifically for kilns using refuse-derived fuels.

Low-Carbon Chemical-Bonded Fired Brick: In this project, we designed bricks that do not require firing in a tunnel kiln; instead, they are processed only through a tempering furnace thanks to the newly developed chemical bonding structure. This allowed us to reduce process-related emissions and deliver an environmentally friendly product.

Resin-Bonded Dolomite Brick Study: Within this study, we succeeded in producing traditionally hot-processed dolomite bricks using a cold process. This reduced our carbon emissions while improving the brick's mechanical properties and hydration resistance to enhance its performance.

Fast-Drying Tundish Mortar: Through this project, we developed a fast-drying tundish mortar that shortens drying time, contributing both to the improvement of our customers' processes and to the reduction of carbon emissions.

Filler Mortar Study: In this study, we improved the sintering capability and performance of our product. Additionally, through formulation optimization, we achieved cost reductions.

Hot Repair Mortar Study: Within the scope of the project, we reduced the cost of hot repair mortars and improved their performance.

As part of our R&D efforts, we implemented Phase 1 of the Automation System, modernizing our traditional control systems and enabling centralized management of our production processes. With this system, we perform data processing, process optimization, and trend analyses more effectively, thereby increasing production efficiency and quality. This transformation not only contributes to energy savings but also strengthens our company's commitment to its sustainability and climate-related goals.



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Environmental Management

To reduce our environmental impacts and enhance resource efficiency, we regularly monitor, report, and continuously improve our performance through management systems aligned with international standards.



As Kūmaş, we work with strong commitment to minimizing our environmental impacts and ensuring the efficient use of natural resources, in line with our Integrated Management System Policy and Sustainability Strategy. Within this scope, we present the environmental activities carried out by our Sustainability & OHS Management and monitored through our Sustainability Committee to our Board of Directors four times a year. Additionally, we report our performance metrics and targets annually through Management Review Meetings (MRMs) under the ISO 14001 Environmental Management System.

In line with our Environmental Management System, we regularly monitor our environmental performance, set annual environmental targets based on the data obtained, and continuously improve our processes. These targets are tracked through measurable indicators under key areas such as energy and water efficiency, waste management, and greenhouse gas emission management.

We also conduct regular environmental training programs to enhance employee awareness, and we evaluate the effectiveness of these programs within the framework of the Integrated Management System. Our monitoring, measurement, and reporting processes related to environmental performance are defined through documents such as the Environmental Risk Analysis Procedure and the Environmental Monitoring and Measurement Plan, and we implement these processes systematically in accordance with these guidelines.

In line with ISO 14064, ISO 14067, and ISO 14046 standards, we regularly monitor our greenhouse gas emissions, carbon footprint, and water footprint, which are verified by accredited third parties. In addition, we manage our processes under an ISO 50001-compliant energy management system, enabling us to track energy performance and identify continuous improvement opportunities.

Environmental Investments (TL)	2022	2023	2024
Total operating expenses of environmental activities	4,670,982	3,077,482	8,093,957
Total environmental investments	50,979,821	26,331,378	43,777,117
Total	55,650,804	29,408,860	51,871,075



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Energy Management

By placing energy efficiency at the core of our operations, we monitor our performance within the framework of ISO 50001 and accelerate the transition to low-carbon production through our renewable energy investments.

As Kūmaş, we place energy efficiency at the core of our operations and strive to use our energy resources as effectively as possible at every stage of our production processes. We view energy management not only as a cost-reduction measure but also as a fundamental component of environmental sustainability and the fight against climate change.

Activities related to our energy performance are managed by our Electrical Maintenance Directorate, with results regularly monitored by the Sustainability Committee. The Committee reports developments in sustainability, including energy performance, to the Board of Directors four times a year. In addition, through the management review meetings conducted within the scope of our ISO 50001 Energy Management System, we provide annual performance reporting to our Board of Directors.

Within the ISO 50001 framework, we continuously monitor and measure our energy performance and take actions aimed at continuous improvement. Annual energy targets are set within the management system, and the initiatives we carry out to improve energy efficiency are tracked through performance indicators.

Targets:

- Increasing the share of renewable/low-carbon energy in total electricity consumption to 100%
- Reducing energy consumption per revenue by %5 by 2035
- Producing 207,200 MWh of renewable energy annually

To raise employee awareness of energy efficiency, we conduct regular energy management and efficiency training programs and monitor their effectiveness, thereby strengthening a culture of continuous improvement.

We invest in modernization projects to reduce energy consumption at our production facilities and redesign our processes with an efficiency focus. Investments continue to increase the share of renewable energy in our production processes. As part of our climate and emission reduction goals, we are investing in two solar power plants SPP with a combined annual capacity of 100 MWe in Yozgat and Sivas. These SPP projects are expected to generate approximately twice our annual electricity demand, with surplus electricity sold to the grid.

Our solar power plants projects will be included in YEKDEM, Türkiye's renewable energy purchase guarantee mechanism. Through this, the project will contribute to the decarbonization of our electricity consumption and enable additional income from electricity sales. The solar power plants are expected to become fully operational at full capacity in 2027.

Our energy management efforts are conducted within the framework of our ISO 50001 Energy Management System. In line with our continuous improvement approach, we use a centralized energy monitoring system to measure, record, and report our energy consumption.



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Non-Renewable Direct Energy	Unit	2022	2023	2024
Gasoline	liter	15,830	42,374	81,778
Diesel	liter	476,419	320,907	338,260
Natural Gas	Sm ³	20,070,728	9,578,394	18,460,685
Other (petroleum coke)	tonnes	40,082	27,794	42,249

Non-Renewable Indirect Energy	Unit	2022	2023	2024
Electricity	MWh	155,255	46,109	85,320

*Year-on-year fluctuations in electricity consumption are driven by changes in fused magnesite production volumes.

To improve our energy efficiency, we implement various projects. In 2024, we carried out a project to prevent heat losses in our drying systems. By replacing worn sealing plates with new ones, we reduced heat loss in the system. As a result, the temperature inside the dryers stabilized, equipment efficiency improved, and unnecessary energy consumption was prevented. This project is expected to save 216,437 m³ of natural gas annually, reducing both our energy costs and carbon emissions while contributing to our environmental sustainability.

To prevent similar energy losses in the future, we continue to carry out regular inspections of sealing plates during planned shutdowns. Accordingly, we aim to sustain energy efficiency and drive continuous improvement in our production processes.

Another project undertaken during the reporting period involved optimizing the burner flame alignment.



Previously, misaligned flames caused excessive heat on the furnace mantle, reducing combustion efficiency. Following measurement checks, the burner tip was centered, ensuring uniform heat distribution across the material and improving combustion efficiency. This project is expected to save 92,641 m³ of natural gas annually.

To further enhance energy efficiency, low-efficiency lighting fixtures were replaced. A total of 711 fixtures were updated with appropriate LED lights, resulting in an energy saving of 81,550 kWh. The field installation process has been completed, and we plan to continue monitoring lighting technologies and environmental measurements regularly in the future.



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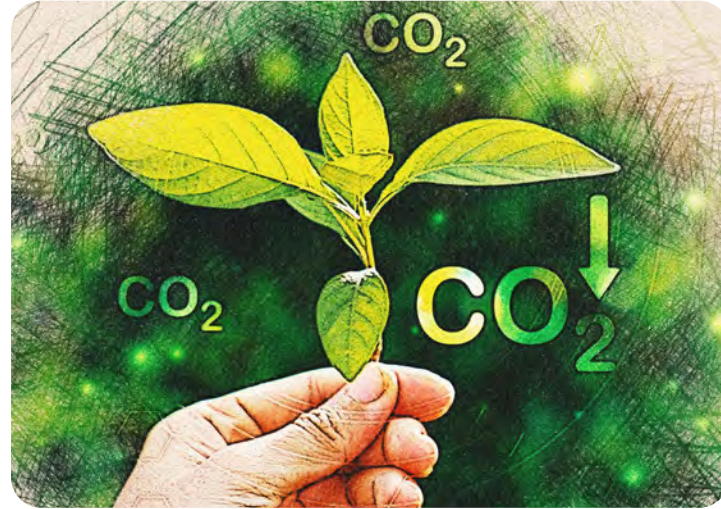
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Emission Management

To reduce our environmental impacts and enhance resource efficiency, we regularly monitor, report, and continuously improve our performance through management systems aligned with international standards.



Greenhouse Gas (GHG) Emissions

As Kūmaş, emission management is a core element of our sustainability strategy, aimed at contributing to the fight against climate change and minimizing the environmental impacts of our operations. The management of greenhouse gas emissions is overseen by our Sustainability & OHS Department, which monitors, verifies, and implements reduction measures. Our performance results are tracked through the Sustainability Committee and reported to the Board of Directors four times a year.

In accordance with ISO 14064, we regularly monitor, measure, verify, and develop action plans to reduce emissions from our production processes. Annual emission targets are set and implemented improvement initiatives are tracked via performance indicators.

Targets:

- Conducting a decarbonization study to commit to a science-based medium-term reduction target for Scope 1 and Scope 2 emissions in line with the 1.5 °C mitigation scenario.
- Reduction of Scope 1 and 2 emissions by 90% by 2050 compared to the 2022 base year, in line with SBTi
- Reduction of Scope 1 and 2 emissions by 90% by 2050, using 2022 as the baseline
- Achieving net zero Scope 1 and 2 emissions by 2050
- Annual assessment and reporting of climate-related risks and opportunities
- Establishment of an internal carbon pricing mechanism by 2027
- Improving current scores in sustainability indices such as CDP and EcoVadis
- Ensuring that all priority suppliers' compliance with climate-related criteria is assessed within the procurement processes by 2026

Our greenhouse gas emissions management processes are defined through internal procedures and relevant documentation and implemented in a systematic manner. We also deliver regular training programs to enhance employee awareness of climate change and emissions management and track their effectiveness.

We actively contribute to policy and regulatory initiatives on combating climate change and decarbonization, which are among our country's key priorities. In this context, during the reporting period, we submitted our opinions and assessments regarding the Porsuk Special Provisions and the Türkiye Green Taxonomy.

To ensure transparent reporting of our climate performance and strategy in line with international standards, we submitted our first report on the CDP platform in 2024.



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We calculate our corporate carbon footprint according to ISO 14064 and the GHG Protocol, and share independently verified results transparently with our stakeholders. Carbon footprint calculations at the product group level are performed according to ISO 14067, integrating our low-carbon production approach into the product lifecycle.

In 2024, our Scope 1 emissions amounted to 414,671 tCO₂e, and Scope 2 emissions were 37,940 tCO₂e. Evaluating emissions from 2022, 2023, and 2024, the decrease in 2023 was due to a reduction in production activities. Despite changes in production volume, we continue our efforts to enhance energy efficiency and control emissions with determination.

Product Life Cycle

We evaluate the life cycle stages of our products, from raw material sourcing to end-of-life, to enhance resource efficiency. By identifying the points where emissions are most concentrated, we aim to reduce our environmental impact and advance on the path to decarbonization. In line with the Life Cycle Analyses (LCA) we conduct, we prepare Environmental Product Declarations (EPDs) to ensure transparency and accountability to our stakeholders.

Scope	2022	2023	2024
Scope 1 (ton CO ₂ e)	429,932	246,733	414,671
Scope 2 (ton CO ₂ e)	49,917	19,970	37,940
Scope 3 (ton CO ₂ e)	374,429	194,900	339,776
Total (ton CO₂e)	854,278	461,603	792,387

*The lower emissions in 2023 are related to the capacity utilization rate.



Product Name	Total Emissions (tCO ₂ e / ton of product)
Enriched Magnesite	0,139
Enriched Dolomite	0,094
Sintered Magnesite	2,321
Sintered Dolomite	1,915
Calcined Magnesite	1,699
Fused Magnesite	3,748
Briquette	1,888
Cured Resistance Powder	2,643
Neutral Mortar – Alumina WFA	2,755
Granulated Sintered Magnesite	2,519
Additive Mortar + Dolomite Mortar	2,391
Additive-Free Mortar	2,507
Fired Magnesite Brick	2,917
Fired Spinel Brick	2,035
Fired Chrome Brick	4,401
Mag-Carbon Brick	3,298
Al-Mag-Carbon Brick	2,673
Dolomite Brick	2,281



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Decarbonization Efforts

As Kūmaş, we plan to launch decarbonization roadmap initiatives in 2025 to contribute to climate change mitigation and support our transition to low-carbon production. This project aims to reduce greenhouse gas emissions from our operations, improve energy efficiency, and make our production processes more environmentally friendly.

Within this scope, we focus on analyzing the energy and fuel consumption profiles of our production lines in greater detail, enhancing our current monitoring and assessment systems, and identifying emission reduction potential more clearly. We continuously evaluate applicable clean production technologies and improve these assessments over time. Leveraging experience gained from initiatives started in previous years, we conduct our analyses scientifically in collaboration with subject matter experts and consulting firms. Additionally, we carry out scenario analyses and emission projections to evaluate the future performance of our operations under different carbon reduction scenarios. These analyses provide critical inputs for establishing our decarbonization roadmap and shaping medium- and long-term investment plans.

Our decarbonization roadmap is built upon the existing system in which we calculate and verify our carbon footprint. Data obtained in line with the ISO 14064 standard serves as a key reference in project planning. Our efforts aim to reduce both direct process-related emissions and indirect emissions through renewable energy investments. By doing so, we enhance energy efficiency, achieve emission reductions through fuel transformation, and gradually lower our carbon intensity.

