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SUSTAINABILITY
Report



INDEX

INTRO

- 03 ABOUT THE REPORT
- 04 CEO LETTER
- 05 BORUSAN GROUP
- 06 BORUSAN MANNESMANN

BORUSAN HOLDING AT A GLANCE

- 09 PRODUCTS
- 10 ECONOMIC PERFORMANCE
- 11 SUSTAINABLE FINANCE AT BORUSAN MANNESMANN
- 12 VISION, MISSION
- 13 BUSINESS ETHICS
- 14 MANAGING CORRUPTION AND ANTI-COMPETITIVE BEHAVIOUR

SUSTAINABILITY STRATEGY

- 18 SUSTAINABILITY MANIFESTO
- 19 CORPORATE GOVERNANCE
- 19 ORGANIZATION CHART
- 20 SUSTAINABILITY ORGANIZATION

RISK MANAGEMENT

- 22 STAKEHOLDER ENGAGEMENT AND MATERIALITY
- 22 MATERIALITY ANALYSIS
- 24 OUR FOCUS AREAS AND MATERIALITY
- 25 OUR CONTRIBUTION TO SUSTAINABLE DEVELOPMENT GOALS
- 29 2022 SUSTAINABILITY PERFORMANCE SUMMARY
- 32 BORUSAN MANNESMANN SUSTAINABILITY TARGETS (2022 - 2030)

1. WE ARE OWNING THE CLIMATE AND CREATING BENEFITS FOR THE PLANET

- 36 COMBATTING WITH THE CLIMATE CRISIS AND TRANSITION TO A ZERO CARBON ECONOMY
- 40 OPERATIONAL EFFICIENCY AND WASTE MANAGEMENT
 - 43 Responsible Waste Management
 - 44 Environmentally and Socially Responsible Use of Resources and Materials
 - 46 Water Management

2. WE DREAM, WE DESIGN, WE TURN IT INTO REALITY BECAUSE WE ARE OWNING OUR HUMAN

- 48 OCCUPATIONAL HEALTH AND SAFETY
- 51 EFFECTIVE HUMAN MANAGEMENT
 - 51 Employee Satisfaction
 - 53 Talent Management
 - 55 Inclusion and Equal Opportunity
 - 60 Human Rights
 - 61 Contributing to the Society

3. WE ARE OWNING INNOVATION BY DESIGNING INNOVATIVE IDEAS

- 63 NEW PRODUCTS AND INNOVATION
- 66 DIGITAL TRANSFORMATION AND ARTIFICIAL INTELLIGENCE

4. WE ARE INSPIRING THE FUTURE - OWN CLIMATE, HUMAN, AND INNOVATION

- 69 Raw Material Circularity Rate, Greenhouse Gas Monitoring and Efforts to Increase Scrap Utilization
- 69 Improving Suppliers Capacity to Use Technology
- 69 2022 Green Procurement Projects
- 71 EFFECTIVE RISK AND CRISIS MANAGEMENT
- 72 EXCELLENCE IN CUSTOMER RELATIONS
- 74 ADOPTION OF INNOVATIVE BUSINESS MODELS

APPENDIX

- 76 COLLABORATIONS
- 76 AWARDS
- 77 STAKEHOLDER COMMUNICATION
- 78 MANAGEMENT SYSTEMS
- 79 PERFORMANCE TABLES
- 84 GLOBAL COMPACT
- 85 GRI CONTENT INDEX



INTRO

ABOUT THE REPORT

Since 2020, as Borusan Mannesmann, we are preparing our sustainability report to provide transparent communication with our stakeholders.

Within this scope, for the last two years we have improved our impacts on our operations and our services with the contribution of our agile teams who are managing our sustainability activities and we have achieved many gains in creating and achieving sustainable development-oriented values in every field in which we operate.

We will regularly publish our report with the aim of increased sustainability awareness of our stakeholders as well.

The scope of our report is the operations within the fiscal year between 01.01.2022 and 31.12.2022.

In our report we are including the consolidated performance of operations of Borusan Mannesmann in Türkiye, Italy and USA. Limited data are stated for Italy Vobarno and USA Baytown since it is the first reporting year for those. As Borusan Mannesmann, to increase our presence in global markets, we added Berg EUROPIPE Holding Corp. operating in Panama City and Mobile to our portfolio in addition to our steel pipe production in the U.S. Since this acquisition was realized in 2023, data regarding our operations in Panama City and Mobile are not included in this reporting period.

This report has been prepared in accordance with the GRI Standards and Borusan Mannesmann's performance towards international frameworks such as the United Nations Global Compact (UNGC). We have also aligned our material topics with the 17 Sustainable Development Goals defined by the UN (UN SDGs) to share the global effects of our operations with our stakeholders.

Terms "company", "corporation" and "establishment" used in the texts refer to Borusan Mannesmann Boru Sanayi ve Ticaret A.Ş. and the term "Holding" refers to Borusan Holding. Our report has been prepared with the consultancy of Sachi Consultancy. Our report has not been subject to any external audit process except water and climate data information. You can contact us for feedback or questions regarding our report at bmsustainability@borusan.com.



CEO LETTER

Dear Stakeholders;

As one who believes in the philosophy of "people first" for success, I would like to offer my condolences to all the citizens we lost in the earthquake this year. There is no description of the pain we have experienced, and there is no compensation for our losses. As a strong Türkiye, I believe that we will heal the wounds together with unity and solidarity. As Borusan Mannesmann, I would like to state that the enduring support we have provided to the earthquake zone since the beginning will carry on until the regions are reconstructed.

At Borusan Mannesmann, we adopt Borusan Group's sustainability strategy, which is addressed holistically under the focus areas of climate, people and innovation, and we transform our business processes with policies and practices that overlap with this approach. In recent years, with our responsibility of being the earliest organization to publish the first sustainability report in the iron and steel sector, we have achieved significant gains in various areas ranging from practices aimed at reducing our carbon footprint in 2022 to OHS developments. We continue our efforts to leave a livable world for the future without hindering the power we derive from these achievements.

In this context, our sustainability journey, which we started in 2020, has now reached a point that guides the sector with the contributions of 95 team members working in 7 thematic groups. I am proud to share the progress we have made with our stakeholders with our third sustainability report.

In this period of uncertainty in the global economy, emerging risks, regional tensions such as Russia-Ukraine, customs barriers, and protectionist policies of countries, rising input prices have forced all companies to identify new opportunities and strategies. At Borusan Mannesmann, we see all negative developments as new opportunities with the potential to capture value globally. We integrate all external factors into our strategy and develop our way of doing business that benefits sustainable development goals. As stated in our 2022 manifesto, we adopt the mission of contributing to the goals of Borusan Holding.

In 2022, one of our biggest achievements was the 14% reduction in greenhouse gas measurements we realized in accordance with ISO 14064:2018 standards compared to 2021.

In 2022, we continued our path of decarbonization, which we started in 2021 with the manifesto of **"We protect the climate by creating benefits for the planet"**. We managed to reduce 700 tons of CO₂ emissions from all our emission sources. We also increased our raw material purchases from low-emission sources in our procurement, purchasing and operational processes that we have developed in accordance with circular economy principles.

In 2022, we added 11 new products to our product range and defined two of these products as sustainable products. We also managed to reduce our water consumption amount by 33%. Sales generated in new product and service groups accounted for 20% of the consolidated gross profitability of our prime products in 2022.

Borusan established its Equal Borusan – Social Equality platform in 2015 to adopt and internalize gender equality at both corporate and individual level. The platform aims to provide equal conditions and opportunities for our employees without discrimination based on religion, language, race, gender, age and disability. At Borusan Mannesmann, we continued our people-oriented efforts in 2022. In this context, we were deemed worthy of the International Occupational Safety Award in 2022 by the British Safety Council, one of the world's leading organizations in the field of Occupational Health and Safety. In addition, according to the results of our employee satisfaction survey, the engagement rate has risen to 82% in 2022. This result is a reflection of our people-oriented approach." As Borusan Mannesmann, we have adopted the steps that Borusan Holding has taken towards its goal of becoming a 200-year company, and we have taken meaningful steps in talent management. "There Is a Letter from You in the Future" helped to establish an empathetic bond between our employees and managers. In 2023, we will continue our efforts to serve the vision of becoming a 200-year company.

In 2022, we acted with the awareness that delivering sustainable impact requires direct participation of our stakeholders and launched the Supplier Sustainability Index and Portal. We aim to collaborate and create synergies with our stakeholders in our sustainability strategy. Also, we have developed the GRP coating application for steel pipes in line with the demand from our customers, especially in Europe, and continued to respond to the voice of our customers.

Our goal is to create value as a company that leaves its mark on the world while continuing to create added value for the Turkish economy; that benefits society while developing innovative products and climate-friendly services. As we move towards this goal, we will continue our efforts to transparently share our commitments and provide regular information to our stakeholders.

In the 100th anniversary of our Republic, we are aware of the responsibility that market leadership gives us and with this awareness, we will continue to take steps that will carry our country and the world into the future. We will combat climate change with decarbonization projects. We will also include our employees in our social impact-oriented projects and carry out activities that will make them feel a part of the process. While achieving these goals, we will benefit from the positive contributions of technology, innovation, and digitalization.

While leading our industry; we will continue to implement sustainability-oriented practices and transformations at the factories in the USA, which we acquired in 2023 in line with our sustainable growth targets, and at our facility in Romania, where we have started construction.

I would like to thank all our stakeholders who carry our company to the future on a journey of sustainable success while presenting our report, in which we present the details of our sustainability performance in 2022.

BORUSAN GROUP

Borusan Group operates globally in the manufacturing, machinery, and power systems, automotive, logistics and energy sectors. Group, whose basic strategy is based on a vision that focuses on developing innovative products and services while continuing to create added value for the Turkish economy, and whose horizons are open to world markets; within this framework, it carries out works that make a difference with its in-house entrepreneurship, innovation, active competition strategy in international markets and its mission to provide maximum benefit to society, economy and the environment.

Aiming to build a sustainable future in 12 countries on 3 continents, Borusan Holding increased its consolidated group revenue from TL 46.7 billion in 2021 to TL 105 billion in 2022. Borusan Holding plays a leading role in the Turkish steel pipe and automotive supply industry with Borusan Mannesmann, Borçelik and Supsan group companies.

Borusan Holding is one of the 34 companies operating in Türkiye under the Business World Plastics Initiative, aiming to create a circular economy for plastics, transparently sharing with the public for the first time their plastics reduction and use prevention commitments until 2023 in line with a common commitment and a common goal.

In this context, you can access the progress report prepared by the Business World Plastics Initiative from the page [plastic-commitments-progress-report-2022.pdf](https://www.plastikgirisimi.org/plastic-commitments-progress-report-2022.pdf) ([plastikgirisimi.org](https://www.plastikgirisimi.org)). Borusan Mannesmann also adheres to these commitments in its sustainability approach.



Borusan Holding A.Ş.

Borusan Holding, the corporate headquarters of Borusan Group, provides strategic direction to Borusan Group by building a bridge between shareholder expectations and companies. Borusan Holding has a structure that gives ideas, questions, directs, and supervises the Group companies and does not engage in direct operational activities.

Borusan Yatırım

Founded in 1977, Borusan Yatırım has participated in the Group's steel, distribution, logistics and technology companies, creating a portfolio of companies with high growth potential and leading positions in their respective fields. Borusan Yatırım has been traded on the BIST since 1996 as the second publicly traded company of the Borusan Group.

Borusan Kocabıyık Foundation

The Borusan Kocabıyık Foundation believes that access to education, culture and the arts are among the most fundamental rights of all people. With the opportunities it offers, Borusan Kocabıyık Foundation aims to develop together with society and contribute to the formation of a modern Türkiye.

By supporting the arts, the Foundation promotes the love of classical music, organizes contemporary art exhibitions in addition to exhibiting the Borusan Contemporary Art Collection, and carries out activities and projects for educational programs based on raising young people as well-equipped individuals.

Economic Enterprises: Borusan Contemporary, Borusan Sanat

BORUSAN MANNESMANN

Borusan Mannesmann Boru Sanayi ve Ticaret A.Ş. (BM), which was established in 1958 and is considered as the most rooted company in the sector, has pioneered the development of the sector in Türkiye with its 65 years of history. Borusan Mannesmann continues its activities in Türkiye with a total production capacity of approximately 1.1 million tons, including 750 thousand tons of longitudinally welded and 300 thousand tons of spiral welded steel pipes, with more than 1,600 employees. In addition to its installed capacity in Türkiye, the company also has production facilities abroad. Borusan Mannesmann, one of the preferred manufacturers in the steel pipe industry in Europe and the rest of the world, creates benefits with a total of 2050 employees worldwide.

Our production facilities operate in 3 regions in Türkiye:



- 1 In our Halkalı facility, commissioned in 1958, we manufacture industrial pipes used in many industries including white goods, automotive and bicycles.
- 2 In our 3 facilities in Gemlik, we produce pipes intended for construction activities, energy transmission and general industry applications.
- 3 Pipes for automotive and industrial use are processed at our facility established in Bursa Organized Industrial Zone (OSB) in 2016. The facility is used to process the products produced in the Halkalı plant and manufactures shock absorbers for motor vehicles, special drawn pipes for automotive applications, other pipes for various engine parts such as seats, steering wheels.

Public + Other
26.57%
37,592,734 TL

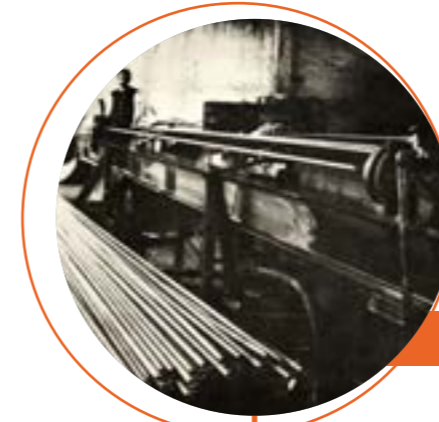


Borusan Mannesmann Yatırım Holding A.Ş.
73.48%
104,152,266 TL

Borusan Mannesmann positions itself as one of the leading steel pipe manufacturers in important markets such as Türkiye, Europe and the USA with the vision of becoming a globally recognized leading steel pipe and complementary solution supplier with a focus on high value-added products, having a production footprint in its main product markets.

In April 2023, Borusan Mannesmann increased its global footprint by the acquisition of Berg EUROPIPE Holding Corp. facilities operating in Panama City and Mobile in the large diameter steel pipe production market in the U.S.

In addition, in line with the goal of sustainable growth in 2023, we have started the groundbreaking of a new facility in Romania. An investment of approximately 15 million euros is planned for the facility, which will carry out cutting and processing of cylinder tubes, reserve tubes and monotubes with special uses in shock absorbers. The facility will have a 4,800 m² production and stock area and will provide employment opportunities for more than 50 people in the first phase. The facility, which is targeted to sell over 10 thousand tons in 2026, also has an investment incentive approval of 5.8 million Euros approved by the Romanian Ministry of Finance.



1958

First years of production Borusan Mannesmann

First industrial investment of Borusan Group.
Second pipe manufacturing plant of Borusan Mannesmann in Türkiye.
Capacity: 7,000 tonnes
Sales 2,000 tonnes
Employee: 27



2023

Borusan Mannesmann

11 production plants
(5 Türkiye, 1 Italy, 4 USA, 1 Romania)
Capacity: 2 million tonnes
Employee: 2800



BM Vobarno

Borusan Mannesmann Vobarno Tubi SPA, located in Vobarno, Italy, specializes in the production of high value-added cold-drawn special pipes with an annual production capacity of 29 thousand tons. It is a well-known manufacturer in Europe in terms of both product and service quality with its proximity to countries where the automotive industry is strong such as Italy, Germany, Spain, and France. Borusan Mannesmann Vobarno Tubi SPA is established on a closed area of approximately 24 thousand m² and operates with 84 employees. ([BM Vobarno | Home](#))

Borusan Mannesmann Pipe US

Borusan Mannesmann Pipe US Inc., a subsidiary established in the United States of America, continues its production and sales activities in our factory with a total investment of 150 million USD. Borusan Mannesmann Pipe U.S. Inc. (BMP) started production activities in the third quarter of 2014 with 300 thousand tons capacity factory, which produces well, and drill pipes used in oil and natural gas extraction activities. The factory is built on an area of approximately 500 thousand m² and operates with 362 employees. With this investment, the Group has become one of the leading manufacturers in Europe in terms of both Group sales volume and production capacity, as well as a Turkish company with a factory in the U.S. ([U.S. Pipe Manufacturer | Borusan Mannesmann Pipe U.S.](#))

Borusan Mannesmann Pipe US is the oil and gas industry's leading manufacturing facility, located in the heart of Texas and backed by global manufacturing experience.

BORUSAN HOLDING AT A GLANCE

BORUSAN HEADQUARTERS

Borusan Yatırım

Founded in 1977, Borusan Yatırım joined the Group companies operating in the sectors of steel, distributorship, logistics and technology, creating a clientèle with huge potential of growth and companies leading their business. Borusan Yatırım has been listed on the BIST since 1996 as the second publicly traded company of the Borusan group.

PRODUCTION GROUP

Combined EBITDA Share: 38.1%
Combined EBITDA:
USD 364 million
Combined Net Sales Share:
49.2%

Borusan Mannesmann

Production Capacity:
1.4 million tons/year
Total Production: 853,000 tons
7 production plants in Europe, Asia and North America
Business Partner:
Salzgitter Mannesmann
International Subsidiaries:
Borusan Mannesmann Pipe U.S.
Borusan Mannesmann Vobarno

Borçelik

Production Capacity:
1.5 million tons/year
Number of Export Countries: 38
Export Volume in 2022
364,000 tons
Turnover: USD 1.9 billion
1 production plant, 2 steel service centres and 2 sales offices
Business Partner: ArcelorMittal

Supsan

Valve Production Capacity:
10 million units a year
Turbo Production Capacity:
30,000 units a year
Total Production:
6.5 million units a year

MACHINERY AND POWER SYSTEMS GROUP

Combined EBITDA Share: 11.2%
Combined EBITDA:
USD 106 million
Combined Net Sales Share:
17.5%

Borusan Cat

Consolidated Sales:
USD 1,152 million
Total Product Sales:
1,300 units (Türkiye)

Sales from Customer Value Agreements: USD 55 million
Business Partners:
Caterpillar, Metso, Mantsinen, CDE, SEM, Exxon Mobil, MaK, EMD and Berg Propulsion
Countries of operation:
Azerbaijan, Georgia Kazakhstan, Kyrgyzstan, Far East of Russia

AUTOMOTIVE GROUP

Combined EBITDA Share: 29.1%
Combined EBITDA:
USD 277 million
Combined Net Sales Share:
20.3%

Borusan Otomotiv Grubu

Borusan Otomotiv Group
New Car Wholesale: 22,701 units
Borusan Otomotiv Group
Retail Sales: 22,686 units
Borusan Otomotiv Group
Consolidated Used Car Sales:
2,351 units
Turnover: USD 1,332 million
Borusan Otomotiv Group's
Retail Sales by Brand
BMW: 18,056 units
MINI: 1,385 units
BMW Motorrad: 1,625 units
Land Rover: 1,530 units
Jaguar: 90 units
Business Partners: GIWA Holding, BMW Group, Jaguar Land Rover

Borusan Araç İhale

Number of Members: 2,674
Sales: 12,838

LOGISTICS GROUP

Combined EBITDA Share: 7.2%
Combined EBITDA:
USD 69 million
Combined Net Sales Share:
10.4%

Borusan Lojistik

Net Sales: USD 470 million
Number of eTA Trips: 399.000
Number of eTA Registered Truckers: 181.000
Number of Warehouses: 28
Number of Transshipment Centers: 28

Borusan Port

Net Sales: USD 222 million
General Cargo Business Volume:
3.5 million tons
Container Business Volume:
123,000 TEUs
Vehicle Handling Business
Volume: 180,000 units

ENERGY GROUP

Combined EBITDA Share: 14.5%
Combined EBITDA:
USD 138 million
Combined Net Sales Share:
2.5%

Borusan EnBW Enerji

Installed Capacity: 725 MW
Gross Profit: 83%
Wind: 666 MW - 92%
Hydroelectricity: 50.3 MW - 7%
Solar: 8.8 MW - 1%
Business Partner: EnBW AG

BORUSAN MANNESMANN AT A GLANCE

Total Sales (Volume)

853,000
Tons

Total Revenue

1,340
Million \$

Activity Areas

38% Industry
48% Oil & Gas
11% Automotive
8% Construction

Number of Employee

2,095

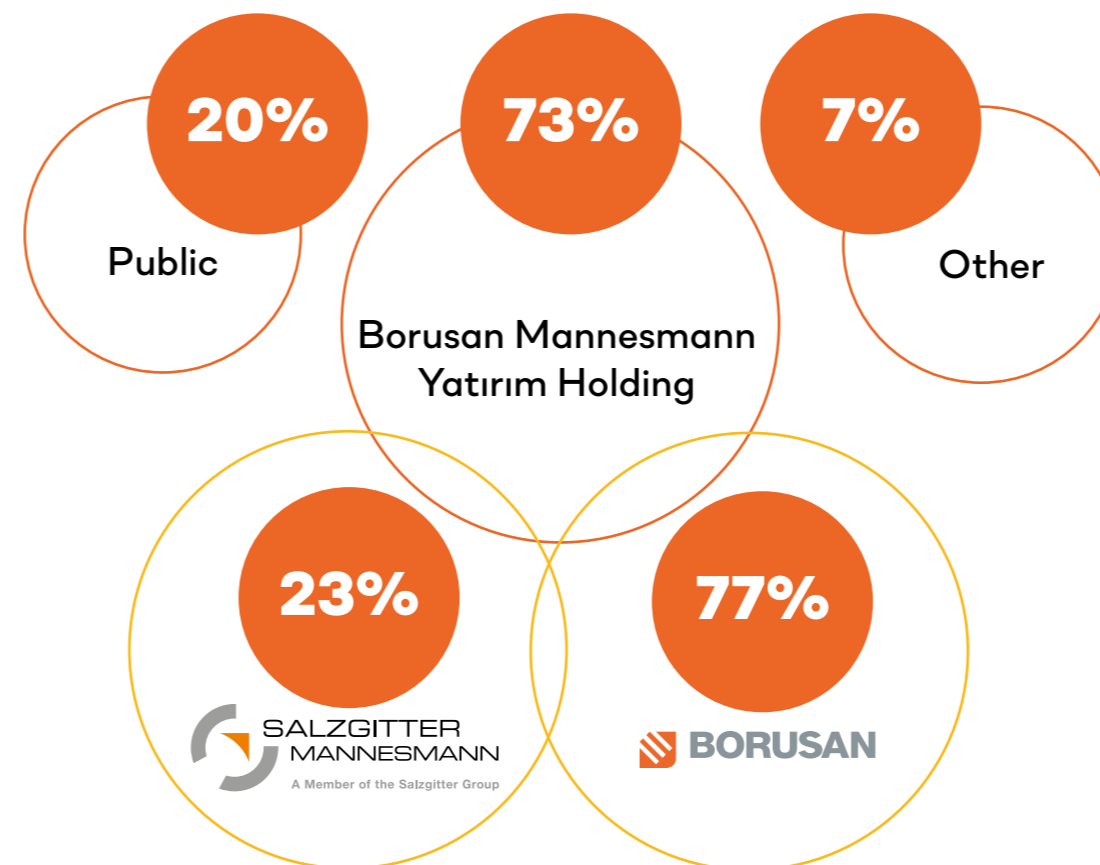
Number of Country

Export Sales more than 70 countries

Market Value

637 million \$

Company and Share Holding Structure



Production Facilities

Gemlik ERW Pipe Plant / Türkiye

Gemlik HSAW Pipe Plant / Türkiye

Gemlik Automotive Tubes Plant / Türkiye

Halkalı Plant / Türkiye

Bursa Service Center / Türkiye

Vobarno Plant / Italy

Houston Baytown Plant / USA

From 2023
Panama City LSAW Pipe Plant
Florida / USA

Mobile HSAW Pipe Plant
Alabama / USA

Ploiești Service Center / Romania

PRODUCTS

As Borusan Mannesmann, we produce line pipes, drill pipes, natural gas, and high-pressure pipes for world-famous energy projects with our 65 years of experience. In line with our growth strategy in value-added products, we share our expertise with the world for the energy sector with our facilities in Türkiye and the U.S.

We exist in all areas of life, from energy to construction, from automotive to general industry, with our production for various needs. Some of the steel pipes we produce ensure that the natural gas entering our homes from the well to our kitchen is clean and safe, while some of them are used in our fire installations of our homes as well as in our cars. Our steel pipes and profiles contribute to the strength and quality of our structures and support us in every area making our daily life comfortable.




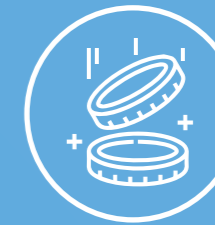



ECONOMIC PERFORMANCE

As Borusan Mannesmann, we supplement our economic performance in 2022 with our R&D and innovation efforts as in 2021, both increasing the benefit of our products and services to our stakeholders and making our business processes more sustainable. As of the end of 2022, 20% of our gross profitability was generated from sales in the new product and service group. In terms of sales volume, this ratio corresponds to 12% of the prime product sales volume.

In 2023, with the addition of Berg Pipe to our operations and our investment in Romania, we increase our production footprint in the world and continue to realize firsts in the steel pipe industry with our innovative solutions.

In 2022, the main factors affecting our economic performance were regional tensions, such as Russia-Ukraine and similar regional tensions; countries' customs barriers and protectionist policies; rising input prices and rising credit costs; as well as fluctuations in energy and raw material prices. In 2022, with the rapid decline in global steel demand, global crude steel production decreased by 4.3% year-on-year to 1.8 billion tons, while Türkiye's crude steel production in 2022 decreased by 12.9% year-on-year to 35,1 million tons. In 2022, overshadowed by the Russia-Ukraine crisis

SALES VOLUME	SALES INCOME	EBITDA	EBIT	TR EXPORT
				
853.000 tons	1340 million \$	200 million \$	106 million \$	328 million \$
+ 12% p/p	+ 62% p/p	+ 147% p/p	+ 1,011% p/p	+ 37% p/p

and the post-pandemic recovery process, the inoperability of steel production facilities in Ukraine significantly affected the steel industry in the region, while rising energy prices led to shutdowns in many factories and production facilities, especially in Europe. In addition, the 2.1% decline in steel production, especially in China, the world's largest steel producer, accelerated the decline in global steel production. While the decline in steel demand pushed capacity utilization rates down, steel prices fell faster than steel raw material prices throughout the year, putting significant pressure on steel producers' profit margins.

In February 2023, our country suffered a serious earthquake which affected many of our provinces. The financial impact of the earthquake was measured as 17 billion dollars According to TÜSİAD, 15-19 billion dollars according to SPO and 12-17 billion dollars according to the World Bank.

