



OYAK MINING
METALLURGY GROUP
2017 SUSTAINABILITY
REPORT



MINING METALLURGY
GROUP

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ABOUT THIS REPORT

Scope of the Report

This report is the fourth sustainability report published by OYAK Mining Metallurgy Group; Turkey's largest integrated flat steel producer, the pioneer and leader of the Turkish steel industry. The first three reports were published under the "Erdemir Group" title. As of 2017 Erdemir and its subsidiaries started operating under the roof of OYAK Mining Metallurgy Group.

The sustainability performance criteria covered by this report apply to the 2017 indicators of the Ereğli Demir ve Çelik Fabrikaları T.A.Ş. (Erdemir) and Iskenderun Demir ve Çelik A.Ş. (Isdemir). The financial data are indicative of the consolidated performance of OYAK Mining Metallurgy Group as a whole.

The report deals with the activities of Erdemir and Isdemir at three different lines:

- Developments in the economic, environmental and social areas during the reporting period;
- OYAK Mining Metallurgy Group's performance under the titles of stakeholders, corporate structuring, human resources and the community;

- The impact of the developments experienced in the steel sector in 2017 on the Group performance and its relation.

The report describes the developments, work carried out and progress achieved on the axis of sustainability from the establishment of the Erdemir and Isdemir up to the year 2017 in chronological order. In addition, the Group's approaches, policies, short, medium and long-term goals and plans for the future are also set out in the sections as deemed necessary.

The report, which provides detailed information of the performances of Erdemir and Isdemir, presents the work carried out in order to internalize sustainability in each area by being based on the principles of being up-to-date, consistent, accountable and transparent. Published sustainability reports, also intended to serve as a record of OYAK Mining Metallurgy Group's corporate performance in that direction.

Reporting Period

Unless otherwise indicated, this report covers the period January 1 - December 31, 2017. The information presented in this report is also intended to serve as a basis for comparison in any sustainability reports that Erdemir and Isdemir may publish in future. The previous sustainability report published by the companies was concerned with 2016.

Reporting Cycle

In principal, OYAK Mining Metallurgy Group publishes reports on an annual basis. While this particular report has been prepared so as to comply with Global Reporting Initiative and similar internationally recognized standards, it has not been independently reviewed or audited in any way.

INTRODUCTION

CORPORATE PROFILE

ADDED VALUE

OYAK MINING METALLURGY GROUP GENERATES AN EVER INCREASING AMOUNT OF ADDED VALUE FOR THE ECONOMY WITH ITS INVESTMENTS.

OYAK Mining Metallurgy Group has been contributing to the development and employment of the Turkish industry for more than 50 years. It generates an ever increasing amount of added value for the economy with its investments in our country's future.

Ereğli Demir ve Çelik Fabrikaları T.A.Ş. (Ereğli) was founded in 1960 with the enactment of the special law, and it entered production with an annual crude steel capacity of 500,000 tons and flat steel capacity of approximately 400,000 tons, on May 15, 1965.

Continuing its investments without interruption in line with the needs of the country's industry, the Company currently commands a crude steel capacity of approximately 4 million tons and final product capacity of approximately 5 million tons.

Holding the title of being Turkey's first and the largest integrated flat steel producer, Erdemir took its place under the OYAK umbrella in 2006.

Following OYAK's decision to group its companies on the basis of sector in a bid to boost managerial efficiency, Erdemir and its subsidiaries were gathered under

INTRODUCTION

the umbrella of OYAK Mining Metallurgy Group in 2017. OYAK Mining Metallurgy Group stands at the forefront of the most employment-generating organizations in the country with its number of employees reaching 12,000 people.

OYAK Mining Metallurgy Group ranks at 43rd in the world on the basis of the 2017 crude steel production ranking, and 3rd among producers in the EU-28 member countries. The Group also ranks 13th on the “World’s Best Steel Manufacturers” list, which is prepared on the basis of September 2017 figures published by World Steel Dynamics, one of the world’s most respected steel research companies.

Companies within OYAK Mining Metallurgy Group operate in the fields of flat and long steel production, steel service center services, mining, gas production, engineering and project management.

Erdemir: Flat steel production

İsdemir: Flat and long steel production

Erdemir Maden (Mining): Pellet, lump ore, fine ore, hematite and pellet cake production

Erdemir Romania: Electrical steel production

Erdemir Mühendislik (Engineering): Engineering and project management services for group companies

Erdemir Çelik Servis Merkezi (Steel Service Centre): Meeting the industry’s need for sized flat steel

Erdemir Asia Pacific Pte. Ltd.: Execution of the Group’s business activities in the Asia-Pacific region

İsdemir Linde Gas Partnership: Industrial gas production

Erdemir: a long history of being a leading producer in the Turkish steel industry

Having started its operations in 1965, Erdemir is one of Turkey’s largest companies with its long-established brand, high production capacity, wide product range, strong financial structure and the employment it provides.

The Company produces hot and cold rolled, tin, chrome and zinc coated flat steel products and plates in accordance with international quality standards at its facilities established in Ereğli, in Turkey’s Black Sea region. Erdemir’s products are used as basic inputs in many industries such as the automotive, white goods, energy, construction, pipe, general machinery and manufacturing, home appliances, heat and pressure vessel equipment, ship building, heavy industry and packaging.

CORPORATE PROFILE

ERDEMİR AND ITS SUBSIDIARIES WERE GATHERED UNDER THE UMBRELLA OF OYAK MINING METALLURGY GROUP IN 2017.

İsdemir –Turkey’s only integrated steel plant capable of producing both long and flat products

Founded in the Iskenderun district of Hatay in 1970, İskenderun Demir ve Çelik A.Ş. (İsdemir) is the largest integrated iron and steel plant in terms of its long product production capacity, and was the third plant to be established in Turkey.

Today, the Company has an annual production capacity of approximately 5.8 million tons of liquid steel, 3.5 million tons of hot rolled flat products, 0.6 million tons of coil and 2.5 million tons of billet.

Erdemir posted the 2nd biggest gain in market value in 2017.

Erdemir, whose shares have been traded under the “EREGL” ticker in the stock exchange since the establishment of Borsa Istanbul in 1986, is listed in the BIST 30 index. With 47.63% of its shares listed, it has one of the broadest ownerships of any publicly traded company.

Having started the year with a share price of TL 5.14, Erdemir’s share price nearly doubled to end the year at TL 10.02. While the BIST 100 index posted an increase of 48% in 2017, Erdemir shares, which were buoyed by the high dividend it distributed and the financial and the Company’s operational achievements, posted a 95% return.

With an increase of TL 17.08 billion in its market value, Erdemir posted the 2nd biggest gain in its market value of any company in 2017, according to data published by Borsa Istanbul.

İsdemir’s shares have been trading on the Pre-Market Trading Platform of Borsa Istanbul under the “ISDMR” ticker since March 28, 2016.

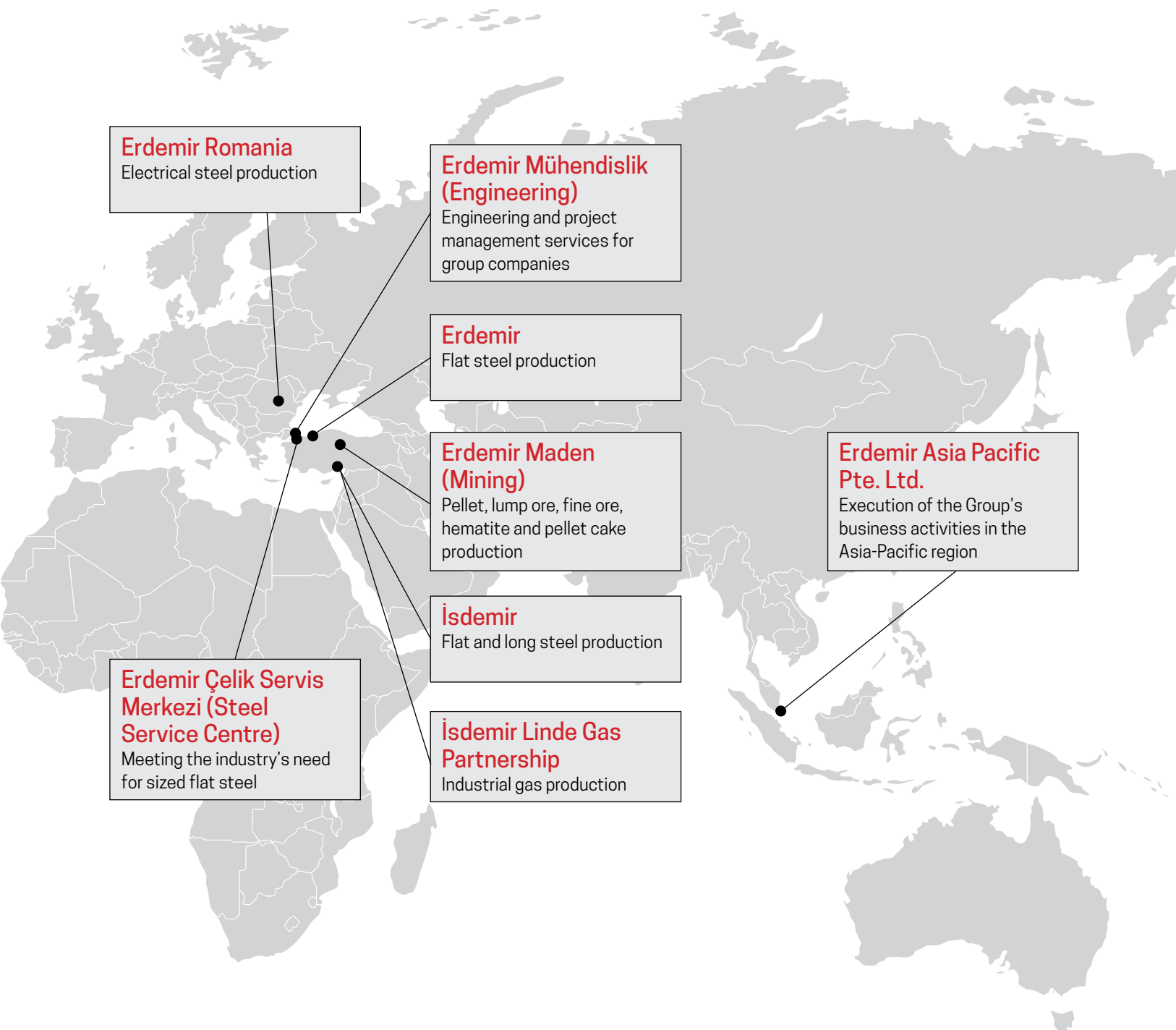
İsdemir shares, meanwhile, opened the year 2017 at TL 2.01 and ended the year with a price of TL 5.29. İsdemir, which reached a market value of TL 9.512 billion in 2017, posted one of the biggest gains in market value among the BIST companies.

Approaching R&D as the determinant of the future and a fundamental source of competence

Erdemir operates in a global sector, where new dynamics are constantly emerging and where conditions of competition are ever changing and developing depending on many parameters. The Company therefore believes that developing new products and production technologies, raising product quality and standards, increasing efficiency and responding rapidly to the customers’ product and service expectations is of great importance.

In this vein, Erdemir aims to meet the present and future needs of the Turkey industry at the highest level through its investments for the production of high value added products.

OYAK MINING METALLURGY GROUP COMPANIES OPERATE IN FLAT AND LONG STEEL PRODUCTION, STEEL SERVICE CENTER SERVICES, MINING, GAS PRODUCTION, ENGINEERING AND PROJECT MANAGEMENT FIELDS.



MAIN SUSTAINABILITY INDICATORS

ECONOMIC

Net Sales Revenue

TL 18,644 million
(USD 5,115 million)

Net Profit

TL 3,754 million
(USD 1,030 million)

Total Assets

TL 28,326 million
(USD 7,523 million)

IN ERDEMİR USD 4,574,140
IN İSDEMİR USD 2,694,245
ENVIRONMENTAL
INVESTMENT
EXPENDITURES WERE
REALIZED IN 2017.

OYAK MINING METALLURGY
GROUP ROUNDED OFF 2017
WITH TOTAL ASSETS OF
USD 7.5 BILLION.

USD 7.3 MILLION
TOTAL INVESTMENT
EXPENDITURES

USD 7.5 BILLION
TOTAL ASSETS

ENVIRONMENTAL

Environmental Investment Expenditures

ERDEMİR: USD 4,574,140

İSDEMİR: USD 2,694,245

Environmental Performance Index

ERDEMİR: 90%

İSDEMİR: 89%

Energy Saving

ERDEMİR: 243,400,215 kWh/year

İSDEMİR: 45,840,388 kWh/year

CO₂ Reduction (annual total greenhouse gas)

ERDEMİR: 110,086 tons/year

İSDEMİR: 25,052 tons/year

Solid Waste Recovery Rate*

ERDEMİR: 80%

Raw material savings: 258,754 tons

İSDEMİR: 60%

Raw material savings: 281,717 tons

* Types of solid wastes reused vary.