Air Emissions

We carry out regular monitoring and improvement initiatives to control air emissions generated by our operations. In our production facilities, flue gas emissions, dust, and particulate matter are tracked using Continuous Emission Monitoring Systems (CEMS) and compared with legal limit values. We report our air emissions at two-year intervals. Within this scope, verification measurements for the years 2022 and 2024 have been conducted, and the results are shared as follows.

We regularly monitor our air emissions through CEMS and compare them with legal limits. By completing our verified emission measurements for 2022 and 2024, the results have been reported as part of our regular reporting practices.

Targets:

- Reducing NOx and SOx emissions by 10% by 2027 using 2022 as the baseline

Emission Type	Unit	2022	2024
CO	Kg/hour	55.3772	10.785
NO	Kg/hour	58.966	39.498
NO ₂	Kg/hour	97.839	65.664
SO ₂	Kg/hour	45.343	29.937
Dust	Kg/hour	7.186	3.2096
HCl	Kg/hour	0.8577	0.1169
HF	Kg/hour	0.8054	0.0418
TOC	Kg/hour	0.4359	1.7861



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Water and Wastewater Management

At Kūmaş, we use water efficiently and focus on reducing our water footprint through regular measurement. Through our 2023–2024 verifications and our Water Efficiency Management System initiatives, we are leading sustainable water management practices in the sector.



At Kūmaş, we adopt a systematic water management approach to ensure efficient use of water at every stage of our operations, reduce our impact on water resources, and increase recovery rates. Within this scope, we regularly monitor and measure our water usage and calculate our water footprint in accordance with the ISO 14046 standard.

All processes related to water management are overseen by our Sustainability and OHS Department. We track our water-related performance metrics through the Sustainability Committee and report them to the Board of Directors four times a year. This allows us to evaluate our water efficiency performance consistently at the senior management level.

As the first company in our sector to report on water footprint, we are taking a pioneering step in water management. In collaboration with Ankara University, we have validated our product and production water footprint data for 2023 and 2024 and prepared industry-comparative efficiency reports based on the results. As of 2024, we have also initiated the implementation of a Water Efficiency Management System and the process for obtaining the Blue Water Efficiency Certificate, further demonstrating our commitment to sustainable water resource management.

Targets:

- Reducing water withdrawal per revenue by %25 by 2027, using 2022 as the baseline



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To monitor and transparently report our water security performance and strategy in line with international standards, we submitted our first report to the Carbon Disclosure Project (CDP) platform in 2024.

At Kūmaş, we source our process and operational water requirements from groundwater resources. We regularly monitor groundwater usage and develop water efficiency and recovery practices to safeguard the sustainability of these resources.

To reduce groundwater consumption, we conduct regular training and awareness programs for all stakeholders, including employees and subcontractors, and record the outcomes annually. Through the ongoing implementation of our Water Efficiency Management System and water recovery projects, we aim to ensure full compliance with legal regulations and reintegrate treated water into production processes. This enables us to minimize environmental impact while reducing reliance on groundwater.



Product / Usage Group	Products	Water Consumption per Unit (m ³ / ton of product)
Raw Material and Semi-Finished Products	Enriched Magnesite	0.035
	Enriched Dolomite	0.035
	Sintered Magnesite	0.177
	Sintered Dolomite	0.132
	Fused Magnesite	1.940
	Calcined Magnesite	0.098
	Briquette	0.457
Mortar Group	Küres	0.419
	Neutral Mortar	0.268
	Granulated Sintered Magnesite	0.234
	Additive Mortar and Dolomite Mortar	0.178
Brick Group	Additive-Free Mortar	0.210
	Fired Magnesite Brick	0.403
	Fired Spinel Brick	0.301
	Fired Chrome Brick	0.287
	Mag-Carbon Brick	1.408
	Al-Mag-Carbon Brick	0.374
	Dolomite Brick	0.341



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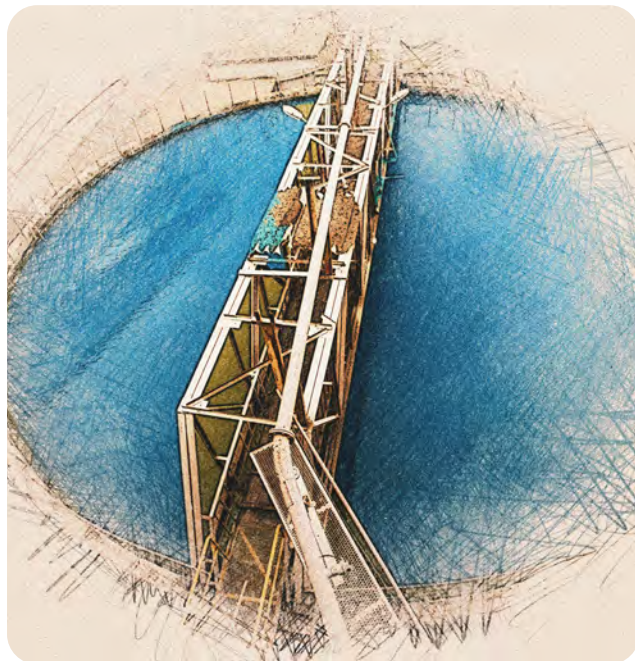
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Kūmaş adopts efficient water use and the protection of natural resources as key priorities. We carry out continuous improvement efforts to reduce water consumption, keep wastewater discharges under control, and increase the volume of recovered water.



Water Withdrawal	Unit	2022	2023	2024
Groundwater	megaliter	273.78	157.42	211.34

Wastewater Discharge	Unit	2022	2023	2024
Surface water sources, including wetlands, rivers, lakes, and oceans	megaliter	39.28	31.97	28.61

	Unit	2022	2023	2024
Water Consumption	megaliter	234.50	125.46	182.73

	Unit	2022	2023	2024
Amount of Recycled Water	m ³	40,000	35,000	31,701



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Waste Management

We reduce waste, increase recycling, and use resources efficiently through sustainable production.

At Kumaş, we are increasingly integrating a circular economy approach into our business processes to ensure the efficient use of natural resources and to transform our production processes into more sustainable operations. We systematically monitor and classify the waste generated in our production processes and assess it according to its recovery potential. Our practices focus on reducing waste at the source and increasing reuse and recycling rates across all operations.

All waste management processes are overseen by our Sustainability and OHS Department. We track our performance metrics through the Sustainability Committee and report them to the Board of Directors via management review meetings within the scope of ISO 14001. Annual waste management targets are established within our management system and shared with relevant departments. Our waste management processes are defined through the Waste Management Instruction, ensuring that all activities are carried out systematically and consistently.

Targets:

- Reaching 99.5% recycled and recovered hazardous waste rate
- Increasing the use of secondary raw materials (scrap and by-products) in production processes by 15% by 2030
- Recycling 30% of the waste generated during the production of brick groups

By adopting the principles of circularity, Kumaş acts in line with the OYAK culture of "More Value with Less Resource." Efficient use of resources, waste minimization, and the reintegration of waste into the production cycle are our priorities. Accordingly, we continuously improve our processes under the Zero Waste Management System in all facilities and aim to elevate the certification levels we have achieved at the basic level.

We ensure full compliance with applicable legislation in the collection, temporary storage, transportation, and disposal of waste. As a result of our operations, we generate both hazardous and non-hazardous waste. We recover all of our non-hazardous waste and a portion of our hazardous waste. In 2024, we sent 95% of our waste to licensed recycling facilities. By obtaining the **Zero Waste to Landfill** certificate, we demonstrate our commitment to sustainable and environmentally responsible waste management practices. In this context, we recover nearly all waste generated during our operations and do not send waste to landfill sites. As **the only facility in the sector holding the Zero Waste to Landfill certificate**, we clearly demonstrate our determination to increase resource efficiency and support the circular economy.

Our subsidiary, Yenilikçi Yapı, operates as a recovery facility that collects end-of-life materials from the market, contributing to the circular economy. Together with Yenilikçi Yapı, we carry out recovery practices to optimize resource use. In our recovery site, bricks that do not meet our quality standards or are lost during production are reintegrated into our production processes as raw materials.



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By Type	Unit	2022	2023	2024
Hazardous Waste	tonnes	193	107	109
Non-Hazardous Waste	tonnes	944	1,094	1,004
Total Waste	tonnes	1,137	1,201	1,113

By Disposal Method	Unit	2022	2023	2024
Energy Recovery	tonnes	119	52	57
Recycling / Recovery	tonnes	1,018	1,149	1,056
Landfill	tonnes	0.015	0	0
Other Disposal Methods	tonnes	0.052	0.040	0.049
Total Waste Disposed	tonnes	1,137	1,201	1,113





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Biodiversity

We conserve ecosystems through efficient use of natural resources, prevent land degradation by reprocessing low-grade minerals, and support biodiversity over the long term.



At Kūmaş, we place great importance on the preservation of natural ecosystems and the sustainability of biodiversity in the regions where we operate. We work meticulously to minimize the environmental impact of our production activities, protect natural habitats, and contribute to maintaining ecosystem balance. In both new investments and existing operations, we consider conservation areas and ecosystem sensitivities identified in Environmental Impact Assessment (EIA) processes.

Efficient use of natural resources and the protection of ecosystems form the foundation of our environmental responsibility approach. In our mining operations, we develop practices to minimize our impact on nature by reprocessing low-quality materials. Between 2021 and 2023, we reprocessed a total of 506,273 tons of low-quality ore at our Turan and Suludere facilities, significantly reducing our environmental footprint. These efforts prevented an additional 17,466,415 tons of mining activities and avoided approximately 7,594,094 m³ of land degradation. By using our natural resources more efficiently, we met our raw material needs from existing stock while contributing to ecosystem preservation.

In 2024, we continued to enhance this approach by increasing the amount of reprocessed low-quality ore to 385,444 tons. This action prevented an additional 13,297,816 tons of mining activities and approximately 5,781,689 m³ of land degradation. By 2025, we aim to further increase this ratio, and by 2026, we plan to conduct all operations using only reprocessed existing resources. In doing so, we aim to eliminate the need for new mining activities, permanently reduce our environmental impact, and make a long-term contribution to biodiversity conservation.

During the 2022, 2023, and 2024 reporting years, we planted 105,000 pine trees across 31 hectares.

Targets:

→ Planting 35,000 saplings by 2027



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Occupational Health and Safety

We adopt occupational health and safety as a cornerstone of our corporate culture and implement processes aligned with international standards to ensure a safe, healthy, and productive working environment.

At Kumaş, we view occupational health and safety not merely as a legal obligation but as a foundational element of our corporate culture. The health, safety, and well-being of each of our employees are indispensable to the sustainable success of our business. With this perspective, we prioritize creating safe, healthy, and productive working environments across all operational areas.

With the strong support of senior management, we continuously work to improve our occupational health and safety performance and to foster a lasting safety culture. We encourage the active involvement of managers and employees at all levels, positioning safe behavior as both an individual responsibility and an institutional value. Our activities are carried out within the framework of the ISO 45001 Occupational Health and Safety Management System.

The Sustainability and OHS Department regularly monitors occupational health and safety performance indicators and conducts improvement initiatives in line with defined targets. The results of these ISO 45001-related metrics and objectives are evaluated annually and reported to senior management through management review meetings. In this way, oversight of our occupational health and safety performance is effectively ensured by the company's highest governing body.

As of 2024, our OHS Committee, consisting of 31 members including 4 employee representatives, held monthly meetings, conducted incident analyses, reviewed near-miss notifications, and monitored corrective actions. Two NEBOSH-certified and one IOSH-certified experts within our organization ensured that all processes were conducted in alignment with international standards.



Our Occupational Health and Safety Culture

Enhancing the knowledge, awareness, and competency levels of our employees is among our key priorities. In line with this objective, we implemented a comprehensive training plan for all employees in 2024.

Within the scope of our training plan, we design and implement training programs in line with our schedule on a wide range of topics, including structured leadership, personal development, technical and professional expertise, and mandatory certification renewals required by regulations.

In 2024, we successfully completed the planned trainings both through face-to-face sessions and online learning platforms. In doing so, we increased participation rates while ensuring continuous access to information.

In 2024, the average training hours per employee amounted to 84.38 hours for monthly-paid employees and 37.36 hours for hourly-paid employees.



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	Number of Participants	Training Hours (person*hour)
Basic OHS Training	624	9.984
Basic Fire Safety Training	43	688
Watermist Fire Suppression System Operation Training	9	13,5
Basic First Aid Training	5	80
First Aid Certificate Renewal Training	11	88
Onboarding Trainings	201	201
Post-Accident Return-to-Work and Information Training	26	26
Post-Illness Return-to-Work Training	8	8
Department Transfer Training	179	179
Job Role Transition Training	28	28
Training on Legal Processes Related to OHS Training	44	132
Training for Employee Representatives	8	128
Training on Pre-Work Personal Risk Assessment & Toolbox Talk Information	12	12
Safe Working Practices with Guillotine Shears and Other Hand Tools Training	7	7
Training on Elevator Emergency Passenger Rescue	8	8
Training on Safe Communication During Work for Maintenance Technicians, Forklift Operators, and Mold Technicians	19	38
Field Area Responsibility Training	15	15
Safe Operation of Construction Machinery Training	16	32
OHS-Environment General Work Instructions and Awareness Training	5	10
Urban Search and Rescue (USAR) Theoretical and Practical Training	52	832
Training on ODAK Software Risk Assessment Module (Environment, OHS, Sustainability)	22	44

In addition to these programs, we conducted specialized initiatives on machine safety and behavioral safety audits. Through all training activities carried out throughout the year, our aim is not only to inform employees but also to embed safe behavior as a natural part of our working culture. This comprehensive approach remains one of our strongest tools in achieving our zero-accident target.