Despite these challenging conditions, 2022 was recorded as one of the historic years for Borusan Mannesmann in terms of financial results. Sales revenues increased significantly, especially with the growth in global markets, and this increase was reflected in financial results by increasing operational profit.

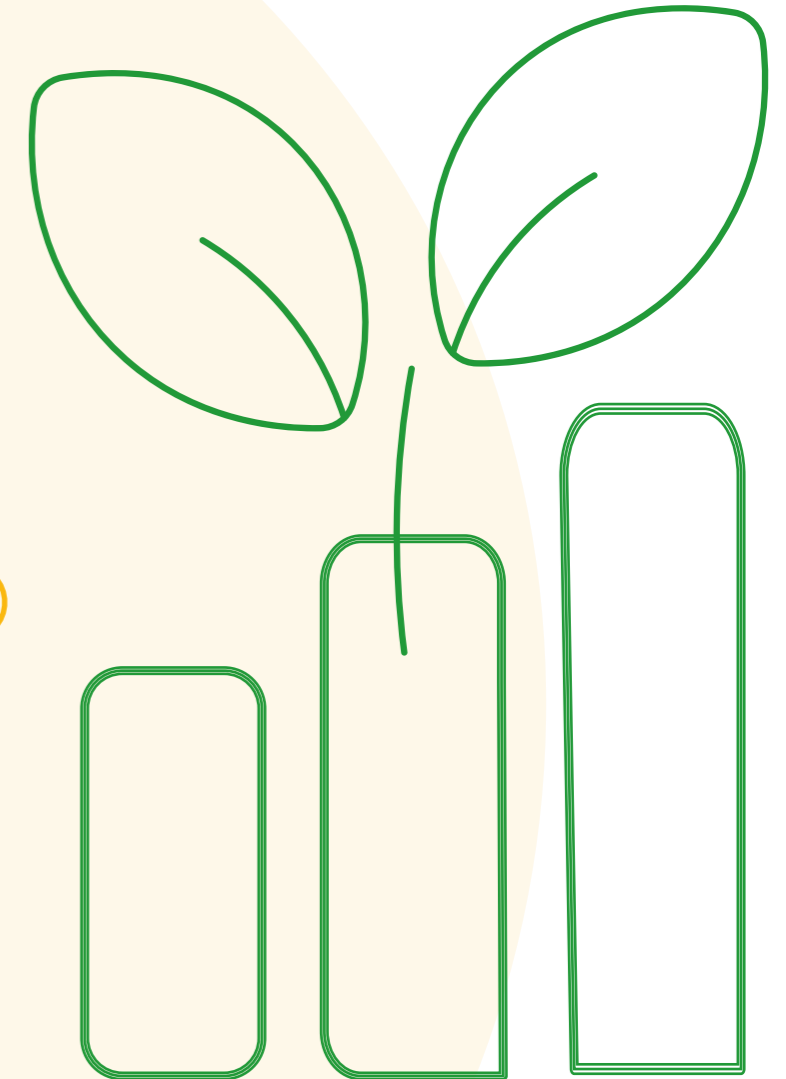
For detailed information on our economic performance, please visit the [link](#).

SUSTAINABLE FINANCE AT BORUSAN MANNESMANN

Sustainable finance aims to make long-term investments in sustainable economic activities and projects, considering environmental, social and governance (ESG) factors during investment decision-making. The European Union Taxonomy, which establishes a list of environmentally sustainable economic activities, aims to increase sustainable investment and to create clear, practical, and easy-to-implement definitions for companies and investors on which economic activities can be considered environmentally sustainable. Thus, it is aimed to provide security for investors and protect investors from green washing.

In 2022, the "Sustainable Finance" working group prepared the Sustainable Finance Guide to serve the projects carried out and/or planned to be carried out in the field of sustainability within Borusan Mannesmann. For Borusan Mannesmann, Sustainable Finance refers to the funding and financial support of projects that can be realized by focusing on "sustainability project criteria". The "Sustainable Finance Guide", which we have prepared as Borusan Mannesmann and aim to guide our internal stakeholders, will be updated in line with developments both in our country and globally.

Our working group also ensured that the bank instructions given by Borusan Mannesmann were started to be made using electronic signatures, and with this initiative, the environmental impact is approximately 20 trees.



Borusan Mannesmann, with its Sustainable Finance approach, supports stable, inclusive, sustainable economic growth and full-productive employment.



VISION, MISSION

VISION, MISSION, AND VALUES



Mission

Provide products and services that add to quality of life and maximize the economic and social development of the society.



Vision

To be a globally recognized leader provider of steel pipe and complementary solutions focusing on high value add products with a production footprint in its major markets.

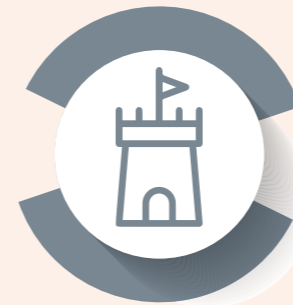


Values



We Contribute in the Community

We promote the cultural development of the society. We encourage our employees to participate in social responsibility projects. We are environmentally responsible.



We Are Reliable

We establish open and honest relationships. We keep our promises. We compete fairly.



We Aim for Excellence

We are experts at our jobs. We aim to overachieve and accomplish this goal. We are innovative and creative.



We Satisfy Our Customers

We strive to help our customers succeed. We generate for our customers with our quality products and services. We listen to the customer's voice.



We Take Initiative and Responsibility

We show effective, individual leadership. We work as a team. We create productive and lean organization.

BUSINESS ETHICS

We accept compliance with business ethics principles and legal regulations as a working standard. As respect for human rights is one of our fundamental principles in our relations with our employees, suppliers, business partners and society, we have signed the United Nations Global Compact and defined clear rules against discrimination, bribery, and corruption in all our activities.

Orange Guide, created by Borusan Holding and determines the business ethics rules we must comply with, is also owned by Borusan Mannesmann, and guides the code of conduct. In this context, mandatory training for our employees is regularly organized. As a publicly traded company, Borusan Mannesmann complies with policies and programs aimed at combating bribery and corruption, and the principle of tax integrity. At Borusan Mannesmann, it is among the values that make up the corporate culture to manage relations with stakeholders in a professional manner and to prevent illegal acts, conflicts of interest. While unethical behaviors such as bribery, corruption and abuse of power are carefully avoided, international efforts to eliminate such crimes are supported and activities are carried out within the framework of compliance with competition law and ethical rules.

The business ethics approach based on transparency, continuity, trust, and honesty, which are our fundamental elements within the scope of Borusan Holding's Core Business Principles, is also embedded in Borusan Mannesmann culture and forms the basis of our stakeholder relations. As Borusan Mannesmann, which establishes trust-based relationships, we do not engage in any activity that would damage trust with our employees, suppliers, competitors, business partners and the environment. We have an Orange Ethical Hotline, which is accessible 24/7, where our employees can anonymously, easily, and transparently communicate all their notifications in order to be both guiding and inclusive in terms of ethical rules.

[Borusan Mannesmann](#)
| [Orange Ethics](#)



In 2022, 180 notifications were submitted to the Orange Ethical Hotline by Borusan Group and the review of 110 notifications was completed within the framework of ethical rules and compliance. 11 notifications were made to the Orange Ethics Hotline in 2022 by our employees.

We act within the framework of the ethical rules determined by the Borusan Holding Ethics Committee, which reports to the Chairman of the Borusan Holding Board of Directors, to provide relations we establish with our stakeholders in the way of transparency and honesty. To be accountable to our stakeholders, to avoid illegal issues, to conduct our internal processes in a secure, fair manner, and to manage them with a sense of responsibility, we ensure that all our employees comply with the ethical rules by closely following the relevant issues. We continuously participate in the training and awareness-raising activities organized by Borusan Holding on ethical behavior and risks related to bribery.

MANAGING CORRUPTION AND ANTI-COMPETITIVE BEHAVIOUR

Principle 10 of the UN Global Compact, of which we are a signatory, states that "Businesses should fight corruption in all its forms, including bribery and extortion". The UN Global Compact requires its participants not only to avoid bribery, extortion, and other forms of corruption, but also to develop internal controls, policies and concrete programs against corruption. The United Nations Convention against Corruption is the legal basis underlying Principle 10. Borusan Mannesmann's corporate culture includes preventing conflicts of interest, managing stakeholder relations in a professional manner, and acting without violating the law.

Our relations with stakeholders are described in the "Orange Guide: Borusan Code of Business Conduct and Ethics". It is aimed to identify behaviors that may pose a risk in terms of corruption and competition within the scope of gifts, accommodation, donation, aid payments, public tenders, conflicts of interest, and it enables us to take all necessary measures. Unethical behavior such as bribery, corruption, and misconduct are always shunned away from at Borusan Mannesmann. We regularly support international efforts to eliminate such crimes, and we conduct all our activities and relations within the framework of competition law and ethical rules. As Borusan Mannesmann, we have the principle of not adopting any political affiliation in Türkiye and all the countries in which we operate and not providing material

or in-kind, direct, or indirect support to political institutions and persons. We communicate transparently with public authorities and act in accordance with fair competition laws. With our competitors, we are maintaining the same ethical, transparent, and fair approach and avoiding any kind of anti-competitive behavior.

In 2022, 3 internal and 3 IT audits were conducted by the Holding. These three internal audits are also based on environmental and social assessments. The scope of all audits conducted within the framework of the annual audit plan includes risks of error, fraud, irregularity, and corruption. In addition, all internal audits conducted by Borusan Holding Internal Audit department in 2022 were also assessed in terms of whether the company's activities have a negative impact on the local community. As a result of the audits performed, no observation that the company's activities have a negative impact on the local community took place.





SUSTAINABILITY STRATEGY

Borusan Mannesmann’s value creation strategy is centered on Climate, People, Innovation and includes offering products that add value to business processes together with all internal and external stakeholders.

With the responsibility of being a pioneer in the sector, we always embrace and lead more innovative approaches.

We are working with all our strength to achieve the zero waste and net zero target set by the Holding and at the same time, we are moving forward with our strategy to contribute to the protection of ecological balance. Together with the Holding, we have set our sustainability targets until the 2030 target year based on the 2021 base year and we share our results with all our stakeholders through our annual sustainability report. We regularly monitor our targets and keep our targets up to date by closely following material issues, stakeholder expectations, national and international developments.

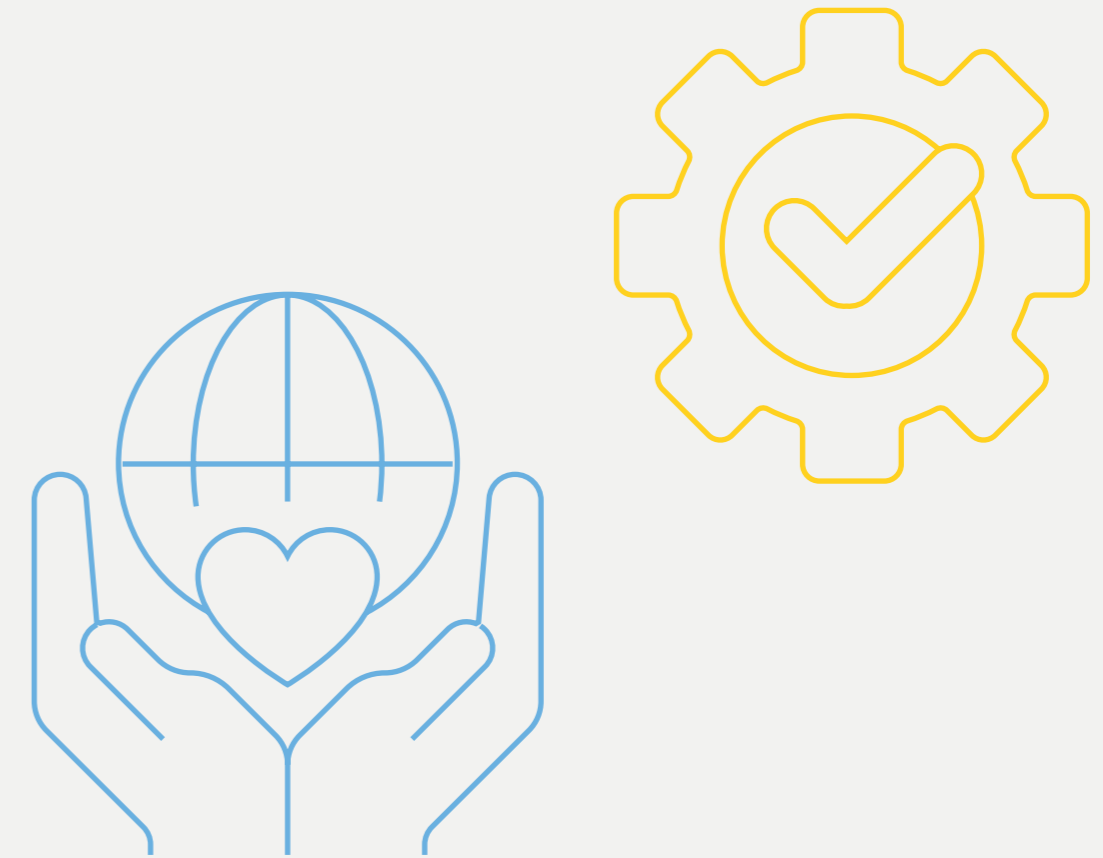
Commercial excellence, operational excellence, sustainability, and new product innovation are the main strategic focus points of our company, and digital technologies and human resources

management are structured to support these main strategic focus points. Borusan Mannesmann has adopted the mission of offering processes and products that add value to the business processes of all our internal and external stakeholders by continuously developing the value creation strategy centered on **Climate, People, Innovation**. As an organization operating in the international market, Borusan Mannesmann considers global developments as well as changing and evolving stakeholder expectations while formulating its sustainability strategy.

Closely following the developments in global sustainability reporting standards, our company has also considered the Corporate Sustainability Reporting Directive (CSRD) process, the new reporting directive in the EU, in its reporting approach. Borusan Mannesmann gives equal weight to financial and sustainability data and regularly receives third-party verifications to ensure the reliability of the data.



HIGHLIGHTS IN 2022



We continue to create added value for the Turkish economy, develop innovative products that leave our mark on the world, and create value for all our stakeholders as a brand that benefits society and produces **climate-friendly** services.

The Value We Created as Borusan Mannesmann in 2022

Input

Value Created

Output and Sustainable Impact

Financial Capital	<p>→ Market Leader in Pipe Sector Financial Value for Stakeholder Contribution to World Economy</p>	<p>\$ 1.340 million sales revenue \$ 328 Million export</p> 
Natural Capital	<p>→ Contribution to Borusan Group Net Zero Target by 2030 Circularity in Pipe Manufacturing Reduction in Water Footprint by water management</p>	<p>700 tons of CO₂ reduction 33% reduction in water consumption 43.334 tons of recovery</p>   
Human Capital	<p>→ A safe working environment An inclusive and equal workplace for all with the Equal Borusan Platform Being a preferred workplace</p>	<p>International Safety Award Brandon Hall Excellence Awards for our Maintenance School Development Program projects Faculty of Engineering Development Award in the category of "Development Program Contributing to the Future of Work and Organization" Equal Borusan: I am a Father First Project</p>   
Social Capital	<p>→ Developing projects with social return Collaboration with stakeholders Volunteering activities Sustainable benefit for society</p>	<p>Borusan Mannesman Forest Social Benefit Projects Tales from Borusan Collaborations</p>  
Intellectual capital	<p>→ Sustainable Product Support for young entrepreneurs Strong innovation and R&D activities</p>	<p>20% of gross profitability from new products and services 2 sustainable products 70% procurement from local suppliers</p>  
Manufactured Capital	<p>→ Leading production facility in Türkiye and in the world with the most established pipe production facility</p>	<p>853.000 Tons</p>  

SUSTAINABILITY MANIFESTO

As Borusan Mannesmann, we positively contribute to Borusan Holding's real ambition and passion for creating a total benefit via inspiring our industry with our values and our resources.

We are Inspiring the Future by owning the Climate, People and Innovation...



Our manifesto, that we have prepared to shed light on the path we set out on with the responsibility to inspire, is 'We are Inspiring the Future by owning the Climate, People and Innovation...' can be accessed from the [link](#).

CORPORATE GOVERNANCE

We have been adding unprecedented value to our country in the manufacturing sector since 1958, and we are continuing to pioneer the market with our new products, services and business models. As Borusan Mannesmann, with the activities we carry out within the scope of Borusan Group's strategic directions; we are maintaining good relationships with all our stakeholders within the scope of Corporate Governance principles.

Our company has been approved by the Capital Markets Board in the operating period of 1 January-31 December 2022. It complied with certain criteria in the published Corporate Governance Principles. During the period, the Company's articles of association, procedures and practices were reviewed in terms of compliance with the principles, and areas of incomplete compliance were identified, while improvements were made in these areas. Compliance with the practices in the Corporate Governance Principles has been adhered to as a principle by the Company management.

Thanks to our mission and vision, which comprises quality, value-added, innovation and creativity within the scope of short-medium-long-term values we create; we have established relationships based on trust and justice with our stakeholders. Since we are a publicly traded company, our corporate governance structure includes an Audit Committee, an Early Detection of Risk Committee, and a Corporate Governance Committee to coordinate the implementation of the Board's decisions and objectives. The Corporate Governance Committee also undertakes the duties of the nomination and remuneration committees. Holding Steering Committee, which consists of executive members to whom Borusan General Manager is affiliated, is Borusan Holding's senior management platform. Borusan Group strategy is determined by the Board of Directors; the structure in place is aimed to provide guidance to the group companies that carry out the day-to-day operations.

Organization Chart

President of the Executive Board



Zafer Atabey
General Manager



Anıl Karaca

Assistant General Manager - Financial Affairs and Foreign Trade Operations



Uğur Onbaşı

Assistant General Manager - Infrastructure Projects Segment



Ali Okyay

Assistant General Manager - Construction and General Industries Segment



Oğuzhan Kuşçuoğlu

Assistant General Manager - Construction and General Industries Segment



Nihan Alhan

Assistant General Manager - Human Resources, Corporate Development, Sustainability



Serdar Birlıkçi

Assistant General Manager - Digital Technologies

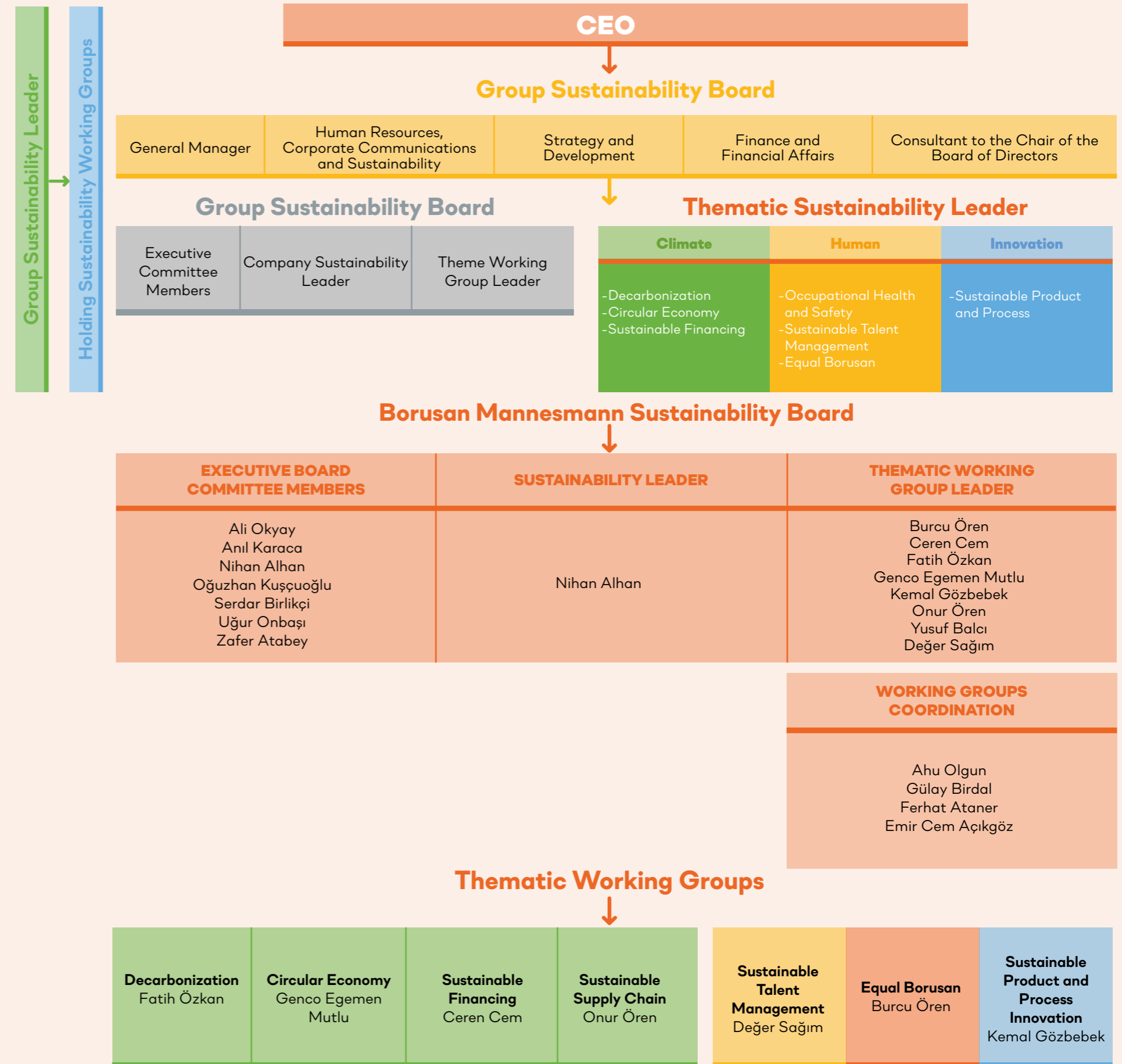
SUSTAINABILITY ORGANIZATION

Number of the agile teams which were established in 2020 with five teams for the purpose of adopting sustainability initiatives within the company has increased to 7 with the addition of Equal Borusan and Sustainable Talent Management, with a total of 95 employees. Our agile teams continued to support decision-making activities by identifying the organizational needs via weekly meetings. At the end of each month, agile team leaders made presentations to the sustainability committee regarding the progress of sustainability goals. Our year-end general evaluation was shared with our employees at our 2022 Sustainability Day.

In 2022, we continued our journey with 7 agile teams and in 2023, we intend to enlarge the impact by including new themes and categories to our roster of agile teams. In 2023, we also plan to establish a more inclusive organization via globalization, i.e., sharing best practices with our Borusan Mannesmann factories in Italy and in the U.S.

The continuity and results of our sustainability movement are also evaluated by Borusan Holding and our subsidiaries. For this purpose, the Holding Sustainability Board convenes quarterly, monitors developments with a holistic perspective and makes necessary adjustments. Borusan Mannesmann sustainability leaders and agile group leaders participate in Holding Sustainability Board meetings.

OUR SUSTAINABLE GOVERNANCE STRUCTURE



RISK MANAGEMENT

Within the scope of the EU Corporate Sustainability Reporting Directive (CSRD), all companies are expected to disclose sustainability risks and opportunities, as well as company-specific information on the business model, and to support all policies and strategies with relevant risk and opportunity materiality studies. Progress on actions taken, regarding sustainability issues and the current and potential negative impacts of the company's operations and value chain, should be regularly monitored, and efforts to eradicate negative impacts should be part of the materiality process.

At Borusan Mannesmann, we are aware of the impact that sustainability constitutes on the business continuity of the company, and we are managing the risks and opportunities in a balanced manner.

A comprehensive sustainable development approach aims to plan the future legacy of our company, not only in terms of economic welfare, but also in terms of environmental and social equality. In this context, Borusan Mannesmann not only manages risks related to natural disasters, extraordinary weather events and biodiversity through its risk management system, but also strives to use natural resources more efficiently, increase employee rights and ensure equal opportunities, in direct contribution to stakeholder welfare and to sustainable development. Risk management topics such as occupational health and safety, product and service responsibility, innovation, business ethics, legal compliance, anti-bribery and anti-corruption are also addressed within the scope of ESG (Environmental Social Governance) factors in decision-making.

The main purpose of Corporate Risk Management activities is to take proactive actions regarding risks by evaluating them at all levels of the organization starting from the Board of Directors level, especially the strategic, operational, financial, compliance and sustainability-

related risks that may affect Borusan Mannesmann accomplishment of its short, medium, and long-term goals. Risk assessments are carried out with direct participation of all stakeholders who manage risks. As a result of risk assessments, actions are determined in order to reduce the potential effects of possible risks and the implementation of these actions is regularly monitored. In order to ensure early detection and effective management of risks, the Borusan Mannesmann Board of Directors established the Early Detection and Management of Risk Committee.

Among the duties of the Committee are early detection and management of the risks stipulated in the capital markets, monitoring the compliance with the principles, and making suggestions to the Board of Directors. The document, stating the duties and responsibilities of the Committee, has been prepared in line with the regulations, provisions and principles within the scope of the Capital Markets Legislation, as well as the Corporate Governance Principles Communiqué of the Capital Markets Board and the Turkish Commercial Code.

The main duties and responsibilities of the Committee is early detection and evaluation of strategic, operational, financial, and other risks that may endanger the existence, development, or continuity of the Company; to identify the possible effects and probability of these risks; manage these risks according to the company's corporate risk-taking profile; to report the identified risks and to take the necessary measures for these risks. It consists of consulting decision-making mechanisms and establishing an effective and efficient internal control system by integrated management systems. The committee continues its work under the division of credit risk, operational risks, market risk, liquidity risk, strategic risks, and reputational risks. Sustainability risks and opportunities are listed as natural disasters, extreme weather events, climate change, biodiversity, efficient use of natural resources, recycling, circular economy, employee rights and equal opportunity.

We are aware that sustainability risks, if realized, can have a corrosive impact on the company in terms of environmental, social, financial, and human rights. We are also aware of the opportunities to transform processes that may pose significant threat to the opportunities themselves. To follow the national and global developments within the scope of sustainability, we receive consultancy services and develop proactive actions. (For example, increasing the level of awareness regarding the additional obligations that the European Green Deal will bring for Borusan Mannesmann and taking precautions in advance). In addition to operational risks such as earthquake, installation, facility, site layout, physical condition, production planning and all shipment processes within the scope of sustainability risks; risks and opportunities due to Türkiye's geopolitical position, and developments such as protectionist policies in steel procurement within the scope of international trade flows are also being investigated. In addition, risks and opportunities related to our human resources management are also addressed within the scope of sustainability risks.

As one of the first groups in Türkiye to adopt corporate risk management, we give importance to conducting project-based risk studies in all our group activities. Borusan Holding manages ethical and compliance risks through policies, procedures, controls, communication, and training. Risks are identified through audits and development suggestions are provided to companies in areas of opportunity. The risk management approach of the Holding companies enables the governance of risk in a consistent, comprehensive, and cost-effective manner by ensuring the identification, assessment and ownership of any development that may pose an obstacle to the achievement of the company's strategic goals. In its audits, the Internal Audit Department evaluates process risks and opportunities as well as social and environmental issues such as compliance with ethical rules, employee rights, occupational health and safety. Social and environmental audits accounted for 69% of the audits conducted at Holding companies in the fiscal year.