Ratio of Recirculated Water Use

ERDEMİR: 92%

İSDEMİR: 95%

SOCIAL

Total Employment (people)

ERDEMİR: 6,035

İSDEMİR: 4,863

Training per Person (hour)

ERDEMİR: 54.6

İSDEMİR: 48.33

OHS Training per Person (hour)

ERDEMİR: 20.28

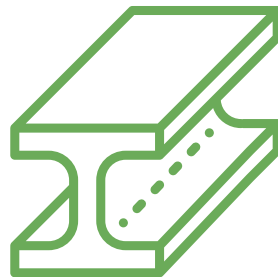
İSDEMİR: 29.92

EFFECTIVELY





THE COMPANIES THAT MAKE UP OYAK MINING METALLURGY GROUP ARE MINDFUL OF THE ECONOMIC, ENVIRONMENTAL, AND SOCIAL WELLBEING OF THEIR STAKEHOLDERS, ARE DECISIVE IN THEIR ACTIONS, AND REALIZE UNDERTAKINGS THAT WILL SHAPE THE FUTURE.



MESSAGE FROM DEPUTY CHAIRMAN AND MANAGING DIRECTOR



EFFECTIVE PRODUCTION PROCESSES

OYAK MINING METALLURGY GROUP'S SUSTAINABILITY POLICIES ARE FOCUSED ON ACHIEVING MORE EFFECTIVE PRODUCTION PROCESSES.

Valued stakeholders:

Having reached levels that are impacting directly on people's lives, technology, resource depletion, and rapid climate change have made our duty of "entrusting a healthy world to future generations" a priority issue on everyone's agenda.

That duty, which is a global goal which underlies the concept of sustainability and which is supported by such supranational organizations as the United Nations, requires everyone to:

- Protect our planet and its natural environment;
- Combat climate change and global warming;
- Use limited natural resources with optimum efficiency in such a way as to avoid waste;
- Add more value to the human and social environment through innovative approaches;
- Ensure the long-term survivability of biological balances.

In this direction, leaders and companies with a global presence have important duties that inescapably involve their commitment major roles in shaping the future.

OYAK MINING METALLURGY GROUP MADE ITS SUSTAINABILITY PRINCIPLES INTRINSIC ELEMENTS OF ITS BASIC STRATEGIES AND IMPLEMENTED THEM THROUGHOUT ITS VALUE-CREATION CHAIN.

WHILE IMPROVING THEIR PERFORMANCE, OYAK MINING METALLURGY GROUP COMPANIES ARE MINDFUL OF THE ECONOMIC, ENVIRONMENTAL, AND SOCIAL WELLBEING OF THEIR STAKEHOLDERS.

OYAK Mining Metallurgy Group and sustainability

The sustainability approaches and policies to which we adhere in OYAK Mining Metallurgy Group are focused on achieving more effective and more productive production processes, on maintaining our overall operational success, and on enhancing the value that we create for society. Our strategies and goals clearly and plainly point us in the direction of what we must do in order to build a better future.

Having made its sustainability principles intrinsic elements of its basic strategies and implemented them throughout its value-creation chain, OYAK Mining Metallurgy Group fulfilled its objectives in 2017 as well. The Group carried out investments in line with this and it created value for its stakeholders by making the most efficient use of all of its material and non-material resources and capital.

We have important duties in Turkey's advancement in the leading economies league table.

As an essential element of today's world, steel is also a potential cornerstone of tomorrow's as well. Taking this plain and

simple fact as its point of departure, OYAK Mining Metallurgy Group has built its business model in keeping with the principle of creating "the best" and "the most efficient" in the conduct of all of its product and service processes.

While improving their performance, the companies that make up OYAK Mining Metallurgy Group are mindful of the economic, environmental, and social wellbeing of their stakeholders, are decisive in their actions, and realize undertakings that will shape the future.

Our Group is a globally competitive player. OYAK Mining Metallurgy Group distinguishes itself as one of Turkey's leading and most exemplary industrial concerns. In keeping with this corporate identity, our country's unchanging top-priority objectives of sustainability and robust development become important elements of our business model.

Producing for Turkey and making a significant contribution to the economy as it does, OYAK Mining Metallurgy Group continues to move forward while remaining fully aware of its responsibilities to adhere much more careful, risk-sensitive, and proactive strategies when planning and carrying out its operations.

MESSAGE FROM DEPUTY CHAIRMAN AND MANAGING DIRECTOR

OYAK MINING METALLURGY GROUP IS EXEMPLARY BY VIRTUE OF ITS CORPORATE STRUCTURE, ITS PRODUCTION APPROACHES FOCUSED ON CONTINUOUS IMPROVEMENT AND INNOVATION, AND ITS RESPONSIBLE AND ACCOUNTABLE MANAGEMENT SYSTEM.

Our sustainability strategy is focused on creating value and on providing people with better ways of life.

Seeking to be a leading and exemplary company in the race to ensure sustainability, OYAK Mining Metallurgy Group grounds its sustainability strategies in the four basic principles of:

- Integrating sustainability into all business processes so as to embrace all from procurements to sales and after-sales services;
- Reducing its environmental footprint while making value-adding products;
- Maintaining groupwise sustainable manufacturing conditions which are mindful of raw material efficiencies, which seek to reduce emissions, and which give priority to occupational health and safety;
- Creating social value for all stakeholders and supporting their ongoing growth and development.

OYAK Mining Metallurgy Group has internalized the “2030 Sustainable Development Goals” (SDG) that were spearheaded by the United Nations and it has defined its priorities on the basis of both these goals and the World Steel Association’s “Sustainability Indicators”.

While a subscriber to all seventeen UN SDG, OYAK Mining Metallurgy Group gives priority importance to three that are of especial concern to its own operations and impact: “Decent Work and Economic Growth”, “Responsible Consumption and Production”, and “Renewable and Clean Energy”.

Outstanding issues in 2017

OYAK Mining Metallurgy Group is an exemplary corporate group by virtue of its corporate structure, its sustainability approaches and practices, its production approaches focused on continuous improvement and innovation, its attention to open communication, and its responsible and accountable management system.

Issues that were of fundamental concern in 2017 were also those that inform OYAK Mining Metallurgy Group’s long term strategies: operational efficiency, protecting the environment and combating climate change, R&D, innovation, installing a World Class Manufacturing system, investing in people, and social engagement. Under all of these headings we achieved manufacturing and marketing results that contributed tangibly to the fulfillment of our sustainability priorities and thus to our development goals.

OYAK MINING METALLURGY GROUP WILL CONTINUE TO ADVANCE CONFIDENTLY AND WITH UNRELENTING DETERMINATION AND PERSEVERANCE TOWARDS ITS GOAL OF BEING A GLOBAL STEEL-INDUSTRY BRAND.

Steel adds lasting value to human life and in 2017 we made significant progress in line with our goal of producing that steel with a minimal ecological footprint. Last year we registered exemplary successes in our R&D efforts to shape the future of steelmaking innovations and solutions while also adding particular value through our efforts to protect the environment.

Another of our priorities is to create and maintain a workplace environment that is compatible not just with occupational health and safety requirements but also with all other aspects of human life and dignity. In 2017 we continued to do this for all of our employees wherever we have operations by constantly monitoring, improving, and developing OHS practices.

On the future...

Our country is a strong one and the region in which it is located offers unrivaled potential. Drawing on the increasingly greater support, preference, and confidence of its shareholders and all other stakeholders, OYAK Mining Metallurgy Group is focused on the future and is committed to transforming that potential into performance through the innovative projects that it undertakes.

Thanks to its strong foresight, flexible corporate structure, and efficient production strengths, OYAK Mining Metallurgy Group will continue to advance confidently and with unrelenting determination and perseverance towards its goal of being a global steel-industry brand.

Speaking both personally and on behalf of our Board of Directors, I extend my thanks to our team for their dedicated efforts that strengthen our Group, to our customers for their confidence in and loyalty to our brand, to our suppliers for their close collaboration, and to all of our business partners and stakeholders.

Very truly yours,

Toker Özcan

Deputy Chairman and Managing Director

IN 2017, WE ACHIEVED MANUFACTURING AND MARKETING RESULTS THAT CONTRIBUTED TANGIBLY TO THE FULFILLMENT OF OUR SUSTAINABILITY PRIORITIES AND THUS TO OUR DEVELOPMENT GOALS.

VISION OF OYAK MINING METALLURGY GROUP

TECHNOLOGICAL INNOVATION

OYAK MINING METALLURGY GROUP ADOPTS TECHNOLOGICAL INNOVATION AS THE MAIN PRINCIPLE OF SUSTAINABILITY.

OYAK Mining Metallurgy Group is building its vision of sustainability on the foundation of becoming an organization that measures its economic, environmental and social impacts, generates value by encouraging innovation, creates a strong financial structure for all stakeholders, and creates sustainable business models.

Steel has a critical place for the technology and sectors that provide the opportunity and power to achieve a green economy. As the most important material for engineering and building in the modern world, steel has applications in aspects of our lives, such as in buildings with renewable energy use, low carbon transportation, fuel saving vehicles with clean energy and infrastructure for recycling facilities, and is expected to maintain an important role in ensuring sustainable development throughout the next century.



ERDEMİR AND İSDEMİR AIM TO SUCCESSFULLY IMPLEMENT THE STRATEGIES THAT THEY HAVE DETERMINED IN ALL AREAS OF FOCUS, ESPECIALLY IN PRODUCTION, SALES AND R&D.

As Turkey's leading steel producer, Erdemir and İsdemir fulfills its responsibilities in sustainable development with its innovative production technologies, the continuous development that it has realized in energy and resource efficiency, its work towards minimizing its environmental impacts, the direct and indirect employment it provides and with the contributions it provides to the welfare of its employees and the society as a whole.

OYAK Mining Metallurgy Group adopts technological innovation as the main principle of sustainability for long term and strong financial performance and high efficiency in production.

In order to contain the environmental footprint of its steel production, to support the life cycle, to encourage reuse in production, the Group aims to encourage smart product design and increase recycling rates of its waste.

Erdemir and İsdemir, which are members of OYAK Mining Metallurgy Group companies that combine the sustainability principles of the Group with their own basic strategies, realizes their investments in this direction.

Companies which build their business models in accordance with the principle of being "the best" in all of their products and services are building a transparent, open and accountable structure. On one hand they are improving their performance, while on the other they consider the benefit of their stakeholders at the economic, environmental and social level. At the heart of the strategic planning approach of OYAK Mining Metallurgy Group lie aligning its operations with its goals, and making the strategy measurable and manageable by means of its Corporate Performance Management. Strategic priorities and areas to focus on are laid out in the game plan created in this direction, and they are brought into action through associating short-term operations with long-term strategies. We are working on alternative scenarios that will provide competitive advantage based on ever-changing dynamic market conditions. Alternative scenarios that will provide a competitive advantage in accordance with constantly changing dynamic market conditions are developed.

Erdemir and İsdemir aim to successfully implement the strategies that they have determined in all areas of focus, especially in production, sales and R&D,

in order to remain the reputable and preferred business and solution partner in the sector, and to continuously increase the value they add to the environment and to people. They keep multifaceted development at the forefront of what they do by building strong, long-term collaboration with suppliers, the society and all other stakeholders, especially their customers and employees.

With their properties of team work, effective leadership and agility, Erdemir and İsdemir determine their goals by anticipating the challenges of a changing dynamic environment and they focus on areas that will provide a competitive advantage. With this plan, in which these areas are detailed, they increase their reputation in the eyes of all their stakeholders and continue to progress at a global level by taking sure steps in order to become an example in every area.

THE JOURNEY CONTINUES

IN 2017, GREENHOUSE GAS VERIFICATION WORK GETS UNDERWAY.

1998

ISO 14001 EMS establishment activities are started.

2003

Erdemir Process System is restructured.

The İsdemir National Quality Movement is participated.

2004

Greenhouse Gas Inventory Studies begin.

Erdemir is awarded the ISO 14001 EMS Document.

İsdemir is awarded the ISO 9001 QMS Document.

Erdemir is awarded the OHSAS 18001 Document.

European Quality Award Certificate of Competency in Excellence is awarded.

2005

İsdemir is awarded the OHSAS 18001 Document.