Employee Engagement and Incentives

We base our occupational health and safety processes on the active participation of our employees. In 2024, we continued to evaluate hazard notifications received from the field and rewarded the employees who submitted the highest number of reports. We also provided an instant recognition award to our colleague who stopped a high-risk operation and prevented a potential accident, emphasizing that safe behavior is one of our core corporate values.

Subcontractor Management

We consider the safety of our subcontractor employees as a direct responsibility of Kūmaş. Before commencing any work, all subcontractors receive comprehensive occupational safety training and pre-job risk assessment briefings. At Kūmaş, we view safety not merely as a target, but as a culture of continuous learning and improvement. To ensure that safe behavior becomes permanent, we systematically raise awareness and encourage each employee to take an active role in the process.

We conduct regular risk assessments to identify any conditions within our facilities that may lead to workplace accidents or occupational illnesses. Based on the results of these assessments, we implement the necessary preventive measures and steadily progress toward our goal of **“zero accidents and zero occupational diseases.”**



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To maintain a safe and healthy working environment across all our operational areas:

- We embrace an Occupational Health and Safety culture and act in alignment with our Integrated Management Systems Policy.
- We ensure the complete and proper use of personal protective equipment and provide the necessary guidance in cases of non-compliance.
- We participate in Occupational Health and Safety trainings and reflect the knowledge we gain into our daily work routines.
- We implement safe design principles in our facilities and ensure continuous improvement with the participation of our employees.
- We stay informed about emergency scenarios and act in accordance with this information in case of potential incidents.
- We fully comply with all legal requirements and internal company procedures.
- We do not assign tasks to colleagues that contradict OHS procedures, and we maintain an ethical and safety-oriented management approach.
- Within the scope of our "Occupational Health Safety and Environmental Reward and Sanction Procedure" we reward safe behavior and encourage compliance with the rules.

We evaluate the health and safety risks that we may encounter in our work areas together with industry dynamics, and we focus on minimizing these risks through appropriate technologies and safe equipment.



Performance Metrics

Occupational Accidents	Group	Unit	2024
Near Miss	Company	Count/Year	20
	Contractor	Count/Year	0
Lost Time Injury (LTI) Cases	Company	Count/Year	23
	Contractor	Count/Year	0
Lost Days	Company	Count/Year	823
	Contractor	Count/Year	0
Number of Non-Lost Time Accidents	Company	Count/Year	80
	Contractor	Count/Year	4
LTIR - Lost Time Injury Rate (Number of Lost Time Injuries x 1.000.000) / Total Hours Worked	Company	Rate	14.91
	Contractor	Rate	0.00
Severity Rate (Lost Days x 1000) / Total Hours Worked	Company	Rate	0.53
	Contractor	Rate	0.00



Targets

In the upcoming period, we aim to implement systemic transformations that will further advance our safe production approach.

In this context, we will move forward with the following goals:

- Reducing the accident severity rate by 50% by 2030, using 2022 as the baseline
- Reducing the lost time injury frequency rate by 75% by 2030, using 2022 as the baseline
- Integrating AI-based camera systems into our Occupational Health and Safety management system



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Talent Management

By supporting the development of its employees, Kūmaş carries talent into the future and ensures sustainable success through a performance-driven culture of continuous improvement.



At Kūmaş, our human resources constitute the cornerstone of our qualified workforce. The success of our organization depends not only on the competencies we currently possess but also on our ability to develop these capabilities and carry them into the future. With this understanding, we adopt a holistic people management approach to attract qualified talent, create conditions that unleash the potential of our employees, and secure long-term success.

With a focus on Employee Wellbeing, we aim to strengthen employee engagement, increase organizational efficiency through the establishment of agile and lean structures that support operational excellence, and position ourselves among the highly preferred employers in the regions where we operate. Through our academy initiatives, we also work to cultivate the qualified workforce required by our industry.

We are building a comprehensive learning system that supports the managerial, professional, and personal development of our employees. We view continuous development as an integral part of our corporate culture, prioritizing practices that ensure our employees keep their knowledge, skills, and competencies up to date. In line with this approach, we carry out various structured development and learning programs designed to support the growth journey of our employees.

Performance and Talent Development

At Kūmaş, we view performance management not merely as an evaluation process but as a strategic tool designed to nurture the potential of our employees. Through our Performance Management System, we aim to foster a culture of high performance and continuous improvement across the company, ensuring fair, streamlined, and transparent evaluation and feedback processes aligned from corporate strategy down to the individual level. All white-collar employees set their annual goals through an online platform, and year-end performance evaluations are used to track goal realization. The results form the basis of individual development planning, transforming performance management into a driving force for sustainable growth.

We implement our Talent Management System for all monthly-paid employees. The process begins with employees' self-assessments and is finalized with managerial evaluations. By systematically identifying short-, medium-, and long-term workforce needs and matching these needs with high-performance and high-potential employees, we support individual development while building readiness for future leadership and expertise roles.

When attracting new talent to our organization, we focus not only on role requirements but also on candidates' openness to learning and capacity for development. We value individuals who can think innovatively, adapt to change, and demonstrate high levels of motivation. Through academic collaborations with universities, sector-focused events, and employer branding initiatives targeting young talent, we aim to position Kūmaş as a preferred employer.

Target

- Increasing the average annual employee training hours to 30 hours by 2026 and to 36 hours by 2030



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Learning Culture and Training Investments

At Kūmaş, we embrace the belief that a strong learning culture forms the foundation of employee development. Our structured training programs, designed to enhance the knowledge and skills of employees at all levels, are developed to holistically cover both technical and behavioral competencies. Within the scope of our Training and Development Procedure, we systematically monitor and implement our learning programs and practices.

Our training processes are primarily conducted face-to-face to enhance employees' knowledge and awareness levels. In addition, employees are assigned online courses through platforms such as E-nocta, Udemy, Busuu, and MIT Sloan, enabling continuous support for their personal and professional development.

In 2024, a total of 32,707 hours of training were delivered. The distribution of these training hours is as follows:

Training Category (By Type)	Unit	2022	2023	2024
Professional Development	Hours	2,723	1,720	7,912
Personal Development	Hours	1,649	557	2,842
OHS	Hours	15,190	13,649	14,224
Other (e.g., Leadership)	Hours	14,420	5,376	7,729
Total Training Hours	Hours	33,982	21,302	32,707

1 Hour Environmental Training Provided to Employees	Unit	2022	2023	2024
Trainings	Hours*person	1,500	1,337	990

A total of 12,235 hours of training were completed by the white-collar workers, and 20,472 hours by the blue-collar workers





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Distribution of Trainings

By Employee Category	Unit	2022	2023	2024
Senior Managers	Hours*person	2,148	1,168	1,265
	People	286	236	674
Middle Managers	Hours*person	6,650	5,377	9,685
	People	780	1,160	3,840
Other Employees	Hours*person	25,185	14,757	21,757
	People	3,934	4,730	4,826
Total		33,982	21,302	32,707

By Gender	Unit	2022	2023	2024
Male	Hours*person	31,657	19,919	29,972
	People	4,707	5,758	8,398
Female	Hours*person	2,325	1,383	2,735
	People	292	365	1,082
Total		33,982	21,302	32,707

By Employment Type	Unit	2022	2023	2024
Blue Collar	Hours*person	24,441	14,123	20,472
	People	3,806	4,513	4,125
White Collar	Hours*person	9,541	7,180	12,235
	People	1,193	1,610	5,353
Contractor Employees	Hours*person	978	1,113	1,485
	People	978	1,113	1,485
Total		33,982	21,302	32,707

We manage all training processes through the DigitalİK platform and regularly monitor participation and progress rates. Through this practice, we contribute to the continuous development of our employees and support a learning-oriented corporate culture.





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Diversity, Equality and Inclusion

At Kumaş, we embrace equality, diversity, and inclusion, create a fair working environment, and take concrete steps to increase female employment.

At Kumaş, we embrace diversity, equity, and inclusion as an integral part of our corporate culture. In recruitment, promotion, remuneration, and working conditions, we adopt a fair and unbiased approach without discrimination based on gender, age, ethnicity, belief, political opinion, disability status, or any similar grounds. Our priority is to create a work environment where every employee has equal access to opportunities and where diverse perspectives and experiences are valued.

Through our efforts to increase women's employment, the ratio of female employees reached to 5.4% in 2024, representing an approximately 8% increase compared to the previous year. We consider the growing share of women in our workforce as a clear reflection of our human resources policies that support diversity.

As of 2024, our total number of employees reached 700, of which, 94.6% are men and 5.4% are women. The proportion of women in mid-level management increased to 7.53%, demonstrating our commitment to strengthening women's representation in decision-making processes. Increasing diversity at managerial levels remains one of our priority objectives. As of 2024, seven male executives serve in senior management roles, while the ratio of female managers at the mid-management level has reached 7.53%, showing consistent progress compared to previous years.

We believe that differences bring strength to our organization, and we are committed to fostering a workplace culture in which everyone feels included, respected, and valued. We maintain a zero-tolerance policy against child labor and forced labor and do not engage in the employment of young workers in our operations. This approach is clearly reflected in our Code of Ethics and Working Principles, and we put these principles into practice through our daily operations and management practices.

Targets

- Establishing a diversity, equity, and inclusion policy/ commitment with the involvement of the Board of Directors
- Increasing the proportion of female employees to 6% by 2028 compared to the 2022 base year





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Distribution of Workforce

By Employment Type	Unit	2022	2023	2024
White Collar – Female	Person	24	23	25
White Collar – Male	Person	119	118	121
Blue Collar – Female	Person	15	10	13
Blue Collar – Male	Person	600	512	541
Total		758	663	700

Contract Type	Unit	2022	2023	2024
Indefinite-term – Female	Person	39	33	38
Indefinite-term – Male	Person	719	630	647
Fixed-Term – Female	Person	0	0	0
Fixed-Term – Male	Person	0	0	15
Total		758	663	700

By Gender	Unit	2022	2023	2024
Male	People	719	630	662
	Percentage (%)	94.9	95.0	94.6
Female	People	39	33	38
	Percentage (%)	5.2	5	5.4
Total		758	663	700

By Age	Unit	2022	2023	2024
18–30 Years	Female	7	5	9
	Percentage (%)	0.92	0.75	1.29
	Male	192	153	172
	Percentage (%)	25.33	23.08	24.57
31–40 Years	Female	17	17	19
	Percentage (%)	2.24	2.56	2.71
	Male	342	356	363
	Percentage (%)	45.12	53.70	51.86
41–50 Years	Female	13	9	9
	Percentage (%)	1.72	1.36	1.29
	Male	171	115	122
	Percentage (%)	22.56	17.35	17.43
51–60 Years	Female	2	2	1
	Percentage (%)	0.26	0.30	0.14
	Male	14	6	5
	Percentage (%)	1.85	0.90	0.71



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Other Groups	Unit	2022	2023	2024
Employees with Disabilities	Female	2	2	3
	Percentage (%)	10	10.5	16.6
	Male	18	17	15
	Percentage (%)	90	89.5	83.4

By Management Category	Unit	2022	2023	2024
Senior Management	Female	0	0	0
	Percentage (%)	0	0	0
	Male	5	6	7
	Percentage (%)	3.50	4.26	4.79
Mid-Level Management	Female	8	9	11
	Percentage (%)	5.59	6.38	7.53
	Male	37	40	43
	Percentage (%)	25.87	28.37	29.45
Other Positions	Female	16	14	14
	Percentage (%)	11.19	9.93	9.59
	Male	77	72	71
	Percentage (%)	53.85	51.06	48.63
Total		143	141	146

Working Status	Unit	2022	2023	2024
Full-Time	Female	39	33	38
	Male	719	630	662





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Employee Satisfaction and Engagement

Kūmaş aims to strengthen employee commitment and satisfaction through fair remuneration, inclusive benefits, and employee-oriented practices.



At Kūmaş, we regard employee satisfaction and engagement as one of the fundamental elements of our sustainable corporate success. By taking the Ten Principles of the United Nations Global Compact (UNGC), which cover human rights and labor standards, as a reference, we aim to develop our responsible business practices in alignment with this framework. We adopt a systematic approach to creating a work environment in which employees feel valued, their opinions are taken into account, and their development is supported. In this context, we implement various practices aimed at continuously improving the employee experience, and place the insights we gain at the core of our strategic human resources planning.

Our Employee Engagement and Experience Survey, conducted in 2023, revealed an employee satisfaction score of 67%. These results serve as an important guide for preserving our strengths while focusing on areas of improvement.

To enhance employee engagement and maintain motivation throughout the year, we organize various in-house activities, tournaments, and family-inclusive events. In addition, our suggestion and reward system highlights the ideas and contributions of our employees, supporting a participatory corporate culture. Our performance management, career planning, and talent management systems further reinforce long-term engagement by promoting employee development.

Compensation and Benefits Policy

At Kūmaş, our compensation policy is based on fair, transparent, and objective criteria. In this regard:

- White-collar employees' salaries are determined using an internationally recognized methodology, considering job descriptions, responsibility levels, and each position's place within the organization.
- Blue-collar employees' compensation is managed in accordance with the provisions of the Collective Bargaining Agreement.

Our benefits policy, which aims to enhance employee well-being, is designed with an inclusive approach. As of 2024, 100% of our hourly-paid employees are covered by collective bargaining agreements. We provide all employees with access to their compensation information and payroll records through our Digital HR platform.

Contract	Unit	2022	2023	2024
Percentage of hourly-paid employees covered by collective bargaining agreements	Percentage (%)	100	100	100

People-Oriented Management

With our people-oriented approach, we place the health, safety, and development of our employees at the core of all our processes.