STAKEHOLDER ENGAGEMENT AND MATERIALITY

Within the scope of the EU Corporate Sustainability Reporting Directive, it is an expected approach to disclose the sustainability issues affecting the company and the impact of the company on sustainability issues. As Borusan Mannesmann, we adopt an inclusive approach that considers the priorities and expectations of our stakeholders in determination of our material issues.

Within the scope of the materiality assessment, we did not conduct a new stakeholder analysis study in 2022, but we updated our existing materiality assessment in line with the feedback from committee meetings, agile group studies, as well as corporate strategies, national, global developments, and global trends.

MATERIALITY ANALYSIS

While conducting our materiality assessment, we aimed to develop the concept of double materiality, especially among our internal stakeholders. The concept of double materiality points to the fact that risks and opportunities can be significant from both a financial and non-financial perspective. Borusan Mannesmann's sustainability strategy is structured on the balanced management of financial and non-financial data.

While reviewing our materiality assessment, we made groupings on some material issues in order to be in line with global developments and to simplify them for our stakeholders. Our list of material topics that emerged because of internal stakeholder interviews and groupings is given below.



Occupational Health and Safety



Effective Risk and Crisis Management
(e.g., Global Crisis Preparedness)



Excellence in Customer Relations



Adoption of Innovative Business Models



Combatting with Climate Crisis and Transition to a Zero Carbon Economy



Operational Efficiency and Waste Management
(Circular Economy, Environmentally and Socially Responsible Use of Resources and Materials / Responsible Waste Management)



Effective Human Management
(Employee Satisfaction, Inclusion and Equal Opportunity, Human Rights)



Contribution to Society



New Product and Innovation



Sustainability in Supply Chain
(Improving Suppliers' Capacity to Use Technology)



Digital Transformation and Artificial Intelligence

Below you can find the table for 2021 & 2022 Material Topics:

2021 Material Topics	2022 Material Topics
Occupational Health and Safety Management	Occupational Health and Safety
Human Rights	Effective Human Management
Employee Satisfaction	
Inclusion and Equal Opportunity	
Circular Economy	Operational Efficiency and Waste Management
Environmentally and Socially Responsible Sourcing and Material Use	
Responsible Waste Management	
Customer Satisfaction and Loyalty	Excellence in Customer Relations
Growth into New Markets	Adoption of Innovative Business Models
Effective Risk and Crisis Management (e.g., Global Crisis Preparedness)	Effective Risk and Crisis Management (e.g., Global Crisis Preparedness)
Combatting Climate Change	Combatting with Climate Crisis and Transition to a Zero Carbon Economy
Contributing to Society	Contributing to Society
New Product and Innovation	New Product and Innovation
Sustainability in Supply Chain	Sustainability in Supply Chain
Improving Supplier's Technology Use Capacity	
Creating a Digital Business Culture	Digital Transformation and Artificial Intelligence

OUR FOCUS AREAS AND MATERIALITY

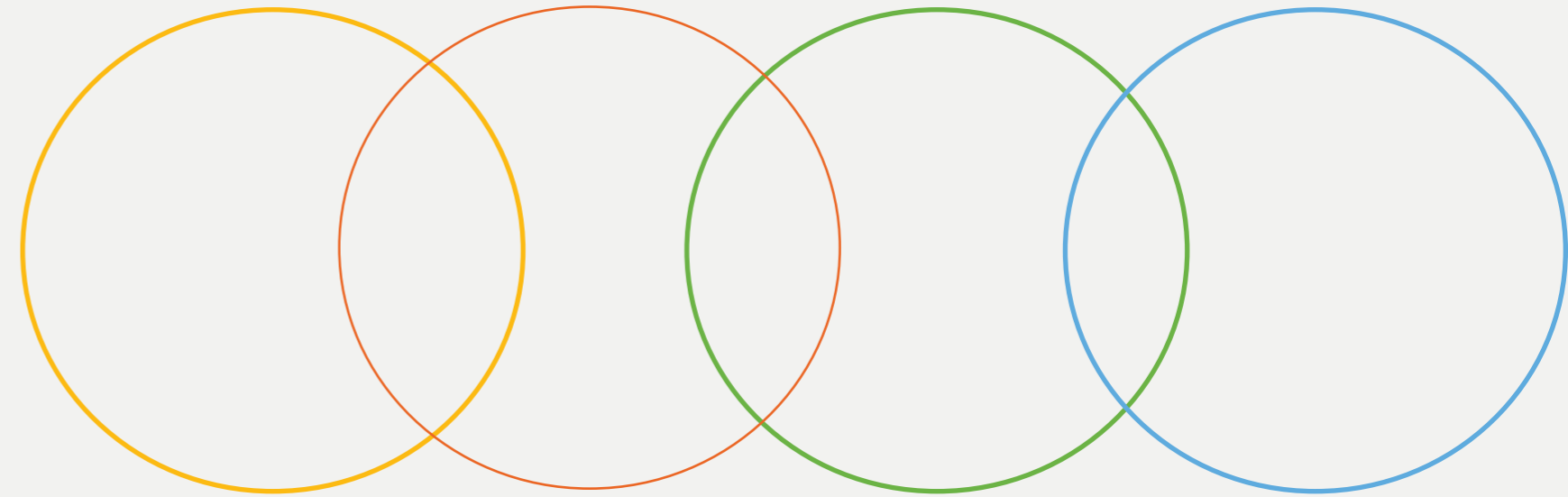
The fact that our material topics are included in the long-term integrated perspective is very important for our strategy, both in terms of sustainability reporting and financial health. The concept of double materiality also requires us, as Borusan Mannesmann, to conduct impact analysis of all our material issues.




In the tables below, you can find the table expressing the anticipated positive and negative externalities of our material issues based on sustainability-specific developments and the corresponding performance drivers.

Material Topic	Positive Impact to Environment/ Social/Economy	Negative Impact to Environment/ Social/Economy	Related KPI
Occupational Health and Safety	Creating a Safer Workplace, Resulting in Happier and More Engaged Employees	Increase in Accident Figures, Unhappy Employees, Criminal Process	Reduction In Accident Frequency and Gravity Index
Effective Risk and Crisis Management	Providing a Workplace Better Positioned Towards the Changing Dynamics of the World	Vulnerability, Uncertainty, Complexity and Ambiguity	All Sustainability KPI's
Excellence in Customer Relations	Ensuring Strong Customer Relationships / Customer Retention, Business Turnover and New Customer Acquisition	Customer Loss / Economic Loss / Brand Reputation Loss	Turnover From New Business Models
Adoption of Innovative Business Models	Delivering Economic Value as an Industry Leader and Finding Low-Emission Solutions	Climate Change / Job Loss	Turnover From New Business Models
Combatting with Climate Crisis and Transition to a Zero Carbon Economy	Minimization of the Impacts of Climate Change Via Adaptation and Mitigation	Climate Deterioration / Loss of Livelihood	Emission Reduction
Operational Efficiency and Waste Management	Reduced Operational Costs and Waste Costs	Increase in Operational Costs and Waste Costs	Waste Amount Reduction
Effective Human Management	Happily, Engaged Employees	High Turnover, Loss of Talent	Talent Retention
Contribution to Society	Strong Stakeholder Relationship	Local Pressures, Legal Processes	Talent Retention
New Product and Innovation	Delivering Economic Value as a Leader and Low-Carbon Solutions	Loss of Competitive Advantage in The Sector	Turnover From New Business Models
Sustainability in Supply Chain	Strong Stakeholder Relationship	Unprecedented Costs	Purchasing in Accordance with Green Purchasing Criteria
Digital Transformation and Artificial Intelligence	Delivering Economic Value as a Leader and Low-Carbon Solutions	Loss of Competitiveness in the Sector	Circular Business Model (Product or Service) Deployment



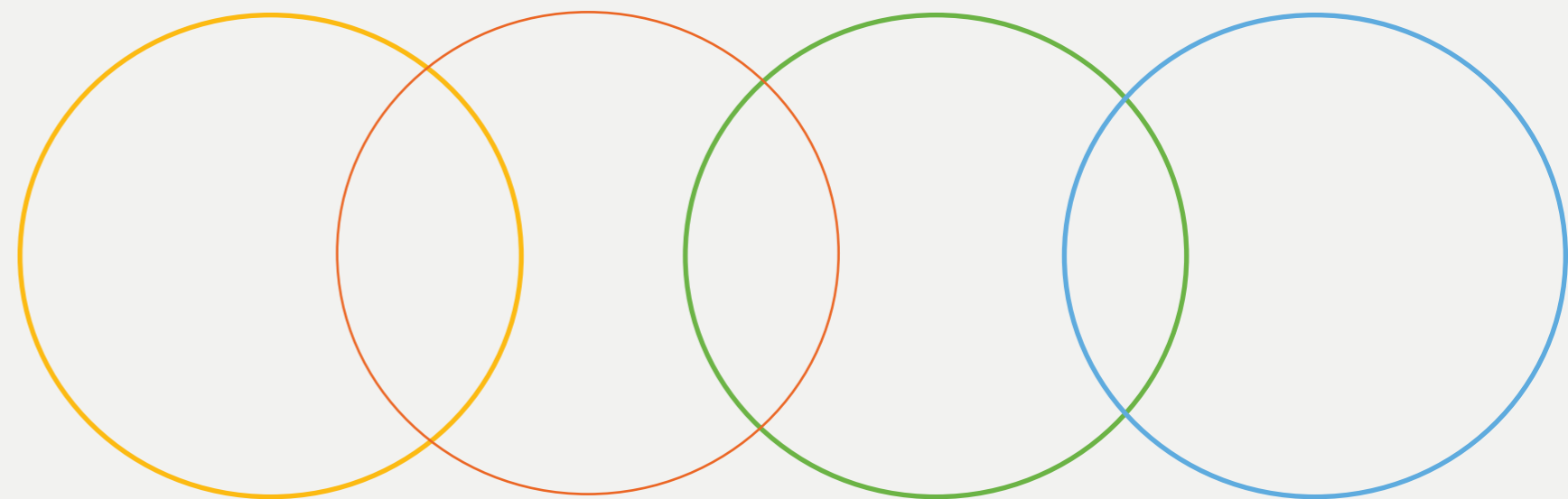
OUR CONTRIBUTION TO SUSTAINABLE DEVELOPMENT GOALS



Philosophy	Pillars	Materiality	SDG Goals	SDG Target Explanation	SDG
Climate	We Are Owning the Climate and Creating Benefits for the Planet	Operational Efficiency and Waste Management (Circular Economy Environmentally and Socially Responsible Sourcing and Material Use Responsible Waste Management)	12.4 / 6.3	<p>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</p> <p>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</p>	 
		Combatting with Climate Crisis and Transition to a Zero Carbon Economy	13.3	13.3. Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	



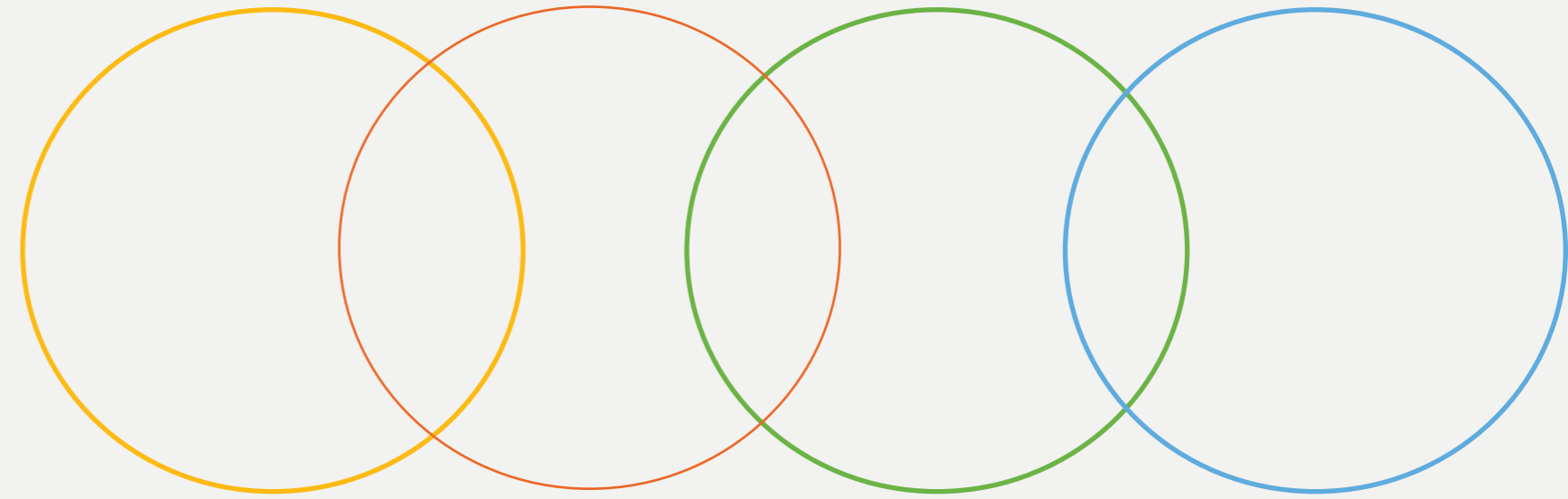
OUR CONTRIBUTION TO SUSTAINABLE DEVELOPMENT GOALS




Philosophy	Pillars	Materiality	SDG Goals	SDG Target Explanation	SDG
People	We Dream, We Design, We Turn It Into Reality Because We Are Owning Our Human	Occupational Health and Safety	8.8	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.	
		Contributing to Society	12.8	12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.	
		Effective Human Management	5.5, 8.7, 8.8	5.5 Ensure women’s full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life./ 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 for / 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.	 



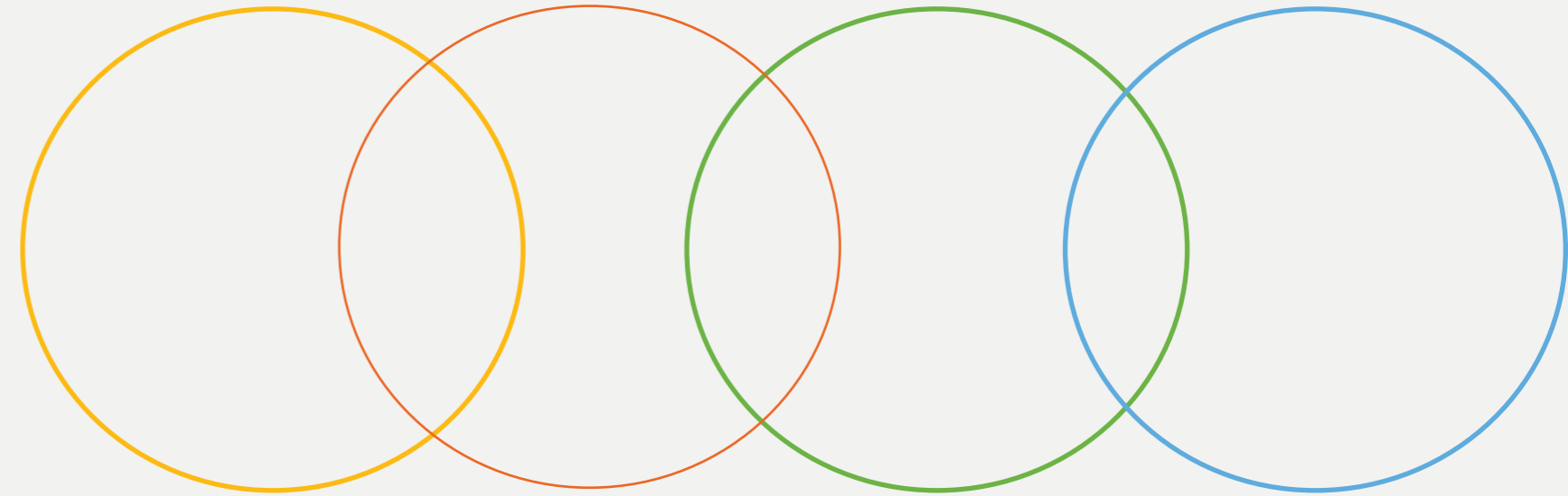
OUR CONTRIBUTION TO SUSTAINABLE DEVELOPMENT GOALS



Philosophy	Pillars	Materiality	SDG Goals	SDG Target Explanation	SDG
Innovation	We Are Owning Innovation by Designing Innovative Ideas	New Product and Innovation	12.a	12.a Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production.	
		Digital Transformation and Artificial Intelligence			



OUR CONTRIBUTION TO SUSTAINABLE DEVELOPMENT GOALS



Philosophy	Pillars	Materiality	SDG Goals	SDG Target Explanation	SDG
Governance	We Are Inspiring the Future - Own Climate, Human and Innovation	Sustainability in Supply Chain	12.a	12.a Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production	
		Effective Risk and Crisis Management	17.14	17.14 Enhance policy coherence for sustainable development	
		Excellence in Customer Relations	17.17	17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnership	
		Adoption of Innovative Business Models	8.5	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	

2022 Sustainability Performance Summary

Climate

By 2030, as Borusan Mannesmann, we aim to reduce our Scope 1 and Scope 2 greenhouse gas emissions by 37% with respect to 2021 levels. At the same time, we will reduce both our water use and the amount of waste going to disposal by 50% by 2030. We have achieved clear outputs in 2022 on this path that we are taking with confident steps.

- In 2022, we reduced our water consumption by 33%, compared to 2021, while increasing the amount of water recovered by 13.2%.
- In 2022, we realized 8 green procurement projects.
- For the first time in 2021, we took part in the CDP initiative, where global investors and customers evaluate environmental sustainability scores. In 2022, we received C mark in Climate and B mark in Water, having increased our water score compared to the previous year.
- With the project we carried out at our Vobarno plant in Italy, we reused the sulfuric acid used in the surface preparation line by treating it instead of the traditional waste disposal route.
- In 2022, we applied for the Istanbul Chamber of Industry Green Transformation Awards, and we received an award in the Environmental Sustainability Management category within the assessment of our initiatives that we addressed with the Climate, People, Innovation approach.
- As Borusan Mannesmann, we were deemed worthy of the Environment Award in the "Large Scale Enterprise Category Metal Sector" within the scope of Şahabettin Bilgisu Environment Awards organized by Kocaeli Chamber of Industry which since 1995 aims to encourage industrial enterprises to contribute to the development of environmental awareness.





Human

Borusan Mannesmann considers its most valuable asset as its human capital. For this reason, we see it as our primary goal to provide our colleagues with a working environment where they will be happy and where they can improve themselves both professionally and individually. In this context, we are proceeding with determination.

- Our priority in occupational health and safety is 'Zero Accidents'. In our 2022 OHS Performance Indicators, a positive decrease of 38% was realized in the accident severity rate, compared to 2021.
- In 2022, we included our Talent Management team in our roster of sustainability agile teams.
- We received the British Safety Council International Safety Awards Distinction Award.
- We received the MESS "Stars of Occupational Safety" Recommended Good Practice Award in the Innovators in Education and Communication Category.
- We received 2 different awards at the Brandon Hall Group 2022 excellence awards with the maintenance school development program.
 - Best Progress in Competence and Talent Development | Gold
 - Best Learning Program Results | Bronze
- In 2022, we organized our first Borusan Mannesmann Sustainability Day, where we shared the cumulative experience of our agile teams through a climate, people, innovation lens.
- We prepared a guide on Sustainable Finance and informed our internal stakeholders.
- We launched the Sustainable Supplier Portal.
- We have implemented the second phase of our 'First, I'm a Father' project, which we developed in collaboration with AÇEV.
- As a heavy industry company, we are developing policies that enable women employees to take part in the office, in the field and in managerial positions. As we move forward in alignment with the 2030 goals of our Equal Borusan agile team, we increased our office female employee ratio to 28.1%, field/factory female employee ratio to 2.95% and female leader ratio to 18% in 2022.



Innovation

On the innovation side, our Sustainable Product and Process Innovation team worked in two different subgroups in 2022. While one of the teams researched sustainable business models, the other team focused on new products and technical issues.

In 2030, we are targeting 20 million\$ in gross profit from new products and business models.

- In 2022, we established the Borusan Mannesmann Collaborative Innovation Network. Additionally, incubation center activities, start-up screenings, graduation project sponsorship programs, job fairs, entrepreneurship circles were undertaken under various business-university partnerships.
- 11 new products were developed and 2 of them were launched as sustainable products.
- Efforts were made to generate electricity from the relative humidity and received an award at the "Energy Producing Factories Summit" with this effort.

BORUSAN MANNESMANN SUSTAINABILITY TARGETS (2022 - 2030)

VALUE DRIVER	SUB TARGET	INDICATOR DEFINITION		Unit	2021 Actual	2022 Actual	2023 Target	2030 Target
CLIMATE Decarbonization	Emission Reduction	Total (Scope 1+ Scope 2)	Emission	Ton CO ₂ e	67.586,99	65.477,65	60.329	43.943
			Target	%	0	3	14	37
			Actual	%	-	3,12	-	-
		Direct (Scope 1)	Emission	Ton CO ₂ e	21.859,48	18.644,29	22.124	21.460
			Target	%	0	0	2	5
			Actual	%	-	14,71	-	-
		Indirect (Scope 2)	Emission	Ton CO ₂ e	45.727,51	46.833,35	38.205	22.483
			Target	%	0	5	19	52
			Actual	%	0	2,42	-	-
	Monitoring		Carbon reporting mechanism via measurement and monitoring	Date	Reporting	Holding transitioned to general digital reporting for group companies	Digital Reporting	Digital Reporting
	Project Development		Proposing emissions reduction projects which require investment	Piece	6	12	5	5
	Supply Chain Sustainability	GHG Reduction in Emissions from Purchased Raw Materials	Reduction versus 2021	%	0	3,78	3	20
CLIMATE Circular Economy	Water	Decrease in water consumption	Reduction versus 2021	%	0	33	5	50
		Increase in recycled water amount	Reduction versus 2021	%	0	13,2	5	50

BORUSAN MANNESMANN SUSTAINABILITY TARGETS (2022 - 2030)

VALUE DRIVER	SUB TARGET	INDICATOR DEFINITION		Unit	2021 Actual	2022 Actual	2023 Target	2030 Target
CLIMATE Circular Economy	Waste	Waste Reduction	Decrease at waste amount to disposal	%	0,00	20,6	5	50
			Recycling of organic waste		Study is ongoing with the Municipality via Borusan Holding for Gemlik Facility	Study is ongoing with the Municipality via Borusan Holding for Gemlik Facility	Study is ongoing with the Municipality via Borusan Holding for Gemlik Facility	
	Supply Chain	Green purchasing versus all purchases	%	0	3	3	TBD	
INOVIATION	Revenue from new business models			USD		Being followed	Being followed	20 million GP
HUMAN OHS	Loss Prevention	Decrease in severity rate	Value	Accident Severity (workforce loss per 1,000 hours)	0,37	0,23	0,30	0,14
			Improvement	%	2	38	10% improvement compared to previous year	10% improvement compared to previous year
		Decrease in accident frequency rate	Value	Accident Frequency (number of accidents per 1 million hours)	6,5	6,38	5,26	2,5
			Improvement	%	2	2	10% improvement compared to previous year	10% improvement compared to previous year
HUMAN Equal Borusan	Gender	Percentage of Women working at offices		%	26,1	28,1	30	36
		Percentage of women non desk employee versus desk employee		%	2,8	2,9	4	16
		Percentage of women executives (all levels)		%	17,5	18	16	27
HUMAN Talent Management	Talent Management	Future Leader Leave Rate		%	6	3	10	5
		Borusan Alpha Leave Rate		%	2020 - 25%	0%	---	20
	Employee Engagement			%	74% WC - 72% BC	82% WC - 67% BC	80% WC - 70% BC	85



CLIMATE

1. WE ARE OWNING THE CLIMATE AND
CREATING BENEFITS FOR THE PLANET

WE ARE OWNING THE CLIMATE AND CREATING BENEFITS FOR THE PLANET

With our emission reduction projects, we prevented approximately 700 tons of emissions in 2022. In 2030, we aim to be carbon neutral, reduce water consumption, and complete our clean technologies portfolio.

Borusan Holding 2030 Climate Group Targets

As Borusan Group, we are aware that every resource we consume is limited and to act with a sense of responsibility is crucial. Targets we pursue in Decarbonization are the following:

- Being Carbon Neutral
- Establishing a CBAM (Regulation on Carbon Regulatory Mechanism at the Border) compliant emission measurement, reporting and verification mechanism
- Developing emissions monitoring and reduction projects that require substantial investment.

Targets we pursue in Circular Economy are as follows:

- Supply Chain management in accordance with Green Procurement criteria
- 50% reduction in water consumption, 50% increase in water recovery by 2030
- Reducing waste to disposal route by 50%, 100% recycling of organic waste

In our report, we have categorized the activities carried out in line with these objectives into two material topics under the title "WE ARE OWNING THE CLIMATE AND CREATING BENEFITS FOR THE PLANET".

Our material topics examined in this context are;

- Combating the Climate Crisis and Transition to a Zero Carbon Economy
- Operational Efficiency and Waste Management

According to the WWF Climate Change Performance Index 2022 report, Türkiye's ranking remains unchanged, whereas countries compete to become climate neutral given the race of time. Despite our low performance in the energy use category mentioned in the report, being a party to the Paris Climate Agreement has enabled us to maintain our position in 2022.

According to the Index:

- No country can be rated as 'very good' in the performance assessment of climate action in concert with the Paris Agreement targets.
- Türkiye ranks 42nd, but its overall performance is marked as 'low'. In the climate policy category, its performance classification improved from 'very low' to 'low'. This is because we have become a party to the Paris Climate Agreement and announced a net zero emission target by 2053.
- The Fit for 55 legislative packages, designed by the European Union as a comprehensive implementation tool for emission reductions in line with the Paris Climate Agreement targets. For our country, the Paris Agreement has revealed that it needs to demonstrate its actions with a more tangible action plan towards achieving the 2053 net zero target.

The United Nations Climate Change Conference COP27 in Egypt made similar calls for all countries.

"It's time to stop talking and take concrete steps."

At the two-week-long COP27 summit in November 2022, nations decided for the first time to set up a fund to pay developing countries that have suffered "loss and damage" from climate-related disasters. Türkiye announced an updated Nationally Determined Contribution (NDC) target following the COP27 summit. Türkiye's 2030 mitigation target increased from 21% to 41% reduction in GHG emissions.

As Borusan Holding, we also participated in COP27. We, as the Holding, witnessed firsthand the decisions taken for the planet and had the chance to closely observe the opportunities that may be in-the-making for our international locations, customers, and suppliers.