2006

Erdemir publishes its Sustainability Steel Report.

İsdemir is awarded the ISO 14001 EMS Document.

Erdemir wins 1st prize in EU Environmental Awards Turkey Program.

2007

Erdemir is awarded the ISO 16949 AQMS Document.

İsdemir wins 1st prize in Energy Efficiency in 7th Industry Project Competition.

2008

Environmental Performance Index starts to be calculated.

2009

İsdemir wins 1st prize in 9th Energy Efficiency in the Industry Project Competition.

2010

Environmental trainings start to be given to employees.

İsdemir wins 1st prize in 10th Energy Efficiency in the Industry Project Competition.

2011

The TS EN 16001 EMS Document is received.

2012

The R&D Center is established.

RIO+20 Sustainable Development in Turkey and the Best Application in the field of Green Economy.

Statistical Data Analyses trainings are initiated.

2013

The ISO 50001 EMS document is awarded.

Three year extension of the ISO TS 16949 document is approved.

2014

The Sustainability Directorate is established

The Erdemir Biodiversity Policy is shaped.

3rd Prize in Efficiency Project Awards is received.

3rd prize in İstanbul Chamber of Industry 14th Environment and Energy Awards is received.

Operational Excellence (OPEX) Projects are initiated

2015

The Continuous Wastewater Monitoring Systems are established.

The Greenhouse Gas Monitoring Plan is submitted to the Ministry.

The Supplier Environment Impact assessments are initiated.

The Environmental Permit Document is renewed.

Employees start to receive Ethical Rules training.

İsdemir wins 1st prize in The Primary Metal Industry Reduction of Energy Intensity.

Erdemir wins 2nd prize in 2nd Efficiency Project Awards.

Erdemir wins the Green Era Award.

Life Cycle Assessment studies are started.

2016

Water footprint studies are initiated.

The ISO/IEC 27001 ISMS document is awarded.

İsdemir wins 1st prize in 16th Energy Efficiency in the Industry Project Competition.

Total Productive Maintenance (TPM) Project is initiated.

2017

Greenhouse Gas Verification work gets underway.

Supplier Risk Analysis Assessment activities are started.

Product Sustainability studies are initiated.

Organizational Sustainability work groups are established.

SUSTAINABILITY PRINCIPLES OF OYAK MINING METALLURGY GROUP

SUSTAINABILITY STRATEGY

ERDEMİR AND İSDEMİR SHAPE THEIR SUSTAINABILITY STRATEGY ON FOUR BASIC PRINCIPLES.

OYAK Mining Metallurgy Group is an exemplary corporate citizen with its corporate structure, approach to sustainability and the practices it follows in this direction, its production approach that is oriented towards continuous improvement and innovation, and with its responsible and accountable management system that attaches importance to open communication.



OYAK MINING METALLURGY GROUP CARES ABOUT FACTORS SUCH AS QUALITY OF LIFE, LEVELS OF PROSPERITY, ECONOMIC COMPETITIVENESS, EMPLOYMENT AND THE CONTINUITY OF THE ECOSYSTEM IN ITS PRODUCTION ACTIVITIES.

Erdemir and İsdemir, which aim to be among the leading institutions in sustainability, shape their sustainability strategy on four basic principles:

- Integrating sustainability into all business processes, starting from the procurement stage and including sales and after-sales services,
- Reducing the environmental footprint, while producing value added products,
- Providing sustainable production conditions, which consider raw material efficiency, aim to reduce emissions and which prioritize occupational health and safety,
- Supporting continuous development by creating social value for all stakeholders

OYAK Mining Metallurgy Group, which takes responsibility for sustainability in every field, cares meticulously about factors such as quality of life, levels of prosperity, economic competitiveness, employment and the continuity of the ecosystem in its production activities.

OYAK Mining Metallurgy Group's Sustainability Strategy, which takes into account environmental and social realities in addition to financial power, defines the performance, which complements each other in these three areas, as the basic corporate focal point.

Sustainable Development Goals and OYAK Mining Metallurgy Group

The Sustainable Development Goals that followed the Millennium Development Goals (MDGs), which were aimed at development in the field of sustainable development and combating poverty in the wake of the Millennium Declaration in 2000, were accepted by 195 member countries of the United Nations (UN).

The 17 Sustainable Development Goals that were determined are made up of 169 (targets) sub headings. The Transforming Our Earth: The 2030 Agenda for Sustainable Development agreement, which regulates these goals, has broadened the dimensions of the sustainability goals.

OYAK Mining Metallurgy Group has determined its sustainability agenda on the basis of the Sustainable Development Goals and the World Steel Association's sustainability indicators, within the scope of the goals, which command a key position both for the current conditions of the world as well as its future.

The Group accepted the 6th, 7th, 8th, 9th, 12th, 13th and 15th goals, which directly concern its operations as a matter of priority, while believing that all of the Sustainable Development Goals are of

importance for the environment, human life and the healthy progress of society. Within the scope of ordinary dialogue and communication with the stakeholder groups, OYAK Mining Metallurgy Group Sustainability Directorate conducted the determination of the goals and they were included in the Group's agenda.

In 2017, Erdemir and İsdemir intensified their efforts towards meeting the Sustainability Goals, which was determined in 2016, believing they would boost the value they create and widen the impact they will bring in terms of sustainability. The Group, which works to use energy, water and other natural resources more effectively and efficiently through the environmental sustainability activities that it carries out at its facilities, continued its research and studies on projects that place importance on minimizing carbon emissions and waste.

SUSTAINABILITY PRINCIPLES OF OYAK MINING METALLURGY GROUP



SDG 6: CLEAN WATER AND SANITATION

Goal:
Resetting water footprint, reducing wastewater discharge.

Action:
OYAK Mining Metallurgy Group, water is used not just in processes and for cooling but also to manage air emissions. The Group seeks to maximize the recirculation of water that has been used in its primary production processes. To a substantial degree, such water is treated and subsequently reused for other purposes.

OYAK Mining Metallurgy Group constantly monitors and manages the parameters of all waste water released into the receiving environment. Samples that are collected at regular intervals during this monitoring process are sent to accredited laboratories for analysis, the results of which are duly reported to authorities.

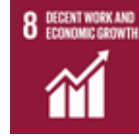


SDG 7: AFFORDABLE AND CLEAN ENERGY

Goal:
Achieving a self-sustaining structure in electrical energy.

Action:
OYAK Mining Metallurgy Group keeps a close watch on technological developments that will improve energy efficiency and it adapts innovative practices to its own business processes. The Group develops and carries out projects aimed at reducing energy losses at its companies and seeks to derive maximum benefit from by-products gases and from waste heat. By-product fuels rather than primary energy resources are exploited as much as possible in the Group's operational processes.

In order to maximize their energy efficiency, the conduct of operations at OYAK Mining Metallurgy Group companies, Erdemir and İsdemir, is subject to an "Energy Management Process" specification that is covered by TS ISO 50001 Energy Management System certification.



SDG 8: DECENT WORK AND ECONOMIC GROWTH

Goal:
Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

Action:
OYAK Mining Metallurgy Group believes that having superior-quality human resources enables it to focus more strongly on its corporate objectives and that enhancing the added value of its employees allows it to contribute more easily to sustainable economic growth.

Believing that personnel who are capable of creating and sharing knowledge, who are open to development, who have responsibility, who come up with solutions, and who are team players are the most important cornerstones of economic growth, the Group supports its employees' continuous development.

Human resources policies and processes at OYAK Mining Metallurgy Group are managed by specialized units; employees are encouraged to take part in management processes; practices are developed that will allow employees to share ideas which are innovative and which will make a difference.



SDG 9: INDUSTRY, INNOVATION AND INFRASTRUCTURE

Goal:
Reducing greenhouse gas emissions by developing high-strength steel.

Action:
Among the many projects being carried out at OYAK Mining Metallurgy Group R&D Center, particular attention is given to the new-generation steels that have a wide range of applications in the automotive industry. These projects focus on equipping steels with new high-resilience and other advanced features for addition to the group's product line. The use of thinner steel sheets with higher strength enables reductions in CO₂ emissions in the automotive sector. Therefore, the main goal of OYAK Mining Metallurgy Group, as in the whole world, is the development of advanced high strength steels and bringing them into use.

The compliance of flue gas emissions at OYAK Mining Metallurgy Group plants with mandated limits is constantly monitored by means of Continuous Emission Measurement Systems (CEMS) and reported directly to the Ministry of Environment and Urbanization's database network.



SDG 12: RESPONSIBLE CONSUMPTION AND PRODUCTION

Goal:

Creating economic value and enabling savings in natural resources by recycling all waste generated from the processes.

Action:

OYAK Mining Metallurgy Group engages in a variety of activities in order to minimize waste discharge and to maximize waste recovery. Waste which cannot be recycled is turned over to licensed firms in accordance with laws and regulations.

The Group develops projects with the aim of recovering waste for use as by-products and/or as alternative raw materials for other industrial applications. Foremost among these projects is one that makes use of steelmaking slag resulting from Group companies Erdemir and Isdemir operations as a by-product in road construction and as an alternative raw material in the cement-making industry.



SDG 13: CLIMATE ACTION

Goal:

- Preparing Erdemir's and Isdemir's CO₂ inventory and determining the reduction technologies,
- Monitoring international climate change developments and ensuring their integration into the Group's plans.

Action:

OYAK Mining Metallurgy Group is implementing plans and policies which are compatible with the low-carbon economy and which have the potential to make a new and global impact.

Aware of its responsibilities to combat climate change, OYAK Mining Metallurgy Group is in the midst of activities to ready itself for compliance with the economic-growth low-carbon economy CO₂ emissions requirements that are called for in the 2015 Paris Agreement.



SDG 15: LIFE ON LAND

Goal:

Protecting biodiversity and supporting local employment.

Action:

OYAK Mining Metallurgy Group collaborates with non-governmental organizations in order to develop projects aimed at the conservation of agrobiodiversity.

Aiming to bring the theme of biodiversity to the forefront in all of its companies, the Group places importance on monitoring its environmental impacts in a multidimensional manner and organizing environmental protection and improvement plans through risk identification and prevention activities to be carried out within the scope of the environmental management system. The Biodiversity Inventory project is aimed at the improvement of habitats with the theme of territorial protection and a focus on conserving biological diversity.

IN 2017, ERDEMİR AND İSDEMİR INTENSIFIED THEIR EFFORTS TOWARDS MEETING THE SUSTAINABILITY GOALS.

CORPORATE GOVERNANCE AT OYAK MINING METALLURGY GROUP

ACCOUNTABLE AND RESPONSIBLE

PRINCIPLES THAT ARE ESSENTIAL TO BE MINDFUL OF STAKEHOLDERS' RIGHTS

OYAK Mining Metallurgy Group conducts its relationships with its stakeholders on the basis of accountable and responsible management principles that are transparent, ethical, and compliant with laws and regulations. The Group regards these principles as elements of corporate governance that are essential to its ability to fulfill its responsibilities towards stakeholders and be mindful of their rights, to make effective use of resources, and to ensure the sustainability of its productive operation and of the added value that it creates for stakeholders.

Erdemir and İsdemir likewise formulate and constantly improve their corporate governance models and practices in line with this basic framework.

In 2017 Erdemir once again paid all due attention to complying with the corporate governance principles and rules mandated by CMB Corporate Governance Communiqué II-17.1 and to fulfilling its statutory responsibilities in a correct and timely manner. The company's corporate governance principles compliance report was publicly disclosed both in its 2017 annual report and on its corporate website.

https://www.oyakmadenmetalurji.com.tr/Sites/1/upload/files/Erdemir_Corporate_Governance_Principles_Compliance_Report_2017-2259.pdf



OYAK MINING METALLURGY GROUP CODE OF ETHICS AND BUSINESS CONDUCT SETS OUT RESPONSIBILITIES UNDER FOUR MAIN HEADINGS: INTEGRITY, AVOIDING CONFLICT OF INTEREST, PROTECTION OF TRADE SECRETS AND CONFIDENTIALITY, AND OUR RESPONSIBILITIES.

Structure and Formation of Board of Directors

Within the scope of Erdemir's Articles of Association, Board of Directors consists of minimum 5 and maximum 9 members to be selected by the General Assembly of Shareholders under the provisions of Turkish Commercial Code and Capital Markets Board Law. Members of Board of Directors are appointed for three years and the independent members are appointed for 1 year. The procedure applied for assembling the Board of Directors, the quorum for the meeting, the resolution and voting as well as the task, rights and powers of the Board of Directors are subject to the Turkish Commercial Code and the provisions of relevant legislation. The members of the Board of Directors are not prevented from assuming other duties outside the company.