We aim to strengthen employee well-being by supporting both their professional growth and their work-life balance. At Kūmaş, our understanding of people-oriented management goes beyond enhancing employee satisfaction; it focuses on contributing to employees' development, supporting their well-being in the workplace, and helping them maintain a healthy work-life balance. Through this approach, we aim to reinforce long-term corporate sustainability.

Workforce

Employment and Turnover	Unit	2022	2023	2024
New Hires – Total	Person	159	52	198
White Collar	Person	45	17	33
Blue Collar	Person	114	35	165
Total Employees Leaving	Person	85	148	160
White Collar	Person	25	24	28
Blue Collar	Person	60	124	132
Total		244	200	358

By Gender	Unit	2022	2023	2024
Male – New Hires	Person	146	50	187
	Percentage (%)	91.82	96.15	94.4
Male – Employees Leaving	Person	79	140	154
	Percentage (%)	92.94	94.6	96.25
Female – New Hires	Person	13	2	11
	Percentage (%)	8.18	3.84	5.56
Female – Employees Leaving	Person	6	8	6
	Percentage (%)	7.06	5.4	3.75
Total		244	200	358

By Age	Unit	2022	2023	2024
18–30 – New Hires	Person	94	30	108
	Percentage (%)	59.12	57.69	54.55
18–30 – Employees Leaving	Person	37	28	56
	Percentage (%)	43.53	18.92	35
31–40 Years old - New Hires	Person	56	18	67
	Percentage (%)	35.22	34.62	33.84
31–40 Years old - Employees Leaving	Person	34	29	62
	Percentage (%)	40.00	19.59	38.75
41–50 Years old - New Hires	Person	7	4	23
	Percentage (%)	4.40	7.69	11.62
41–50 Years old - Employees Leaving	Person	10	75	37
	Percentage (%)	11.76	50.68	23.125
51–60 years old - New Hires	Person	2	0	0
	Percentage (%)	1.26	0.00	0.00
51–60 Years old - Employees Leaving	Person	4	16	5
	Percentage (%)	4.71	10.81	3.125



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Parental Leave	Unit	2022		2023		2024	
		Female	Male	Female	Male	Female	Male
Employees entitled to parental leave	Number	1	32	1	31	2	42
Employees who took parental leave	Number	1	32	1	31	2	42
Employees who returned to work after parental leave	Number	1	32	1	31	2	42
Employees who returned and remained employed for at least 12 months after returning	Number	1	30	1	27	1	35



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Certificates and Management Systems

Certificate Name

ISO 9001:2015 Quality Management System

ISO 45001:2018 Occupational Health and Safety Management System

ISO 50001:2018 Energy Management System

ISO 27001:2022 Information Security Management System

ISO 14064-1:2018 Corporate Carbon Footprint

ISO 14046:2014 Water Footprint

ISO 14067:2018 Product Carbon Footprint Standard

ISO/IEC 17025:2017 Laboratory Accreditation Certificate

Authorized Legal Entity Competency Certificate

Zero Waste to Landfill

Greenhouse Gas Protocol (GHG Protocol): Corporate Accounting and Reporting Standard

GMP+ (Good Manufacturing Practice)

Environmental Product Declaration (EPD)



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Performance Indicators

Economic Performance Indicators

Suppliers	Unit	2022	2023	2024
Total Number of Suppliers	Number	872	814	917
Total Number of Local Suppliers	Number	831	769	863
Total Number of Foreign / Global Suppliers	Number	41	45	54
Total Number of New Suppliers	Number	41	39	45
Percentage of Local Suppliers	%	95	95	94

	Unit	2022	2023	2024
Number of Critical Suppliers	Number	183	205	216

Environmental Performance Indicators

Environmental Investments (TL)	2022	2023	2024
Total operating expenses of environmental activities	4,670,982	3,077,482	8,093,957
Total environmental investments	50,979,821	26,331,378	43,777,117
Total	55,650,804	29,408,860	51,871,075

Non-Renewable Direct Energy	Unit	2022	2023	2024
Gasoline	liter	15,830	42,374	81,778
Diesel	liter	476,419	320,907	338,260
Natural Gas	Sm ³	20,070,728	9,578,394	18,460,685
Other (petroleum coke)	tonnes	40,082	27,794	42,249

Non-Renewable Indirect Energy	Unit	2022	2023	2024
Electricity	MWh	155,255	46,109	85,320



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Scope	2022	2023	2024
Scope 1 (ton CO ₂ e)	429,932	246,733	414,671
Scope 2 (ton CO ₂ e)	49,917	19,970	37,940
Scope 3 (ton CO ₂ e)	374,429	194,900	339,776

Emission Type	Unit	2022	2023	2024
CO	Kg/hour	55.3772	10.785	
NO	Kg/hour	58.966	39.498	
NOX (NO ₂)	Kg/hour	97.839	65.664	
SO ₂	Kg/hour	45.343	29.937	
Dust	Kg/hour	7.186	3.2096	
HCl	Kg/hour	0.8577	0.1169	
HF	Kg/hour	0.8054	0.0418	
TOC	Kg/hour	0.4359	1.7861	

	Unit	2022	2023	2024
Amount of Recycled Water	m ³	40.000	35.000	31.701

	Unit	2022	2023	2024
Water Consumption	megaliter	234.50	125.46	182.73

Water Withdrawal	Unit	2022	2023	2024
Groundwater	megaliter	273.78	157.42	211.34

Wastewater Discharge	Unit	2022	2023	2024
Surface water sources, including wetlands, rivers, lakes, and oceans	megaliter	39.28	31.97	28.61

By Type	Unit	2022	2023	2024
Hazardous Waste	tonnes	193	107	109
Non-Hazardous Waste	tonnes	944	1,094	1,004
Total Waste	tonnes	1,137	1,201	1,113

By Disposal Method	Unit	2022	2023	2024
Energy Recovery	tonnes	119	52	57
Recycling / Recovery	tonnes	1,018	1,149	1,056
Landfill	tonnes	0,015	0	0
Other Disposal Methods	tonnes	0,052	0,040	0,049
Total Waste Disposed	tonnes	1,137	1,201	1,112



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Social Performance Indicators

Occupational Accidents	Group	Unit	2024
Near Miss	Company	Count/Year	20
	Contractor	Count/Year	0
Lost Time Injury (LTI) Cases	Company	Count/Year	23
	Contractor	Count/Year	0
Lost Days	Company	Count/Year	823
	Contractor	Count/Year	0
Number of Non-Lost Time Accidents	Company	Count/Year	80
	Contractor	Count/Year	4
LTIR - Lost Time Injury Rate (Number of Lost Time Injuries x 1.000.000) / Total Hours Worked	Company	Rate	14.91
	Contractor	Rate	0.00
Severity Rate (Lost Days x 1000) / Total Hours Worked	Company	Rate	0.53
	Contractor	Rate	0.00

Contract	Unit	2022	2023	2024
Percentage of hourly-paid employees covered by collective bargaining agreements	Percentage (%)	100	100	100

Training	Number of Participants	Training Hours (person*hour)
Basic OHS Training	624	9.984
Basic Fire Safety Training	43	688
Watermist Fire Suppression System Operation Training	9	13,5
Basic First Aid Training	5	80
First Aid Certificate Renewal Training	11	88
Onboarding Trainings	201	201
Post-Accident Return-to-Work and Information Training	26	26
Post-Illness Return-to-Work Training	8	8
Department Transfer Training	179	179
Job Role Transition Training	28	28
Training on Legal Processes Related to OHS Training	44	132
Training for Employee Representatives	8	128
Training on Pre-Work Personal Risk Assessment & Toolbox Talk Information	12	12
Safe Working Practices with Guillotine Shears and Other Hand Tools Training	7	7
Training on Elevator Emergency Passenger Rescue	8	8
Training on Safe Communication During Work for Maintenance Technicians, Forklift Operators, and Mold Technicians	19	38
Field Area Responsibility Training	15	15
Safe Operation of Construction Machinery Training	16	32
OHS-Environment General Work Instructions and Awareness Training	5	10
Urban Search and Rescue (USAR) Theoretical and Practical Training	52	832
Training on ODAK Software Risk Assessment Module Environmental and OHS Sustainability	22	44



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Training Category (By Type)	Unit	2022	2023	2024
Professional Development	Hours*person	2,723	1,720	7,912
Personal Development	Hours*person	1,649	557	2,842
OHS	Hours*person	15,190	13,649	14,224
Other (e.g., Leadership)	Hours*person	14,420	5,376	7,729
Total Training Hours	Hours*person	33,982	21,302	32,707

1 Hour Environmental Training Provided to Employees	Unit	2022	2023	2024
Trainings	Hour	1,500	1,337	550

By Employee Category	Unit	2022	2023	2024
Senior Managers	Hours*person	2,148	1,168	1,265
	People	286	236	674
Middle Managers	Hours*person	6,650	5,377	9,685
	People	780	1,160	3,840
Other Employees	Hours*person	25,185	14,757	21,757
	People	3,934	4,730	4,826
Total		33,982	21,302	32,707

By Gender	Unit	2022	2023	2024
Male	Hours*person	31,657	19,919	29,972
	People	4,707	5,758	8,398
Female	Hours*person	2,325	1,383	2,735
	People	292	365	1,082
Total		33,982	21,302	32,707

By Employment Type	Unit	2022	2023	2024
Blue Collar	Hours*person	24,441	14,123	20,472
	People	3,806	4,513	4,125
White Collar	Hours*person	9,541	7,180	12,235
	People	1,193	1,610	5,353
Contractor Employees	Hours*person	978	1,113	1,485
	People	978	1,113	1,485
Total		33,982	21,302	32,707



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By Employment Type	Unit	2022	2023	2024
White Collar – Female	Person	24	23	25
White Collar – Male	Person	119	118	121
Blue Collar – Female	Person	15	10	13
Blue Collar – Male	Person	600	512	541
Total		758	663	700

Contract Type	Unit	2022	2023	2024
Indefinite-term – Female	Person	39	33	38
Indefinite-term – Male	Person	719	630	647
Fixed-Term – Female	Person	0	0	0
Fixed-Term – Male	Person	0	0	15
Total		758	663	700

By Gender	Unit	2022	2023	2024
Male	People	719	630	662
	Percentage (%)	94.9	95.0	94.6
Female	People	39	33	38
	Percentage (%)	5.2	5	5.4
Total		758	663	700

By Age	Unit	2022	2023	2024
18–30 Years old	Female	7	5	9
	Percentage (%)	0.92	0.75	1.29
	Male	192	153	172
	Percentage (%)	25.33	23.08	24.57
31–40 Years old	Female	17	17	19
	Percentage (%)	2.24	2.56	2.71
	Male	342	356	363
	Percentage (%)	45.12	53.70	51.86
41–50 Years old	Female	13	9	9
	Percentage (%)	1.72	1.36	1.29
	Male	171	115	122
	Percentage (%)	22.56	17.35	17.43
51–60 Years old	Female	2	2	1
	Percentage (%)	0.26	0.30	0.14
	Male	14	6	5
	Percentage (%)	1.85	0.90	0.71



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Employment and Turnover (Türkiye) Unit 2022 2023 2024

New Hires – Total	Person	159	52	198
White Collar	Person	45	17	33
Blue Collar	Person	114	35	165
Total Employees Leaving	Person	85	148	160
White Collar	Person	25	24	28
Blue Collar	Person	60	124	132
Total		244	200	358

By Gender Unit 2022 2023 2024

Male – New Hires	Person	146	50	187
	Percentage (%)	91.82	96.15	94.4
Male – Employees Leaving	Person	79	140	154
	Percentage (%)	92.94	94.6	96.25
Female – New Hires	Person	13	2	11
	Percentage (%)	8.18	3.84	5.56
Female – Employees Leaving	Person	6	8	6
	Percentage (%)	7.06	5.4	3.75
Total		244	200	358

By Age Unit 2022 2023 2024

18–30 – New Hires	Person	94	30	108
	Percentage (%)	59.12	57.69	54.55
18–30 – Employees Leaving	Person	37	28	56
	Percentage (%)	43.53	18.92	35
31 – 40 Years old - New Hires	Person	56	18	67
	Percentage (%)	35.22	34.62	33.84
31 – 40 Years old - Employees Leaving	Person	34	29	62
	Percentage (%)	40.00	19.59	38.75
41 – 50 Years old - New Hires	Person	7	4	23
	Percentage (%)	4.40	7.69	11.62
41 – 50 Years old - Employees Leaving	Person	10	75	37
	Percentage (%)	11.76	50.68	23.125
51 – 60 Years old - New Hires	Person	2	0	0
	Percentage (%)	1.26	0.00	0.00
51 – 60 Years old - Employees Leaving	Person	4	16	5
	Percentage (%)	4.71	10.81	3.125



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By Management Category		Unit	2022	2023	2024
Senior Management	Female		0	0	0
	Percentage (%)		0	0	0
	Male		5	6	7
	Percentage (%)		3.50	4.26	4.79
Mid-Level Management	Female		8	9	11
	Percentage (%)		5.59	6.38	7.53
	Male		37	40	43
	Percentage (%)		25.87	28.37	29.45
Other Positions	Female		16	14	14
	Percentage (%)		11.19	9.93	9.59
	Male		77	72	71
	Percentage (%)		53.85	51.06	48.63
Total			143	141	146

Other Groups		Unit	2022	2023	2024
Employees with Disabilities	Female		2	2	3
	Percentage (%)		10	10.5	16.6
	Male		18	17	15
	Percentage (%)		90	89.5	83.4

Working Status		Unit	2022	2023	2024
Full-Time	Female		39	33	38
	Male		719	630	662

Employees Entitled to Parental Leave	Unit	2022		2023		2024	
		Female	Male	Female	Male	Female	Male
Employees entitled to parental leave	Number	1	32	1	31	2	42
Employees who took parental leave	Number	1	32	1	31	2	42
Employees who returned to work after parental leave	Number	1	32	1	31	2	42
Employees who returned and remained employed for at least 12 months after returning	Number	1	30	1	27	1	35



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SDG Index

SDGs	Goals and Targets	Our Contributions	Location
 SDG 3: GOOD HEALTH AND WELL-BEING			
Target 3.9	By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	Through the ongoing implementation of our Water Efficiency Management System and water recovery projects, we aim to ensure full compliance with legal regulations and reintegrate treated water into production processes. This enables us to minimize environmental impact while reducing reliance on groundwater.	Pages 51-53: Water and Wastewater Management Pages 54-55: Waste Management
 SDG 4: QUALITY EDUCATION			
Target 4.3	By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university	At Kūmaş, we view performance management not merely as an evaluation process but as a strategic tool designed to nurture the potential of our employees. Through our Performance Management System, we aim to foster a culture of high performance and continuous improvement across the company, ensuring fair, streamlined, and transparent evaluation and feedback processes aligned from corporate strategy down to the individual level.	Pages 63-64: Talent Management Page 67: Workforce Pages 42-43: R&D and Innovation Pages 62-64: Talent Management
Target 4.4	By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship		
Target 4.5	By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations	As Kūmaş, we adopt equitable and inclusive practices in employment. Based on disability status, 16.6% of our employees are women and 83.4% are men.	
Target 4.7	By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development.	At Kūmaş, we embrace the idea that a culture of learning forms the foundation of employee development. Our structured training programs, designed to enhance the knowledge and skills of employees at all levels, are developed with a holistic approach covering both technical and behavioral competencies. Within the scope of our Training and Development Procedure, we monitor and manage our training programs and practices.	