On the national level, the Ministry of Environment, Urbanization and Climate Change carries out value-added activities on climate change. With the establishment of the Climate Council, which was organized to undertake coordinated action in an effort to combat against climate change, the goals to determine short, medium and long-term strategic goals with the active participation of all stakeholders in line with our country's 2053 net zero emission and green development goals, to contribute to the legislation to be developed on climate, and to create a road map that includes basic policies and priority actions in the context of reducing greenhouse gas emissions and adaptation to climate change were formalized. As Borusan Mannesmann, we regularly participate in the discussions relating to the Climate Change Action Plan established by the Climate Council and contribute via offering our sectoral perspective.

On the international level, the Intergovernmental Panel on Climate Change (IPCC) published its sixth assessment report. The report shared the latest developments on global warming and climate change. It also emphasized the urgent need to dwindle the use of fossil fuels to favor a move towards more sustainable and environmentally friendly planning as soon as possible.

With all these prominent national and international developments in 2022; it is indicative of the proactive approach that Borusan Mannesmann has identified, namely **CLIMATE**, as a critical value driver among our three sustainability pillars. In this context, we continued to take concrete steps in order to combat climate change in 2022.

COMBATTING WITH THE CLIMATE CRISIS AND TRANSITION TO A ZERO CARBON ECONOMY

Low carbon economy, in its most general definition, is a model that ensures that the energy required in all activities occurring in the production-consumption chain in an economy is based on the lowest level of carbon emissions. In this context, it is essential to adopt new business models.

If countries and companies want to put decarbonization initiatives at the center of their economic future, they must consider economic fluctuations and the difficulties in determining energy prices. Borusan Mannesmann regularly updates its risk and opportunity analyses by taking all these externalities into account.

We at Borusan Mannesmann have been pursuing our efforts to switch to renewable energy for the past few years. By the end of 2022, we started to work on concrete outputs. First, we made a power purchase agreement (PPA) to obtain the energy we use in production from renewable energy sources. According to the agreement, we have started to supply our energy needs from renewable energy power plants starting from the first half of 2023. In 2023, we also documented the electricity we purchased for our production sites with IREC certificates. We have also started feasibility studies for the establishment of a Wind Power Plant with Borusan EnBW.

By the end of 2022, in addition to the execution of the projects determined in 2021 in terms of decarbonization, our most important output was the new Wind Power Plant project and the determination of the budget for improvements in energy efficiency design throughout 2023. In addition, Borusan Mannesmann's decarbonization team carried out both awareness activities and various energy efficiency improvement projects throughout 2022.

As Borusan Mannesmann, we implemented **9** decarbonization projects in **2022** and achieved a greenhouse gas reduction of **700 tons** from these projects.

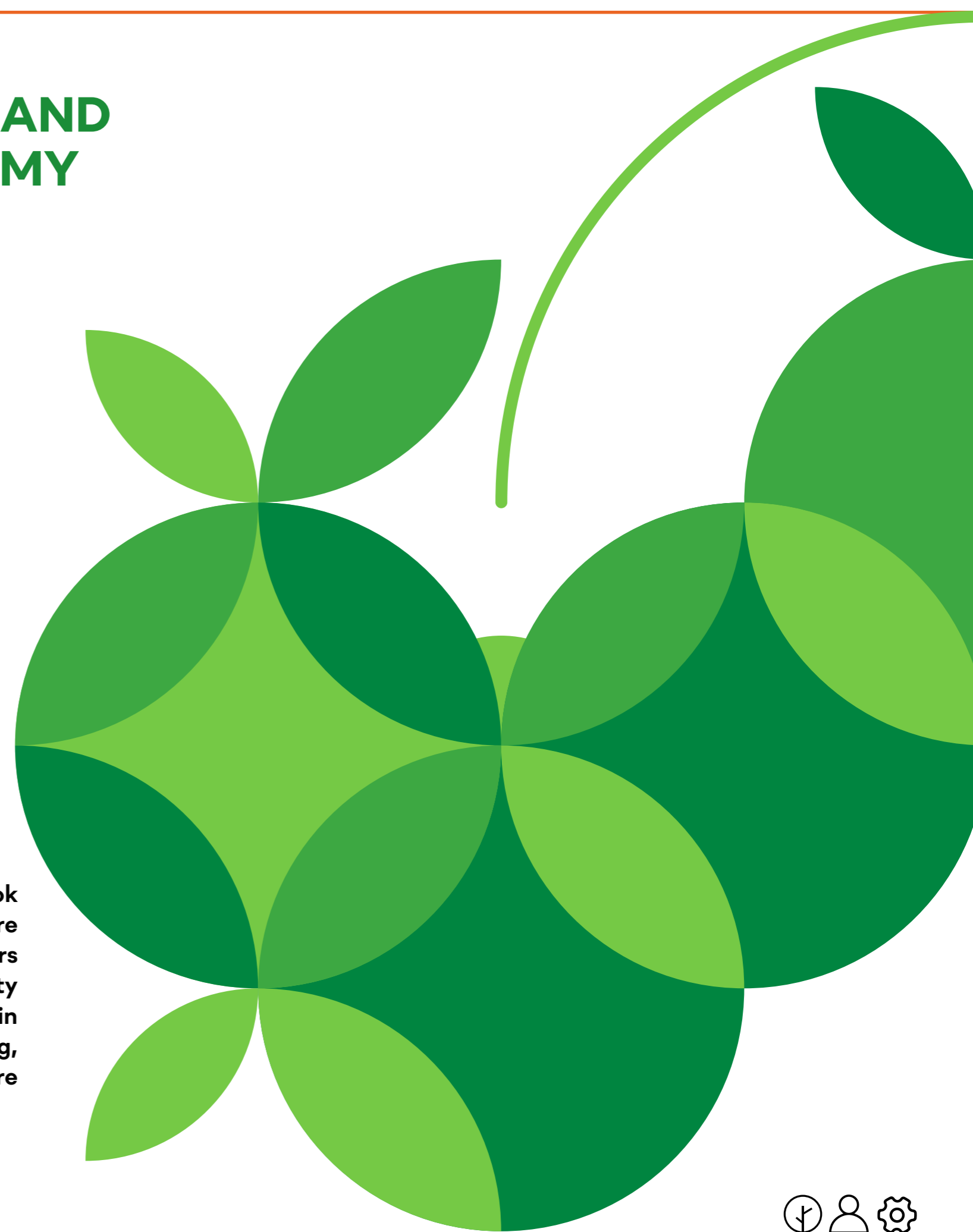


2,500 tons of CO₂ improvement is targeted with the projects that will be implemented in 2023.



For 2023; an investment budget of USD 2.225.000 is planned for climate initiatives.








For the first time in 2021, we took part in the CDP initiative, where international investors and customers evaluate environmental sustainability scores. In 2022, we received C mark in Climate and B mark in Water scoring, having increased our water score compared to the previous year.



In cooperation with Yuvam Dünya, we implemented the Climate Champions project with the children of Borçelik, Borusan Mannesmann and Borusan Port workforce in order to raise the total level of awareness. With this program, children were informed about sustainability and climate change through workshops, and in follow-up to the project, we ensured that each child served as a Climate Ambassador of the schools.

In 2022, we also conducted awareness-raising activities for our employees on responsible energy use through digital bulletin boards, cafeteria TVs, mailing and SMS. In the email posts, we included information about the necessity of not leaving electronic devices in sleep mode and the importance of carsharing for reduction in greenhouse gas emissions.

Some of the energy efficiency projects realized at Borusan Mannesmann in 2022 are:

-  The new line consumes 15% less energy than the previous welding machine design thanks to the revision of the RS30-2 welding machine at Gemlik factory.
-  With the SRM Cooling Tower optimization works at Gemlik plant, the pumps were prevented from running when the line stopped; by this system, 30% reduction in the energy consumption of this line was achieved.
-  We have started to calculate greenhouse gas emissions voluntarily since 2021 at our plant in Houston Baytown in the USA. We have also started to prefer the use of electric vehicles in our internal logistics processes and thus achieved an overall reduction in our emission amounts.
-  At Gemlik plant, we collaborated with the RePG startup company to recover the waste heat in the compressor machinery. As a result of this collaboration, we generated electrical energy from low-temperature waste heat under real field conditions. The heat of the oil coming into the system from the radiator in the compressor was humidified using the evaporator. The vaporized fluid turned the specially designed turbine to generate electrical energy.
-  We also revised the exterior lighting with LED in all our factories.
-  By turning off the fans in the SRM panel rooms, an annual reduction of 9 tons of CO₂ emissions was achieved.
-  With the improvements we made in the natural gas consumption of our annealing furnaces, we spent 575,360 m³ less natural gas compared to 2021, and similarly, with the improvements we made in our steam boilers, we saved 180,000 m³ of natural gas and \$153,000.



In 2022, we continued greenhouse gas measurement as in 2021, and we had our emission measurement verified by a third-party certification firm according to the ISO 14064-1:2018 standard. Within the scope of the measurement, the operational control limit was taken as the data consolidation approach.

2022 calculations include Category 1, Category 2 and Category 3 greenhouse gas emissions and our emission management includes CO₂, CH₄ and N₂O gases.

Our 2022 greenhouse gas emissions are detailed in the table below according to Category 1, 2 and 3.



Year	Scope 1 (ton CO ₂ -e)	Scope 2 (ton CO ₂ -e)	Scope 3 (ton CO ₂ -e)	Total
2020	17,667.4533	40,251.1681	4,902.36	62,820.98
2021	21,761.86	45,727.51	87,485.70	154,975.30
2022	18,644.29	46,833.35	128,798.16	194,275.8

Scope 1 Direct Emission Sources
Scope 2 Indirect Emission Sources
Scope 3 Indirect emissions from transportation

In 2022, despite a significant increase in our production values compared to 2021, we achieved a 24% reduction in our category 1 resources and a 3% reduction in category 1 + category 2.

In the table, Category 3 values differ significantly from each other. In 2020, only personnel transportation and waste disposal values; in 2021, personnel, product and raw material transportation data and in 2022, personnel, product, raw material, auxiliary raw material, waste transportation data were included as Category 3 data.

In addition, according to ISO 14064-1:2018 standard, Category 4 emissions, which refers to indirect emissions from the products used by the organization, have been calculated by Borusan Mannesmann for the past 2 years. In this context, in 2021, only the data of suppliers who were able to submit EPD were taken as basis, while in 2022, verification was made using library reference information. Our Category 4 value for 2022 is calculated at 1.446.589,45 tCO₂ (Category 4: Indirect emissions from products used by the organization).

As Borusan Mannesmann, we review our activities which has high energy needs, identify areas where we can implement savings, and advance our decarbonization activities at these points. We monitor our energy efficiency efforts with the certified ISO 50001 Energy Management System. In this context, our Gemlik plants have been certified with ISO 50001 and the certification process of our Halkali plant was completed in 2021.

In 2022, we started measuring the greenhouse gas emissions caused by our energy sources at our Borusan Mannesmann Vobarno plant in Italy. It is our target to have further detail in the measurements and obtain verification for 2023.

 **BM Vobarno**

Year	Scope 1 (ton CO ₂ -e)	Scope 2 (ton CO ₂ -e)	Total
2022	4.974,38	1.467,54	6.441,92

Scope 1 | Direct emission sources
 Scope 2 | Indirect emission sources

 **BORUSAN MANNESMANN**

Regular emission measurements are also carried out at our Borusan Mannesmann Pipe US Inc. factory in Baytown, USA, starting from 2021.

Year	Scope 1 (ton CO ₂ -e)	Scope 2 (ton CO ₂ -e)	Scope 3 (ton CO ₂ -e)	Total
2021	10.695,62	7.108,41	379.781,05	397.585,08
2022	17.684,71	10.695,62	366.071,75	394.416,08

Scope 1 | Direct emission sources
 Scope 2 | Indirect emission sources
 Scope 3 | Indirect emissions from transportation



The reason for the overall increase in emissions is linked to the increase in production figures and as a result, the emissions intensity also increased by 7% from 2021 to 2022 (in category 1 + category 2). Category 3 intensity decreased by 17% despite the increase in production figures.

Within the scope of combating climate change, Borusan Mannesmann takes urgent action to mitigate the negative effects of climate change.



OPERATIONAL EFFICIENCY AND WASTE MANAGEMENT

To contribute towards the Circular Economy goals, at Borusan Mannesmann, we continue to carry out activities that will contribute to Holding targets in 2022.

One of our biggest investments in this sense is the construction of the Gemlik facility's Biological Treatment Plant Revision, for which construction is expected to take place in 2023.

Circular Economy is not only a model that returns the waste back to the source, but it is also a way of thinking to develop processes and ensure efficiency within the recycling-reuse-repurposing-reproduction cycle that feeds one another at each stage of the value chain. This is adopted as a way of doing business and as an operational philosophy for Borusan Mannesmann.

At Borusan Mannesmann, we continue our mission by adopting circular economy strategies as our business model.

Circular economy activities include all activities carried out within the scope of resource utilization, waste reduction and waste assessment.

By building our business models on the axis of innovation, we make resource-efficient decisions, choose more environmentally friendly products in our material preferences, incorporate innovation into our business processes, reduce/repurpose our wastes and identify new opportunities in the field of circularity. As Borusan Mannesmann, circularity is an important principle for both our own waste and raw materials. We attribute our waste with an environmental value and economic loss, and we care about their reuse. Our top priority is to adopt the principle of circularity throughout our entire value chain and to implement reusable or waste-free

materials in our end products. Our circular economy working group evaluates the environmental, social and economic impacts of all our outputs and examines these processes in terms of sustainability pillars, while carrying out studies to take action primarily against climate change in an effort to figure out its impact on sustainability-related risks.

Circular economy also plays an important role in our product innovation processes. We contribute to the circular economy by increasing the lifetime of our products through R&D studies.

Within the scope of Circular Economy, 22 projects were planned, 9 projects were completed in 2022, and 13 projects were transferred to 2023. The 2023 budget studies of the transferred projects have been completed. The prominent project was the recycling work carried out at the Halkalı plant.

We are aware of the importance of local suppliers in the circular economy. In this context, we procured 70% of all our raw material purchases from local suppliers in 2022.



Some of the activities carried out by Borusan Mannesmann within the scope of Circular Economy are described below:

At Borusan Mannesmann Halkalı Plant, we have implemented many recovery projects. At our Halkalı plant, we executed a project to produce tensile pipes with recycled chemicals. With this project, we recovered reactive oil and at the same time, we ensured the reuse of byproduct rust protection oil in our processes. By filtering the reactive oil that comes out as waste from the processes, we ensured **the reuse of 49,800 kg of oil** and at the same time, we achieved a gain of \$251,340. **With this project, 1 out of every 4 pipes produced in Halkalı as of 2022 was produced with recycled oil.**

As a result of the project carried out throughout 2022, we **saved 53,452 kg of oil** and achieved a gain of \$103,509. On the other hand, we indirectly contributed to less chemical production, logistics, disposal and therefore relatively less carbon footprint per unit product since the equivalent amount was substituted.

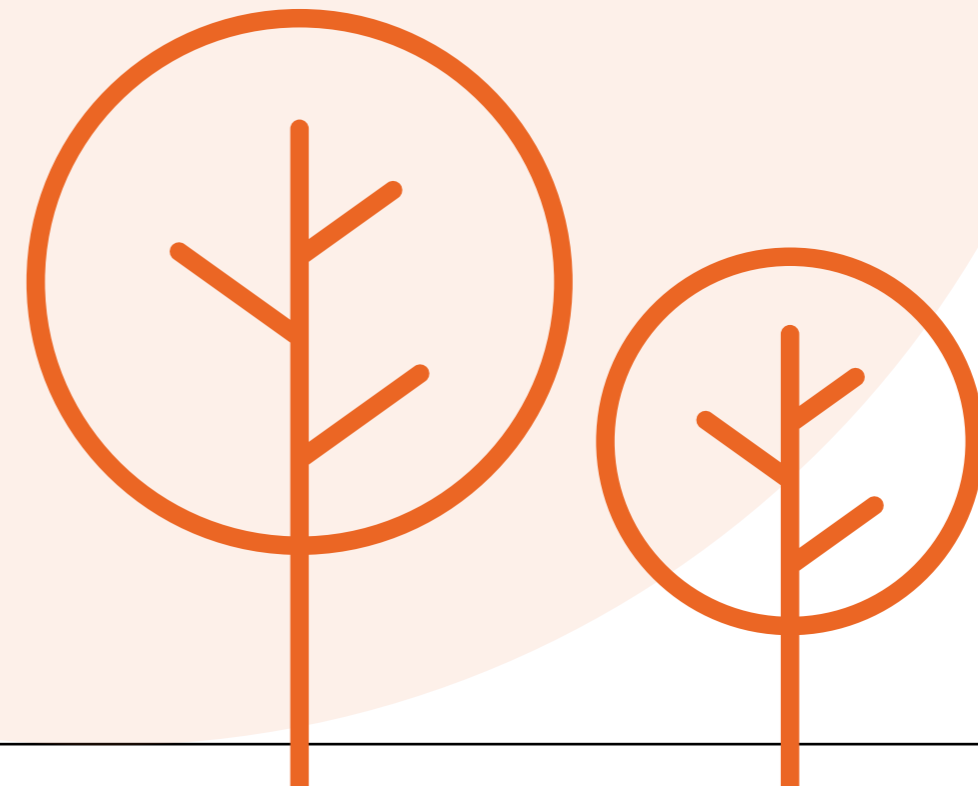
We reused the **idle belts in the Halkalı plant as pipe end protective strapping and continued to use them for existing orders**, offered in 2 different diameters and weights.

At the Borusan Mannesmann Spiral Plant, we recovered 42 tons of plastic raw material by processing the waste as granules.

By the content change in the phosphate and surface preparation pools at the Halkalı plant, 15,000 kg of barium chloride and 15,000 kg of lime were saved compared to 2021, resulting in a reduction relating to the consumption of treatment chemicals.

Following the trials at the Borusan Mannesmann Halkalı Plant in January and February 2022, the activation bath was removed and an annual saving of 4,250 kg of activation chemicals was achieved.

At Borusan Mannesmann Halkalı Plant, acid use was eliminated, and 4,200 kg of sulfuric acid was saved.



Some of the activities carried out by Borusan Mannesmann within the scope of Circular Economy are described below:

As Borusan Mannesmann, we have executed a project to recycle the dross waste sent to disposal from the submerged arc welding stations and by installing a sieve system, **we have collected and reused approximately 0,5 kg - 1,5 kg of dross going to disposal per pipe.**

A project to prevent paint waste during the transition to polyethylene in FBE coating was realized. Before the system installation, powder epoxy in 1,000 kg sacks in the loading system were transferred to the bunker in the operation area via pumps. The bunker capacity was 0.6 tons, while the paint was emptied and sent to waste at every paint change. A pump was added to the powder epoxy feeding point with an extra connection. Via pumping, the paint was fed directly into the 200 kg capacity tank. In this way, 0.6 tons of waste is prevented during paint changes and the paint is kept ready for use in the next production. With this project, we achieved a reduction of 3,600 kg in the amount of hazardous waste.

After the polyethylene coating of the faulty products of Segment 1 line pipe was peeled off, the coatings were regranulated in crushers and started to be used as **recycled material** in ERW Plant 3LPE coating works.

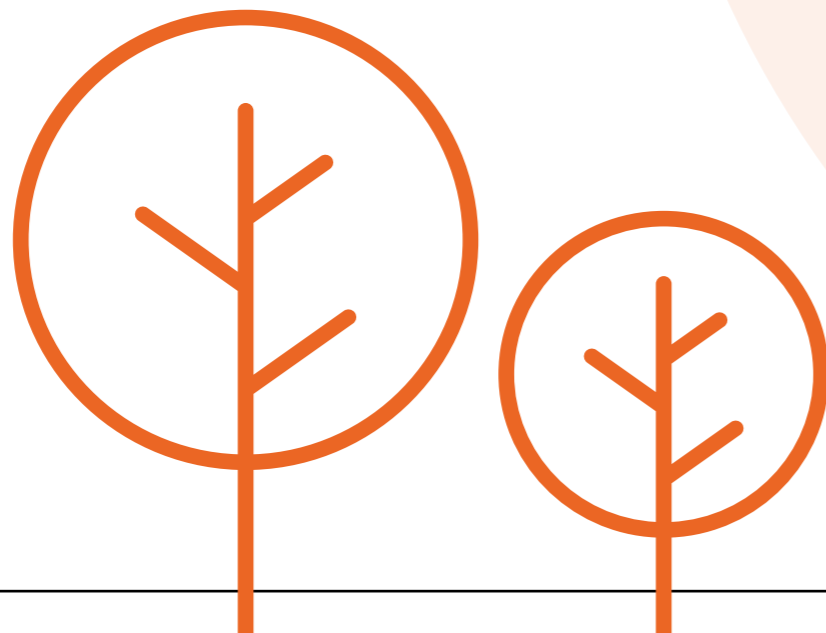
As a result of the evaluation of the equipment dismantled from the SRM1 line, the idle equipment in the warehouse was analyzed and made ready for shipment to America within the scope of SRM America investment. **As a result, approximately \$220k worth of material was saved.**

Due to the improvement projects implemented in the Automotive Plant, there was a reduction in the use of oil, water use, amount of reactive oil, and air. Via the roll form oil filtration, clean feed oil and additives were reduced. In the surface preparation facility, water evaporation was prevented by operating the bath temperatures at relatively lower values and the need for additional water was reduced. By extending the reactive oil filtration process time, the amount of oil discharge was reduced, the same amount of oil was reused, and air consumption was reduced thanks to cleaning the burrs adhering to the tipping jaws with water-based waste solvent instead of air.

In the BM Vobarno plant, we carried out a project on the recovery and utilization of sulfuric acid used in surface preparation. Before the project, sulfuric acid was replaced every 10 days and 3,600 m³ of acid was wasted annually. The project enabled the acid to be regenerated and reused. The installed system was also designed within the scope of industry 4.0 and the system is ready to be monitored instantly. The iron sulphate obtained because of regeneration, and it is used as raw material in the agricultural and pharmaceutical sectors. As a company, we received the REACH certificate for the iron sulphate produced. With this project;

- We reduced acid waste from 360 tons per year to 75 tons. We reduced the use of new acid from tons/year to 84 tons/year.
- Depending on the decrease in the pollution load of the treatment plant, sludge formation has also decreased.
- In addition, the project was entitled to benefit from the support opportunities provided by the Italian Government within the scope of Industry 4.0. Government incentives amounting to 40% of the project cost were received.

Borusan Mannesmann ensures sustainable production and consumption approaches in the business model developed within the framework of Operational Efficiency Approach and Circular Economy.



RESPONSIBLE WASTE MANAGEMENT



"Zero Waste" is a goal defined as a waste management philosophy that includes preventing waste, using resources more efficiently, preventing or minimizing waste generation by reviewing the causes of waste generation, and collecting and recycling waste separately from the source.

To reach the 2050 zero waste, zero emission target set by the Holding, specific sub targets have also been set within the scope of the principle of reducing carbon emissions and waste in a way to reach the zero waste/zero emission target, while contributing to the protection of ecological balance, which is the basis of our strategy.

In this context, it is aimed to reduce the amount of waste that cannot be recycled by 50% in 2030. It is also aimed to recycle all organic wastes by 2030. In this way, it is aimed to bring the waste from our plants back into the economy without being subject to any incineration and storage processes.

Since our company operates in the steel industry, most of the waste generated from production are recycled. In addition, the pipes we produce can also be recycled into steel at the end of their useful life. Therefore, the circularity of our company is considerably high both in terms of our production process and in terms of the specific product. Collecting the waste generated because of our production processes at the source without mixing them with each other is vital for our circular economy targets. According to our waste management procedure, all separated waste is evaluated for their recovery characteristics and possibilities within the framework of the relevant regulations. Through annual ISO 14001 Environmental Management System, we certify the compliance of the environmental impacts arising from our factories with internationally recognized standards. The ZERO WASTE certificate issued by the Ministry of Environment has been obtained for all our facilities.

In 2022, the concept of "circularity" stood out among Borusan Group companies and 131,195 tons of waste was recovered. The recovery amount corresponded to 43,334 tons for Borusan Mannesmann.

TÜRKİYE		
	2021	2022
Total Waste Management (Tons)	44,563.905	51,203.44
Amount of Waste to Disposal (Tons)	5,286	7,870
Amount of Recycled Waste (Tons)	39,277.181	43,334

According to the Holding's circular economy principles, the incineration of waste and dispatching to cement factories as additional fuel source is defined as waste-to-disposal. There has been a significant increase in the amount of waste disposal compared to 2021. Although the difference in the amount of production has an impact on this increase, the amount of waste increased due to the general cleanup carried out in 2022.

The goal of recycling organic waste has been researched for the Gemlik facility. The project will be evaluated and implemented by Borusan Holding.

Studies have also been carried out to develop the concept of circularity in our overseas facilities, and the waste management table for 2022 is given below:

VOBARNO		
	2021	2022
Total Waste Management (Tons)	3,422.630	2,881.278
Amount of Waste to Disposal (Tons)	991.540	762.920
Amount of Recycled Waste (Tons)	2,431.090	2,118.358

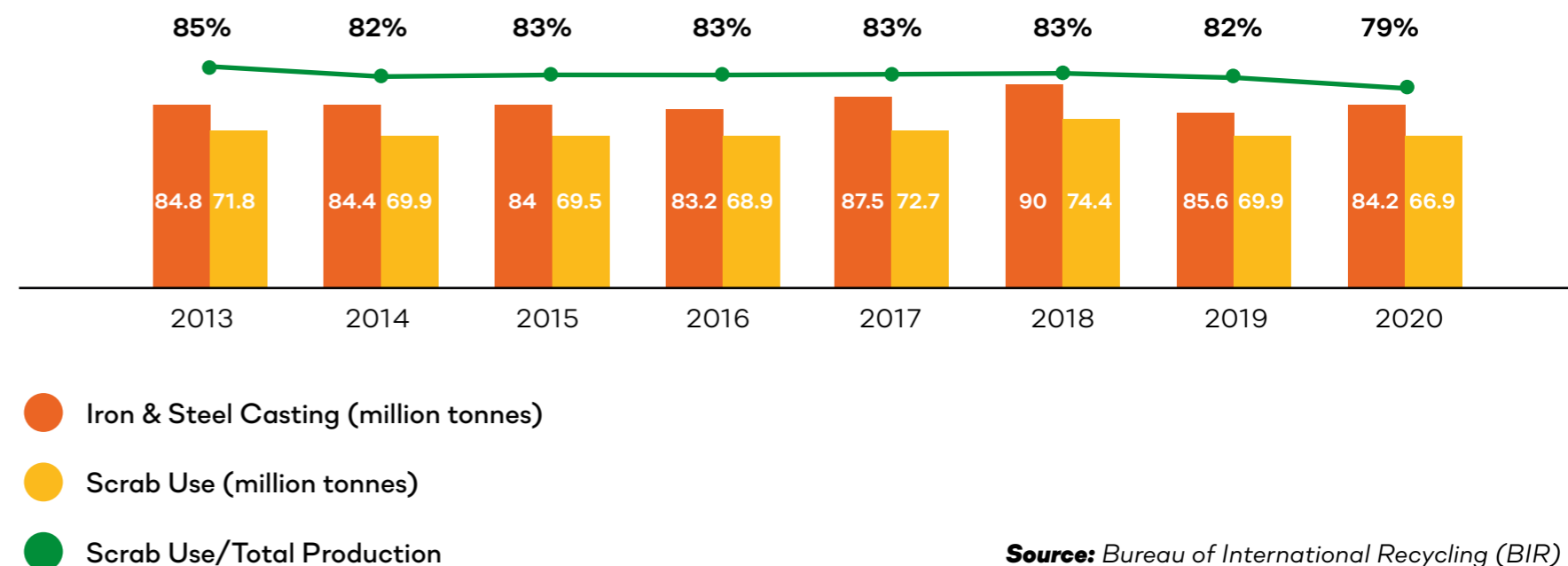
ENVIRONMENTALLY AND SOCIALLY RESPONSIBLE USE OF RESOURCES AND MATERIALS

We have also mentioned this topic in more detail in section 4: **WE ARE INSPIRING THE FUTURE - OWN CLIMATE, HUMAN, AND INNOVATION**

In the Steel Sector Outlook report prepared by KPMG, it is stated that the steel industry, one of the most important sectors for economic development, is highly affected by global conjunctures, economic and political developments, and the actions of other major producer countries. 2021 and the first half of 2022 were very active in this sense. Protectionist measures by the EU and the US, China's focus on domestic consumption, the EU's Border Carbon Regulation Mechanism ("CBAM") to be implemented by the EU as part of the combat against climate change, protectionist practices of countries and supply chain problems have been on the watchlist for Türkiye's steel producers in the recent period.