Except the Independent Board Members, Board of Directors consists of legal persons and in 2017 the Company had two woman members who are the proxy of a legal person. The procedures for designating independent candidates and making public disclosures were completed and candidates were elected according to regulations. The established committees under the BoD functioned effectively during the year.

Number, Structure and Independence of the Committees Established Under the Board of Directors

At Erdemir an Audit Committee, an Early Detection of Risk Committee and a Corporate Governance Committee were set up so that the Board of Directors is able to perform their tasks and responsibilities more effectively. Committees' meeting schedules and their activities, and operational procedures are specified in sets of regulations that are published on the corporate websites. The decisions that such committees take are of an advisory nature and they are submitted as such to the Board of Directors, which has the final say.

One member is assigned for more than one committee due to the condition that requires the Auditing Committee to be made up of completely independent board members and the chairmen of the other committees to be comprised of the independent board members.

Frequency of Meetings of the Audit Committee: Once every three months and at least four times a year.

Frequency of Meetings of the Early Detection of Risk Committee: Once every two months and at least six times a year.

Frequency of Meetings of the Corporate Governance Committee: Once every three months and at least four times a year.

For detailed information, please see page 90-109 of OYAK Mining Metallurgy Group's 2017 Annual Report.

https://www.oyakmadenmetalurji.com.tr/Sites/1/upload/files/ERDEMIR_07_AR-2343.pdf

RISK MANAGEMENT AND CODE OF ETHICS

OYAK Mining Metallurgy Group Code of Ethics and Anti-Corruption Policy

In 2016, OYAK Mining Metallurgy Group revised the Code of Ethics and Business Conduct which sets out the standards, ethical practices and expectations that form the basis for OYAK Mining Metallurgy Group's business relations and activities, in line with changing conditions and best practices. OYAK Mining Metallurgy Group's Code of Ethics and Business Conduct apply to all of the Group companies, related third parties and employees.

OYAK Mining Metallurgy Group Code of Ethics and Business Conduct sets out responsibilities under four main headings: Integrity, Avoiding Conflict of Interest, Protection of Trade Secrets and Confidentiality and Our Responsibilities.

CORPORATE GOVERNANCE AT OYAK MINING METALLURGY GROUP

WITHIN THE SCOPE OF CORPORATE RISK MANAGEMENT PROCESSES, CORRUPTION RISKS ARE ASSESSED, CONTINUOUSLY MONITORED, AND PERIODICALLY REPORTED TO EARLY DETECTION OF RISK COMMITTEE.

The document also provides detailed coverage of issues pertaining to receiving and giving gifts as well as attendance to activities sponsored by third parties. The mechanisms created for reporting ethical violations are described in the Code of Ethics and Business Conduct. Disciplinary rules and penalties to be applied in case of violations are stated in the Disciplinary Actions Procedures.

The Anti-Corruption Policy, which applies throughout OYAK Mining Metallurgy Group, was put into practice in the first half of 2016 and the policy document was announced to all stakeholders on the Group companies' websites. According to OYAK Mining Metallurgy Group Anti-Corruption Policy; regardless of being in public or private sector, accepting or giving any cash/non-cash benefit that may be included in the scope of corruption is forbidden. It is unacceptable for any individual or organization who is in the scope of this policy to be a part of such payments under any circumstances. OYAK Mining Metallurgy Group's employees cannot be held responsible for any disruptions or delays in their business processes that may occur as a result of not making facilitation payments.

As stated in the Anti-Corruption Policy, OYAK Mining Metallurgy Group does not support illegal activities. All donations and sponsorships carried out by OYAK Mining Metallurgy Group are managed and recorded by the Head of Corporate Relations and shared with the general public. OYAK Mining Metallurgy Group is not party to any political tendency or organization and does not donate to any political parties or politicians.

Within the scope of corporate risk management processes, corruption risks are also assessed and continuously monitored. Works within this context are periodically reported to Early Detection of Risk Committee, which is composed of independent board members. At least once a year and in case of request, the Audit Committee, which is composed of independent board members, is informed about internal control environment, review and investigation activities with respect to corruption risks.

OYAK Mining Metallurgy Group Anti-Corruption Policy includes issues that need to be taken into account in the establishment and carrying out of business partnerships. Procurement transactions and sales processes at OYAK Mining Metallurgy Group are conducted within transparent principles and with consideration of objective criteria. It is essential to work with suppliers who provide added value by directly taking supply responsibility, issue their own invoices, and assume financial and legal responsibility during the procurement process of goods and services. OYAK Mining Metallurgy Group works directly with its clients. Communications with the clients are held either directly with the client's corporate authorized person or through the intermediary firms or individuals who have official representation authority. In addition to this, prior to merging with or acquiring a company; risk of corruption, internal control environment and reputation of the candidate company is carefully examined by OYAK Mining Metallurgy Group.

ALL OYAK MINING METALLURGY GROUP EMPLOYEES HAVE DUTY AND RESPONSIBILITY TO COMPLY WITH THE GROUP'S CODE OF ETHICS AND ANTI-CORRUPTION POLICY, AS DOES ANY STAKEHOLDER TO WHICH THOSE POLICIES APPLY.

OYAK Mining Metallurgy Group conducts the communication of the Code of Ethics and Anti-Corruption Policy with third parties with whom it has business relations through the company websites and periodicals. Besides, since 2016, contracts entered into with suppliers have stipulated compliance with the Code of Ethics and Business Conduct and the Anti-Corruption Policy as a condition.

OYAK Mining Metallurgy Group identifies intermediaries, suppliers or contractors who are known or suspected of giving bribes and monitors them by creating a blacklist. All business relationships are terminated with potential suppliers who are on the blacklist for suspected acts of bribery or corruption, and the process of terminating contracts with existing suppliers is initiated.

Related Code of Ethics and Business Conduct are included in the recruitment sets of those new hires in any OYAK Mining Metallurgy Group company. Also Group employees are provided with effective training practices so as to effectively enhance their awareness of and ability to deal with issues involving ethical rules and anti-corruption practices. As of May 2018, OYAK Mining Metallurgy Group's white-collar employees were provided with e-learning on the Code of Ethics and Business Conduct. In the e-learning programs, the standards of behavior, which would be expected to be demonstrated in situations that may be faced in business life, are also explained through case studies. Annually declarations of compliance with the Code of Ethics and Business Conduct are taken in an electronic platform from the Group

employees. The results are analyzed through the studies conducted jointly by the Human Resources and Internal Audit functions and action is taken when deemed necessary.

https://www.oyakmadenmetalurji.com.tr/Sites/1/upload/files/Erdemir_Etik_Kurallar_Kitapcigi_ING-1947.pdf

https://www.oyakmadenmetalurji.com.tr/Sites/1/upload/files/Erdemir_Group_Anti_Corruption_Policy-1890-2125.pdf

In 2016, OYAK Mining Metallurgy Group became a corporate member of the Ethics and Reputation Society of Turkey as part of the Group's ongoing efforts to ensure the sustainability of its Code of Ethics and Anti-Corruption Policy. Also in 2017, OYAK Mining Metallurgy Group representatives attended a seminar on "Business Integrity Country Agenda-Turkey" organized by TI (Transparency International)-Turkey, the Turkish Chapter of Transparency International. Participation in such organizations and events contributes both to ethics awareness and to business results.

Within the reporting period, OYAK Mining Metallurgy Group ranked third among A-group companies, including those with subsidiaries both in Turkey and abroad, in the "Business World Transparency System" survey, in which the areas of the Anti-Corruption Program, Organizational Transparency and Country Reporting are evaluated. The survey, conducted by the International Transparency Association, covers companies traded on the Borsa Istanbul.

Please refer for the Report:

<http://en.seffaflik.org/wp-content/uploads/2017/03/BICA-EN.pdf>

All OYAK Mining Metallurgy Group employees have duty and responsibility to comply with the Group's Code of Ethics and Anti-Corruption Policy, as does any stakeholder to which those policies apply. In order to ensure full compliance, a variety of Group-wise mechanisms have been installed to prevent or to identify policy breaches. Written and verbal communication channels (e-mail, post, ethics hotline) have been set up through which every stakeholder may report suspected violations and obtain explicit information about rules. All communication through these channels is subject to the Group's confidentiality principles and practices.

OYAK Mining Metallurgy Group adopts a policy that prevents attitudes and behavior, which could construed as retaliation against any employees or persons reporting an ethical violation. In 2017, reports received from the ethical communication channels were assessed sensitively through OYAK Mining Metallurgy Group Internal Audit function and were finalized in the Ethics Committee. In the ethical investigations, which were conducted during the reporting period by our Internal Audit Unit, no significant irregularities were found.

As stated in the Disciplinary Actions Procedure, the penalties to be levied against white-collar employees in the event of any violation of the Code of Ethics and Business Conduct consist

CORPORATE GOVERNANCE AT OYAK MINING METALLURGY GROUP

OYAK MINING METALLURGY GROUP ETHICS COMMITTEE IS RESPONSIBLE FOR THE DISSEMINATION AND UNDERSTANDING OF THE CODE OF ETHICS AND BUSINESS CONDUCT.

of warnings and termination of the employment contract. The Ethics Committee determines the penalty deemed necessary following an investigation and assessment of the issue by the Internal Audit Unit. The penalties and procedures to be applied against blue-collar workers are set out in the Collective Labor Contract (CLC).

OYAK Mining Metallurgy Group Ethics Committee has the highest authority to ensure compliance with the Code of Ethics and Anti-Corruption Policy throughout the Group and to resolve incompliances. Ethics Committee consists of the Chairman of the Board of Directors and the Managing Director, top managers of Group Human Resources and Group Legal Departments. Head of Internal Audit acts as the secretary of the Ethics Committee. OYAK Mining Metallurgy Group Ethics Committee is responsible for the dissemination and understanding of the Code of Ethics and Business Conduct, updating them when deemed necessary, examining any reports of violations and making decisions in accordance with the disciplinary actions procedure.

Ethics Committee decides by a majority vote, and in the event of a tied vote, the outcome shall be determined by the decision of the Chairman of the Committee. The Committee's decisions are recorded and archived by the Head of Internal Audit.

Internal Audit System

OYAK Mining Metallurgy Group Internal Audit Unit conducts risk-based audit activities to provide the Board with an objective and independent assurance of whether the systems of risk management, internal control and governance processes, designed and implemented by the management, is adequate and effective. The purpose, authority and responsibilities of the Internal Audit Department were determined with the Internal Audit Charter. The Internal Audit Department, which is in charge of evaluating OYAK Mining Metallurgy Group companies' risk management, control and governance processes and improving them, reports directly to the Chairman of the Board of Directors and the Managing Director.

In accordance with the relevant communiqué of the Capital Markets Board (CMB), the effectiveness of the internal control system is assessed at least once a year by the Board of Directors. In this context, the Internal Audit Department regularly informs the Audit Committee, which consists of independent members of the Board of Directors, about the internal audit activities.

During the audits, any risks, which may be related to corruption within the relevant units and processes, are addressed in detail. It is ensured that actions are taken to strengthen the internal control environment. Within the scope of the audits carried out during 2017 in the various business processes of the 4 Group companies, which were included in the audit program, corruption risks were assessed and no case of corruption was found.

ERDEMİR INCREASED ITS CORPORATE GOVERNANCE RATING FROM 9.02 IN 2016 TO 9.22 IN 2017 IN THE CORPORATE GOVERNANCE PRINCIPLES COMPLIANCE RATING REPORT, WHERE ITS COMPLIANCE WITH CORPORATE GOVERNANCE PRINCIPLES WAS EVALUATED.

The Internal Audit Department conducts examinations and investigation activities related to the issues that constitute irregularity with OYAK Mining Metallurgy Group Code of Ethics and Business Conduct and the Anti-Corruption Policy. The Audit Committee, which consists of independent members of the Board of Directors, is regularly informed of the activities carried out by the Internal Audit Department and the results thereof.

Policies and Regulations Adopted by OYAK Mining Metallurgy Group

The policies and regulations improved by OYAK Mining Metallurgy Group in various and, which are put into practice in the related units are as follows:

- Code of Ethics and Working Principles and Anti-Corruption Policy
- Public Disclosure Policy
- Compensation Policy
- Donations and Contribution Policy
- Staff Compensation Policy
- Dividend Distribution Policy
- Audit Committee Regulation
- Corporate Governance Committee Regulation
- Early Detection of Risk Committee Regulation

Please see for detailed information:

<https://www.oyakmadenmetallurji.com.tr/homepage#/investor-relations/corporate-governance/policies-and-regulations/>

OYAK Mining Metallurgy Group has also published comprehensive policies concerning human resources, occupational health and safety, management systems.