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SDGs	Goals and Targets	Our Contributions	Location
 SDG 5: GENDER EQUALITY			
Target 5.1	End all forms of discrimination against all women and girls everywhere	Through our efforts to increase women’s employment, the ratio of female employees reached to 5.4% in 2024, representing an approximately 8% increase compared to the previous year. We consider the growing share of women in our workforce as a clear reflection of our human resources policies that support diversity.	Pages 65-67: Diversity, Equality and Inclusion
Target 5.2	Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation		
 SDG 6: CLEAN WATER AND SANITATION			
Target 6.3	By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	To reduce groundwater consumption, we conduct regular training and awareness programs for all stakeholders, including employees and subcontractors, and record the outcomes annually. Through the establishment of our Water Efficiency Management System, we aim to achieve full compliance with legal regulations and to reintroduce treated water into production processes without discharge, through a project for the recovery of domestic wastewater and surface water. This enables us to minimize environmental impact while reducing reliance on groundwater.	Page 21: Management of Climate-Related Risks Pages 51-53: Water and Wastewater Management
Target 6.4	By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity		
 SDG 7: AFFORDABLE AND CLEAN ENERGY			
Target 7.2	By 2030, increase substantially the share of renewable energy in the global energy mix	We invest in modernization projects to reduce energy consumption at our production facilities and redesign our processes with an efficiency focus. Investments continue to increase the share of renewable energy in our production processes. As part of our climate and emission reduction goals, we are investing in two solar power plants with a combined annual capacity of 100 MWe in Yozgat and Sivas. These SPP projects are expected to generate approximately twice our annual electricity demand, with surplus electricity feeding it into the grid.	Pages 46-47: Energy Management Pages 48-49: Greenhouse Gas (GHG) Emissions
Target 7.3	By 2030, double the global rate of improvement in energy efficiency		



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
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SDGs	Goals and Targets	Our Contributions	Location
 SDG 8: DECENT WORK AND ECONOMIC GROWTH			
Target 8.2	Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors	As Kūmaş, we continue to enhance the quality and diversity of our products through continuously updated technology and R&D efforts. While providing solutions tailored to the needs of the industry and our customers, we also manage our environmental impacts to ensure resource and energy efficiency. In this way, we aim to create sustainable economic value and play a decisive role in the sector as an effective player on a global scale.	Pages 42-43: R&D and Innovation
Target 8.5	By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	<p>We believe that differences bring strength to our organization, and we are committed to foster-ing a workplace culture in which everyone feels included, respected, and valued. This approach is clearly reflected in our Code of Ethics and Working Principles, and we put these principles into practice through our daily operations and management practices.</p> <p>As Kūmaş, we adopt equitable and inclusive practices in employment. Based on disability status, 16.6% of our employees are women and 83.4% are men.</p>	<p>Pages 65-67: Diversity, Equality, and Inclusion</p> <p>Page 67: Workforce</p>
Target 8.7	Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms	At Kūmaş, we do not tolerate child labor or precarious working conditions in any of our business processes. We expect our subcontractors, business partners, customers, and other stakeholders to meet these criteria and implement human resources policies that comply with the ILO Conventions ratified by Türkiye.	<p>Page 23: Business Conduct and Legal Compliance</p> <p>Page 65: Diversity, Equality, and Inclusion</p>
Target 8.8	Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment	At Kūmaş, we view occupational health and safety not merely as a legal obligation but as a foundational element of our corporate culture. The health, safety, and well-being of each of our employees are indispensable to the sustainable success of our business. With this perspective, we prioritize creating safe, healthy, and productive working environments across all operational areas.	Pages 58-61: Occupational Health and Safety



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SDGs	Goals and Targets	Our Contributions	Location
 SDG 9: INDUSTRY, INNOVATION AND INFRASTRUCTURE			
Target 9.4	By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	Our subsidiary, Yenilikçi Yapı, operates as a recovery facility that collects end-of-life materials from the market, contributing to the circular economy. Together with Yenilikçi Yapı, we carry out recovery practices to optimize resource use. In our recovery site, bricks that do not meet our quality standards or are lost during production are reintegrated into our production processes as raw materials.	Page 6: About Kūmaş Page 41: Economic Performance Pages 54-55: Waste Management
Target 9.5	Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending	We continue to bring innovative solutions to the industry through our R&D efforts, developed using the latest technologies. We strive to meet our customers' needs by enhancing the quality and variety of our products; we play an active role in ensuring today's resources are carried into the future by developing low-carbon products.	Pages 10-11: Areas of Activities Page 9: Vision, Mission and Values Page 16: Awards and Achievements Pages 42-43: R&D and Innovation
 SDG 10: REDUCED INEQUALITIES			
Target 10.3	Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard	At Kūmaş, we embrace diversity, equity, and inclusion as an integral part of our corporate culture. In recruitment, promotion, compensation, and working conditions, we adopt a fair and unbiased approach without discrimination based on gender, age, ethnicity, belief, political opinion, disability status, or any similar grounds. Our priority is to create a work environment where every employee has equal access to opportunities and where diverse perspectives and experiences are valued.	Page 9: Vision, Mission and Values Pages 65: Diversity, Equality and Inclusion



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SDGs	Goals and Targets	Our Contributions	Location
 SDG 12: RESPONSIBLE CONSUMPTION AND PRODUCTION			
Target 12.2	By 2030, achieve the sustainable management and efficient use of natural resources	<p>We ensure full compliance with applicable legislation in the collection, temporary storage, transportation, and disposal of waste. As a result of our operations, we generate both hazardous and non-hazardous waste. We recover all of our non-hazardous waste and a portion of our hazardous waste. In 2024, we sent 95% of our waste to licensed recycling facilities. By obtaining the Zero Waste to Landfill certificate, we demonstrate our commitment to sustainable and environmentally responsible waste management practices. In this context, we recover nearly all waste generated during our operations and do not send waste to landfill sites. As the only facility in the sector holding the Zero Waste to Landfill certificate, we clearly demonstrate our determination to increase resource efficiency and support the circular economy.</p>	<p>Pages 54-55: Waste Management</p>
Target 12.4	By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment		
Target 12.5	By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse		
 SDG 13: CLIMATE ACTION			
Target 13.1	Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	<p>At Kūmaş, we manage risks and opportunities arising from climate change through a holistic approach to ensure the long-term sustainability of our operations. We assess climate-related risks under two main categories: physical risks and transition risks. To manage these risks, we create an extensive long list and evaluate them during risk and opportunity workshops conducted with the participation of the Sustainability Committee and relevant departments. Among the physical risks assessed within this long list are heatwaves, sudden rainfall, floods, and overflows. Transition risks include developments in global and national climate policies, carbon pricing mechanisms such as the Emissions Trading System (ETS) planned to be implemented in Türkiye in the near future, reporting obligations, and cost risks associated with the transition to a low-carbon economy. Through this process, we evaluate the potential impacts of climate-related risks across our entire value chain, including upstream, direct operations, and downstream activities.</p>	<p>Page 21: Management of Climate-Related Risks</p>



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SDGs	Goals and Targets	Our Contributions	Location
 SDG 15: LIFE ON LAND			
Target 15.5	Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species	At Kūmaş, we place great importance on the preservation of natural ecosystems and the sustainability of biodiversity in the regions where we operate. We work meticulously to minimize the environmental impact of our production activities, protect natural habitats, and contribute to maintaining ecosystem balance. In both new investments and existing operations, we consider conservation areas and ecosystem sensitivities identified in Environmental Impact Assessment (EIA) processes.	Page 56: Biodiversity
 SDG 16: PEACE, JUSTICE AND STRONG INSTITUTIONS			
Target 16.5	Substantially reduce corruption and bribery in all their forms	We conduct all activities in full compliance with national legislation and international accounting standards, and maintain our commercial records in a transparent, accurate, and auditable manner. Suspicious transactions or unethical situations are immediately reported to our Ethics and Disciplinary Committee, and necessary investigation processes are carried out with diligence. The Committee conducts an independent assessment in such cases and ensures that appropriate actions are taken.	Page 23: Anti-Corruption Page 23: Internal Audit
Target 16.6	Develop effective, accountable and transparent institutions at all levels	In line with the principles of transparency, accountability, and legal compliance, we fulfill our tax obligations and contribute to the national economy by managing all tax processes fairly, accurately, and on time.	Page 19: Organizational Structure Page 41: Economic Performance



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GRI Content Index

Statement of use	Kūmaş Manyezit A.Ş. has reported the information cited in this GRI content index for the period January 1, 2024 to December 31, 2024 with reference to the GRI Standards.
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI Sector Standard(s)	GRI 14: Mining Sector 2024



For the Content Index – Advanced With Reference option Service, GRI Services reviewed that the GRI content index has been presented in a way consistent with the requirements for reporting with reference to the GRI Standards, and that the information in the index is clearly presented and accessible to the stakeholders.

GRI Services reviewed the correct mapping of the GRI disclosures presented in the GRI content index to Sustainable Development Goals (SDGs), based on the 'Goals and targets database' tool available from GRI website.

The service was performed on the English version of the report.

GRI Standard/ Other Source	Disclosure	Location	Page Number	Omission and Explanation	SDG Target	GRI Sector Standard Ref. No.
GENERAL DISCLOSURES						
GRI 2: General Disclosures 2021	2-1 Organizational details	Corporate Governance	19-25	-	-	-
	2-2 Entities included in the organization's sustainability reporting	Organizational Structure	19	-	-	-
	2-3 Reporting period, frequency and contact point	About the Report	2	-	-	-
	2-4 Restatements of information	2024 at a Glance Company History Awards and Achievements Value Chain Management Sustainability Strategy Economic Performance Energy Management Emission Management Water and Wastewater Management Waste Management Occupational Health and Safety Talent Management Diversity, Equality, and Inclusion Employee Satisfaction and Engagement	2 8 16 27 31 41 46 48 51 54 58 62 65 68	-	-	-
	2-5 External assurance	No external assurance audit has been conducted for KÜMAŞ's sustainability report.	Organizational Structure	19	- -	- -



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GRI Standard/ Other Source	Disclosure	Location	Page Number	Omission and Explanation	SDG Target	GRI Sector Standard Ref. No.
GENERAL DISCLOSURES						
GRI 2: General Disclosures 2021	2-6 Activities, value chain and other business relationships	Areas of Activities Value Chain Management Stakeholder Engagement	10 27 30	-	-	-
	2-7 Employees	Stakeholder Engagement Diversity, Equality, and Inclusion Employee Satisfaction and Engagement	30 65 68	-	-	-
	2-8 Workers who are not employees			Not disclosed. (Kumaş Manyezit A.Ş. does not have any non-employee workers as of the reporting period.)	-	-
	2-9 Governance structure and composition	Corporate Governance	19-25	-	-	-
	2-10 Nomination and selection of the highest governance body	Organizational Structure	19	-	-	-
	2-11 Chair of the highest governance body	Organizational Structure	19	-	-	-
	2-12 Role of the highest governance body in overseeing the management of impacts	Organizational Structure	19	-	-	-
	2-13 Delegation of responsibility for managing impacts	Corporate Risk Management	21	-	-	-
	2-14 Role of the highest governance body in sustainability reporting	Organizational Structure	19	-	-	-
	2-15 Conflicts of interest	Business Ethics and Legal Compliance	23	-	-	-
	2-16 Communication of critical concerns	Corporate Risk Management Stakeholder Engagement Sustainability Strategy	21 30 31	-	-	-
	2-17 Collective knowledge of the highest governance body	Organizational Structure	19	-	-	-
	2-18 Evaluation of the performance of the highest governance body	Organizational Structure	19	-	-	-
2-19 Remuneration policies	Diversity, Equality, and Inclusion Employee Satisfaction and Engagement	65 68	-	-	-	