In the sectoral assessment of the Industrial Development Bank of Türkiye, it is stated that in the steel sector, which accounts for approximately 7% of global CO₂ emissions, the widespread use of scrap in steel production is among the options that stand out in the first place within the scope carbon emissions reduction. In the same study, it was also stated that, although this method alone is not a solution to completely decarbonize the steel sector, production in the Electric Arc Furnace (EAF) plant investments, which have relatively lower overall carbon emissions and produce crude steel from scrap, has gained pace. Türkiye, together with the USA, Iran and India, is one of the countries in the world that largely produces crude steel from scrap.

Scrab Use in Iron & Steel Casting Production



Source: Bureau of International Recycling (BIR)

The EU Green Deal, which is announced in 2019, aims to make the EU the first carbon-neutral continent by 2050, also prioritizes transformation in the steel industry, as in other carbon-intensive sectors, and has led Türkiye to consider low-carbon approaches in steel production. Türkiye's relatively higher EAF capacity based on scrap steel is a country-specific advantage in terms of the sector's overall emissions (Türkiye Steel Sector Report: Production, Trade and Decarbonization Process - SEFIA February 2022)

As Borusan Mannesmann, we continued our activities to increase the use of steel recycled from scrap in 2022 with the purpose to minimize the impact in our value chain given the relative environmental advantages of recycled steel.

In this context, we have built our strategy on purchasing raw materials from suppliers that produce with EAF content, which has lower greenhouse gas emissions among existing production technologies. In this way, we were able to both reduce our greenhouse gas emissions and increase the circularity rate in our raw materials.

As Borusan Mannesmann, we reduced our raw material greenhouse gas emissions by **3.78% in 2021 compared to 2022** by preferring raw material sources that cause relatively less carbon emissions.

To produce proactive solutions for our customers and to better monitor the environmental performance of our products, we received 42 EPDs in 2022. With EPD's we can evaluate and transparently declare the entire lifecycle of our products from an environmental perspective. We have a total of 42 Environmental Product Declarations, 30 for Segment 2-3 products and 12 for Segment 1 products. You can access our EPDs via [EPD Türkiye](#).

In 2023, we are expanding the EPD studies to cover automotive segment products.

In addition, for Segment 4 products, we are expanding the EPD we conducted for Green Pipe in Tube & Wire Trade Fair to cover all products in 2023. In this way, we will also be capable of offering this solution to our Segment 4 customers.



WATER MANAGEMENT



Two important components that make water use possible are “water quantity” and “water quality”. The need for water can only be fully met by providing these two components together. The United Nations Environment Program states that the world has 1,400 million km³ of water. However, a very small proportion of this amount is usable. Since the amount of usable water varies significantly according to location and time, some regions, and periods of the world experience “water shortages”. This situation on a global scale also manifests itself on a Turkish scale and can lead to water shortages in some regions. In addition to the unequal distribution, the change in precipitation and thus water regime in the basins due to climate change brings the problems arising from “water scarcity” to the top of the agenda, especially in regions of Türkiye with high population and industrial activities. [Water Management in Türkiye: Problems and Suggestions (tusiad.org)]

As Borusan Mannesmann, we are aware that the water problem is a problem that triggers many problems and can be solved with a collective approach. With this awareness and within the scope of the targets set by Borusan Holding, Borusan Mannesmann has become a part of the solution by way of producing and implementing projects in an effort to reduce the need for water resources via alternative wastewater treatment methods and reducing the amount of water used in products and processes.

There is a need for water use during pipe production, especially in finishing process. By continuously monitoring the amount of water supplied and the quality of the wastewater we generate, we ensure compliance with legislation as well as the sustainability of our relations with our stakeholders and the environment. In this context, as Borusan Mannesmann, we give importance to the evaluation of our management style and the actions we take on international platforms. We consider CDP as a transparent platform for water management. In 2022, as in 2021, we responded to the CDP Water initiative and increased our score compared to the previous year with a B- score.

We set targets to minimize water usage. In 2022, we carried out projects with our Circular Economy Team.

As in 2021, our water footprint verification efforts continued, and we completed our verification by a third-party certification firm, according to the ISO 14046-1:2014 standard.

Water is needed at many processes in our facilities. Especially in our Gemlik facility, due to the use of groundwater, we need to pre-treat the water before using it in the processes. For this purpose, we regularly carry out efforts to reduce our water consumption.

In the table below, you can see the water data at our Borusan Mannesmann facilities in Türkiye.

	2022 (m ³)	2021 (m ³)
WATER CONSUMPTION	328.410,4	452.313
WATER DISCHARGE	124.719,6	120.574,3

At Borusan Mannesmann, the need to prepare the surface with activation before phosphate has decreased due to the change in customer expectations. As a result of the meetings and technical information exchanges with the suppliers, the effect of the trials and processes on the final product was analyzed and the bath was removed following the studies. Before the project implementation, the activation bath was renewed and installed every week. During installation, 8m³ of water and 25 kg of chemicals were used and 10 kg of chemicals were added daily. With the project, both water and chemicals were saved. The project aims to reduce water consumption by 300 m³/year. With the project, a cost advantage of \$12,500 was achieved, while 416 m³/year of water and 4,250 kg of activation chemicals were saved.

You can see the water data for 2021 and 2022 for our Baytown and Vobarno factories in the table below.

	VOBARNO	
	2021	2022
Water Consumption (m³)	447.359	440.956
Water Discharge (m³)	410.238	367.424

By focusing on water conservation, Borusan Mannesmann ensures sustainable water management, accessible water for all and wastewater services.





HUMAN

2. WE DREAM, WE DESIGN, WE TURN
IT INTO REALITY BECAUSE WE ARE
OWNING OUR HUMAN

WE DREAM, WE DESIGN, WE TURN IT INTO REALITY BECAUSE WE ARE OWNING OUR HUMAN

OCCUPATIONAL HEALTH AND SAFETY

At Borusan Mannesmann, we see every employee as a part of our family and consider the health and safety of all family members as our primary responsibility. Inspired by the culture of Borusan Holding, we carry out our activities with great sensitivity in line with the high importance we give to the OHS. Our main goal is to increase the mutual trust of all our stakeholders in Borusan Mannesmann and to maximize their commitment to the company. Risk analyses, performance measurements, trainings, drills and digital applications are carried out within the framework of the "Zero Accident" target. Based on our zero occupational accident target, we realize various projects to ensure that OHS culture is embraced by all our employees.

With the Face-to-Face OHS application, we brought together factory managers and OHS spokespersons, who are the voice of factory employees, in panels led by OHS initiative leaders. OHS spokespersons contacted employees and conveyed OHS-related suggestions to factory managers. The purpose of the "This Is My OHS Suggestion" application is to listen to, appreciate the suggestions of employees, who have put forth their noteworthy ideas, and to encourage our fellow employees to make similar suggestions, based on the idea that "the biggest wasted potential for a business is that employees do not express their ideas". In this context, it is aimed to create a safer working environment by organizing a 'Safety Walk' in the field. By answering questions and sharing opinions on suggestions through the Face-to-Face OHS application, question marks in the focus of OHS have been eliminated, light has been shed on the future with the OHS mission, and most importantly, general OHS awareness

has been increased, keeping up to date with the agenda items. OHS culture was expanded with the "Visible and Exemplary OHS Leadership" demonstrated by all participating managers in the field with the "This is My OHS Suggestion" application.

In 2022, we received the "International Occupational Safety Award" from the British Safety Council, one of the world's most respected institutions in the field of Occupational Health and Safety. According to the results of Borusan Mannesmann 2022 evaluated by the British Safety Council, we received an award in the "Distinction" category, the highest applicable rating in the field of occupational health and safety. With this success, Borusan Mannesmann became the only steel pipe manufacturer in Europe to receive an award in the "Distinction" category within the scope of the 64th "International Occupational Safety Awards" in 2022.

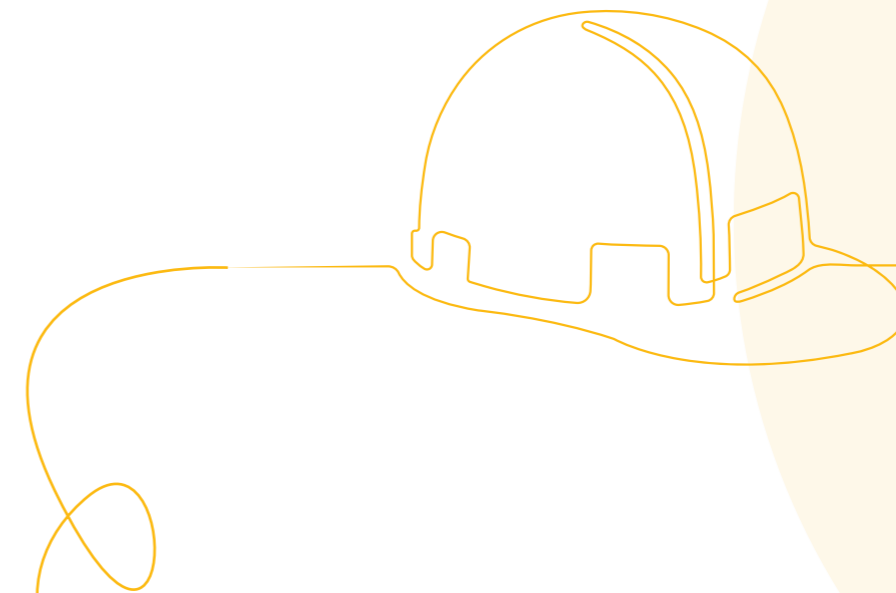
In the 7th Stars of Occupational Safety competition organized by MESS in 2022, we received the "Recommended Good Practice Award" in the category of "Innovators in Training and Communication" for the OHS Communication Studies carried out last year.

All these awards are the outputs of the OHS Cultural Development Program, which we consider a long-term target and strive continue to improve day by day for this goal. Within the scope of this program, employees must exhibit safe behaviors and at the same time report unsafe situations. The OHS Cultural Development Program consists of 42 different systems and programs. Our goal with the OHS Cultural Development Program, which consists of applications such as the Behavior-Oriented Observation and Feedback System (B'Dost), image processing technology with artificial intelligence, OHS Personality Inventory applied in recruitment processes, and interactive operator authorization trainings, is "Zero Accidents".

In 2022, we had no fatal work accidents.

We are aware of the importance of communication in occupational safety, and we carry out important projects on communication. Some of the OHS Communication Activities we carried out in 2022 are:

- This is Listening to OHS from Leaders, a panel was held, where we listened to OHS from our leaders. Holding OHS Committee Chairman Levent Kocabıyık and Holding OHS Committee Leader Nursel Ölmez Ateş shared the OHS conversation with all employees.
- During OHS Week, a movie was prepared in which we listened to OHS from our working children.
- Award-winning Safety Quiz special for OHS Week was shared.
- These are the Champions of OHS Notifications: In 2022, our field employees who gave the most and most valuable OHS Notifications were rewarded.
- Awareness mailing activities were shared on OHS Day.
- A special award-winning puzzle was made for OHS Week.
- This is OHS Face to Face: A live chat was organized by our Deputy General Manager, in which our Factory Directors answered questions and listened to suggestions by our OHS spokespersons.
- This is My OHS Suggestion: Here is My OHS Suggestion Presentations were organized with the participation of all employees and managers in the field, regarding the OHS risks, suggestions and solutions identified by the employees.





In 2022, we also implemented digital applications in terms of OHS. We established a system where unsafe situations and behaviors in the field are automatically detected through cameras using Artificial Intelligence and Image Processing Technology. More than 2,000 unsafe situations and behaviors were detected by allowing the integration of 40 cameras in our fields.

Borusan Mannesmann implemented many best practices in occupational health and safety in 2022.

In 2023, the capacity is expected to increase to 80 cameras.

Assistant Mobile Application (Borusan Mannesmann Türkiye - All Locations):

We have developed a mobile application software to determine whether employees, subcontractors and visitors who are present in all Borusan Mannesmann locations are safe and whether they need help in case of emergencies such as earthquake, fire, flood, etc. It is aimed to increase the speed and effectiveness of the actions to be taken by accessing data quickly in an emergency, accelerating the planning and coordination process. Thus, it is foreseen that gains will be achieved in rescue operations by providing guidance to the employees in the fastest way possible.

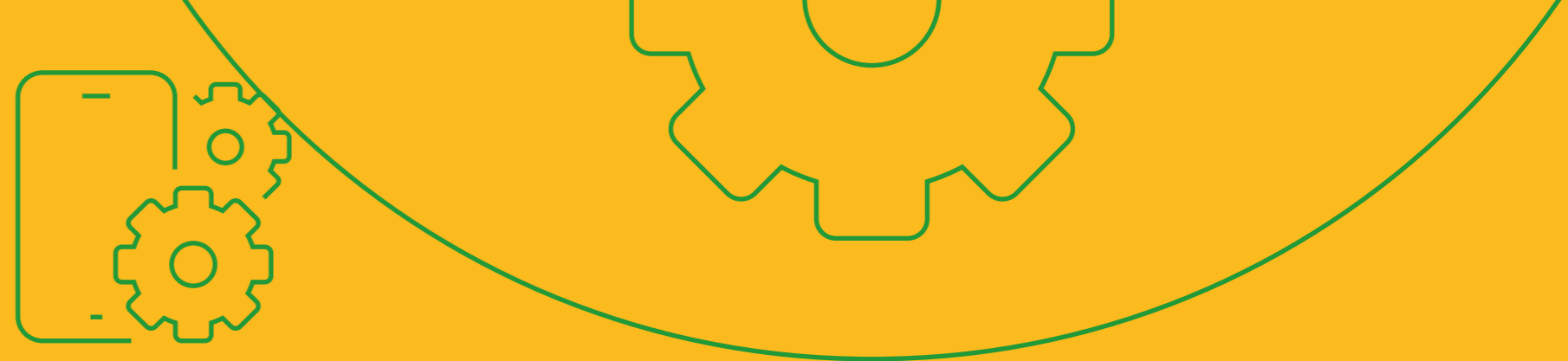
Spiral Pipe End Preparation Station Robotic Improvement project (Borusan Mannesmann Türkiye - Gemlik HSAW Pipe Plant):

In order to eliminate the physical and ergonomic risks exposed during the execution of the Gemlik Spiral Plant TAB Plate Removal and Pipe End Grinding operations with manual labor, a robotic process automation of the entire line has been applied. With this integration, the risks of occupational accidents and ergonomics have been eliminated and a significant improvement has been achieved in the working conditions of the employees.

ABM90 Online Pipe Straightening Line Project (Borusan Mannesmann Türkiye - Gemlik Automotive Tubes Plant):

With 100% automation, the online straightening line automatically feeds the pipes coming out of the visual control bench to the straightening line without any human intervention. With the automation improvements made on the line, it has not only increased the opportunity of employees to work in a safe and healthy environment, but also contributed to increasing the welfare conditions of employees in said working quarters. With the elimination of manual operations, in addition to the elimination of accident risks, our most important priority, high-paced working conditions have been improved, operations requiring repetition and effort have been eliminated, ergonomic risks have been eliminated, and a significant contribution has been made to significantly reduce exhaustion, anxiety levels of employees.

As part of our holistic sustainability efforts, we will continue to create a safer and healthier work environment for our human capital, our dearest asset.



In 2022, we had no fatal work accidents in our factories.
You can find the occupational health and safety statistics of our factories for 2022 below.

Work Incidents	Group	Türkiye	Baytown	Vobarno
Number of Accidents (Occupational accidents resulting in loss of more than 3 days)	Company	23	40	2
	Contractor	4	0	0
Lost Time Injury Rate (Number of Injury x 1,000,000) / Number of Workers	Company	6.57	1.18	12.74
	Contractor	4.52	0	0
Accident Severity Rate (Loss Day x 1,000) / Number of Workers	Company	0.26	0	0.36
	Contractor	0.15	0	0

OHS Trainings (man-hour)	Türkiye	Baytown
Company Employees	45,778.4	6,320
Contractor Employees	3,980	0
Total Number of Participants	44,466	6,320

	Türkiye	Baytown
Number of Safety Committees (quantity)	15	1
Number of Committee Members (people)	36	15
Number of Safety Representative (people)	2	15


The occupational health and safety performance result of Borusan Mannesmann Türkiye factories were realized as follows:

In 2022, we achieved a 38% overall improvement compared to our target, furthering our commitment to a safe workplace for our employees.

EFFECTIVE HUMAN MANAGEMENT

We cover this topic under 3 main topics.

- Employee Satisfaction and Talent Management
- Inclusion and Equal Opportunity
- Human Rights

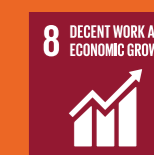
VALUE DRIVER	SUB TARGET	INDICATOR DEFINITION		UNIT	2021 Actual	2022 Actual	2023 Target	2030 Target
	Loss Prevention	Decrease in Accident Frequency Rate	Value	Accident Frequency Rate (number of accidents per 1 million hours)	0.37	0.23	0.30	0.14
			Improvement	%	27	38	10% improvement compared to previous year	10% improvement compared to previous year
		Decrease in Accident Gravity Index	Value	Accident Severity (workforce loss per 1.000 hours)	6.5	6.38	5.26	2.5
			Improvement	%	2	2% improvement	10% improvement compared to previous year	10% improvement compared to previous year

Employee Satisfaction

As Borusan Mannesmann, we act with the awareness that our most valuable asset is our human capital. With our people-oriented approach, we place infinite value on our employees, who are the source of our strength. In this context, supporting them technically and personally, developing working models and providing an inclusive working environment are among our top priorities. In this context, as Borusan Mannesmann, we measure the satisfaction of our employees on an annual basis and generate ideas to improve the experience of our colleagues who add value to our brand as we aim to be the voice of all our employees. **In 2020, our employee engagement and satisfaction score were 80%, 74% in 2021 and 82% in 2022.**

This score reflects how effective our work on employee satisfaction has been. As in 2021, to ensure that our employees can benefit from health services, we offer outpatient and inpatient treatment for all our office employees via private health insurance. We also offer annual health screenings and life insurance options for our employees in various scopes. In addition, we aim to support the future of our employees with the Private Pension Plan offering company contribution. In addition to the monthly deductions made from the salaries of our employees covered by the pension plan, we provide company support at the same rate. The content of these benefits varies according to the seniority levels of our employees. At Borusan Mannesmann, we did not have any employee on maternity leave in 2022. In 2022, 90 of our employees benefited from the 2-week paternity leave practice we started in 2021. This number reflects the importance we attach to work life balance and the individual needs of our employees.

Borusan Mannesmann supports stable, inclusive, and sustainable economic growth, full and productive employment, and decent work for all through its proactive work in the field of Occupational Health and Safety.

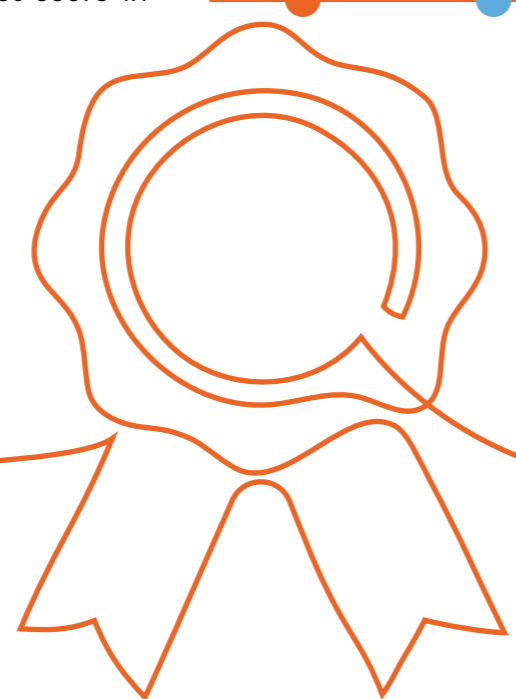


As Borusan Mannesmann, we give importance to the development of our employees' talent because we understand we can only achieve organizational goals with content, competent and talented employees. For this reason, we constantly update our talent development programs to both develop our existing talents and to be a go-to company that attracts up-and-coming talents.

At the same time, we aim to develop a feedback culture through regular performance evaluations and reviews. Using the feedback, we receive because of these evaluations; we create individual and corporate development plans. In this way, we aim to maximize the potential of our employees through Performance Management Processes and ensure that they work in close cooperation. At Borusan Mannesmann, we are determined to support the individual success of our employees and to make the future of our organization brighter by working on continuous improvements, innovations in areas such as talent development and performance management.

In 2022, according to the results of the survey organized by Talent Board, one of the world's leading candidate experience research and monitoring organizations, we received the "Best Candidate Experience" award by achieving the highest score in the EMEA region.

At Borusan Mannesmann, we know the value of continuous training and place it at the center of our business. Over the years, we have continuously expanded the hours and variety of training we offer to increase the skills and knowledge levels of our employees, providing them with unlimited training and development opportunities to create the best versions of themselves.



In 2022, the total training hours received by Borusan Mannesmann Türkiye employees are shown in the table:

Trainings	2022	2021	2020
Professional Improvements (hour)	21,077	24,454	24,718
Individual Improvement (Hour)	2,367	100	1,916
OHS (Hour)	30,483	15,734	6,515
Other (Hour)	5,714	9,960	13,605
Total Training Hours	59,641	50,248	56,754

Talent Management

Every year, within the scope of the talent management process, all our employees evaluate their potential assessments with their managers for the development of their competencies and create their self-development plans in a 360 manner. For the development of our employees, we support and encourage them to step out of their comfort zones and take part in different projects, receive feedback from their colleagues and listen to the experiences of leaders from the company they look up to. The most effective teamwork, where our employees get out of their comfort zone and engage in different activities, is defined as sustainable teamwork.

To listen to our employees more effectively, we included our Talent Management team in our sustainability agile teams in 2022.

We developed new approaches with the Talent Management team that joined our sustainability organization structure during the reporting period. The participation of people from different departments broadened our perspective. **The focus of the Sustainable Talent Management team in 2022 was the action plan in line with the aspiration to become a 200-year company.**

The talent management team manages their projects with regular weekly meetings like other agile groups.



In 2022, we created projects for which we received positive feedback in a relatively short period of time.

- Inspiring breakfasts: As Borusan Mannesmann, we meet at inspiring breakfasts as a mixed community consisting of representatives from different departments and executive board members. In these specially designed meetings, we had the opportunity to communicate and get to know each other better.
- Orientation Processes: Statistical studies have shown that there exists some room for improvement in our orientation processes. Within the scope of the project, we collectively developed the responsibilities of a new employee before and during onboarding: first day tasks, first 15 days and departmental adaption strategies within 30 days were determined. Our aim was to create a working environment where our new colleagues would feel sense of belonging even before employment.
- Feedback on the Development Journey: With this project, it is aimed that employees receive effective feedback from their managers, present the opportunity to strengthen performance and unlock potential in their career journey and that the feedback culture is embraced by all employees.

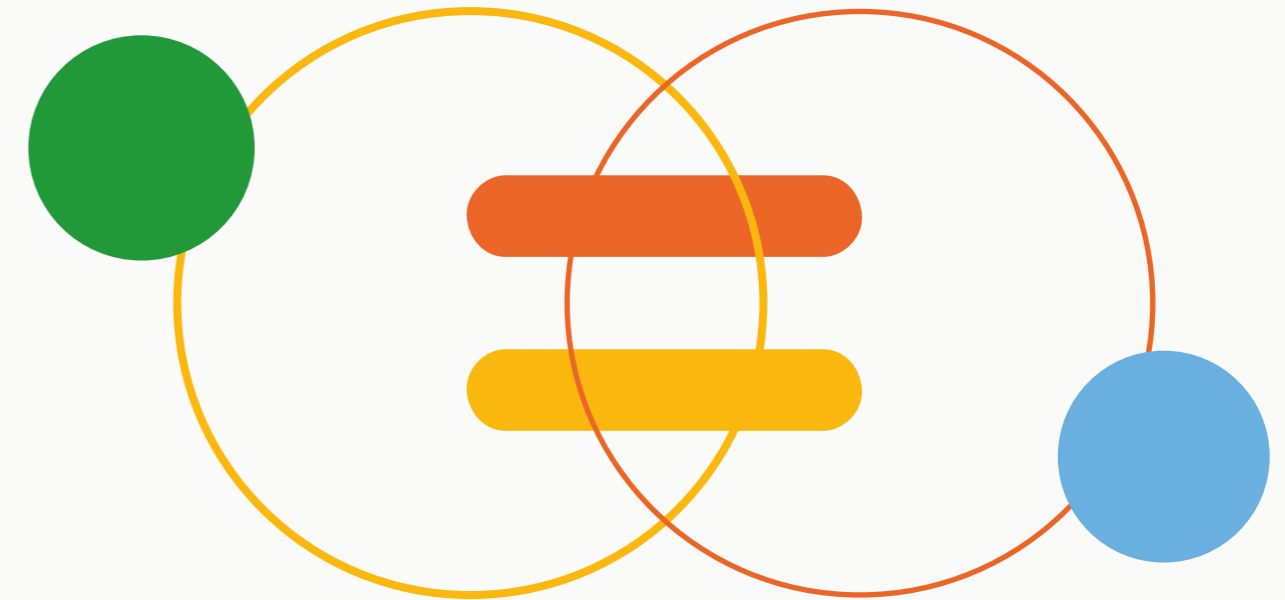
As with Sustainability Talent Management, our Human Resources Employee Council also carried out projects in this context:

- A mini survey was shared during the Digital Session organized with the participation of all dedicated colleagues under the leadership of our General Manager. In this survey, the feedback received by employees from their managers for competency planning, the feedback requested by them and the quality of the feedback they received were evaluated. According to the survey results, 1 out of every 3 employees stated that they could not receive feedback from their managers, 21% abstained from requesting feedback, and 23% stated that the quality of the feedback they received was not effective enough.
- Following the results, "Development Plan Discussions with HR" was organized as a follow-up to the Employee Council findings. In this context, a platform was designed to encourage people to proactively ask for feedback from their managers and make appointments with HR Business Partners to share tips on their development plans. 57 people were interviewed, and an evaluation questionnaire was shared with the participants to measure the effectiveness of the interviews. The results were prepared in a summary report to be presented to the employees.
- In the final step of the process, an e-mail was sent to all team leaders with the subject "A Letter From the Future You" written by the employees. With this mail, both numerical data and emotionally touching expressions were used to raise awareness and empathize with managers. Following the actions taken, employees not only received feedback from their managers, but also asked for feedback themselves, and awareness level has increased regarding the feedback culture, one of the most important elements of their career and competency development journey. With this project, we applied for the Borusan Holding Inspiration for the Future Awards and were shortlisted as one of the finalists.