Corporate Governance Rating Note

Erdemir, an OYAK Mining Metallurgy Group company, increased its corporate governance rating from 9.02 in 2016 to 9.22 in 2017 in the Corporate Governance Principles Compliance Rating Report, for which it first applied in 2015 and where its compliance with Corporate Governance Principles was evaluated. With this successful achievement, Erdemir has once again been qualified for inclusion in the Corporate Governance Index, proving that it is a transparent, fair, responsible and accountable institution.

Kobirate International Credit Rating and Corporate Governance Services Inc., with his authorized by the Capital Markets Board in Turkey (CMB) and which carries out the rating activities of companies included in the Corporate Governance Index of the Stock Exchange Istanbul (BIST), prepared Erdemir's Corporate Governance Principles Compliance Rating Report.

The report states that Erdemir's compliance with the Corporate Governance Principles published by the Capital Markets Board (CMB) has been meticulously adopted, public disclosure activities and transparency are at a high level, and the rights of shareholders and stakeholders are fairly observed. In the report, which also recognizes that the structure and working conditions of the Board of Directors are compliant with the Corporate Governance Principles, it was stated that Erdemir deserved a place in the BIST Corporate Governance Index at the highest level.

STAKEHOLDERS AND STAKEHOLDER RELATIONS

STAKEHOLDER PARTICIPATION

OYAK MINING METALLURGY GROUP'S STAKEHOLDER COMMUNICATION CHANNELS INCLUDE DIFFERENT FORMATS.




OYAK Mining Metallurgy Group conducts open, honest and sincere communication with all of its stakeholders.

The communication that OYAK Mining Metallurgy Group has established with its large stakeholder group and the feedback it has obtained in this context provide a highly valuable contribution in determining the corporate strategic priorities and development of business policies in addition to creating a very valuable source of information on how the Group is perceived externally, as well as in brand recognition and awareness.



Stakeholder participation in OYAK Mining Metallurgy Group, which has open, honest and involved a sincere dialogue with all of its stakeholders, includes different formats, such as the surveys that are conducted with customer groups in order to determine different needs and expectations, and periodic meetings held with employees, NGOs and shareholders.

ERDEMİR AND İSDEMİR ESTABLISHED AN OPEN LINE OF COMMUNICATION BETWEEN THE INSTITUTION AND THE EMPLOYEES TO REVEAL TEAM SPIRIT, TO CONTRIBUTE TO THEIR MOTIVATION AND TO SHARE KNOWLEDGE.

Stakeholder Groups, Communication Channels and Stakeholder Participation

Stakeholder Groups	Communication Channels and Stakeholder Participation
<p>Employees</p> 	<p>Erdemir and İsdemir use different communication channels to learn the expectations of their employees, to introduce means to meet their communication needs in line with their expectations, to establish an open line of communication between the institution and the employees, to reveal team spirit and to maintain the understanding of "us", to reinforce employees' sense of belonging, to contribute to their motivation and to share knowledge.</p> <ul style="list-style-type: none"> <li>· The opinions, suggestions and feedback communicated to the system through various means such as face-to-face interviews within the scope of performance system, suggestion systems, the Ethics Committee and Corporate Reputation Survey by the employees are considered to be important sources of information and development needs are turned into opportunities. <li>· Çelikten Gelecek (the Future from Steel) newspaper, distributed throughout the Group, raises employees' awareness of the developments in the Group. It also allows the success of employees and their social activities to be spread throughout the Group. <li>· Intranet - Steel Portal, an internal communication channel, shares the information that may be needed, such as the Group's agenda, internal news and developments, HR applications, manager messages, weather forecast by location, menu list, idea pool, personal announcements and phone list in addition to special days like employees' birthdays, and anniversaries. <li>· Erdemir TV has been serving as an innovative communication means throughout the Group since 2015. The Erdemir Group TV features institutional developments, activities and novelties aimed at employees, management messages, health and OHS topics and general cultural programs. <li>· Personnel-oriented events such as Company anniversaries and New Year's celebration are used to strengthen and foster inter-employee communication and to contribute to general motivation and morale.

STAKEHOLDERS AND STAKEHOLDER RELATIONS

<p>Potential Employees</p> 	<p>Erdemir and İsdemir, who are working to bring new talent to the institution:</p> <ul style="list-style-type: none"> · Take part in universities' career days and other events in order both to solicit students' opinions and to effectively promote OYAK Mining Metallurgy Group by this way. · Use social media, traditional media and websites to provide timely information about the Group. · Accept job queries and applications through their websites. · The Company's brand perception is systematically measured through Corporate Reputation Surveys.
<p>Customers</p> 	<p>In their capacity as much-in-demand sources of steel-industry products and services, both Erdemir and İsdemir engage in close communication with their customers through an extensive and specialized industry-based marketing and sales network in order to address the widely diversified needs and expectations, which their customers have.</p> <ul style="list-style-type: none"> · Erdemir engage with their customers through individual meetings, visits and satisfaction surveys in order to discover customers' wishes and expectations and to improve product and service quality in line with changing market conditions and demands. Customer complaints from Erdemir and İsdemir are collected through "Erdemir online" Erdemir Group portal. Upon receipt, such complaints are examined by the after sales service unit on location, issues which are in need of correction are identified, action is taken as necessary and problems are resolved as expeditiously as possible by the units in cooperation with the quality groups. · Customers are provided with whatever information they may require not only by means of product catalogues, technical information visits and plant tours but also through technical training programs related to steel and steel usage, which are organized in line with needs. Support is given to local and international clients by participating in the design phase of new projects. · Customer-oriented events such as "Industry Days" are staged; customers are kept informed about developments through corporate websites.

Shareholders, Investors and Analysts



Relations with shareholders, institutional investors and analysts are conducted so as to systematically support Group companies' brand value.

- Erdemir shares are traded on the "BIST Star" equity market. Whenever Erdemir receives written or verbal requests for information from its shareholders, it responds to them without delay through its investor relations unit and in accordance with capital market laws and regulations. Also, information requests about İsdemir, whose shares have been trading on Borsa İstanbul's Pre-trading Platform, are responded by investor relations unit.
- Material events are announced as soon as they transpire through the Public Disclosure Platform.
- Corporate websites are used to publicly disclose corporate governance compliance reports, annual reports, investor presentations and material events in both the Turkish and English languages.
- Shareholders may forward any requests for information or suggestions they may have to the Company through its investorrelations@erdemir.com.tr e-mail address.
- Matters included in agenda, which are shared with shareholders before the General Assembly Meeting, is decided at General Assembly Meeting.
- Company representatives take part in roadshows and conferences and conduct investor meetings.

Suppliers



In their dealings with their suppliers, both Erdemir and İsdemir take a relational development approach that creates value for Group and all the parties involved.

- For the procurement of all their outsourced products and services, both companies communicate clearly with their suppliers in a variety of ways that include face-to-face meetings.
- Company representatives visit suppliers' premises.
- Corporate websites are used to keep suppliers informed about current developments, to publish annual and sustainability reports and to provide information about yearly economic, environmental and social activities.



STAKEHOLDERS AND STAKEHOLDER RELATIONS

Media




A close and open dialogue approach with local and regional media organizations is adopted with the principle of effective and sustainable communication in order to demonstrate and convey OYAK Mining Metallurgy Group's stance, its perspective and attitude in the face of any event- situation, and to contribute to the Group's reputation in the best possible way. The Group works to the principle of sharing accurate, transparent and up-to-date information with the media in a timely and understandable manner.

- Newsworthy developments about the Group and Group companies are disclosed through media press conferences, interviews, press releases and tours of plant facilities.
- Corporate websites provide access to press releases, annual and sustainability reports and social media platform developments.
- Questions from the press are responded to verbally and in writing.
- Corporate Reputation Surveys are conducted in order to determine media concerns' perceptions about the Group and its members.
- The Environmental Impact Assessments (EIA) that are conducted before undertaking new investments are announced through media, whose representatives are invited to take part in EIA hearings.

<p style="text-align: center;">Society</p> 	<p>As a corporate citizen, which values society and people, OYAK Mining Metallurgy Group is primarily concerned with developing and maintaining good relations with the society.</p> <ul style="list-style-type: none"> · Socially beneficial activities and projects are undertaken. · Corporate websites and social and other media channels are used to provide timely information. · The Group's brand perception is systematically measured through Corporate Reputation Surveys. · EIA meetings that are conducted before new investments are undertaken are open to the public.
<p style="text-align: center;">NGOs</p> 	<p>In order to create common platforms, to deal with common strategic issues and to develop solutions to existing problems-OYAK Mining Metallurgy Group enters into and maintains relations with national-level non-governmental organizations such as coalitions, associations and professional/industrial chambers.</p> <ul style="list-style-type: none"> · Group representatives join such organizations, take part in their management and attend their meetings and play active roles in their working groups. · Group representatives attend NGOs' presentations and conferences, exchange knowledge and experience with them and take advantage of learning opportunities. · Information about current developments is made available through OYAK Mining Metallurgy Group corporate websites. · Representatives of NGOs are invited to attend the public EIA meetings that are conducted before new investments are undertaken. · The Group's brand perception is systematically measured through Corporate Reputation Surveys.

STAKEHOLDERS AND STAKEHOLDER RELATIONS

<p style="text-align: center;">Public Agencies and Organizations</p> 	<p>OYAK Mining Metallurgy Group believes that it is important to maintain good relations with public agencies and organizations in accordance with the requirements of laws and regulations and the rules of ethical conduct.</p> <ul style="list-style-type: none"> · All reporting and disclosures are carried out as mandated by laws and regulations. · Group representatives attend meetings to deal with industry-related problems. · Public agencies' and organizations' requests for information, opinions and recommendations are responded to. · Information about current developments is made available through OYAK Mining Metallurgy Group corporate websites. · Public agencies and organizations are invited to send representatives to attend the public EIA meetings that are conducted before new investments are undertaken. · The Group's brand perception is systematically measured through Corporate Reputation Surveys.
<p style="text-align: center;">All Stakeholders</p> 	<p>OYAK Mining Metallurgy Group and Group companies attach importance to organizing the web pages in a manner that allows easy access to any information that their stakeholders may request. As the face of companies opening to the outside world, corporate internet websites allow visitors to access information that they are looking for quickly and in a practical manner with their simple interface and user-friendly design.</p> <p>The Group's corporate websites contain forms and email addresses (iletisim@erdemir.com.tr, grupiletisim@erdemir.com.tr, info@isdemir.com.tr) which all stakeholders may use to submit requests, suggestions, opinions and complaints about general and specific issues such as Erdemir's and Isdemir's business processes, environmental performance, etc. Requests and feedback received through these channels are directed to the appropriate company units and dealt with.</p> <p>OYAK Mining Metallurgy Group Code of Ethics and Business Conduct a document that is published on the Group's corporate websites also provides stakeholders with information about how matters that are contrary to Group companies' rules and/or deemed to be unethical may be reported to ethics committees and/or their advisors.</p>

Initiatives, Associations and Chambers

The main initiatives, associations and chambers in which OYAK Mining Metallurgy Group is a member, are listed below.

- International Chamber of Commerce Turkish National Committee

- World Energy Council Turkish National Committee (WEC-TNC)

- World Steel Association (worldsteel)

- The European Steel Association (EUROFER)

- İstanbul Chamber of Industry

- Turkish Steel Exporters' Association

- Turkish Steel Producers Association

- Corporate Governance Association of Turkey

- Turkish Ethics and Reputation Society

- Turkish Investor Relations Association

- Turkish Quality Association

- People Management Association of Turkey

- Turkish Marine Environment Protection Association (TURMEPA)

- Transparency International

Besides participating in TOBB's (The Union of Chambers and Commodity Exchanges of Turkey) Climate Change and Environment Committee, OYAK Mining Metallurgy Group is also a member of the Greenhouse Gas Mitigation Working Group set up by the Republic of Turkey Ministry of Environment and Urbanization.

In addition, actively participating in the work groups of the Business World and the Sustainable Development Association, OYAK Mining Metallurgy Group will be represented in the association in 2018 with 4 people in the fields of Energy, Cycle Economy, New Technologies in Sustainability, Finance and Reporting.

OYAK MINING METALLURGY GROUP JOINS SUCH ORGANIZATIONS, TAKES PART IN THEIR MANAGEMENT AND ATTENDS THEIR MEETINGS AND PLAY ACTIVE ROLES IN THEIR WORKING GROUPS.

SUPPLY CHAIN MANAGEMENT

ADDING VALUE TO SUPPLIERS

OYAK MINING METALLURGY GROUP'S SUPPLY POLICY ADDS VALUE BOTH TO THE GROUP AND TO SUPPLIERS.