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GRI Standard/ Other Source	Disclosure	Location	Page Number	Omission and Explanation	SDG Target	GRI Sector Standard Ref. No.
GENERAL DISCLOSURES						
GRI 2: General Disclosures 2021	2-20 Process to determine remuneration	Employee Satisfaction and Engagement	68	-	-	-
	2-21 Annual total compensation ratio	Employee Satisfaction and Engagement	68	-	-	-
	2-22 Statement on sustainable development strategy	Sustainability Strategy	31	-	-	-
	2-23 Policy commitments	Corporate Governance Value Chain Management Occupational Health and Safety	19-25 27 58	-	-	-
	2-24 Embedding policy commitments	Corporate Governance Value Chain Management Occupational Health and Safety	19-25 27 58	-	-	-
	2-25 Processes to remediate negative impacts	Corporate Risk Management	21	-	-	-
	2-26 Mechanisms for seeking advice and raising concerns	Business Ethics and Legal Compliance	23	-	-	-
	2-27 Compliance with laws and regulations	Business Ethics and Legal Compliance	23	-	-	-
	2-28 Membership associations	Economic Performance	41	-	-	-
	2-29 Approach to stakeholder engagement	Stakeholder Engagement Material Topics	30	-	-	-
2-30 Collective bargaining agreements	Employee Satisfaction and Engagement	68	-	-	-	
MATERIAL TOPICS						
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Stakeholder Engagement Material Topics	30	-	-	-
	3-2 List of material topics	Material Topics	30	-	-	-



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GRI Standard/ Other Source	Disclosure	Location	Page Number	Omission and Explanation	SDG Target	GRI Sector Standard Ref. No.
Occupational Health and Safety						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	14.15.1, 14.16.1
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	Management Systems and Certifications Occupational Health and Safety	24 58	-	SDG 8	14.16.2
	403-2 Hazard identification, risk assessment, and incident investigation	Value Chain Management Sustainability Strategy Occupational Health and Safety	27 31 58	-	SDG 8	14.16.3
	403-3 Occupational health services	Occupational Health and Safety	58	-	SDG 8	14.16.4
	403-4 Worker participation, consultation, and communication on occupational health and safety	Value Chain Management Sustainability Strategy Occupational Health and Safety	27 31 58	-	SDG 8	14.16.5
	403-5 Worker training on occupational health and safety	Value Chain Management Sustainability Strategy Occupational Health and Safety	27 31 58	-	SDG 8	14.16.6
	403-6 Promotion of worker health	Value Chain Management Sustainability Strategy Occupational Health and Safety	27 31 58	-	SDG 3	14.16.7
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Value Chain Management Sustainability Strategy Occupational Health and Safety	27 31 58	-	SDG 8	14.16.8
	403-8 Workers covered by an occupational health and safety management system	Value Chain Management Sustainability Strategy Occupational Health and Safety	26 31 60	-	SDG 8	14.16.9
	403-9 Work-related injuries	Sustainability Strategy Occupational Health and Safety	31 58	-	SDG 3, 8	14.16.10
	403-10 Work-related ill health	Sustainability Strategy Occupational Health and Safety	31 58	-	SDG 3, 8	14.16.11
GRI 14: Mining Sector 2024	Critical incidents	Occupational Health and Safety	58	-	-	14.15.3
	Sites with emergency preparedness and response plans	Occupational Health and Safety	58	-	-	14.15.4
No Use of Child Labor in Operations						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	14.18.1
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	Business Ethics and Legal Compliance	23	As KÜMAŞ, we do not tolerate child labor or precarious working conditions in any of our business processes. We expect our subcontractors, business partners, customers, and other stakeholders to meet these criteria and implement human resources policies that comply with the ILO Conventions ratified by Türkiye.	SDG 8, 16	14.18.2
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	Sustainability Strategy	31	-	SDG 5, 8, 16	14.18.3



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GRI Standard/ Other Source	Disclosure	Location	Page Number	Omission and Explanation	SDG Target	GRI Sector Standard Ref. No.
Resource and Energy Management						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	14.1
GRI 302: Energy 2016	302-1 Energy consumption within the organization	Sustainability Strategy Energy Management	31 46	-	SDG 7, 8, 12, 13	14.1.2
	302-2 Energy consumption outside of the organization	Sustainability Strategy Energy Management	31 49	-	SDG 7, 8, 12, 13	14.1.3
	302-3 Energy intensity	Sustainability Strategy Energy Management	31 46	-	SDG 7, 8, 12, 13	14.1.4
	302-4 Reduction of energy consumption	Sustainability Strategy Energy Management	31 46	-	SDG 7, 8, 12, 13	-
	302-5 Reductions in energy requirements of products and services	Sustainability Strategy R&D and Innovation Energy Management	31 42 46	-	SDG 7, 8, 12, 13	-
Waste Management						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	14.5.1, 14.6.1
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	Waste Management	54	-	-	14.5.2
	306-2 Management of significant waste-related impacts	Waste Management	56	-	SDG 3, 6, 12	14.5.3
	306-3 Waste generated	Waste Management	54	-	SDG 12, 15	14.5.4
	306-4 Waste diverted from disposal	Waste Management	56	-	SDG 3, 12	14.5.5
	306-5 Waste directed to disposal	Waste Management	54	-	SDG 3, 6, 12, 15	14.5.6
GRI 14: Mining Sector 2024	Tailings disposal methods	Waste Management	54	-	-	14.6.2
	Tailings facilities	Waste Management	54	-	-	14.6.3
Air Emission Management						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	14.3.1
GRI 305: Emissions 2016	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Emission Management	48	-	SDG 3, 12, 14, 15	14.3.2
Facility Closure and Operational Site Rehabilitation						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	-



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GRI Standard/ Other Source	Disclosure	Location	Page Number	Omission and Explanation	SDG Target	GRI Sector Standard Ref. No.
Forced Labor and Modern Slavery						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	14.19.1
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	Business Ethics and Legal Compliance	23	At KÜMAŞ, we do not tolerate child labor or precarious working conditions in any of our business processes. We expect our subcontractors, business partners, customers, and other stakeholders to meet these criteria and implement human resources policies that comply with the ILO Conventions ratified by Türkiye.	SDG 8	14.19.2
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	Sustainability Strategy	31	-	SDG 5, 8, 16	14.19.3
Anti-Corruption						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	14.22.1
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	Business Ethics and Legal Compliance	23	-	SDG 16	14.22.2
	205-2 Communication and training about anti-corruption policies and procedures	Business Ethics and Legal Compliance	23	-	SDG 16	14.22.3
	205-3 Confirmed incidents of corruption and actions taken	Business Ethics and Legal Compliance	23	-	SDG 16	14.22.4
Payments to Governments						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	14.23.1
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	Economic Performance	41	-	SDG 8, 9	14.23.2
GRI 207: Tax 2019	207-1 Approach to tax	Economic Performance	41	-	-	14.23.4
	207-2 Tax governance, control, and risk management	Corporate Risk Management	21	-	-	14.23.5
	207-3 Stakeholder engagement and management of concerns related to tax	Stakeholder Engagement Material Topics	30	-	-	14.23.6
	207-4 Country-by-country reporting	Economic Performance	41	-	-	14.23.7
Use of Renewable Energy						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	14.2.1
Mine Waste Management						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	14.3.1



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GRI Standard/ Other Source	Disclosure	Location	Page Number	Omission and Explanation	SDG Target	GRI Sector Standard Ref. No.
Product Quality						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	-
GRI 417: Marketing and Labeling 2016	417-1 Requirements for product and service information and labeling	Areas of Activities Product Groups Value Chain Management Business Ethics and Legal Compliance R&D and Innovation	10 12 27 23 42	-	SDG 12	-
Water and Waste Water Management						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	14.7.1
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	Management of Climate-Related Risks Sustainability Strategy Water and Wastewater Management	21 31 51	-	SDG 6, 12	14.7.2
	303-2 Management of water discharge-related impacts	Sustainability Strategy Water and Wastewater Management	31 51	-	SDG 6	14.7.3
	303-3 Water withdrawal	Sustainability Strategy Water and Wastewater Management	31 51	-	SDG 6	14.7.4
	303-4 Water discharge	Sustainability Strategy Water and Wastewater Management	31 51	-	SDG 6	14.7.5
	303-5 Water consumption	Sustainability Strategy Water and Wastewater Management	31 51	-	SDG 6	14.7.6
Brand Value						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	-
Transparency						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	-
Equality and Inclusion						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	14.2.1
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	Diversity, Equality, and Inclusion Employee Satisfaction and Engagement	65 68	-	SDG 5, 8	14.2.5
	405-2 Ratio of basic salary and remuneration of women to men	Diversity, Equality, and Inclusion Employee Satisfaction and Engagement	65 68	-	SDG 5, 8, 10	14.2.6
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	Diversity, Equality, and Inclusion	65	-	SDG 5, 8	14.2.7
GRI 401: Employment 2016	401-3 Parental leave	Employee Satisfaction and Engagement	70	-	SDG 5, 8	14.2.3
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	About Kūmaş	6	-	SDG 4, 5, 8, 10	14.2.4
		Occupational Health and Safety	58			
		Talent Management	63			



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GRI Standard/ Other Source	Disclosure	Location	Page Number	Omission and Explanation	SDG Target	GRI Sector Standard Ref. No.
Indirect Economic Impacts						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	14.9.1, 14.23.1
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	Economic Performance	41	-	SDG 8, 9	14.9.2, 14.23.2
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	About Kumaş Sustainability Strategy	6 31	-	SDG 5, 9, 11	14.9.3
	203-2 Significant indirect economic impacts	About Kumaş Sustainability Goals	6 32	-	SDG 1, 3, 8	14.9.4
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	Supply Chain Management	27-28	-	SDG 8	14.9.5
Protection of Land and Resource Rights						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30 30	-	-	14.12.1
Climate Change and Climate Adaptation						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	14.2.1, 14.24.1
GRI 102: Climate Change 2025	102-1 Transition plan for climate change mitigation	Corporate Risk Management Greenhouse Gas (GHG) Emissions	21 48	-	-	-
	102-2 Climate change adaptation plan	Corporate Risk Management Greenhouse Gas (GHG) Emissions	21 48	-	-	-
	102-3 Just transition	Corporate Risk Management Greenhouse Gas (GHG) Emissions	21 48	-	-	-
	102-4 GHG emissions reduction targets and progress	Sustainability Strategy Greenhouse Gas (GHG) Emissions	21 48	-	-	-
	102-5 Scope 1 GHG emissions	Sustainability Strategy Greenhouse Gas (GHG) Emissions	21 48	-	-	-
	102-6 Scope 2 GHG emissions	Sustainability Strategy Greenhouse Gas (GHG) Emissions	21 48	-	-	-
	102-7 Scope 3 GHG emissions	Sustainability Strategy Greenhouse Gas (GHG) Emissions	21 48	-	-	-
	102-8 GHG emissions intensity	Sustainability Strategy Greenhouse Gas (GHG) Emissions	21 48	-	-	-
	102-9 GHG removals in the value chain	Sustainability Strategy Greenhouse Gas (GHG) Emissions	21 48	-	-	-
	102-10 Carbon credits	Product Groups Sustainability Strategy Greenhouse Gas (GHG) Emissions	12 31 48	-	-	-
GRI 201: Economic Performance 2016	201-2 Financial implications and other risks and opportunities due to climate change	Management of Climate-Related Risks	21	-	SDG 13	14.2.2
GRI 415: Public Policy 2016	415-1 Political contributions	Emission Management	48	-	SDG 16	14.24.2



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Biodiversity						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	14.4.1, 14.8.1
GRI 101: Biodiversity 2024	101-1 Policies to halt and reverse biodiversity loss	Stakeholder Engagement Material Topics	56	-	SDG 6, 14	14.4.2
	101-2 Management of biodiversity impacts	Biodiversity	56	-	SDG 6, 14	14.4.3
	101-4 Identification of biodiversity impacts	Biodiversity	56	-	-	14.4.4
	101-5 Locations with biodiversity impacts	Biodiversity	56	-	SDG 6, 14	14.4.5
	101-6 Direct drivers of biodiversity loss	Biodiversity	56	-	SDG 6, 14	14.4.6
	101-7 Changes to the state of biodiversity	Biodiversity	56	-	SDG 6, 14	14.4.7
	101-8 Ecosystem services	Biodiversity	56	-	-	14.4.8
GRI 14: Mining Sector 2024	Approval and review of closure and rehabilitations plans	Biodiversity	56	-	-	14.8.5
	Land disturbed and rehabilitated	Biodiversity	56	-	SDG 15	14.8.6
	Estimated life of mine	Biodiversity	56	-	-	14.8.7
	Financial provisions for closure and rehabilitation	Biodiversity	56	-	SDG 15	14.8.8
	Post-mining transition	Biodiversity	56	-	-	14.8.9
Ethical Practices						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30 30	-	-	-
Fair and Responsible Employment						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	14.17.1
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	Employee Satisfaction and Engagement	69	-	SDG 5, 8, 10	14.17.3
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	As Kūmaş does not employ part-time workers, there is no difference in response to the question.		-	SDG 3, 5, 8	14.17.4
	401-3 Parental leave	Employee Satisfaction and Engagement	70	-	SDG 5, 8	14.17.5
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	About Kūmaş Occupational Health and Safety Talent Management	6 58 63	-	SDG 4, 5, 8, 10	14.17.7
	404-2 Programs for upgrading employee skills and transition assistance programs	Sustainability Strategy Talent Management	31 62	-	SDG 8	14.17.8, 14.8.3
	404-3 Percentage of employees receiving regular performance and career development reviews	Sustainability Strategy Talent Management	31 62	-	SDG 5, 8, 10	-
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	Sustainability Strategy	31	-	SDG 5, 8, 16	14.17.9
	414-2 Negative social impacts in the supply chain and actions taken	Sustainability Strategy	31	-	SDG 5, 8, 16	14.17.10