In addition, the following activities are ongoing in human resources processes to increase employee satisfaction.

- Providing mentorship to employees in career development plans,
- Thematic lunch events, refreshments, treats involving facilities and head office within the scope of social activities,
- Training, conferences, coaching-mentorship programs within the scope of the competency development plan,
- Team-specific business plan meetings with accommodation or all-day business plan meetings,
- New Year's Eve, Summer Welcoming Parties and various other organizations,
- Team motivational dinners,
- Gifts given to employees in case of birth and / or marriage,
- Digital and physical sharing meetings (digital sessions of the CEO with employees once a month and best practices sharing meetups in factories)
- Inspiring breakfasts,
- Studies conducted after the employee engagement survey,
- Annual family picnic,
- Internal and external sports activities (such as trekking, bowling, volleyball, fishing),
- In addition to paternity leave, one more week of leave,
- Work on the establishment of the Sustainability Faculty,
- Sales Faculty organization.

Borusan Mannesmann is a pioneering company reflecting an inclusive approach that aims to ensure women’s full and effective participation in decision-making processes adhering to economic and social life. At the same time, it ensures equal opportunities for women to assume leadership roles in decision-making mechanisms at all levels.



Inclusion and Equal Opportunity

As a heavy industry company, we are developing policies that allow women employees to take part in the office, in the field and in managerial positions, and we intend to take important steps in this field.

As we step into the future, we are determined to reach our 2030 targets. In 2023, we have set a target to increase the ratio of female in-office employees to 30%, the ratio of female field/factory employees to 4% and the ratio of female leaders to 16%. These targets are decisive steps taken to support women to play a more active and diverse role in business life.

However, these policies are not only limited to gender equality. At Borusan Mannesmann, we focus on efforts to increase gender equality in all areas, not just at one area, but in a broader perspective. We strive to broaden the understanding of diversity and inclusion along with gender equality and to integrate these values into every aspect of our business culture.

VALUE DRIVER	SUB TARGET	INDICATOR DEFINITION	UNIT	2021 Actual	2022 Actual	2023 Target	2030 Target
 Equal Borusan	Gender	Percentage of women working at offices	%	26.1	28.1	30	36
		Percentage of women non desk employee versus desk employee	%	2.8	2.9	4	16
		Percentage of women executives (all levels)	%	17.5	18	16	27

At Borusan Mannesmann, we empower and increase our capabilities with the principles of diversity and inclusion; thus, inspired by our differences, we have strengthened our agility, flexibility, and innovative spirit as Borusan Mannesmann employees. Inclusion refers to active participation in life regardless of belief, ethnicity, age, gender, sexual orientation, political opinion, property, disability status, etc. At Borusan Mannesmann, we provide inclusive opportunities by offering equal opportunities to our workforce. We do not discriminate in recruitment processes and evaluate candidates only based on their professional experience and skills.

Sustainable Development Goal 10 focuses on reducing inequalities. Target 10.2 states a global goal to support the social, economic, and political empowerment and inclusion of every individual regardless of age, gender, disability, race, ethnicity, religion, economic status or any other status by 2030. Borusan Group works towards a world where gender equality is fully achieved and where women and men are equal and side by side in every situation; we, at Borusan Mannesmann, embrace the exact same goal. Extending this goal to all our business practices constitutes one of our primary objectives. We attach particular importance to equal representation of women and men in the business world, equal rights and opportunities, equal promotion and pay. We also adopt the gender equality policies established by Borusan Group.

You can access the "Gender Lens" guide, which describes Borusan Group's gender policies and vision, at the link below.
<https://www.borusan.com/Media/en/AnnualReport/2020/social-gender-equality.html>

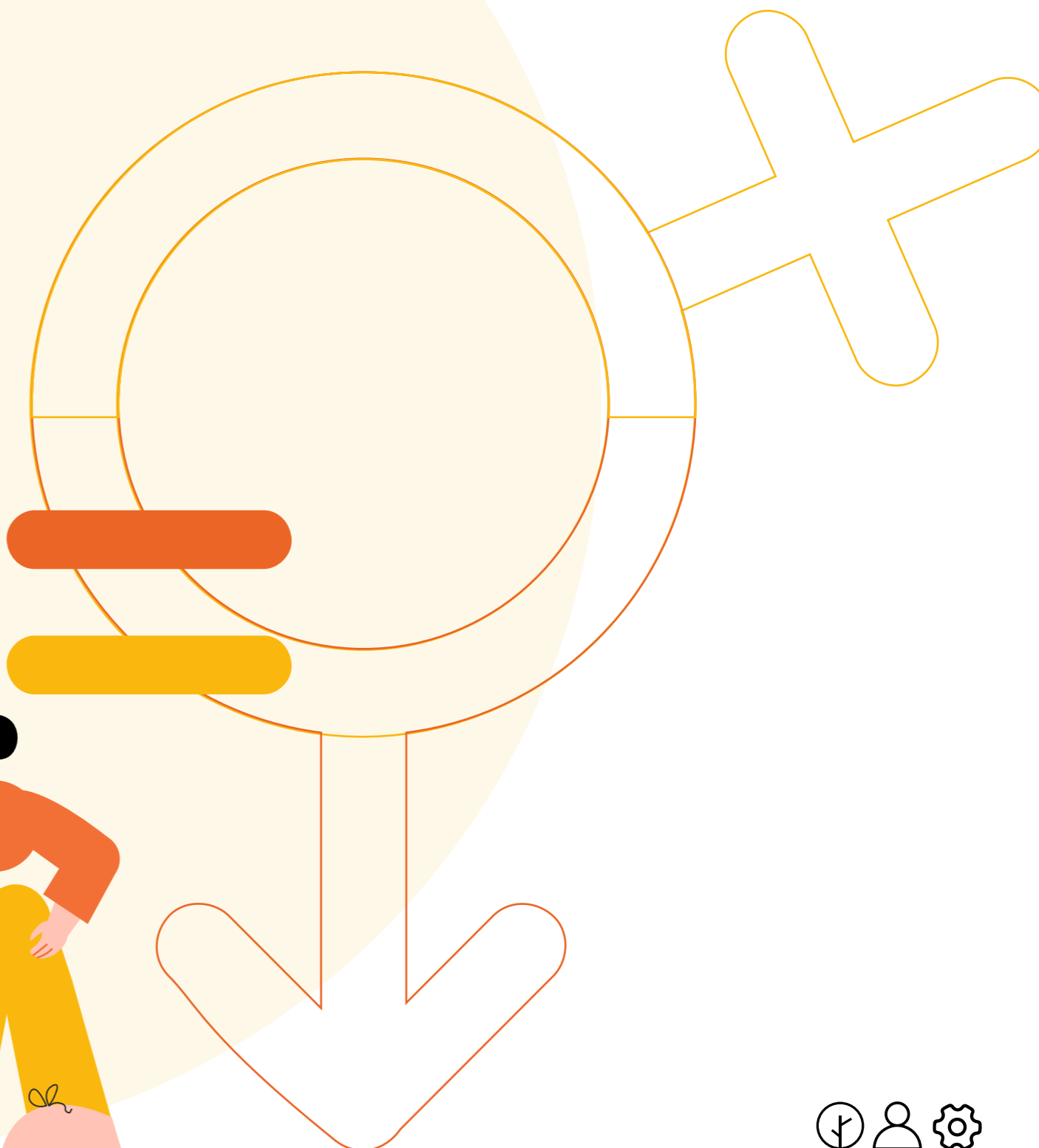
The "Equal Borusan - Social Equality Platform" was established in 2015 with the belief that gender equality at Borusan should be adopted and internalized at corporate and individual levels. The platform aims to achieve concrete results on gender equality in a wide range of areas from human resources policies to communication. Observing gender equality in all decision-making and implementation processes in business life, adopting inclusive policies to eliminate inequalities and making a commitment to take steps

in the right direction are in the focus of the Borusan Holding and Borusan Mannesmann. To demonstrate our commitment in this regard, our General Manager signed the Equal Borusan Commitment on March 5, 2020, pledging to adopt gender equality across the entire company.

You can access all videos prepared by Borusan Mannesmann Equal Borusan platform in 2022 on Borusan Mannesmann social media accounts.

Borusan Mannesmann Equal Borusan team pursues the goal of realizing the number of female employees in the company, specified as 36% for office employees and 16% for factory, field and workshop employees by 2030, and this ratio is continuously monitored on a monthly and annual basis as it is an important precursor for the steel industry, a male-dominated occupation due to the line of business.

As Borusan Mannesmann, we play an active role within the scope of gender equality approach not only for our employees but also for our society. On November 25th International Day for the Elimination of Violence against Women, we have pledged to stand by those who have been subjected to violence and to show Zero Tolerance to Violence, embodied as Borusan Group policy in our support mechanisms. You can access our Domestic Violence Guide prepared by Borusan Group at the following [link](#).



Happy International Women's Day!

Every year on March 8, recognized by the United Nations as a day based on human rights, we reiterate our commitment to raising women's political, social awareness and celebrate their economic and social achievements. As Borusan Mannesmann, we have taken an important step to contribute to the empowerment of women so that they can transform their lives, communities, and the world. We donated to the Foundation for the Evaluation of Women's Work on behalf of all our employees to support women's struggle for life and to make their labor valuable. This donation aims to support women assume the power to shape not only their own lives, but also societies and the world. We proudly shared digital certificates emphasizing our donations to the Foundation for the Evaluation of Women's Work and our support efforts with our colleagues. As Borusan Mannesmann, we will continue our determination to empower women in their struggle to discover true potential and positively impact the world. We are proud that we will continue to stand by women, who are important conveyors of social change. We are moving forward together towards a fair, more equal and stronger world.

Breast Cancer Awareness Month

We communicated briefings intended for our female employees during breast cancer awareness week.

I Am a Father First!

The "I Am a Father First" Project was launched in 2019 and was relaunched in 2022. The project, to which 42 people applied in the first phase, started with a training organized in Gemlik in December and then continued in Halkalı. The main purpose of the project is for our employees who are fathers to build a relationship based on love and trust with their children at an early age. Our goal is to contribute to the mental, social and emotional development of children. With the project realized within the scope of Equal Borusan, it was emphasized that being a 'parent' should be identified with equality, and it was aimed to support our employees who are fathers to become more knowledgeable and sensitive individuals following gender equality training. You can access the video of the training from the [link](#).

Our Equality Newsletter Is Online!

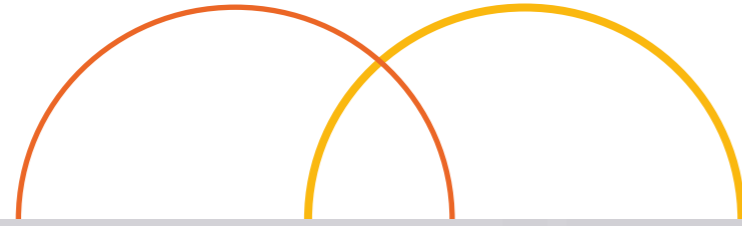
At Borusan Mannesmann, we are proud to share all the activities we carry out within the scope of our "Equal Borusan" initiative, which we launched to support equality and diversity, with our colleagues through digital platforms under the Equality Newsletter. From training to events, from awareness campaigns to information-sharing sessions, we emphasize the importance of equality and diversity by communicating each step we take to a wide audience through the Equality Newsletter. We are happy to reach more people while realizing this important initiative.



Brainstorming with Alpha Interns on Next Generation Ideas and Gender Equality

In 2022, Borusan Mannesmann came together with our Alpha Interns, the leaders of the future, and held inspiring brainstorming sessions. In these special meetings, we organized 2 separate meetings to share the ideas of the young generation and discuss what we can achieve in the field of gender equality. With the results of these comprehensive meetings, we had the opportunity to collaborate with Uludağ University and Koç University "Women in Engineering" Clubs. The technical trips we organized together reflected in our steps to attract young talents from the business world and overall strengthened the presence of women in engineering. As a result of the conversations, we organized a technical trip to our Gemlik plant with the "Women Engineers" student clubs. We aimed to support the presence of women in the field of engineering, provided that at least 50% of the teams participating in these special trips consisted of female engineering students. Prior to the technical trip, we organized a presentation on Borusan Mannesmann's efforts to increase female employment and the steps we have taken within the framework of the Equal Borusan initiative. This presentation was an inspiring experience, providing an opportunity to convey Borusan's larger commitment to gender equality and its efforts in this area to future leaders. At Borusan, we believe that these activities with Alpha Interns are important steps towards embracing the vision of the younger generation, i.e., a fair future in the field of gender equality. We continue to build the future together.

With the aim of contributing to progress on important issues such as gender equality, women's studies and gender roles, Equal Borusan and YUGender (Directorate of Women and Family Studies Application and Research Center) collaborated with universities. We came together at the sharing meeting, talked about the projects we have completed from the past to the present and discussed our future. Assoc. Prof. Dr. Özlem Duva Kaya from the Philosophy Department of the Faculty of Literature and Huriye Toker, Director of YUGender and Prof. Dr. at Yaşar University Faculty of Communication, also attended the meeting and provided their perspectives.



Equality School

Borusan Holding has been active in the field of gender equality for the last 10 years and raises awareness on gender equality through the Borusan Equality School, which is implemented in cooperation with the Top talent career platform. In this program, gender equality is addressed and discussed at length under various subheadings. These training videos were offered free of charge to everyone for one year on Top talent's training platform. As Borusan Mannesmann, we provided support to Human Resources Business Partner & Industrial Relations Manager and former Equal Borusan leader Arif Öner on his presentation regarding Inclusive Solutions for Working Life.

UN Global Compact Signatory

Borusan Holding has been a participant of the United Nations Global Compact (UNGC) since 2006. In 2021, 4 more group companies completed their signature processes and took their place among the participating companies. As one of the participating companies, we became part of the world's largest corporate sustainability initiative. At the same time, we have joined the ranks of important institutions that closely follow, shape and guide the sustainability agenda at the global and local level. In this context, we participated in the climate acceleration program in 2022.



Benchmark Studies with Companies

As Borusan Mannesmann, we participated in the "Gender Equality at Ford Otosan" Webinar, organized as part of TAYSAD's "Equal Opportunity, Diversify Talent Project" in 2022. In this webinar, we acquired valuable information regarding the pioneering efforts to support women in technology and innovation and to increase equal opportunity and representation in the workplace within the framework of sustainability programs.

Gathering with Female Fieldworkers

We regularly listen to the voices of all our colleagues with our "more open and transparent" communication approach. In line with this understanding, Nihan Alhan, our Assistant General Manager and Executive Board Member responsible for People, Corporate Development, Environment and Sustainability, came together with our female field staff at Halkalı and Gemlik facilities.

Equal Borusan Orientation Trainings

At Borusan Mannesmann, we attach great importance to the adoption of the Equal Borusan mindset by all our colleagues and aim to internalize Equal Borusan principles. For this purpose, we continued Borusan Equals Orientation Training in 2022 as well. We have provided training to a total of 600 people in 2022.

Equality Field

We have relaunched the "This Is the Equality Zone" initiative to create new employment opportunities for female employees. Our determination to increase the number of female employees and our efforts towards this goal paid off, and with the latest hiring at our Halkalı Plant, we increased our total number of female employees from 35 to 40 in January 2022. These efforts indicate that we continue to strengthen our commitment to equality and diversity.

Equal Leaders Seminar

Launched in 2021 and organized for the second time in 2022, the "Equal Looking Leaders" seminar brought together unit managers and senior executives. In the first of our two-session seminar, we explained the basic concepts of inclusion to the participants. These concepts included topics such as prejudice, uniformization and discrimination. In addition to providing information about the neuroscience of stereotyping, we also organized a section on unintentional biases and shadow concepts. We discussed topics such as unconscious biases that people may have and how to be aware of these biases. In the second session of our seminar, we discussed the issue of inclusion from a systemic perspective. We discussed how we can achieve and sustain inclusion in organizations and society at large. We emphasized to our participants why it is important to promote diversity and value different perspectives. Through these seminars, we aimed to help our leaders adopt an inclusive approach and support diversity within the organization. We aimed to raise awareness among our participants and create a more equitable and inclusive work environment.

Accelerators of Gender Equality and Women's Empowerment in the Context of the COVID-19 Pandemic

As Borusan Mannesmann, we supported the event organized by UN WOMEN by participating to a meeting titled Gender Equality "Accelerators of Gender Equality and Women's Empowerment in the Context of the COVID-19 Pandemic". Nihan Alhan, Borusan Mannesmann Human Resources, Corporate Development, Environment and Sustainability Leader, attended the event as a keynote speaker. Nihan Alhan shared her experiences and views on gender equality, especially during the COVID-19 pandemic, at the event. She emphasized our commitment as Borusan Mannesmann to support gender equality and contributed to women empowerment in all areas of society, as well as within the scope of our own organization. Organized by UN WOMEN, the event brought together different voices and perspectives to discuss how gender equality plays an important role in our rapidly changing world, especially in times of crisis. Nihan Alhan's contribution highlighted the importance of collaboration and knowledge-sharing to drive meaningful change and progress towards a more inclusive and just society.

Equality for Women at Work Certificate



In 2022, Borusan applied for the "Equality for Women at Work Certificate", which aims to audit and certify organizations that offer equal rights and opportunities to women in the business world, in cooperation with the Sustainability Faculty and Intertek. With this pioneering work, the process was completed with various evaluation criteria ranging from gender equality to safe working conditions under main headings such as management systems, recruitment and employment, occupational health and safety, supply chain and social impact, and we were announced among the organizations that deserved the certificate.

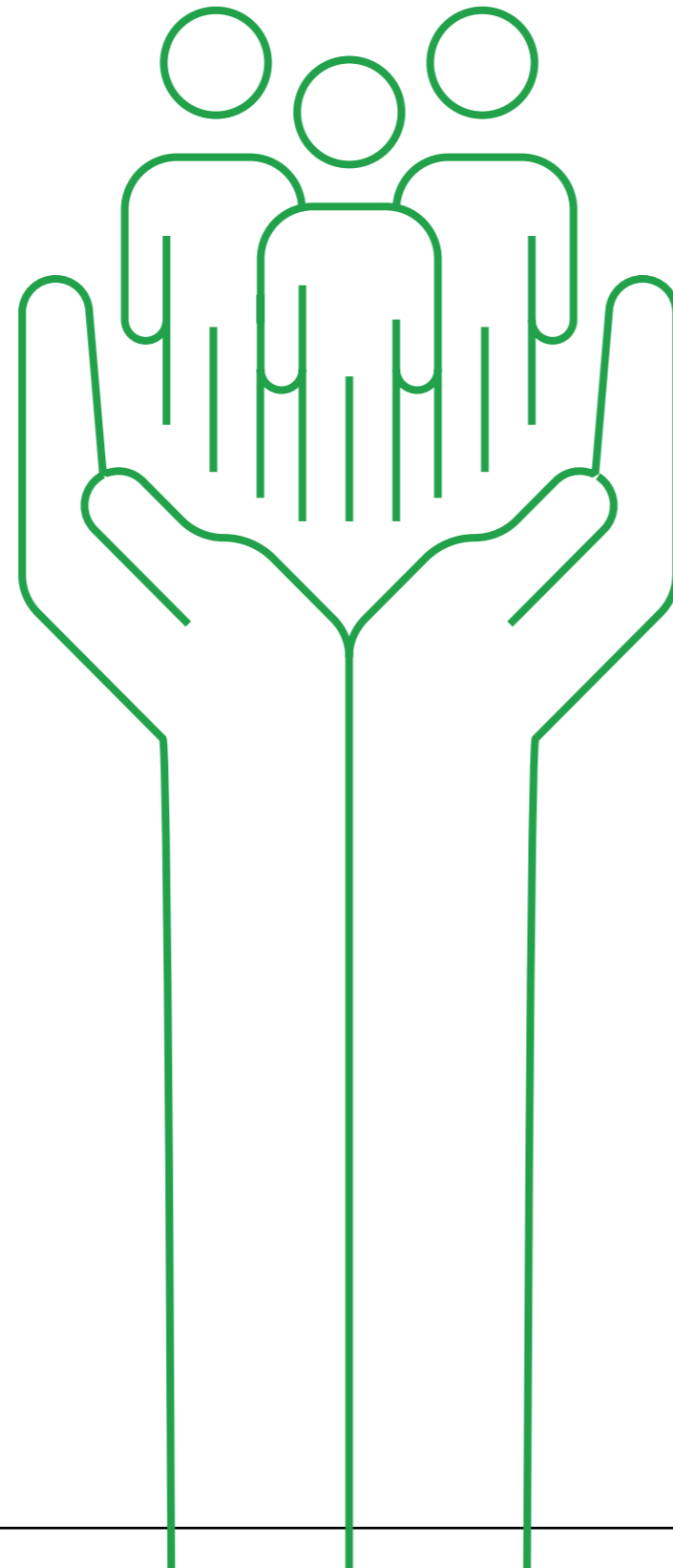
As Borusan Mannesmann, we assumed a pioneering role in our sector by successfully completing this process thanks to the intensive efforts of our 14-member Borusan Equals team. By receiving the Equality at Work Certificate, we have completed a crucial step towards our goal of becoming a strong employer brand. This work demonstrates our contribution to the promotion of gender equality and fair working conditions not only in our own organization, but also in the business landscape in general. As Borusan Mannesmann, we will continue to contribute to a sustainable and equitable future by similar steps.



Human Rights

Within the scope of the Sustainable Development Goals, which adopt the goals of eliminating inequalities, strengthening economic growth and employment, combating climate change, developing sustainable production and consumption and strengthening human rights, it is aimed to eliminate all inequalities in the world by 2030 and to provide equal conditions and opportunities for people in terms of economic and social advancement without discrimination of religion, language, race, gender, age and disability.

At Borusan Mannesmann, we design all our business processes in line with universal human rights guidelines. The Orange Ethics, consisting of our internal company guidelines, supports compliance with human rights and guides us to prevent unethical behavior. We offer our employees an innovative working environment that supports innovation and creativity under the heading of Human, which we have identified as a strategic focus area. We believe that the difference in business life is made by "human" and therefore, we consider providing our employees with a healthy, safe, and fair working environment as our corporate priority. Complying with human rights without compromise forms the basis of our work culture. We respect our employees' right to unionize and support the free exercise of their union rights. We aim to establish constructive relationship with trade unions. Borusan Mannesmann is a member of the Turkish Employers' Association of Metal Industries (MESS), the authorized labor union representing the workers. In our operations in Türkiye, the unionization rate among our employees is 81.7%. We act in compliance with the Human Rights Principles of the United Nations Global Compact, of which we are also a signatory.



CONTRIBUTING TO THE SOCIETY

Borusan Mannesmann, one of Türkiye's leading industrial enterprises, has been continuing its lifecycle as a company which has successfully adopted sharing with society as a core value. Focusing especially on education, culture and arts in its corporate social responsibility projects, the company not only aims to add value to the country but also accepts it as a responsibility to contribute to society in areas where the state falls short. Borusan Mannesmann realizes social responsibility projects in the fields of education, culture, and arts, and provides great support to these areas by adopting the principle of paying its debt of loyalty to the society, while continuing to add value to the society for society, stakeholders and business partners through its collaborations.

Sustainable Development Goal 17 explains the importance of establishing partnerships for goals. To achieve our 2030 goals, to benefit from all our stakeholders, to lead change together; we are working to support the society we live in. In this way, we believe that global partnerships will be revived, and unity will be stronger.

We know that every step that strengthens society will also bind us together as an institution. As Borusan Mannesmann, we establish strong, embracing, and integrated collaborations at all levels without leaving anyone out. In this context, we embrace the future and inspire our society with the impact of projects we carry out in the fields of arts, culture, and education.

In addition, Borusan Group published our Volunteering Handbook on December 5, World Volunteer Day, aiming to create value for all our stakeholders and employees. You can access our handbook at [Volunteer Handbook](#).

In 2021, we started a sapling planting project together with the "Become a Partner with the Green" project carried out jointly by the Confederation of Turkish Employers' Associations (TİSK) and the Seed Association. Within the scope of this project, we planted 3 saplings on behalf of all our employees who have recently joined us, retired, and had children. In 2022, we proudly planted a total of 1050 saplings in the soil. Hence, we not only contributed to afforestation, but also had the contentment of making a meaningful reference to the important periods of our employees' lives. The aim of this project is to contribute towards creating a green and healthy environment for future generations by integrating the love of environment and nature into business life.

"Tales from Borusan" books written by Borusan, which is completed in 2021, are sent to the children in the earthquake zone to help them recover and respite from the negative effects of the earthquake.

With the "This idea felt like a medicine to all of us" initiative that we started in 2022, all unused, undamaged and unexpired medicines were re-delivered to those in need. Thanks to this initiative, we both contributed to the circular economy and helped many people to heal.



Borusan Mannesmann supports public, public-private, civil society partnerships and develops initiatives based on the cumulative experience, resourcing strategies of collaborations to strengthen the means of implementation and to revitalize the global efforts for sustainable development.