Supplier relations management at OYAK Mining Metallurgy Group contributes to both to the development of Group companies and to environmental sustainability.

At Erdemir and İsdemir, the timely supply of raw materials, auxiliary raw materials and other consumable materials at the requested quality, which are required for production in line with the needs of the plants, is vital. Procurement processes aim to ensure that alternative products and services contribute to the development of the Group companies as well as meeting their needs and demands.

The Group's purchasing activities are undertaken by the Purchasing Units. The Procurement Units that carry out these activities, which require a multifaceted and comprehensive plan, serve as a bridge between internal customers and suppliers.

A supply policy that adds value to suppliers as well as the Group

OYAK Mining Metallurgy Group, which has a diverse and comprehensive supplier portfolio, adds value both to the Group and to suppliers in the process of supplying goods and services. It aims to provide a high level of benefit in terms of cost, quality and time.

OYAK MINING METALLURGY GROUP TAKES THE GREATEST CARE TO ENSURE THAT THE SENSITIVITY IT SHOWS TO THE ENVIRONMENT IS ALSO SHARED BY SUPPLIERS.

THE GROUP SELECTS SUPPLIERS WHO RESPECT THE ENVIRONMENT, WHO PAY ATTENTION TO THE ENVIRONMENTAL ISSUES, AND WHO ATTACH IMPORTANCE TO SUSTAINABILITY IN ALL TRANSACTIONS.

OYAK Mining Metallurgy Group takes the greatest care to ensure that the sensitivity it shows to the environment is also shared by suppliers. The Group, which communicates this sensitivity to candidate suppliers, selects suppliers who respect the environment, pay attention to the environmental issues, attach importance to sustainability in all transactions starting from the supplied material during the course of the procurement process and take action in this regard.

Information regarding OYAK Mining Metallurgy Group's supplier relations and strategies include the following processes.

Supplier strategies

Within the framework of the strategies determined by the joint studies carried out with international consultancy companies, supplier classification is carried out by examining their market positions.

Supplier application process

Purchasing transactions at OYAK Mining Metallurgy Group which exceed certain limits are published on the e-procurement platform until the end of their bidding period, in accordance with the Group's Transparency Policy.

Companies who wish to give a quotation are able to apply by filling in the required

information according to the purchasing type, by entering the supplier application section on the platform.

Suppliers in the position of submitting a quotation and with whom the purchasing process is ongoing are expected to comply with the ethical values set out in OYAK Mining Metallurgy Group's corporate website during the quotation collection process.

Companies complying with the criteria are registered in the supplier portfolio once they obtain the necessary approvals. The supplier application and portfolio management processes are subjected to improvements within the scope of the supplier evaluation project.

Main procurement categories

Purchases at OYAK Mining Metallurgy Group are carried out in the following main supply categories;

- raw materials,
- materials,
- services,
- project based work

In line with the type of purchase, many criteria are taken into consideration from the financial status of the suppliers to the number of employees, the quality certificates they hold and their capacities.

SUPPLY CHAIN MANAGEMENT

AT OYAK MINING METALLURGY GROUP, POTENTIAL SUPPLIERS ARE IDENTIFIED THROUGH PARTICIPATION IN SECTORAL CONFERENCES, FAIRS AND EVENTS.

Visits to suppliers

During supplier visits, which are conducted depending on the importance of material types, detailed investigations are carried out and every stage is observed, from the material production processes to the quality control systems.

Efforts to expand the supplier portfolio

At OYAK Mining Metallurgy Group, activities to search for new suppliers are carried out for the products in order to ensure supply security. To this end, potential suppliers are identified through participation in sectoral conferences, fairs and events. Potential suppliers are brought to the supplier status if they achieve success in the trial period.

Supplier risk analysis

As sustainability in supply bears vital importance for the production cycle, the Group closely follows market developments and sector publications, and risk analysis is carried out by continuously liaising with suppliers, with action plans prepared when necessary.

Within this context, in 2017, risk assessments in terms of legal, ethical, financial status, geopolitical and corporate aspects, and the improvement plan work, were carried out for 203 suppliers.

Supplier performance evaluations

Supplier performances are systematically monitored at OYAK Mining Metallurgy Group. In addition to sustainability, suppliers are evaluated under the headings of price, quality, delivery and market power, and are classified based on their scores. Within the scope of this scoring;

- The Group does not work with class D suppliers,
- Improvement plans are prepared for class C suppliers,
- Verbal-written warnings are given to Class B suppliers, stipulating measures they are required to take,
- The Group continues to work with Class A suppliers without taking any action.

OYAK Mining Metallurgy Group conducted over 11,250 companies' supplier performance evaluations.

Improvement activities carried out jointly with the suppliers

Various projects are implemented in cooperation with suppliers and OYAK Mining Metallurgy Group's technical teams in order to improve material performance and reduce occupational health and safety risks.

OYAK MINING METALLURGY GROUP EVALUATES THE VARIOUS CRITERIA OF SUPPLIERS ON SUSTAINABILITY STRATEGIES AND DETERMINES WHETHER OR NOT INVESTMENTS HAVE BEEN CARRIED OUT IN THIS FIELD.

An extensive supplier evaluation list

OYAK Mining Metallurgy Group also encourages its suppliers to apply methods aimed at the “sustainable steel” philosophy.

The Group evaluates the various criteria of suppliers with the evaluation list prepared for integrating the priority issues within the scope of sustainability strategies with the procurement processes.

These criteria include the following,

- The environment, OHS and energy management systems,
- The human rights policy and the practices in this regard,
- Transportation of hazardous materials
- Studies carried out regarding the environment and energy efficiency,
- Capacity and references
- Sustainability strategies and determining whether or not investments have been carried out in this field

Applications with regard to fuels used by ships

One of the important applications for suppliers at OYAK Mining Metallurgy Group concerns the content of the fuel used by the ships. Within the framework of “International Convention for the Prevention of Pollution from Ships

(MARPOL) Annex VI”, ships must use fuels that do not contain more than 0.10% sulphur at the borders of the Emission Control Zones (ECA Zone).

The sulphur content, which is set at a maximum of 3.50% for non-ECA Zones, will be reduced to 0.50% from 1 January 2020.

In the contracts which it enters into with suppliers, OYAK Mining Metallurgy Group stipulates that the ships used in operations hold certifications for their international quality and standards, such as the “International Oil Pollution Prevention Certificate (IOPP)”, and that the certificates should remain valid.

The key environmental measures taken and applied on the MV Fortune Express ship, which is leased by OYAK Mining Metallurgy Group, were as follows,

- Efforts are ongoing to reduce the ship’s carbon footprint thanks to achieving efficiency obtained as a result of fuel savings provided after the LED lighting conversion.
- Sulphur emissions are reduced by maximizing combustion efficiency through correct and appropriate planned maintenance procedures.
- Fuel consumption is limited by keeping the chimney boiler in operation when the ship is at sea, thereby continuing reductions in sulphur emissions.
- The use of low-sulphur MGO (Marine Gasoil) minimizes carbon emissions.

THE GROUP ENCOURAGES ITS SUPPLIERS TO APPLY METHODS AIMED AT THE “SUSTAINABLE STEEL” PHILOSOPHY.

IDENTIFYING PRIORITIES

IN IDENTIFYING SUSTAINABILITY PRIORITIES OYAK MINING METALLURGY GROUP DEPLOYS TABLE-TOP ANALYSIS METHODOLOGY.

OYAK Mining Metallurgy Group categorizes its sustainability priorities under three main headings: “Economic”, “Environmental”, and “Social”.

The Group’s sustainability approach addresses the issues of establishing economic and business continuity, ensuring employee satisfaction through labor and manpower practices, safeguarding employee rights in ways that are mindful of human rights, contributing to the society of which it is a member, engaging in safe and secure production operations, managing customer and supplier relations ethically and fairly, and reducing environmental impact.

The process of identifying sustainability priorities and drawing up related plans for the future were carried out in OYAK Mining Metallurgy Group as part of work taking place on three different axes by deploying the table-top analysis methodology.

- Feedback pertaining to primary sustainability categories, which was received by units that interact with external stakeholders (customers, suppliers etc.) which they forwarded to Group management and Sustainability Directors.
- Wishes, expectations and opinions expressed by employees through various channels,
- Feedback received from NGOs and their representatives.



TOPICS DIRECTLY RELATED TO OYAK MINING METALLURGY GROUP'S BUSINESS ACTIVITIES WERE EMPHASIZED IN THE DETERMINATION OF PRIORITIES.

In the determination of priorities, the following topics were emphasized; directly related to OYAK Mining Metallurgy Group's business activities, deemed to be important by core stakeholder groups, capable of having an impact on stakeholders with whom the Group interacts or might interact.

The results found from the prioritization work are targeted to be inputted to many topics such as OYAK Mining Metallurgy Group's determination of strategies in the upcoming period, improving service processes and the development of new products.

In the period ahead, OYAK Mining Metallurgy Group intends to manage these and similar issues by conducting broad-based focus-group meetings and surveys at regular intervals.

OYAK MINING METALLURGY GROUP'S SUSTAINABILITY PRIORITIES



ECONOMIC

- Economic Performance and Profitability
- Ethical Management and Full Compliance with Laws
- Continuous Improvement of Financial and Operational Performance
- R&D and Innovation Management



ENVIRONMENTAL

- Environmental Investments
- Waste Management
- Bringing Waste into the Economy
- Water Management
- Reduction of Emission
- Compliance with Environmental Legislation
- Energy Efficiency
- Life Cycle Assessment and Resource Efficiency Studies
- Ecolabelling
- Climate Change and Energy Management
- Biodiversity



SOCIAL

- OHS Practices
- Career and Human Resources Planning
- Contribution to Society Development through CSR Projects
- Customer Satisfaction

SUCCESSFULLY



OYAK MINING METALLURGY GROUP
HAS CONTINUED TO SUCCESSFULLY
RAISE ITS COMPETITIVE POSITION
BY CONTINUING THE OPERATION,
MAINTENANCE AND MODERNIZATION
ACTIVITIES IN ALL OF ITS UNITS.



HIGHEST FINAL PRODUCT OUTPUT

IN 2017, THE GROUP'S YEAR-END TOTAL PRODUCTION OF FLAT FINAL PRODUCTS REACHED A RECORD 7.7 MILLION TONS.



OYAK Mining Metallurgy Group carried its competitive clout to ever higher levels in 2017.

Erdemir and İsdemir, which continues its modernization and improvement activities in line with its principle of high quality production, once again increased its production and productivity in 2017 and closed the year with new production records.

The Group has continued to successfully raise its competitive position by continuing the operation, maintenance and modernization activities in all of its units.

Crude steel production of 9.2 million tons in 2017

In 2017, OYAK Mining Metallurgy Group, which alone produced 25% of the crude steel in Turkey, realized crude steel production of 9.2 million tons.

The capacity utilization rate at Erdemir and İsdemir stood at 97% in 2017. The labor time spent for final product production stood at as 2.64 man-hours per ton at Erdemir and 1.82 man-hours per ton at İsdemir.

In 2017, OYAK Mining Metallurgy Group realized its highest ever final flat steel product output, at 7.7 million tons.

In 2017, Erdemir produced 4.5 million tons of flat products, including 2.6 million tons of hot steel and 1.8 million tons of cold steel. With the production of 3.2 million tons of hot products produced by İsdemir,

IN 2017, OYAK MINING METALLURGY GROUP, WHICH ALONE PRODUCED 25% OF THE CRUDE STEEL IN TURKEY, REALIZED CRUDE STEEL PRODUCTION OF 9.2 MILLION TONS.

ECONOMIC PERFORMANCE

the Group's year-end total production of flat final products reached a record 7.7 million tons.

In 2017, OYAK Mining Metallurgy Group produced 1.3 million tons of long final products, including 0.7 million tons of billet and 0.6 million tons of coil.

OYAK Mining Metallurgy Group ports handled 26.4 million tons of products in 2017.

In 2017, a total of 26.4 million tons of handling were performed at Erdemir and İsdemir ports, of which 3 million tons were for third parties. As of the end of 2017, the Group's port revenues stood at approximately USD 19 million.

Approximately 0.8 million tons of the 10.7 million tons of handling services carried out at the Erdemir Port were provided to the third parties. The amount of products handled in 2017 was the highest for 9 years, with total handling revenues of USD 7.9 million.

The handling services offered at the İsdemir Port amounted to 15.7 million tons in total, including 2.1 million tons for third parties and handling revenues of approximately USD 11 million.