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GRI Standard/ Other Source	Disclosure	Location	Page Number	Omission and Explanation	SDG Target	GRI Sector Standard Ref. No.
Data Security						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	-
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	Business Ethics and Legal Compliance	23	-	SDG 16	-
Critical Incident Management						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	14.15.1
R&D Studies						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	-
High-Conflict Risk Areas						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	14.25.1
Participation in Sustainable Public Policies						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	14.24.1
Stakeholder Communication						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	-
Interaction with Local Communities						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	14.10.1
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	Stakeholder Engagement Corporate Risk Management Sustainability Strategy	30 21 31	-	-	14.10.2
	413-2 Operations with significant actual and potential negative impacts on local communities	Stakeholder Engagement Corporate Risk Management Sustainability Strategy	30 21 31	-	SDG 1, 2	14.10.3
GRI 14: Mining Sector 2024	Grievances from local communities	Business Ethics and Legal Compliance	23	-	-	14.10.4



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GRI Standard/ Other Source	Disclosure	Location	Page Number	Omission and Explanation	SDG Target	GRI Sector Standard Ref. No.
Unionization						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	14.20.1
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Sustainability Strategy Employee Satisfaction and Engagement	31 68	-	SDG 8	14.20.2
GRI 14: Mining Sector 2024	Strikes and lockouts	Employee Satisfaction and Engagement	68	-	-	14.20.3
Protection of Local Community Rights						
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement Material Topics	30	-	-	14.11.1
GRI 411: Rights of Indigenous Peoples 2016	411-1 Incidents of violations involving rights of indigenous peoples	Business Ethics and Legal Compliance	23	KÜMAŞ (the Company) prioritizes operational excellence, commercial agility, high profitability, quality, customer satisfaction, continuous improvement, and sustainability in all areas of its operations. It approaches all its processes with sensitivity to ethical behavior, integrity, and compliance with legal regulations... The 'Code of Ethics and Working Principles' prepared within this framework serves as a guide for the Company in all its operational and managerial activities. The Code of Ethics and Working Principles defines the fundamental principles of conduct within our Company and applies to all our stakeholders.	SDG 2	14.11.2
GRI 14: Mining Sector 2024	Free, prior, and informed consent	Biodiversity	56	-	-	14.11.4



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Kūmaş transparently reports its sustainability- and climate-related risks and opportunities in accordance with TSRS standards and discloses their financial impacts and strategic priorities within this framework.



The consolidated sustainability and climate-related disclosures included in this report have been prepared for Kūmaş Manyezit Sanayi A.Ş. (“Kūmaş” or “the Company”) subsidiary (Yenilikçi Yapı Malzemeleri Yatırım Üretim San. ve Tic. A.Ş.) and are presented in accordance with the Turkish Sustainability Reporting Standards (TSRS) published by the Public Oversight, Accounting and Auditing Standards Authority (KGK).

This report, covering the reporting period from January 1 to December 31, 2024, has been prepared in accordance with TSRS. These disclosures are based on TSRS, which was published in the Official Gazette of the Republic of Türkiye on December 29, 2023, and is effective for annual periods beginning on or after January 1, 2024.

TSRS refers to the sustainability and climate-related standards published by KGK and the sector-based application guide:

- TSRS 1: General Requirements for Disclosure of Sustainability-related Financial Information
- TSRS 2: Climate-related Disclosures
- TSRS 2 Sector-Based Implementation Guide: Volume 10 – Metals and Mining

The report discloses information on sustainability and climate-related risks and opportunities that could reasonably be expected to affect Kūmaş's short-, medium-, or long-term cash flows, access to financing, or cost of capital. The magnitude of the financial impact of the sustainability and climate-related risks identified by Kūmaş is assessed based on revenue, in line with the financial materiality criteria used in reporting.

Sustainability and climate-related risks and opportunities that could reasonably be expected to affect Kūmaş's future financial capability are shared in the Strategy section, which forms the core content of the report.

Transition Exemptions

Kūmaş benefits from transition exemptions under articles E3, E4, E5, and E6 specified in TSRS 1 and the article specified in TSRS 2.

- **TSRS 1 E3 and TSRS 2 C3:** Kūmaş only includes information pertaining to the relevant reporting period in the report.
- **TSRS 1 E5 and TSRS 1 E6:** Kūmaş does not disclose information regarding sustainability-related risks and opportunities.

In accordance with Provisional Article 3 of the Board Decision on the Scope of TSRS Implementation, Kūmaş does not disclose Scope 3 emissions in this report.

Reporting Boundaries and Measurement Approach

Kūmaş has used the equity approach when determining its organizational boundaries for reporting greenhouse gas emissions. According to this approach, the greenhouse gas emissions of its subsidiary have been included in the emissions inventory in proportion to the Company's shareholding in the subsidiary.



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About Kümaş

As Türkiye's leading magnesite producer, Kümaş manufactures high-quality refractory products at its integrated facilities and exports to over 60 countries.



Founded in Kütahya in 1972 as a public joint stock company, Kümaş began producing sintered magnesite from natural magnesite ore in 1976. The Company, which possesses rich magnesite and dolomite resources, is the market leader in Türkiye's refractory sector in terms of reserve size. The Company's mining sites are located in the provinces of Kütahya, Eskişehir, Bursa, Erzinan, Çankırı, and Konya.

Kümaş processes magnesite ore sourced from rich mining fields into sintered magnesite, sintered dolomite, calcined magnesite, KÜRES, fused magnesite, refractory mortars, and refractory bricks at Türkiye's only vertically integrated refractory facility. The Company exports to more than 60 countries, primarily in the iron and steel, cement, and glass sectors.

The name of Kümaş's subsidiary included in the consolidation and the Company's share in its capital are as follows:

—
100%
Kümaş's Share Ratio
Yenilikçi Yapı Malzemeleri Yatırım Üretim Sanayi
ve Ticaret A.Ş.



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Overview of the Value Chain

In preparing its sustainability and climate-related disclosures, Kūmaş has integrated not only its direct operations but also its upstream and downstream value chain into the reporting process.

Upstream Value



Exploration, licensing, and mining operations

Energy producers and transmission & distribution

Equipment and machinery manufacturers and distributors

Chemical manufacturers

Packaging manufacturers

Direct Operation



Calcination

Sintering

Electrofusion

Refractory product manufacturing

Quality and process control

Waste management & by-product recovery

Sales and marketing

Downstream Value Chain



Engineering and field application services

Iron and steel industry

Cement industry

Glass industry

Other heavy industry

Logistics & Export



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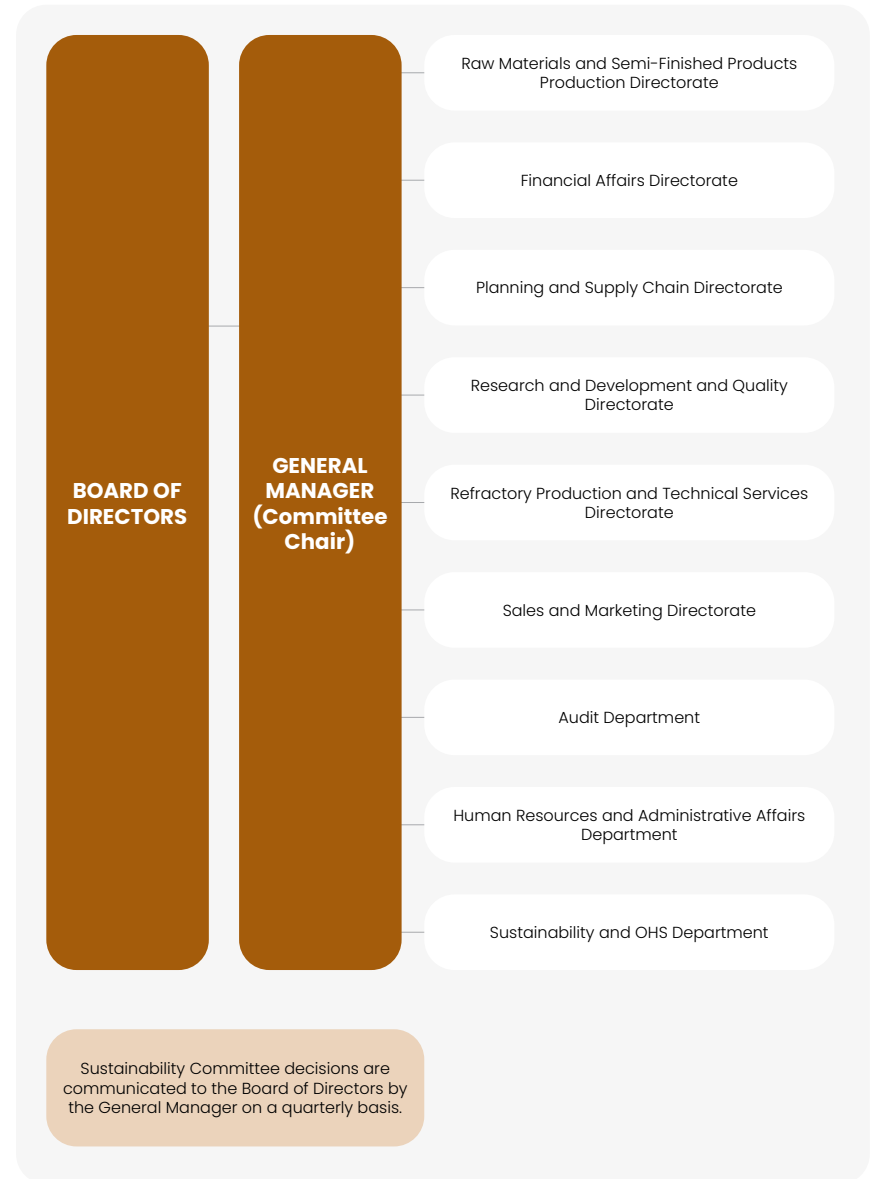
Governance

Kūmaş manages sustainability at the Board of Directors level, directing strategy and implementation in a holistic manner.

The Board of Directors is responsible for monitoring sustainability and climate-related performance at Kūmaş. The Board has delegated this responsibility to the General Manager and the Sustainability Committee. As Committee Chair, the General Manager, as the executive with the highest level of responsibility for sustainability and climate-related issues, is responsible for ensuring that corporate policies and commitments comply with national and international sustainability and climate standards and for regularly monitoring this compliance.

The Sustainability Committee, which operates under the management, is responsible for overseeing environmental issues and prepares and implements the Company's short-, medium-, and long-term sustainability strategy and roadmap. The Committee also monitors sustainability and climate-related risks, opportunities, and impacts, reporting to the Board of Directors four times a year. Decisions of the Committee are evaluated, and sustainability and climate-related performance, progress toward targets, and measures taken are reviewed regularly.

The Committee also promotes the dissemination of a sustainability culture throughout the Company and supports the integration of the sustainability approach into corporate decision-making processes by actively communicating with stakeholders. Management bodies and senior executives regularly consult with internal working groups specializing in sustainability and climate-related issues and maintain continuous interaction with stakeholders and subject matter experts in order to develop the necessary knowledge, skills, and competencies to respond to sustainability and climate-related risks and opportunities. Board members receive regular training on best practices and international standards in sustainability and climate-related issues within the sector.





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Kumaş Deputy Chairman of the Board, A. Çağatay Dikmen, makes strategic contributions to the Company's sustainability approach through his strong academic background and public-sector experience in the fields of environment, energy, and sustainability. At Kumaş, sustainability- and climate-related risks and opportunities are addressed in an integrated manner with corporate risk management, environmental, occupational health and safety, and quality management systems rather than as standalone targets, and are regularly monitored through the Sustainability Committee and reflected in corporate decision-making processes.

Deputy Chairman of the Board of Directors of Kumaş (representative of OYTAŞ Domestic and Foreign Trade Inc.) A. Çağatay DİKMEN holds bachelor's, master's, and doctoral degrees in mining engineering, environmental sciences, and sustainable development. He has gained academic expertise in energy transformation and sustainability, particularly through his doctoral thesis titled "The Role of Renewable Energy Sources in Türkiye's Future within the Framework of Sustainable Development." He has served for many years in the public sector in the process of shaping environmental and energy policies; he has held positions as department head, deputy director general, and director general at the Ministry of Environment and Urbanization.

He also played an active role in harmonizing environmental policies during the European Union accession process and served as the national focal point and board member representing Türkiye at the European Environment Agency. He continues his academic activities by teaching courses on the environment and sustainability as a visiting lecturer at universities. He has published three books on the environment, energy, and sustainability, as well as articles in national and international scientific journals.

Kumaş has not yet included sustainability and climate-related issues in the incentives it provides for management. Instead of being set as separate and measurable targets, sustainability and climate-related matters have been integrated into the Company's overall sustainability and operational performance criteria.

At Kumaş, management implements various controls and procedures to ensure effective oversight of sustainability and climate-related risks and opportunities. These controls are carried out in an integrated manner with risk management, environmental management, occupational health and safety, and quality management systems. The Sustainability Committee regularly evaluates data from relevant units, monitors performance indicators, and recommends improvement actions when necessary. Thus, sustainability performance is addressed in an integrated manner with corporate risk management and internal audit processes, ensuring consistency of decisions across the entire organization.



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Strategy

By integrating climate and environmental risks into its strategic planning, Kūmaş strengthens its long-term resilience and accelerates its sustainable transformation through low-carbon production, renewable energy investments, water management, and advanced technological solutions.

Kūmaş integrates risks and opportunities related to climate change, natural resource management, and environmental regulations into its strategic planning processes to ensure the long-term sustainability of its operations. The company aims to protect both its operational resilience and financial performance by strengthening sustainability-focused decision-making mechanisms.