17 PARTNERSHIPS FOR THE GOALS



By making a social contribution, Borusan Mannesmann contributes to ensuring that, everyone everywhere will gain knowledge and awareness regarding sustainable development and live in harmony with nature by 2030.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION





INNOVATION

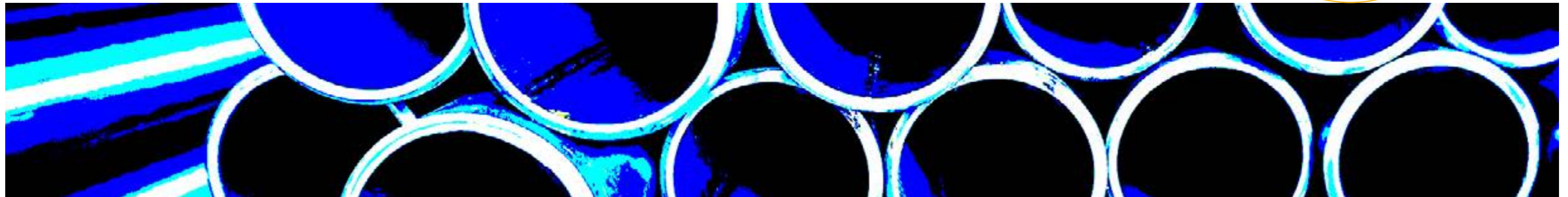
3. WE ARE OWNING INNOVATION
BY DESIGNING INNOVATIVE IDEAS

Sustainable Development Goal 9; Target 9.4; "By 2030, with each country acting in accordance with its own capacity, development of infrastructure and retrofitting industries to become sustainable is made possible by increasing the efficient use of resources and increasing the adoption of cleaner and more environmentally sound technologies and industrial processes".

According to the 2022 report of the Global Innovation Index prepared by the World Intellectual Property Organization (WIPO), the Swiss-based organization of the United Nations (UN), Türkiye rose 4 places to 37th place in terms of innovation. Thus, our country has risen 14 places in the index in the last two years and managed to enter the top 40 for the first time.

Within the scope of global targets, we aim to act in accordance with this goal in all our organizational structure. We are implementing innovative business models suitable for the future. With more than 70 years of industry experience, we are meticulously moving forward to carry our business model long into the future.

As of the end of 2022, 20% of the Company's consolidated prime product gross profitability was generated from sales in the new product and service group. In terms of sales volume, this value corresponds to 12% of the total prime product sales tonnage. At the end of 2022, the sectoral breakdown of consolidated new product sales in terms of volume is 11% Infrastructure and Projects, 50% Construction and General Industry and 39% Automotive. On the product development side, the focus on value-added advanced processes and coatings continued in 2022. In addition, innovative pipe development activities that address different areas of use for all business lines continue. In addition, projects in the field of digital transformation, research on IoT technologies, applications that can benefit customers and web 4.0 developments continue.



NEW PRODUCTS AND INNOVATION

As Borusan Mannesmann, the budget we allocated to new product development and innovation studies was \$520.000 in 2020 and \$750.000 in 2021. In 2022; Based on the ratio of R&D expenditure to turnover, the innovation budget for 2022 was determined as 1,072,000.00 dollars, which means an increase of 43% compared to 2021.

The budget we allocate to our investments for sustainable growth is increasing every year. We advance our innovative product studies within the framework of our policy to support domestic suppliers.

Our Sustainable Product and Process Innovation Agile team was the team with the most participants in 2022, so the team worked in two groups. One group explored different sustainable business models, while the other group delved into new products and more technical work.

Ratio Of R&D And Innovation Investments to Total Investments			
Unit	2020	2021	2022
%	1.4	0.9	4

In 2030, we are targeting
20 million\$ GP from
new products and
business models.

In 2022, you can see some of our product development efforts below.

Carbon Neutral Pipe: It is a green certified product built using Arcelor XCarb™ HRC with zero stated internal carbon emissions. It was launched in June 2022 at the Tube and Wire (Dusseldorf) exhibition.

H2 Line Pipe: H strength tests started for SSAW pipes. Tests for ERW pipes started in 2023.

We participated in a joint industry program in the US for the development of a steel pipe suitable for hydrogen transmission.

Electricity Generation from the Factory: We continue to work with RePG to generate electricity from ambient relative humidity. Opportunity areas in the factory were also identified. The "Electricity Generation from Compressor Heat Differences Project" we realized last year received an award at the "Energy Producing Factories Summit".

Digital Marketing: Trials are underway for digital marketing instead of labels.

Reduction of Plastic Plug Raw Material: We designed molds for thinner plugs and reduced the use of plastic by 15% as part of a cost improvement project for plastic plugs.

Reuse of Waste Plugs: We made bird nests by reusing waste plugs.

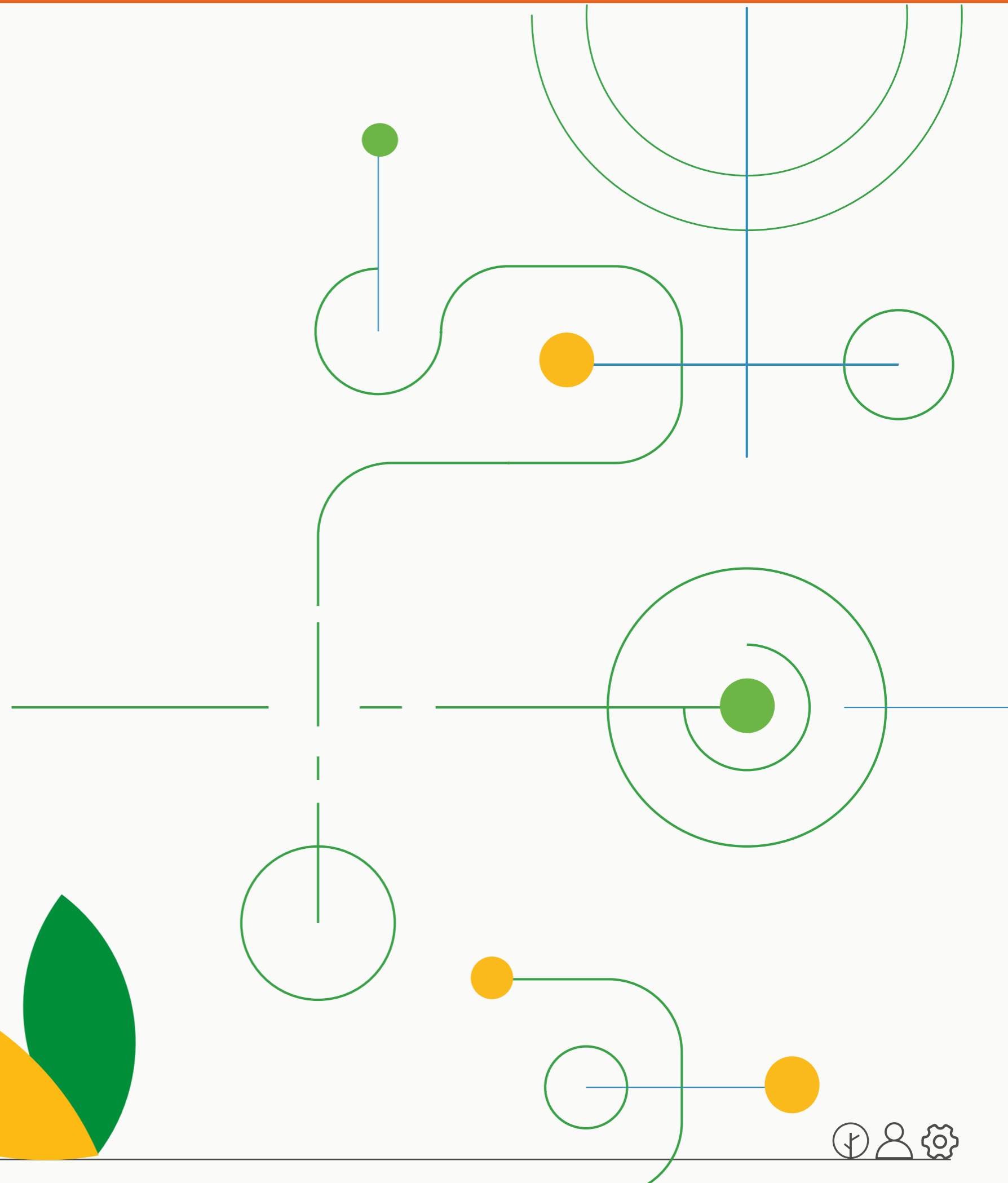
B'Design: It is a project to sell 2nd quality / idle pipes by transforming them into furniture such as bookshelves and lamps. The main purpose is to make the name Borusan Mannesmann known to the end user. We collaborated with "Industrial Design" departments of Mimar Sinan, Yeditepe, METU and Bilgi Universities to come up with the prototypes.



Borusan Mannesmann Innovation Network:

It is a database that aims to create an innovation hub with the ultimate purpose to develop scalable, functional new products and services in line with company strategies based on an open-source methodology. In addition to the platform's setup in 2022, we carried out incubation workshops, start-up screenings, graduation projects, sponsorship programs and university entrepreneurship clubs' activities. In parallel to our 2023 innovation vision, we have organized a 3-week in-house entrepreneurship camp with GOOINN. Within the scope of our work COIN, we gave seminars at 7 universities and contacted approximately 500 people. We initiated 8 projects involving different business units and collaborated with 2 incubation centers. We welcome everyone with creative ideas implementing digital applications data collection or digital services that can be integrated into pipe manufacturing.
<https://factory.borusanmannesmann.com/>

We have also conducted studies on Carbon Capture, Utility and Storage, which means capturing CO₂ and using it directly or indirectly to eliminate greenhouse gas emissions from our facilities. In this context, companies working on this technology in Türkiye and in the world have been researched and the level of industrial applications in the CCUS have been identified. Companies have been contacted to eliminate carbon in biofuel waste through micro-algae and metal-organic cages. Applicability, potential efficiency, and cost studies were conducted for Gemlik factories. Research on this technology is still ongoing.



DIGITAL TRANSFORMATION AND ARTIFICIAL INTELLIGENCE

Digitalization, taken to a whole new level with Industry 4.0, is transforming production processes by combining virtual and real production worlds to create an ecosystem for greater flexibility, quality, and efficiency. Digitalization in industry presents new opportunities. At Borusan Group, we view digital transformation as an integral part of our sustainable value creation processes, and we take steps to carry our company confidently into the future with the digital transformation projects we realize.

At Borusan Mannesmann, we continued our digital transformation projects in 2022.

As Borusan Mannesmann, we started our digitalization journey with a digitalization budget of 6.5 million dollars in 2021 and increased our budget to 7.35 million dollars in 2022.

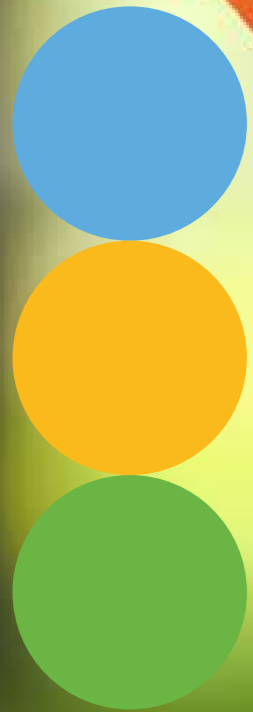
In 2022, we updated our Boru Hattı application, which includes developments in the mechanical installation sector, updated technical regulations and information about our dealers.

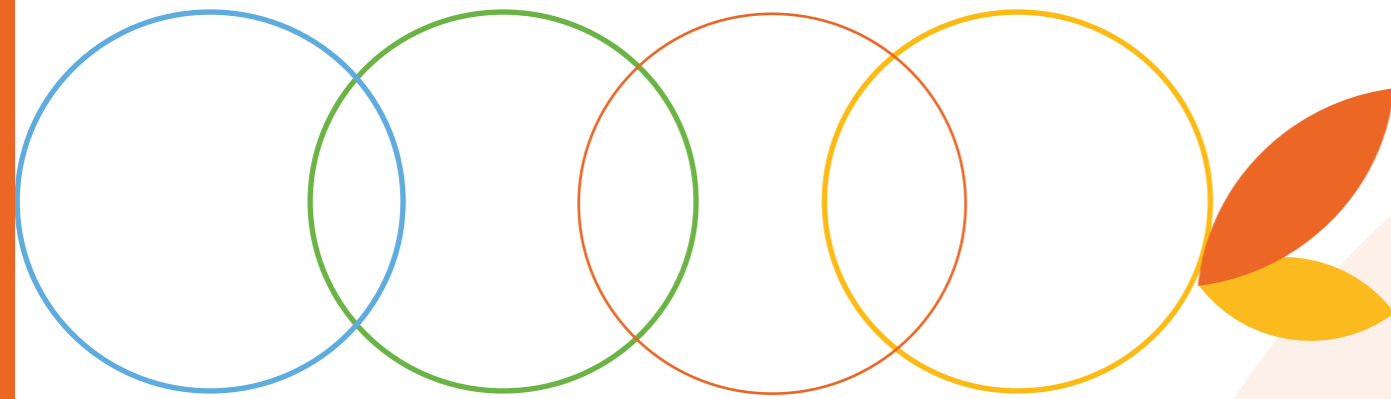
[Download Boru Hattı Application!](#)



A wooden house model with a chimney, a small square window, a larger four-pane window, and an arched doorway. It sits on a bed of green moss. A large, stylized orange leaf graphic is positioned behind the house and the text. The background is a blurred forest scene with sunlight filtering through the trees.

**4. WE ARE INSPIRING
THE FUTURE - OWN
CLIMATE, HUMAN,
AND INNOVATION**





SUSTAINABILITY IN THE SUPPLY CHAIN

Deeming it invaluable for its business partners and stakeholders to adopt a culture of sustainability, Borusan Holding launched its Sustainable Procurement Policy in 2023. The Sustainable Procurement Policy has been prepared with the aim of conveying Borusan’s sustainability approach to its business partners and ensuring that all suppliers in the procurement portfolio work based on compliance with Borusan’s environmental, social and governance expectations and sustainability manifesto.

You can find detailed information about Borusan Sustainable Purchasing approach at Sustainable Sourcing (surdurulebilirsatinalma.com)

Today, when we feel the impact of global developments in all our processes, it is very important to establish a sustainable supply chain. As Borusan Mannesmann, in the ESG Strategic Approach and Future Outlook study we have identified “supply chain disruptions, increasing logistics and energy costs” as our biggest risks in raw materials procurement from the supply chain partners, and we have determined “Expanding the Supply Chain Ecosystem” as a value driver in a bid to align our entire supply chain and to move forward with them on our sustainability journey. Sustainable supply chain

management is the management of all supply chain value drivers to maximize social welfare and supply chain profitability while minimizing environmental impacts. Sustainable supply chain management is crucial for organizations to create value in the long term. In addition to full compliance with Borusan Holding’s sustainable purchasing policies, as Borusan Mannesmann, we further expanded our Supplier Portal in 2022, which we started to establish in 2021 with our IT teams and sustainability team. We follow the developments of our suppliers on the portal and carry out their scoring according to set criteria. Our mission within the scope of sustainability in the supply chain is as follows:

Making all stakeholders within our ecosystem a part of our sustainability movement.



Our aim is to create, protect and improve long-term environmental, social and governance values for all stakeholders involved in the process of delivering products and services to the market through Supply Chain Sustainability efforts.

In 2022, the Supply Chain Sustainability agile team continued its work. In 2022, we managed our work on 4 focus areas.

- 1** Greenhouse Gas Monitoring from Sourced Raw Materials and Efforts to Increase Scrap Utilization
- 2** Supplier Sustainability Index and Portal
- 3** Sustainable Supply Chain PR Activities
- 4** Procurement in Compliance with the Sustainable Procurement Criteria

As we move forward in our focus areas, we have also implemented the Supplier Working Conditions Protocol. On the other hand, if cases such as unethical behavior, legal non-compliance or corruption are detected, we terminate relationships with all suppliers or subcontractors who do not act in accordance with our supplier working criteria. As a Group, we are strictly against forced or compulsory labor and child labor, and we carry out the necessary audits to prevent the risk of the slightest violation in this regard.

We also follow the developments in the world within the scope of supplier management. On June 11, 2021, the German Bundestag approved the German Supply Chain Compliance Act, which affects not only German companies but also their suppliers in foreign countries. Effective from January 1, 2023, the focus of the Act is the prevention of violations of human rights and environmental law. While the Act imposes various obligations directly on German companies, it also affects domestic and foreign companies in the value chain of German organizations. In this context, we are also working with our suppliers and working on addressing compliance issues that may arise via obtaining legal consultancy.



Raw Material Circularity Rate, Greenhouse Gas Monitoring and Efforts to Increase Scrap Utilization

We support socioeconomic development in our country by prioritizing local suppliers in our supply chain.

In 2022, Borusan Mannesmann Türkiye's non-raw material cost breakdowns and regional supplier distribution ratios are as follows.

Procurement by Cost	2022
Local Supplier	92.4%
External Supplier	7.6%
Supplier Split by Region	2022
Local Supplier	97.5%
External Supplier	2.5%

In 2022, sustainability was added to the performance evaluation criteria of raw materials procurement with the launch of the Supplier Portal. Coordination meetings were organized with Erdemir and İsdemir. Scrap utilization rates per ton of crude steel and CO₂ emission amounts were requested from our steel suppliers. In 2022, a 3% improvement was targeted, and the target was surpassed with an overall 3,7% improvement rate.

At the same time, benchmark studies were conducted to adapt to evolving customer expectations.

Improving Suppliers' Capacity to Use Technology

To encourage and monitor the development of our suppliers under the umbrella of sustainability, we have prepared a "Supplier Sustainability Assessment Questionnaire". Within the framework of the questionnaire, there are 5 main headings and 55 total questions. Supplier sustainability index score methodology was designed, and an evaluation scale was created. The responsible sourcing commitment letter was added to the survey content and suppliers' approvals were requested.

At the end of 2022, the digital survey was shared with 10 raw materials, 3 coating and 37 non-raw material suppliers.

2022 Green Procurement Projects

Green Procurement (GP) is defined in the European Commission's Communication on Public Procurement for a Better Environment as "the process by which public administrations procure goods, services and works that have less environmental impact throughout their life cycle compared to similar goods, services and works with the same basic function." As Borusan Mannesmann, we have recently aligned our suppliers with the company policy in the design of the process for the products and services we purchase, and through product evaluation criteria for sourced products used in production.

• Reducing the Amount of Foam Soap Use

Using a special equipment, the amount of soap used for hand cleaning was reduced. While the amount of consumption in the second period of 2021 was 4,000 liters, the amount of consumption in the second period of 2022 decreased to 2,800 liters. 1,200 liters less chemicals were used annually.

• IBC with Deposit Project

In Chemical Products, it was guaranteed that products are shipped with washed and reused IBCs instead of brand-new IBCs. Products are shipped with 600 IBCs annually. 50 IBCs were used for this purpose and waste in IBCs were eliminated. The cost benefit arising from the use of IBC was reflected as a discount in the unit price. 75% reduction in order, shipment, and invoicing processes, 3 tons of diesel/year reduction, reduction in IBC waste, total cost advantage of EUR 10,200/year were achieved with the project.

• Sleeve Dispatch Project

The project for designing a crate system to replace all of the materials used for packaging was realized. As a result of the reduction in packaging materials, labels and labor, various advantages have been realized by the supplier and Borusan Mannesmann. In addition to 50% reduction in internal transportation costs, improvement in delivery time with reduced packaging and space saving with stocking advantage; use of 2 tons of fuel consumption, 2100kg plastic waste and 9 tons of wooden pallets were eliminated.

• Staff Tea Set Project

The tea we distributed to our employees are wrapped in single sachets (Tea + Sugar + Mixer). These sets were also packaged in packs of 50. Use of single-use packs have been discontinued. 2,400,000 pieces/year tea sets are distributed to the personnel. 5 tons of plastic waste, 4,800 people/day of workforce, 5 MWh of electrical energy use were reduced contributing to a cost advantage of 240,000 TL annually.

• Number of Bins Used with the Use of Plastic Waste Reduction Dilution Apparatus Mitigation Project

Plastic waste is reduced by using larger drums instead of buying many small drums. The dilution apparatus mixes the concentrated product with water in the specified amount and turns it into a ready-made product, thus eliminating a significant amount of plastic waste in the environment.

OUR GOAL: 100% Green Procurement

In 2022, we continued our green procurement transformation efforts, which we started in 2020. In this context, our goal is to transform all procurement processes into green procurement. Green procurement transformation will enable us to identify and manage our risks in advance, establish more comprehensive and transparent relationships with our suppliers and create efficient processes at the same time. If we ensure sustainability at all stages of the supply chain, we can create long-term benefits.

Borusan Mannesmann works to build resilient infrastructures, support inclusive and sustainable industrialization, and strengthen innovation.



EFFECTIVE RISK AND CRISIS MANAGEMENT

As Borusan Holding, we were able to eliminate risks and identify opportunities for our company, thanks to our effective risk management and corporate governance in this period where risks and their effects on the national economy were extensive.

Borusan Mannesmann regularly monitors external trends while formulating its strategy. It has determined its risks and opportunities according to external trends. Within the framework of 2022 risk management, the external trends it follows are urbanization, mobilization, globalization, climate change and industry 4.0.

The risks it manages in this process are regional tensions such as Russia-Ukraine, customs barriers, and protectionist policies of countries, rising input prices (energy, etc.), fluctuating raw material prices and rising credit costs.

The increasing demand for oil due to the energy crisis and the corresponding increase in demand for pipes used in extraction wells, alongside the revival of the market and the increase in sales, which fell because of the pandemic in the automotive sector, all compete against the protectionist policies implemented by countries, which, in turn restrict pipe export markets. On the other hand, they also offer opportunities for local production, and for us as Borusan Mannesmann, they are opportunities arising from risks.



EXCELLENCE IN CUSTOMER RELATIONS

Borusan Holding does not have one-to-one relations with its customers due to the complexity of its operations. Despite the size, we strive for customer satisfaction and take the necessary security measures by paying attention to information security.

Within the scope of customer expectations, customer satisfaction surveys, competitor product analysis, periodic customer visits, customer audits are carried out, and in addition, a satisfaction score is calculated monthly by evaluating the quality and shipment performance of our customers within the scope of IATF 16949. After the complaint notification is shared with the customer's preferred channel, the complaint process is initiated by the Customer Quality and Project Management (CQPM) department by entering it into the Customer Complaint Management system. The complaint is evaluated by the responsible departments and an 8D report is created about the complaint. After the 8D report is created, the complaint is closed by sharing it with the customer.

Borusan Mannesmann's customer satisfaction policy is based on customer orientation. To make customer satisfaction permanent, customer requirements are meticulously examined, and all developments are closely followed. Customer feedback is one of the most important channels of stakeholder communication for us. Borusan Mannesmann implements the VOC - Voice of the Customer Management System. With this system, the demands and opinions of our customers are collected and evaluated in a systematic and holistic manner. Business processes are improved to meet the expectations of our customers; products and services are developed according to these expectations.

Borusan Mannesmann was awarded the ISO 10002 Customer Complaints Management Quality System Certificate, a world first in the pipe industry. With this understanding, continuous improvement efforts are made to increase customer satisfaction. Our ISO 10002 certificate is also available for our Gemlik, Halkali, Bursa and Central facilities. Within the scope of our management system, we have an approval requirement in place for orders within 12 hours after order placement, so that our customers can follow their orders more easily and quickly manage the details of order entries. We are constantly increasing our efficiency through the digital channels we use in our processes. All orders and connection forms are automatically communicated to our customers. Address information and all delivery notes are automatically and transparently shared for shipments. We have also reinforced customer satisfaction by increasing our loading and pipe delivery speed through process optimization improvements.

Due to the pandemic, we could not conduct our customer satisfaction survey in 2020, which we last conducted in 2018. Under normal conditions, the survey is normally conducted every two years. Our customers in the automotive segment have a separate customer satisfaction survey, and supplier evaluation forms are shared with these customers annually. While the average of our customers who completed the performance report and provided feedback in 2019 was 91%, this value was 93% in 2020, and this value increased to 93,9% in 2021. At Borusan Mannesmann, we care about protection of customer data. During 2022, no negative situation was encountered regarding the violation of customer confidentiality.



We commissioned many projects in 2022 to increase Customer Satisfaction. Some of these projects are summarized below.



• **Spiral Factory GRP Coating Investment - Denmark Pipeline Project**

This project has been developed in response to inquiries from our customers, especially in Europe, about a coating type that has not been done before. GRP coating on steel pipes is an application performed by very few companies in the world and only by companies specialized in this type of coating. Pipe manufacturers were also having this process done by third companies in projects where the coating was required. We aimed to make a difference by patching this coating for the first time within a pipe company’s own production and to contribute to our profitability by increasing customer satisfaction. Our customer preferred us because we were able to complete the process within our own facilities. At the end of the project, we owned a new GRP coating facility with all its components. The internal automation, software and engineering of the facility were completely designed and built by Borusan Mannesmann. Within the scope of the investment project, 18 employees in our factory received training on this process. 5 of our engineers have become experts in this field. Borusan Mannesmann has become the only pipe manufacturer to perform this coating in-house, especially in GRP coated pipeline projects, which are in demand in Europe, and has contributed to Borusan’s brand value. The pipes shipped to our customer with GRP coating were used in Denmark’s Biogas - Green Gas project, which aims to produce more environmentally friendly energy. With this project, a new product has been included in our production footprint and project announcements where this coating type is demanded is being followed.

• **CCM Management**

This project was developed to improve the response times for quality complaints received from the customer and to address customer dissatisfaction with an action plan in a relatively short period of time. An expert employee was assigned to the export team for CCM-related issues. In addition, a Quality engineer was appointed to focus on export complaints. An IT development project has been put on the agenda for the development of a CCM system for export goods in 2023.

• **Delivery Report Development**

This project was developed to visualize the real-time stock flow of products in order to make more accurate customer shipment planning and to inform key users about stocking decisions.

• **Priority Management Procedure Implementation**

This project was implemented to address the slow progress of container filling and potential delays in shipments by prioritizing the products that needs to be stocked. The project was developed to speed up weekly shipments and to speed up the flow in the finishing lines during the production.

• **Borusan Mannesmann CRM System**

In 2021, the CRM project was commissioned by our sales units. With the implementation of the CRM system, it is aimed to centrally manage all customer activities and at the same time contribute to corporate knowhow. In the 2nd and 3rd phases of the project, it will be ensured that the order query processes carried out manually will be transferred to the system and opportunity analysis will be made with data. The project is due to be completed in 2024.

Processes are managed according to our internal document “Customer Satisfaction Measurement Instruction”. Within the scope of customer satisfaction, customer satisfaction surveys, competitor product analysis, periodic customer visits, customer audits are conducted, and in addition, satisfaction scores are calculated monthly by evaluating the quality and shipment performance of our customers as per the IATF 16949 guidelines. The supplier assessments shared by our customers are also regularly shared in internal presentations. Customers are ensured that their dissatisfaction will be carefully evaluated, monitored, and remedied. After the complaint notification is shared through the customer’s preferred channel, the complaint process is initiated by the Customer Quality and Project Management (CQPM) department by submission to the CCM system. The complaint is evaluated by the relevant departments and an 8D report is created regarding the complaint. After the 8D report is created, it is shared with the customer and the complaint is closed.

We do not have a general satisfaction score for automotive segment customers. Within the scope of IATF 16949, a monthly satisfaction score is calculated for customers on a customer basis and presented monthly at meetings.