Continuing to exceed customer expectations

With its customer-focused approach, product quality and continuously developed product range, OYAK Mining Metallurgy Group continued to meet the expectations of its customers at the top level in 2017 as well.

The Group also continued its investment activities aimed at reducing the dependence of Turkish industry on imports. With the commissioning of the galvanizing line in 2018, the Group will be supporting the automotive industry by domestically producing wide galvanized materials, which are vital for the sector, while at the same time it will mean materials which had been imported will now be produced in Turkey.

In addition, in 2017 the Group also commenced work to establish a heat treatment plant for the production of high value-added and abrasion resistant steels.

More growth in sales volumes

The Group carries out effective marketing, sales and distribution activities. By ensuring the desired shipment volume at the desired time, the Group remains an important ring of the supply chains of the customers by meeting the customers' demands for specially sized products through the four Steel Service Centers located in Ereğli, Gebze, Manisa and İskenderun.

Erdemir and İsdemir which sold 8.96 million tons of final products in 2017, added 14 new flat steel grades to its product range.

OYAK Mining Metallurgy Group recorded a 10% YoY increase in exports in 2017, exporting 1.2 million tons to 45 countries over a wide geographical area extending from South America to the Middle East and North Africa.

INNOVATION MANAGEMENT

CUSTOMER RELATIONS MANAGEMENT

STRONG RELATIONSHIPS

OYAK MINING METALLURGY GROUP CONTINUES ITS OPERATIONS WITH A BUSINESS APPROACH THAT IS FOCUSED ON BUILDING STRONG RELATIONSHIPS WITH CUSTOMERS.



Customer-focused business management

Today's changing world and developments in the shifting economic order calls for drastic changes in the conceptual field. In a world of rapid change, traditional ways of doing business have given way to multidimensional relationship management, positioning the customer at the heart of this cycle.

In this context, Customer Relationship Management (CRM) is becoming a tool for businesses to find customers in an increasingly competitive environment, to retain these customers, to make them loyal customers and to increase profitability ratios in the relations established with these customers.

Having a customer portfolio that is composed of a range of industries and users, OYAK Mining Metallurgy Group determines customer needs and expectations in a timely and accurate manner with the Customer Relationship Management that it applies and achieves a competitive advantage by setting itself apart with its products and services.

The Group continues its operations with a business approach that is focused on adding value to its customers and building mutually sustainable and strong relationships with each other.

Aiming to keep customer satisfaction and loyalty high at all times, OYAK Mining Metallurgy Group attaches importance to its customers, establishes strategies based on the information it gains through its efforts to get to know them more closely, ensures that all customers are a part of the process and differentiates itself from its competitors with its long-standing experience, international know-how and market knowledge.

OYAK MINING METALLURGY GROUP EXAMINES ITS CUSTOMERS' FEEDBACK ON AN ANNUAL BASIS THROUGH THE CUSTOMER SATISFACTION AND LOYALTY SURVEY.

INNOVATION MANAGEMENT

The information, activities and processes necessary to establish long-term and lasting relationships with the customers

OYAK Mining Metallurgy Group examines its customers' feedback on an annual basis through the Customer Satisfaction and Loyalty Survey conducted by an independent research company. The aim of the survey is;

- To determine the Group's power to satisfy customers and ensure they are loyal to the organization,
- To provide advice that will help to take actions and to shed light on strategic plans by identifying the strength of the Group, the aspects it needs to protect, and areas requiring improvement,
- To determine progress in various dimensions by comparing the results of the survey with the results of past years.

After determining the areas deemed to be strong and open to improvement according to the results of the survey, action plans are prepared through meetings carried out with the relevant units. Steps are taken to effect improvements in line with the designated action plans.

OYAK Mining Metallurgy Group is one of the steel industry companies that have increased its customer satisfaction levels at most during the recent years. The Group's customer satisfaction rate which is well above the sectoral average increased 34% and 8% from its levels in 2010 and 2013 respectively.

A corporate strategy geared towards maximizing relations with the customer

OYAK Mining Metallurgy Group's product range, which has been developing constantly in recent year, has helped to increase the value offered to the customers. OYAK Mining Metallurgy Group

offers its customers and the environment thinner and safer steel at the qualities that have higher strength. The Group creates joint income opportunities by developing its customers together in conjunction with itself, while also reducing import dependency. It reduces its customers' raw material costs by offering advanced steel qualities and developing cost reduction proposals.

OYAK Mining Metallurgy Group jointly decides on the properties of the products produced from steel, within the framework of the dialogue and close communication it establishes with its customers. The Group develops steel with tailor-made characteristics depending on the area of use, and thus goes beyond being a mere producer to become a real solution partner.

INNOVATIVE SOLUTIONS

ERDEMİR R&D CENTER AIMS TO MEET THE INCREASING NEEDS AND EXPECTATIONS OF ITS CUSTOMERS WITH INNOVATIVE SOLUTIONS.

Brought to the sector by OYAK Mining Metallurgy Group and the first R&D Center to have been approved by the Ministry, the Erdemir R&D Center continues to operate successfully.

Erdemir R&D Center aims to meet the increasing needs and expectations of its customers with innovative solutions. In line with this goal, work is carried out to produce competitive, new products with high added value at reasonable cost, while searching for alternative raw material resources, identifying alternative materials and technologies that reduce costs and ensuring raw materials and energy resources can be used more efficiently.

In 2017, more competitive products could be offered to the market by achieving a cost advantage through improvements made to the production processes by the R&D Center. In addition, work to recover waste found in the production processes - one of the most important areas of improvement in the iron and steel industry - continued successfully.

A total of 32 projects have been completed in the R&D Center, which operates under four main groups; Raw Materials and Iron Production, Steel Production and Casting Technologies, Hot Products and Processes, Cold Products and Process R&D. Work on an additional 52 projects is currently ongoing.



THE R&D CENTER, WHERE INFRASTRUCTURE WORK CONTINUES, IS EXPECTED TO PROVIDE A KEY CONTRIBUTION TO THE GROUP'S CORPORATE COMPETENCIES.

Erdemir R&D Center successfully passed the audit by the Ministry of Science, Industry and Technology, which evaluated the 2nd operation period.

Erdemir's R&D Center, the first in the Turkish steel sector and approved by the Ministry of Science, Industry and Technology on August 26, 2014, successfully passed the Ministry audit carried out for the 2nd operation period.

Rapid progress in infrastructure work at the Erdemir R&D Center

The R&D Center aims to carry out all studies more quickly and with numerous repetitions, independent of the constraints placed by the production facilities, and with lower trial costs. Work to establish Raw Material and Product Development Simulation Laboratories, which were launched in this context, also continued in 2017. Some of the Phase I construction work at the R&D Center, which will be transferred out of the plant site, was completed during the year. The Phase II construction work is planned to be completed in the first quarter of 2018.

The installation and commissioning works of the experimental sinter simulator, vacuum induction furnaces and hot dip galvanizing simulator, the procurement

processes for which have now been completed, will be carried out in 2018. The tender/procurement process of the hot and cold rolling simulator has also been completed. The Erdemir R&D Center is planned to have completed its move to the new campus in the first half of 2018. The new site has an area of approximately 30 acres, where all of its laboratories will be gathered together.

The R&D Center, which will continue to provide services with an even stronger infrastructure in 2018, is expected to provide a key contribution to the Group's corporate competencies, endurance and the value proposition that it offers to its customers.

Life Cycle Assessment launched in Erdemir processes.

In line with the Group's sustainability approach, Life Cycle Assessment studies have been launched in the Erdemir processes. In this context, the LCA studies conducted with Boğaziçi University continued in 2017 in order to determine targets that bring environmental performance to a higher level. According to the results of the workshop carried out, 80% of the GaBi software meetings were completed.

A pilot-scale autoclave was installed into the technical infrastructure of the Erdemir R&D Center for the purpose of carrying out slag aging studies to enable the use

of steel mill slag in highways, and it was commissioned. The laboratory gained the ability to measure the expansion behavior of slag according to relevant standards.

Feasibility studies, which were initiated with the aim of reducing the Erdemir slag stock area and recovering the entire annual slag amount by economic methods, are still ongoing.

- Determination of quantities that can be used in the aging process and highways,
- The usage rates of slag in the sinter and cement sector,
- Assessing the possibility of increasing the utilization rate of slag at the sinter plant

With the supply of additional equipment and testing apparatus for the devices located in the metal forming laboratory at Erdemir, the center was equipped to measure surface quality after painting, oil film thickness of the sheet surface and the earing property of tin materials with thinner thicknesses. In addition, new competencies were gained in advanced characterization techniques by carrying out studies in areas such as correlating the phase characterization and texture properties with process parameters and final product characteristics through the electron diffraction method.

R&D AND INNOVATION MANAGEMENT

WITHIN THE SCOPE OF EXISTING AND NEW PRODUCT DEVELOPMENT STUDIES CONDUCTED JOINTLY BY THE R&D AND QUALITY TECHNOLOGY DEPARTMENTS DURING 2017, DEVELOPMENT STUDIES ON FOURTEEN NEW STEEL GRADES WERE COMPLETED.

Erdemir R&D Center, which closely follows the technological developments, attaches great importance to the training of its employees.

Erdemir R&D Center places importance on training activities aimed at ensuring continuous development of employees in light of current technological developments. In 2017, seven training programs were offered in different technical subjects, which were tailored to the needs of employees. The employees were encouraged to continue their doctoral and post-graduate studies.

In 2017, a total of 46 employees were working R&D Center, including one employee with a doctorate, 11 doctoral students, nine employees with a post graduate degree, six post graduate students, 12 employees with a bachelor's degree, one associate degree student and six employees who either hold an associate degree or who graduated from high school.

Erdemir R&D Center contributed to the promotion of the Group and the accumulation of intellectual capital by participating in events with a total of 45 declarations after the approval by the Ministry. Fourteen of the declarations/posters participations took place at international events. Employees of the R&D Centre also participated in events organized in the national/international

arena related to the mining and metallurgy sector in 2017 with a total of 7 declarations published, three of which were abroad.

Four registered patents/utility models in OYAK Mining Metallurgy Group

In 2017, two patents and three utility model applications were tabled in response to invention proposals from Group employees. The registration process of a total of 11 applications, including five patents/utility models for which applications were submitted, is continuing. The Group currently has a total of four registered patents/utility models, including two patents and two utility models.

On the other hand, three of the projects, for which applications have been submitted since 2014 within the scope of the TÜBİTAK TEYDEB 1501 Industrial R&D Projects Support Program, were successfully completed. The process continues for the five projects for which the decision was taken to give support.

The number of product grades increased at Erdemir and İsdemir.

OYAK Mining Metallurgy Group carries out intensive activities to develop and produce high added value products for a variety of sectors, including automotive

OYAK MINING METALLURGY GROUP OFFERS A TOTAL OF 461 FLAT STEEL PRODUCT GRADES FOR SALE. WITH THE 14 NEW GRADES OFFERED FOR SALE IN LONG PRODUCTS, THE TOTAL NUMBER OF LONG PRODUCT GRADES HAS INCREASED TO 282.

and white goods. Priority is given to studies which are looking for ways to increase efficiency and reduce costs.

Within the scope of existing and new product development studies conducted jointly by the R&D and Quality Technology departments during 2017, development studies on fourteen new steel grades were completed. Nine hot, three cold, one galvanized and one tin grade were offered for sale.

OYAK Mining Metallurgy Group offers a total of 461 flat steel product grades for sale. Studies have been continuing to develop three grades for galvanized products and one grade for hot products. With the 14 new grades offered for sale in long products, the total number of long product grades has increased to 282.

Within the scope of Wind Farm projects, quality approval studies were carried out with leading companies of the sector in 2017, and the Group was then able to start producing products for domestic and international wind farm projects. Work to provide supplies to companies with which contracts were signed will continue throughout 2018.

New quality development studies with the automotive sector also continued in 2017. Within this scope, efforts to reduce the dependence of domestic companies on imports continued by developing new high strength grades specific to the sector.

TURKAK TS EN ISO/IEC 17025 audit was successfully completed.

The Erdemir Test Laboratories and the Erdemir Calibration Centre successfully passed the accreditation surveillance audit conducted within the scope of the TS EN ISO/IEC 17025 standard, thus extending the validity of the certificate for another year. During the Test Laboratories audit period, the following procedures and their methods were audited: Determination of Total Silicon Content by using the ISO 439 Steel and Iron-Gravimetric Method, Determination of Moisture, Ash, Volatile Substance and Fixed Carbon Content in Coal by using the ASTM D 7582 Thermogravimetric Method (TGA) and Determination of Total Sulphur Content by using the ASTM D 4239 High-Temperature Tube Furnace Combustion Method. They were included in the scope of accreditation.