At Kūmaş, sustainability and climate-related risks and opportunities are assessed both qualitatively and quantitatively. The Company has adopted a threshold value whereby an item is considered to have a “reasonable expectation of affecting future financial adequacy” if it has the potential to impact more than 5% of its annual revenue.

The time periods defined as short term (1–3 years), medium term (4–6 years), and long term (7 years and above) have been determined in line with Kūmaş’s business model and financial planning cycles.

- In the short term, operational risks and environmental compliance activities are prioritized.
- In the medium term, the transition process is managed with a focus on energy efficiency, production modernization, and new technology investments.
- In the long term, scenario analyses and adaptation plans are conducted in line with our carbon reduction and physical climate impact adaptation objectives.

Kūmaş is conducting scenario analyses to enhance its resilience against transition and physical risks associated with climate change as part of its strategic planning. In this context, policy changes, carbon pricing, market and technology developments have been assessed qualitatively and quantitatively, taking into account the IEA Net Zero Emissions by 2050 (NZE 2050), NGFS Net Zero 2050, IEA Announced Pledges Scenario (APS), IPCC RCP2.6 and RCP8.5 scenarios. The WRI Aqueduct tool has been used in water risk analyses; and it is determined that the water supply risk in the regions where Kūmaş operates is at a traceable level, but no significant impact on financial performance is anticipated in the short and medium term.

The Climate Law, which is planned to come into force in Türkiye in 2025, and the Emissions Trading System (ETS), which is expected to enter the full implementation phase in 2028, constitute a significant medium-term financial risk area for Kūmaş. As its activities in the refractory sector are expected to fall directly under the Emissions Trading System (ETS), the Company may face direct emissions from its operations and indirect carbon costs arising from energy consumption.

The scenario analyses indicate that the impact of the ETS is expected to be limited in its initial years due to low carbon prices; however, in line with Türkiye’s 2053 Net Zero target, rising carbon prices may lead to increased cost pressures in the long term. In this context, through its Climate Transition Plan initiatives launched in 2025, Kūmaş identifies emission reduction opportunities and integrates these elements into its strategic and financial planning processes.

Additionally, energy transformation is at the heart of Kūmaş’s decarbonization strategy. In this regard, the Company is investing in two solar power plants with a total installed capacity of 100 MWe in Yozgat and Sivas. Scheduled to be fully operational in 2026, these facilities will meet approximately twice Kūmaş’s annual electricity needs. The aim is to generate additional revenue by selling surplus electricity to the national grid and to secure foreign currency-based income under YEKDEM. These investments are expected to result in a significant reduction in operating expenses related to electricity consumption in the medium term.

Within the scope of carbon management, Kūmaş is also evaluating the future applicability of an internal carbon pricing system. Although the Company has not yet identified the implementation of an internal carbon price as a strategic priority, with the implementation of the ETS mechanism in Türkiye, the Company aims to develop an internal carbon pricing mechanism to internalize environmental externalities.



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Water stress risk is a significant operational and financial factor for Kūmaş, which operates in the provinces of Kūtahya, Eskişehir, Bursa, Erzincan, Çankırı, and Konya. WRI Aqueduct 4.0 data indicates that water demand in the region will exceed supply and that water supply costs may increase. To mitigate this risk, the Company has invested in wastewater treatment and rainwater harvesting systems and plans to increase recovery and reuse rates with these systems, which will be put into operation.

The “Zero Discharge Project,” planned to be fully operational in 2026, will enable the reuse of wastewater in production processes, reduce dependence on freshwater sources, and eliminate the risk of discharges that violate regulations. Through this system, water withdrawal will be limited to evaporation-related losses only, resulting in significant reductions in water supply, energy consumption, chemical usage, and laboratory testing costs.

In addition, R&D activities have been directed to support the sustainability strategy. Work on carbon reduction technologies, alternative energy sources, and water recovery forms the core elements of the innovation-driven growth and low-carbon economy transition strategy.

Climate-Related Risk	Risk Definition	Action – Impact	Explanation
<p>Risk Title Carbon Pricing Mechanisms</p> <p>Risk Type and Key Driver Policy Risk / Implementation of carbon pricing systems</p> <p>Value Chain Stage Direct operations</p> <p>Time Horizon Medium term</p> <p>Probability Very high</p> <p>Impact Medium</p> <p>Type of Financial Impact Increase in indirect operating costs</p>	<p>With the Turkish Climate Law coming into effect in 2025, the Turkish ETS will transition to a pilot phase in 2026 and a full implementation phase in 2028. Businesses covered by MRV, including the refractory sector, will be directly subject to carbon costs from this date onwards.</p>	<p>Preparation of a climate transition plan Launched in 2025, the climate transition plan involves identifying emission sources and evaluating reduction options. The plan is expected to be completed in 2026.</p>	<p>The estimated financial impact reflects the average annual carbon cost liability for the 2028–2030 period. According to NGFS scenarios, the price increase will be limited in the medium term and increase in the long term.</p>



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Climate-Related Risk

Risk Title

Water Stress and Scarcity

Risk Type and Key Driver

Physical Risk / Chronic water stress

Value Chain Stage

Direct operations

Time Horizon

Medium term

Probability

Very high

Impact

Medium - Low

Type of Financial Impact

Increase in indirect operating costs

Risk Definition

Kūmaş's production facilities and mining sites in Kütahya are at risk of high water stress in the future. According to WRI Aqueduct 4.0 data, water demand is projected to exceed supply in the 2030-2050 period. This situation may lead to difficulties in drawing water from wells, operational disruptions, or additional costs.

Action – Impact

Water efficiency and reuse initiatives

With the Wastewater Treatment Plant Upgrade and Infrastructure Drainage System, to be completed by 2025, it is aimed to recover domestic wastewater and to become a zero wastewater discharge facility.

Explanation

The financial impact reflects the annual additional costs of sourcing water from external sources (e.g., tanker transport) in the event of potential supply constraints.



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Climate-Related Risk

Opportunity Title

Climate Change – Renewable Energy Investments

Opportunity Type and Key Driver

Energy source – Use of renewable energy

Value Chain Stage

Direct operations

Time Horizon

Medium

Probability

Almost certain

Impact

Medium-High

Financial Impact Type

Increase in indirect operating costs

Risk Definition

Kūmaş is investing in two solar power plants (SPP) with a total installed capacity of 100 MWe in Yozgat and Sivas, in line with its efforts to combat climate change and reduce emissions. These plants will have the capacity to meet approximately twice the Company's annual electricity needs. All production will be sold to the electricity grid.

Action – Impact

Revenue is expected to be generated from a decrease in electricity costs, the sale of surplus energy, and the sale of carbon credits from renewable energy production.

Explanation

Aiming to source all its electricity from renewable sources by 2026, Kūmaş plans to completely eliminate market-based Scope 2 emissions, reduce energy costs, and generate additional revenue from surplus production with this investment.



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Climate-Related Opportunity

Opportunity Heading

Water – Water Efficiency and Wastewater Recovery

Opportunity Type and Key Driver

Resource efficiency – Reducing water consumption

Value Chain Stage

Direct operations

Time Horizon

Short-term

Probability

Almost certain

Impact

Medium-Low

Financial Impact Type

Increase in indirect operating costs

Opportunity Description

Kūmaş does not use water in its mining operations and consumes only very limited amounts of water in its production processes. However, energy and chemical costs are incurred for groundwater pumping, wastewater treatment, and discharge. Investments have been made in new wastewater treatment and rainwater harvesting systems to reduce the water footprint and achieve the zero discharge target. With these systems, treated wastewater will be reused, water withdrawals will be limited to evaporation losses, and wastewater discharge will be completely eliminated.

Action – Impact

The tightening of water discharge limits and operational and legal compliance risks arising from potential discharge restrictions will be mitigated; the reuse of treated water will reduce water pumping, chemical consumption, and laboratory analysis costs, and water efficiency will be increased, strengthening operational resilience against water stress risks associated with climate change.

Explanation

Kūmaş implements a structured water management program to reduce water scarcity risks and ensure compliance with legal requirements. Water footprint assessments in accordance with the ISO 14046 standard have been conducted since 2022, and the goal is to implement a zero wastewater discharge system by 2026. This will reduce groundwater withdrawal and increase resilience to water-related risks.

As of 2024, analyses have determined that climate-related risks and opportunities do not exceed the financial threshold set by the Company. Therefore, there are no climate-related risks and opportunities that require significant adjustments to the value of assets and liabilities in the financial statements.

TSRS 2 Sector-Based Implementation Guide – Volume 10 – Metals and Mining

Topic	Metric	Category	Measurement Unit	Code	Description
	Gross total Scope 1 emissions, percentage under emissions limiting regulations	Quantitative	Metric tons (t) CO ₂ -e, Percentage (%)	EM-MM-110a.1	The ETS application is not available.
Greenhouse Gas Emissions	Discussion of long- and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	N/A	EM-MM-110a.2	Scope 1 emission reduction target is not available. It will be determined by the study to be conducted in 2026.
Energy Management	(1) Total energy consumed (2) percentage grid electricity and (3) percentage renewable	Quantitative	Gigajoule (GJ), Percentage (%)	EM-MM-130a.1	(1) 2,340.383 (2) 13% (3) 0%
Water Management	(1) Total water withdrawn, (2) total water consumed; percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m ³), Percentage (%)	EM-MM-140a.1	(1) 211.34 thousand m ³ (2) 182.73 thousand m ³ ; 100% from regions with high water stress
	Number of incidents of non-compliance associated with water quality permits, standards and regulations	Quantitative	Number	EM-MM-140a.2	0



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Risk Management

Kūmaş systematically analyzes sustainability and climate risks across the value chain by integrating them into corporate risk management; it strengthens its strategic and operational resilience through data-driven monitoring, scenario analyses, and preventive actions.

Kūmaş implements a comprehensive risk management process to systematically identify, assess, prioritize, and monitor sustainability and climate-related risks and opportunities. This process covers direct and indirect impacts related to climate change, water, energy management, biodiversity, and environmental regulations.

Sustainability and climate-related risk management are integrated into the Company's corporate risk management system and managed within a holistic framework alongside financial, operational, legal, and reputational risks. Thus, sustainability and climate-related risks are addressed not only from an environmental perspective but also through a strategic and financial approach.

The risk identification process covers all stages of the value chain, from direct operations to the supply chain, and from product use to end-of-life management. Risks and opportunities are assessed both qualitatively and quantitatively, taking into account short, medium, and long-term time frames.

The key inputs and sources used in the identification process are as follows:

Legislation and standards:

- ISO 14001 Environmental Management System
- ISO 14064 Carbon Footprint Standard
- ISO 14046 Water Footprint Standard
- IPCC climate projections
- National regulations (ETS, Climate Law, etc.)

Scenarios used:

- Representative Concentration Pathways (RCP) developed by the Intergovernmental Panel on Climate Change (IPCC)
- International Energy Agency (IEA)
- Network for Greening the Financial System (NGFS)
- World Resources Institute (WRI) Aqueduct Water Risk Map

The likelihood and potential impact of identified risks are analyzed in terms of legal compliance, financial consequences, reputational impact, operational continuity, and strategic priorities. As a result of this assessment, risks are classified according to their level of importance.

The prioritization of sustainability and climate-related risks is based on a 5x5 risk matrix that considers both the likelihood of each risk occurring and its potential impact. High-impact or high-probability risks are addressed at the Board of Directors level and incorporated into strategic planning and budgeting processes. The risk profile is updated annually by reviewing sustainability and climate-related risks in line with new regulations or physical climate impacts.

Kūmaş conducts measurements at all production sites, particularly in critical areas such as water usage, energy consumption, and greenhouse gas emissions, and analyzes the data obtained to measure both operational performance and the effectiveness of risk mitigation practices.

Risk indicators and performance results are regularly reported to senior management; corrective or preventive actions are planned when necessary. Kūmaş adopts preventive and adaptation-focused approaches to mitigate the impacts of sustainability and climate-related risks.



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Metrics and Targets

Kūmaş monitors its emissions, energy, and water performance according to international standards and makes sustainable decisions.

Kūmaş implements a systematic management system to measure and monitor the impact of sustainability and climate-related risks and opportunities on business performance. This approach, which supports the Company's strategic decision-making processes, is designed to comply with both legal requirements and national and international standards. Sustainability performance is monitored through key indicators such as greenhouse gas emissions, energy consumption, and water usage.

Greenhouse Gas Emissions (Scope 1 and 2)

- Kūmaş's greenhouse gas emissions are calculated in accordance with the ISO 14064 standard and the Greenhouse Gas Protocol: Corporate Accounting and Reporting Standard (2004).
- Fossil fuel consumption, electricity purchase, and process-based emissions are determined based on the IPCC 2006 guidelines and AR6 emission factors. Calculations are made in tons of carbon dioxide (CO₂) equivalent, and all Scope 1 and 2 emissions are subject to independent third-party verification.
- Data sources used include SAP system records, production furnace feed data, laboratory analyses, energy consumption reports, and equipment leakage rates.

Greenhouse Gas Emissions (tonCO ₂ e)	2024
Scope 1	414,671.59
Scope 2	37.941

Water Usage

- Water usage includes groundwater extraction, water consumed, and water discharged.
- In water risk assessments, international tools such as the WRI Aqueduct Water Risk Map are used to track both absolute values and qualitative risk classifications.

Water Usage (thousand m ³)	2024
Water Withdrawn	211.34
Water Consumed	182.73
Water Discharged	28.61

Kūmaş has not yet set an official emission reduction target for the current reporting year. The company plans to define this target within the next two years and aims to develop medium-term carbon management and reduction strategies.



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