ADOPTION OF INNOVATIVE BUSINESS MODELS

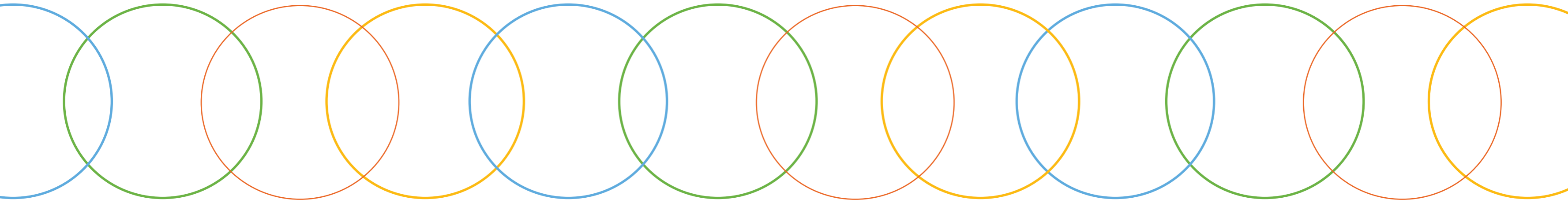
At Borusan Mannesmann, we are aware that the way to demonstrate agile and resilient corporate governance in a rapidly changing world is to integrate innovative business models into our value creation chain. In this context, Borusan Mannesmann is preparing to establish a new facility in Romania with an investment of approximately EUR 15 million. With this investment, we will primarily serve the automotive industry in continental Europe. We aim to start commercial production in this investment by the end of 2023. In addition, Borusan Mannesmann acquired 100 percent of Berg Pipe, one of the US companies producing large diameter line pipes of the highest quality and capacity, in exchange for a total transaction value of 162 million US dollars.

Borusan Mannesmann focuses on global markets to ensure sustainable growth while adding value to our country. As a result of this acquisition, Borusan Mannesmann is positioned as one of the largest Turkish industrial investors in the US.





APPENDIX



1- COLLABORATIONS

We organized collaborations with TUSIAD, KALDER, Turkish Ministry of Environment, Urbanization and Climate Change.



2- AWARDS

Name of Award	Year	Awarder Institute	Awarded Project
Şahabettin Bilgisu Environment Awards	2022	Kocaeli Chamber of Commerce	Steel Sector Most Successful Facility
Global Candidate Experience Awards	2022	Talent Board	Best Candidate Experience
Best Productivity Enhancing Project of the Year	2022	ST Industry Radio Communication and Yeditepe University	Energy Generation from Compressor Waste Heat
Innovators in Education and Communication Recommended Practice Award	2022	MESS	With the communication projects and activities, we carried out throughout the year with a focus on OHS
Best Learning Program Result	2022	Brand Hall Excellence Awards	Maintenance School Development Program
Distinction Award	2022	British Safety Council	As a result of the evaluation of all our OHS practices
Best Progress in Competence and Capability Development	2022	Brand Hall Excellence Awards	Maintenance School Development Program

3- STAKEHOLDER COMMUNICATION

Borusan Mannesmann’s important stakeholder groups and the communication tools it has identified are as follows:

STAKEHOLDER GROUP	COMMUNICATION METHOD	COMMUNICATION FREQUENCY
Borusan Mannesmann	CEO ve GM Memorandums (Special day celebrations, information on important issues)	Periodic
	Special Day Events (Digital)	Continuous
	Employee Engagement / Satisfaction Surveys	Annual
	Internal and External Reports (sustainability-operational reports)	Periodic
	Social Responsibility Platforms and Clubs	Continuous
	Social Media, Corporate Websites and Borusan Applications	Continuous
	Trainings	Continuous
	Guides / Manuals	Continuous
	Internal and External Meetings, Assessments and Announcements	Continuous
	Ethical Principles and Ethics Line	Continuous
	Borusan Holding	Internal and External Reports
Internal and External Meetings, Assessments and Announcements		Continuous
Social Media, Corporate Websites and Borusan Applications		Continuous
Special Status Notifications		Simultaneous
Group Companies	Internal and External Reports	Annual
	Internal and External Meetings, Assessments and Announcements	Continuous
	Trainings	Continuous
	Corporate Websites, Social Media	Continuous
Suppliers	Internal and External Reports	Annual
	Supplier Visits, Supplier Audits, Supplier Platforms	Continuous
	Social Media	Continuous
Board	Board meetings	Continuous
	Internal and External Reports	Annual
	Corporate Websites, Social Media	Continuous

STAKEHOLDER GROUP	COMMUNICATION METHOD	COMMUNICATION FREQUENCY
Media	Internal and External Reports	Continuous
	Press Releases	Continuous
	Social Media, Corporate Websites and Borusan Applications	Continuous
Customers	Internal and External Reports	Annual
	Customer Satisfaction Surveys	Continuous
	Internal and External Meetings, Assessments and Announcements	Continuous
	Social Media, Corporate Websites and Borusan Applications	Continuous
	Customer Standards / Customer Audits	Continuous
Competitors	Internal and External Reports	Periodic
	Associations etc. formations	Continuous
	Social Media, Corporate Websites and Borusan Applications	Continuous
	Associations etc. formations	Continuous
Local Community	Internal and External Reports	Periodic
	Social Responsibility Projects	Continuous
	Social Media, Corporate Websites and Borusan Applications	Continuous
Students, Academics, Universities	Career days	Continuous
	Social Responsibility Projects	Continuous
	Coaching and Internship Programs with Students	Continuous
	Social Media, Corporate Websites and Borusan Applications	Continuous
Financial Institutes	Internal and External Reports	Annual
	Social Media, Corporate Websites and Borusan Applications	Continuous
Public and Local Administrations	Internal and External Reports	Annual
	Internal and External Meetings, Assessments and Announcements	Continuous
	Social Media, Corporate Websites and Borusan Applications	Continuous
	Projects	Project Based
	Audits	Simultaneous / Periodic



4- MANAGEMENT SYSTEMS

STAKEHOLDER GROUP	COMMUNICATION METHOD	COMMUNICATION FREQUENCY
Civil Society Organizations and Professional Associations	Internal and External Reports	Annual
	Internal and External Meetings, Assessments and Announcements	Continuous
	Projects	Project Based
	Social Media, Corporate Websites and Borusan Applications	Continuous
	Memberships	Continuous
	Donations and Sponsorships	Project Based
Other Stakeholders	Internal and External Reports	Annual
	Internal and External Meetings, Assessments and Announcements	Continuous
	Social Media, Corporate Websites and Borusan Applications	Continuous
Unions	Internal and External Reports	Annual
	Internal and External Meetings, Assessments and Announcements	Continuous
R&D Ecosystem	Internal and External Reports	Annual
	Collective Innovation Network as Borusan Mannesmann	Continuous

Integrated Management Systems	
Management System Standards Documents	Valid Locations
ISO 14064-1:2006 Greenhouse Gas Calculation Verification	Gemlik, Halkalı, Bursa, Gebze, Merkez
ISO 16949 IATF Automotive Quality Management System	Gemlik, Halkalı, Bursa
Integrated Management System (ISO 14001:2015 Environmental Management System, ISO 45001:2018 Occupational Health and Safety Management System, ISO 9001:2015 Quality Management System, ISO 10002:2018 Customer Satisfaction Management System)	Gemlik, Halkalı, Bursa, Merkez
ISO 50001:2018 Energy Management System	Gemlik, Halkalı, Bursa, Merkez
ISO 17025:2017 Qualification Accreditation of Testing and Calibration Laboratories	Gemlik
API 5L Specification for Line Pipe	Gemlik
API 5CT Specification for Casing and Tubing	Gemlik
API Q1 Quality Management System	Gemlik

5- FINANCIAL PERFORMANCE INDEX

Number of R&D employees				
	Unit	2020	2021	2022
	Number	3	4	4
Number of university collaborations				
Collaboration Name	Unit	2020	2021	2022
PE	Number			1
B'Design	Number			2
Number of new products produced				
Product Name	Unit	2020	2021	2022
Commissioned After the Development Process	Number	11	12	6
Commissioned without Development Process	Number	6	6	5
Ratio of R&D and Innovation investments to total investments				
	Unit	2020	2021	2022
	Percentage	1.4	0.9	4
Ratio of R&D expenditure to turnover				
	Unit	2020	2021	2022
	Percentage	0.1	0.03	0.08
Cost benefit from processes improved through R&D / Innovation / Digitalization				
	Unit	2020	2021	2022
Cafeteria Waste Water Treatment	USD		1,250	12,280
Compressor Station Energy Recovery	USD		1,250	1,580
Lean 6 sigma projects	USD	2,442,522	1,885,910	400,000
Digitalization of the Environmental Report Card	USD		108	256
Automating Financial Data Transfer	USD		36	50

6- SOCIAL PERFORMANCE INDICATORS

Labor Force by Employment Type and Gender

	2019	2020	2021	2022
White Collar-Women	58	59	69	88
White Collar-Men	192	194	196	216
Blue Collar-Women	20	19	35	43
Blue Collar-Men	1,168	1,139	1,235	1,315
Total	1,438	1,411	1,535	1,662

Number of Employees by Gender and Management Category

		2019	2020	2021	2022
Top Management	Women	1	2	2	1
	%	11,11	20	22,22	14
	Men	8	8	7	6
	%	88.89	80	77.78	86
Mid-Level Management	Women	6	4	4	5
	%	20.69	14.29	11.11	11
	Men	23	24	32	39
	%	79.31	85.71	88.89	89
Other	Women	71	72	98	125
	%	5.07	5.21	6.5	8
	Men	1,329	1,301	1,392	1,486
	%	94.93	94.79	93.5	92

Labor Force by Employment Type and Gender

	2019	2020	2021	2022
White Collar-Women	58	59	69	88
White Collar-Men	192	194	196	216
Blue Collar-Women	20	19	35	43
Blue Collar-Men	1,168	1,139	1,235	1,315
Total	1,438	1,411	1,535	1,662

Other Groups

		2019	2020	2021	2022
Men-Hired	HC	59	45	235	191
	ratio	79%	79%	82%	81%
Men-Resigned	HC	129	69	140	200
	ratio	91%	86%	84%	90%
Women-Hired	HC	16	12	50	46
	ratio	21%	21%	18%	19%
Women-Resigned	HC	13	11	26	23
	ratio	9%	14%	16%	10%

		2019	2020	2021	2022
18-30 Age - Hired	HC	39	30	220	183
	ratio	52%	53%	77%	77%
18-30 Age - Resigned	HC	51	35	91	129
	ratio	36%	44%	55%	58%
31-40 Age - Hired	HC	24	20	56	44
	ratio	32%	35%	20%	19%
31-40 Age - Resigned	HC	54	25	47	38
	ratio	38%	31%	28%	17%
41-50 Age - Hired	HC	9	6	6	5
	ratio	12%	11%	2%	2%
41-50 Age - Resigned	HC	15	13	14	5
	ratio	11%	16%	8%	2%
51-60 Age - Hired	HC	3	1	2	5
	ratio	4%	2%	1%	2%
51-60 Age - Resigned	HC	22	8	14	13
	ratio	15%	10%	8%	6%
Over 60 Age - Hired	HC	0	0	1	0
	ratio	0%	0%	0.4%	0%
Over 60 Age - Resigned	HC	0	0	0	0
	ratio	0%	0%	0%	0%

	2019		2020		2021		2019	
	Women	Men	Women	Men	Women	Men	Women	Men
Employees eligible for maternity leave	2	81	3	102	3	82	0	90
Employees on maternity leave	2	81	3	102	3	82	0	90
Employees returning to work after maternity leave	1	81	3	102	3	82	0	90
Those who return to work after maternity leave and work for at least 12 months thereafter	1	81	3	102	3	82	0	90

Occupational Health and Safety Data

OCCUPATIONAL HEALTH AND SAFETY - TÜRKİYE					
Occupational Accidents	Group	Unit	2020	2021	2022
Number of Accidents (Occupational accidents resulting in loss of more than 3 days)	Company	Qty/year	16	19	23
	Subcontractor	Qty/year	2	7	4
AFR - Accident Frequency Rate (Lost Time Injury Rate) (Number of Accidents x 1,000,000) / Employee Count (EC)	Company	Ratio	6.65	6.15	6.57
	Subcontractor	Ratio	2.73	7.69	4.52
ASR - Accident Severity Ratio (Severity Rate) (Lost Days x 1,000) / Employee Count (EC)	Company	Ratio	0.26	0.44	0.26
	Subcontractor	Ratio	0.19	0.14	0.15
Occupational disease rate (ODR) Number of Occupational Diseases x 1,000,000 / Employee Count (EC)	Company	Ratio	0.00	0.00	0.00
	Subcontractor	Ratio	0.00	0.00	0.00

OCCUPATIONAL HEALTH AND SAFETY - ITALY			
Occupational Accidents	Group	Unit	2022
Number of Accidents (Occupational accidents resulting in loss of more than 3 days)	Company	qty/year	2
	Subcontractor	qty/year	0
AFR - Accident Frequency Rate (Lost Time Injury Rate)	Company	Ratio	6.65
	Subcontractor	Ratio	2.73
(Number of Accidents x 1,000,000) / Employee Count (EC)	Company	Ratio	12.74
	Subcontractor	Ratio	0
ASR - Accident Severity Ratio (Severity Rate) (Lost Days x 1,000) / Employee Count (EC)	Company	Ratio	0.36
	Subcontractor	Ratio	0.0

OCCUPATIONAL HEALTH AND SAFETY - BAYTOWN			
Occupational Accidents	Group	Unit	2022
Number of Accidents (Occupational accidents resulting in loss of more than 3 days)	Company	Qty/year	40
	Subcontractor	Qty/year	0
AFR - Accident Frequency Rate (Lost Time Injury Rate) (Number of Accidents x 1,000,000) / Employee Count (EC)	Company	Ratio	1.18
	Subcontractor	Ratio	0
ASR - Accident Severity Ratio (Severity Rate) (Lost Days x 1000) / Employee Count (EC)	Company	Ratio	0
	Subcontractor	Ratio	0



Occupational Health and Safety - Trainings	TÜRKİYE		
	2020	2021	2022
Number of Company Employees	28,297	36,699	40,867
Number of Subcontractor Employees	5,687	2,065	3,599
Total Number of Participants	33,984	38,764	44,466
Company Employees (Person*Hours)	21,610.04	29,831.04	45,778.40
Subcontractor Employees (Person*Hour)	7,214.55	2,920.95	3,890
Total OHS Trainings (Person*Hour)	28,854.59	32,751.99	49,668.40

Number of Committees - TÜRKİYE	2020	2021	2022
Number of OHS Committees Established	10	13	15
Total Number of Members in Board OHS Committees	28	33	36
Number of Employee Representatives in Board OHS Committees	2	2	2

Number of Committees - Baytown	2020	2021	2022
Number of OHS Committees Established	0	1	1
Total Number of Members in Board OHS Committees	0	15	15
Number of Employee Representatives in Board OHS Committees	0	15	15

7- ENVIRONMENTAL PERFORMANCE INDEX

Environmental Investments	Borusan Mannesmann Türkiye			
	Currency (TL)	2019	2020	2021
Total operating expenses of environmental activities	2,445,318.70	2,567,584.64	3,845,469.64	6,914,311.75
Total investments in environmental protection	287,315.00	445,680.00	-	-
Total	2,732,633.70	3,013,264.64	3,845,469.64	6,914,311.75

Proportion of reused/recycled packaging	Borusan Mannesmann Türkiye					
	Type of Packaging Waste	Unit	2019	2020	2021	2022
	Plugs (Quantity)	Qty	3,973,113	5,013,088	7,267,730	6,563,766

Borusan Mannesmann Water Management

Türkiye	2022 (m³)	2021 (m³)
Water Consumption	328,410.4	452,313
Decharge	124,719.6	120,574.3

	VOBARNO	
	2021	2022
Water Consumption (m³)	447,359	2,881,278
Amount of Water Discharged (m³)	410,238	367,424

Borusan Mannesmann Waste Management

TÜRKİYE		
	2021	2022
Total Waste Amount (Tons)	44,563.905	51,203.44
Amount of Waste Disposed (Tons)	5,286	7,870
Amount of Waste Recycled (Tons)	39,277.181	43,334

VOBARNO		
	2021	2022
Total Waste Amount (Tons)	3,422.630	2,881.278
Amount of Waste Disposed (Tons)	991.540	762.920
Amount of Waste Recycled (Tons)	2,431.090	2,118.358

2022 GREENHOUSE GAS EMISSIONS

Borusan Mannesmann Türkiye

Years	Category 1 (ton CO ₂ -e)	Category 2 (ton CO ₂ -e)	Category 3* (ton CO ₂ -e)	Total
2020	17,667.4533	40,251.1681	4,902.36	62,820.98
2021	21,762.09	45,727.51	87,485.70	154,975.30
2022	18,644.29	46,833.35	128,798.16	194,275.8
Category 1 Category 2 Category 3	Direct emission sources Indirect emissions from purchased energy Indirect emissions from transportation			

Borusan Mannesmann Pipe US Inc.

Years	Category 1 (ton CO ₂ -e)	Category 2 (ton CO ₂ -e)	Category 3* (ton CO ₂ -e)	Total
2021	10,479.62	7,108.41	178,949.00	196,537.02
2022	17,684.71	10,695.62	333,636.69	362,017.03
Category 1 Category 2 Category 3	Direct emission sources Indirect emissions from purchased energy Indirect emissions from transportation			

Borusan Mannesmann Vobarno

Years	Category 1 (ton CO ₂ -e)	Category 2 (ton CO ₂ -e)	Total
2022	4,974.8317	1,467.5390	6,441.9207
Category 1 Category 2	Direct emission sources Indirect emissions from purchased energy		

Borusan Mannesmann Water Management - Baytown

Volume of Water Withdrawal	Unit	2020	2021	2022
Water Consumption	m ³	25,2	21,43	38,79

Amount of Wastewater Discharged	Unit	2020	2021	2022
3 rd Party	m ³	25,2	21,43	38,79

Environmental Costs	Unit	2020	2021	2022
Total Operational Environmental Costs	\$	255.203	190.802	384.022

GLOBAL COMPACT

United Nations Global Communication on Progress

Borusan Mannesmann is a member of the UN Global Compact. Companies that are party to the UN Global Compact align their strategies and operations with the 10 Principles in the areas of human rights, labor standards, environment, and anti-corruption.

Human Rights	
Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights.	Business Ethics, Human Rights Titles
Principle 2: Businesses should make sure that they are not complicit in human rights abuses.	Business Ethics, Human Rights Titles
Labor	
Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	Human Rights Titles
Principle 4: Businesses should uphold the elimination of all forms of forced and compulsory labor.	Human Rights Titles
Principle 5: Businesses should uphold the effective abolition of child labor.	Human Rights
Principle 6: Businesses should uphold the elimination of discrimination in respect of employment and occupation.	Inclusion and Equal Opportunity
Environment	
Principle 7: Businesses should support a precautionary approach to environmental challenges.	Operational Efficiency and Waste Management
Principle 8: Businesses should undertake initiatives to promote greater environmental responsibility.	Environmentally and Socially Responsible Use of Resources and Materials
Principle 9: Businesses should encourage the development and diffusion of environmentally friendly technologies	Environmentally and Socially Responsible Use of Resources and Materials
Corruption	
Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery	



GRI CONTENT INDEX

Borusan Mannesmann has prepared a report for the period 01.01.2022-31.12.2022 in accordance with GRI Standards.

Statement of use	Borusan Mannesmann has reported in accordance with the GRI Standards for the period 1 January 2022-31 December 2022
GRI 1	GRI 1: Foundation 2021.
Applicable GRI sector standards	Not currently available.

GRI	Disclosure	References	Notes
Material Topics			
GRI 2: General Disclosures 2021	2-1 Organizational details	Borusan Group, Borusan Mannesmann, Corporate Governance	
	2-2 Entities included in the organization's sustainability reporting	About the report	
	2-3 Reporting period, frequency and contact point	About the report	
	2-4 Restatements of information	Annex	
	2-5 External Assurance	About the report; limited external assurance is provided for the specific information related with climate and water footprints amount	
	2-6 Activities, value chain, and other business relationships	Borusan Mannesmann at first glance, Products	
	2-7 Employees	Annex	
	2-8 Workers who are not employees	Annex	
	2-9 Governance structure and composition	Corporate Governance	
	2-10 Nomination and selection of the highest governance body	Corporate Governance	
	2-11 Chair of the highest governance body	Corporate Governance	
	2-12 Role of the highest governance body in overseeing the management of impact	Corporate Governance	
	2-13 Delegation of responsibility for managing impacts	Corporate Governance	
	2-14 Role of the highest governance body in sustainability reporting	Sustainability Organization	
	2-15 Conflicts of interest	Business Ethic	
	2-16 Conflicts of interest	Corporate Governance, Risk Management	
	2-17 Corporate Governance	Corporate Governance	Details are also shared in the annual report

GRI	Disclosure	References	Notes
Material Topics			
GRI 2: General Disclosures 2021	2-18 Evaluation of the performance of the highest governance body	Corporate Governance	Details are also shared in the annual report
	2-19 Remuneration policies	Business Ethic, Effective Human Management Inclusion and Equal Opportunity	
	2-20 Process to determine remuneration	Business Ethic, Effective Human Management Inclusion and Equal Opportunity	
	2-21 Annual total compensation ratio		Not available
	2-22 Statement on sustainable development strategy	Sustainability Strategy, Our contribution to sustainable development goals	
	2-23 Policy commitments	Annex, Management System	
	2-24 Embedding policy commitments	Annex, Management System	
	2-25 Processes to remediate negative impacts	Business Ethic	
	2-26 Mechanisms for seeking advice and raising concerns	Business Ethic	
	2-27 Compliance with laws and regulations	Annex, Management System	
	2-28 Membership association	Annex	
	2-29 Approach to stakeholder engagement	Stakeholder engagement and materiality analysis	
	2-30 Collective bargaining agreements	Business Ethic	

GRI	Disclosure	Notes
Material Topics		
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Stakeholder Engagement and Materiality Analysis
	3-3 Management of material topics	
Occupational Health And Safety		
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement and Materiality Analysis
GRI 403: Occupational Health and Safety 201	403-1 Occupational health and safety management system	Annex; OHS
	403-2 Hazard identification, risk assessment, and incident investigation	Risk Assessment, OHS
	403-3 Occupational health services	Annex; OHS

GRI	Disclosure	Notes
Occupational Health and Safety		
GRI 403: Occupational Health and Safety 201	403-4 Worker participation, consultation, and communication on occupational health and safety	Annex; OHS
	403-5 Worker training on occupational health and safety	Annex; OHS
	403-6 Promotion of worker health	Annex; OHS
	403-9 Work-related injuries	Annex
	403-10 Work-related ill health	Annex
Effective Risk and Crisis Management		
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement and Materiality Analysis
GRI 403: Occupational Health and Safety 201	403-2 Hazard identification, risk assessment, and incident investigation	Risk Assessment, OHS, Sustainability Strategy
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	Combating Corruption and Anti-Competitive Behavior
	205-2 Communication and training about anti-corruption policies and procedures	
	205-3 Confirmed incidents of corruption and actions taken	
Excellence in Customer Relation		
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement and Materiality Analysis
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	Excellence in Customer Relation, Annex
Procurement Practices		
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement and Materiality Analysis
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	Number of local suppliers is provided
Adoption of Innovative Business Models		
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement and Materiality Analysis
GRI 201: Economic Performance 2016	201-4 Financial assistance received from government	Economic Performance
Combatting with the Climate Crisis and Transition to a Zero-Carbon Economy		
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement and Materiality Analysis
GRI 302: Energy 2016	302-1 Energy consumption within the organization	Combatting with the climate crisis and transition to a zero-carbon economy



GRI	Disclosure	Notes
Combatting with the Climate Crisis and Transition to a Zero-Carbon Economy		
GRI 302: Energy 2016	302-3 Energy intensity	Combatting with the climate crisis and transition to a zero-carbon economy
	302-4 Reduction of energy consumption	
	302-5 Reductions in energy requirements of products and services	
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	Annex
	305-2 Energy indirect (Scope 2) GHG emissions	Annex
	305-5 Reduction of GHG emissions	Combatting with the climate crisis and transition to a zero-carbon economy
Operational Efficiency and Waste Management		
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement and Materiality Analysis
GRI 306: Wastes 2020	306-1 Waste generation and significant waste-related impacts	Waste Management, Stakeholder Engagement and Materiality Analysis
	306-2 Management of significant waste-related impacts	Waste Management, Stakeholder Engagement and Materiality Analysis
	306-3 Waste generated	Waste Management
	306-4 Waste diverted from disposal	Waste Management, Annex
	306-5 Waste directed to disposal	Waste Management, Annex
GRI 301: Wastes 2016	301-1 Recycled input materials used	Environmentally and Socially Responsible Sourcing and Material Use
	301-2 Recycled input materials used	Environmentally and Socially Responsible Sourcing and Material Use
	301-3 Environmentally and Socially Responsible Sourcing and Material Use	Environmentally and Socially Responsible Sourcing and Material Use, Annex
GRI 303: Water and Effluents 2018	303-3 Water withdrawal	Annex
	303-4 Water discharge	
	303-5 Water consumption	
Effective Human Management		
Employee Satisfaction		
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement and Materiality Analysis
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	Effective Human Management

GRI	Disclosure	Notes
Effective Human Management		
Employee Satisfaction		
GRI 401: Employment 2016	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	Effective Human Management, Annex
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	Employee Satisfaction, Annex
	404-2 Programs for upgrading employee skills and transition assistance programs	Employee Satisfaction
Inclusion and Equal Opportunity		
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement and Materiality Analysis
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	Annex, Organizational Structure
GRI 406: Non-Discrimination 2016	406-1 Incidents of discrimination and corrective actions take	Business Ethic
Human Right		
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement and Materiality Analysis
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	Business Ethic
Contributing to the Society		
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement and Materiality Analysis
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	Contributing to the Society
	413-2 Operations with significant actual and potential negative impacts on local communities	Stakeholder Engagement and Materiality Analysis
New Product and Innovation		
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement and Materiality Analysis
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	New Product and Innovation, Annex
	203-2 Significant indirect economic impacts	Economic Performance
Sustainability in Supply Chain		
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement and Materiality Analysis
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	Annex
	203-2 Significant indirect economic impacts	Sustainability in Supply Chain



GRI	Disclosure	Notes
Sustainability in Supply Chain		
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	Green Procurement, Sustainability in Supply Chain
Digital Transformation and Artificial Intelligence		
GRI 3: Material Topics 2021	3-3 Management of material topics	Stakeholder Engagement and Materiality Analysis
GRI 201: Economic Performance 2016	201-4 Financial assistance received from government	Economic Performance
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	Annex
	203-2 203-1 Infrastructure investments and services supported	Digital Transformation and Artificial Intelligence

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