IN LINE WITH NEW QUALITY DEVELOPMENT STUDIES, EFFORTS TO REDUCE THE DEPENDENCE OF DOMESTIC COMPANIES ON IMPORTS CONTINUED BY DEVELOPING NEW HIGH STRENGTH GRADES SPECIFIC TO THE AUTOMOTIVE SECTOR.



SOCIAL DEVELOPMENT

THE GROUP'S ACTIVITIES FOR CONTRIBUTION TO SOCIAL DEVELOPMENT ARE PLANNED ACCORDING TO THE NEEDS OF THE SOCIETY.

OYAK Mining Metallurgy Group carries out projects aimed at supporting social development and meeting the expectations of society.

Contributing to Turkey's economy with the value that it generates, the direct and indirect employment it creates and the taxes it pays, OYAK Mining Metallurgy Group carries out projects aimed at supporting social development and meeting the expectations of the society, especially in the regions where it operates.

The Group's activities for contribution to social development are planned according to the data obtained from the corporate reputation survey and the needs of the society.

OYAK Mining Metallurgy Group fulfills its responsibilities to its stakeholders in a timely manner in line with its transparent and responsible management approach and a corporate culture which is committed to compliance with ethical and legal regulations. The Group enters collaboration with government agencies and non-governmental organizations in order to reach the wider masses and increase the impacts of its projects.

OYAK Mining Metallurgy Group gives priority to long-term, comprehensive and high-impact social responsibility projects.

In 2017, Erdemir and Isdemir continued its projects in the fields of occupational health and safety, biodiversity and the arts, which it determined as its priority areas in its corporate social responsibility policy. These projects are listed below:

ERDEMİR HAS BEEN CONTINUING WORK ON THE PROJECT TO PROMOTE CULTIVATION OF THE “OTTOMAN STRAWBERRY”, A PROJECT WHICH IS FOCUSED PRIMARILY ON THE PRODUCTION AND REPRODUCTION OF QUALITY SEEDLINGS.

The “I Produce Safely” Project: Within the scope of the project launched in 2015 at Erdemir and İsdemir in order to improve the OHS performance and attain zero accidents, work groups were established by determining priority areas at both facilities. A detailed field survey specific to the OHS was conducted concurrently with the focus group interviews with the participation of 900 employees. As a result of the survey outcomes and group work, the projects were prepared so that all employees would adopt and voluntarily encourage an understanding of accident-free steel production throughout the organizations. The prepared projects were presented to the “I Produce Safely” Committee and the senior management, and the steps to be taken as a priority were determined.

The Steel and Life Sculpture

Competition: In order to emphasize the indispensable place of the steel produced by Erdemir in human life through art and contribute to the education of art in Turkey, Erdemir organized the 4th “Steel and Life” Sculpture Competition in 2017. In the competition, which is aimed at students studying sculpture at undergraduate and graduate level in universities in Turkey, students used steel produced by Erdemir and İsdemir in making many works of art, while bringing about a fusion of art and steel. Works of art that were awarded and found to be worthy of exhibition within the scope of the Steel and Life Sculpture Competition were introduced to art lovers in Istanbul, Ereğli, Iskenderun, Divriği and Ankara.

Ottoman Strawberry Cultivation: Erdemir has been continuing work on the project that got underway in 2016 to promote cultivation of the “Ottoman Strawberry”, a fruit identified with the region of Ereğli in the Black sea region, where the Erdemir production facilities are located, but which has seen a decline in recent years. The project was focused primarily on the production and reproduction of quality seedlings in cooperation with the Karadeniz Ereğli District Directorate of the Ministry of Food, Agriculture and Animal Husbandry, the Zonguldak Ereğli District Directorate of National Education and the Association of the Widen Growth of the Ottoman Strawberry and Protection of Producers.

Contributing to social development

In addition to these projects, Group companies carry out activities to contribute to social development, primarily in the regions they operate. The children’s play, which became a regular event at the Group in Ereğli on the April 23rd National Sovereignty and Children’s Day, was held in four cities in 2017. The Musical play, “Magnet Child”, was first shown to children in Ereğli on April 18th. The children’s play, which has gained popularity in the 4 cities that the Group is present, reached more than 2,000 children in 2017.

Erdemir, a group company, continued to meet local schools’ needs for technical equipment, maintenance and repair and materials, as it has every year. During the holy month of Ramadan, the company

continued its long tradition of providing food aid to families in need. Financial assistance, in cash, was provided to meet the food needs of the Karadeniz Ereğli Physical Disabilities Association. Within the scope of the cooperation with the public institutions and organizations, municipalities in the region were provided with assistance in kind and in cash, to help fund various projects such as roads, bridges and the construction of overpasses. Following a request by the Karadeniz Ereğli Social Assistance and Solidarity Foundation, material aid was extended to open vocational courses for convicted and imprisoned detainees, to assist in efforts to integrate them back into society.

İsdemir also continued to meet the various material needs of public institutions in the region in 2017. Reading room materials were provided to the Iron-Steel Primary School within the site. Pupils at the Iron Steel Junior High School who scored highly in the TEOG examination were given tablets. A cash donation was given to the Payas Handicapped Association for the purchase of a battery operated wheelchair. İsdemir continued to provide support such as cleaning and electricity expenses of the schools in the lodging area, the food expenses of students in need, the security personnel in the districts and the personnel of the public institutions within the site, and also transportation expenses for those students with limited means, as it has in previous years. Packed meals were provided to those in need during the holy month of Ramadan.

RESPONSIBLY





THE CORPORATE CULTURE OF OYAK MINING METALLURGY GROUP IS UNWAVERINGLY DEVOTED TO WORKING RESPONSIBLY TOWARDS PROTECTING THE ENVIRONMENT, TO USE EXISTING RESOURCES EFFECTIVELY, EFFICIENTLY AND CORRECTLY.



ENVIRONMENTAL PERFORMANCE

MANAGEMENT SYSTEMS AT OYAK MINING METALLURGY GROUP

SUSTAINABLE FUTURE

OYAK MINING METALLURGY GROUP ASSUMES RESPONSIBILITY FOR THE SUSTAINABLE FUTURE OF THE WORLD AS WELL AS TURKEY'S AND TAKES APPROPRIATE STEPS.

OYAK Mining Metallurgy Group shapes its production activities in the light of sustainability criteria. Renewable energy, energy efficiency and environmental investments are always at the forefront of the Group's approach.

The corporate culture of OYAK Mining Metallurgy Group is unwaveringly devoted to working responsibly towards protecting the environment, to use existing resources effectively, efficiently and correctly, to benefit from communication channels in the name of development and awareness of all stakeholders, and to constantly develop environmental performance in order to pass on a cleaner and more livable world to future generations.

The Group aims to increase effectiveness in the use of resources, to reduce waste, to act appropriately when it comes to recycling at every stage of the activity cycle, and to protect and improve human capital.



THE GROUP IS FOCUSED ON INVESTMENT PROJECTS THAT WILL PROVIDE PROTECTION OF THE ENVIRONMENT AND MITIGATE THE ADVERSE EFFECTS OF CLIMATE CHANGE.

ENVIRONMENTAL PERFORMANCE

OYAK Mining Metallurgy Group demonstrates its contribution in efforts to tackle global climate change and to resolve environmental problems by assuming responsibility for the sustainable future of the world as well as Turkey's and by taking appropriate steps accordingly. Focusing on investment projects that will provide protection of the environment and mitigate the adverse effects of climate change, the Group conducts this process in accordance with an approach which is fully compliant with laws and legislation, and which is responsible, transparent, accountable and adds value to its stakeholders, with the most advanced assessment, management and monitoring methodologies.

Management System Policies at Erdemir and Isdemir

OYAK Mining Metallurgy Group, which produces in accordance with national and international standards in the iron and steel sector, carries out all its processes in accordance with the law and under a management approach that creates value for its stakeholders and which is both responsible and accountable.

The Group's Occupational Health and Safety, Quality, Environment, Energy and Information Security Management Systems policy is based on managing by objectives, providing resources that are consistent with the objectives, continuous improvement and raising awareness of all employees.

The principles of the Occupational Health and Safety, Quality, Environment, Energy and Information Security Management Systems implemented at OYAK Mining Metallurgy Group are given below:

Occupational Health and Safety

- To manufacture "Accident-free Steel" by applying risk management,
- To protect the health of employees by ensuring that the working environment is safe,
- To ensure that the ownership take ownership of a sustainable "safety culture".

MANAGEMENT SYSTEMS AT OYAK MINING METALLURGY GROUP

OYAK MINING METALLURGY GROUP CARRIES OUT ALL ITS PROCESSES IN ACCORDANCE WITH THE LAW AND UNDER A MANAGEMENT APPROACH THAT CREATES VALUE FOR ITS STAKEHOLDERS.

Quality

- To spread an approach of customer focus to the whole organization with effective communication,
- To create an innovative and creative employee culture,
- To increase profitability through projects and improvements that increase efficiency and reduce costs.

The Environment

- As part of its approach to sustainable development, to implement technologies that produce the lowest level of waste in the environment as a result of technical, economic and commercial evaluations and to protect natural resources with effective and efficient use of the raw materials
- To monitor, assess and continuously improve the environmental impact of processes in order to continuously improve environmental performance,

- To reduce waste at its source, to improve and encourage recovery, to collect and dispose of waste,
- To inform, to raise awareness among all social stakeholders including the employees, customers, suppliers, society and the state concerning OYAK Mining Metallurgy Group's perspective on the environment, its applications and the outcomes it obtains, and to establish open communication.

Energy

- To implement technological innovations that increase energy efficiency,
- To maximize use of by-product gases and waste heat released,
- To minimize energy losses by systematic measurement and monitoring.

Management System Documents of Erdemir and İsdemir

Management Standard	Erdemir	İsdemir
TS EN ISO 9001:2015 Quality Management System	X	X
TS EN ISO 9001:2008 Quality Management System	-	-
TS EN ISO 14001:2015 Environment Management System	X	X
TS EN ISO 14001:2005 Environment Management System	-	-
TS 18001 Occupational Health and Safety Management System	X	X
IATF 16949:2016 Quality Management System for the Automotive Industry	X	X
TS EN ISO 50001 Energy Management System	X	X
TS EN ISO/IEC 17025:2012 General Requirements for the Competence of Testing and Calibration Laboratories	X	-
TS EN ISO/IEC 17025:2012 Laboratory Qualification Certificate	-	X
ISO/IEC 27001:2013 Information Security Management System	X	X

OYAK MINING METALLURGY GROUP HAS DEVELOPED ITS ENVIRONMENTAL APPROACH INTO A SYSTEMATIC STRUCTURE THAT IS OPEN TO INTERNATIONAL AUDIT.

Information Security

- To raise awareness among all employees that corporate information that is generated, processed and shared is of value,
- To define corporate information assets and information processing environments, to systematically manage the risks and to take precautions related to any vulnerabilities in security,
- To comply with the information security requirements of the stakeholders with whom there is an exchange of information, and to ensure the security of their information.

OYAK Mining Metallurgy Group carefully oversees these principles that it has adopted and reflects them on its behavior and work methods.

OYAK Mining Metallurgy Group works towards the goal of increasing production and profitability, while at the same time ensuring that all processes work in an integrated manner with the environmental protection approach.

The Environmental Management System at Erdemir and İsdemir

A high level of sensitivity with regard to environmental awareness and environmental issues are among the key elements of OYAK Mining Metallurgy Group's business principles.

Given that environmental sensitivity and responsibility form an integral part of how it has conducted business for many years, the Group has developed its environmental approach into a systematic structure that is open to international audit with the Environmental Management System.

As a holder of the TS EN ISO 14001 Environmental Management System Certificate, OYAK Mining Metallurgy Group carries out detailed activities to ensure that the environmental policy, which it determined within this scope, is adopted by all employees.

OYAK Mining Metallurgy Group's Environmental Policy is based on the following pillars:

- Within the scope of its approach to sustainable development, to implement technologies which cause the least amount waste to the environment in accordance with technical, economic and commercial evaluations and to protect natural resources with effective and efficient use of the raw materials
- To monitor, assess and continuously improve the environmental impact of processes in order to continuously improve environmental performance,
- To reduce waste at the source, to improve and encourage recovery, to collect and dispose of waste,
- To inform and raise awareness of OYAK Mining Metallurgy Group's perspective on the environment, its applications and the outcomes it obtains among its social stakeholders including employees, customers, suppliers, society and the state, and to establish open communication.

OYAK Mining Metallurgy Group believes that high quality production is possible only with efficiency, effectiveness, recovery, zero accidents, environmental sensitivity and savings.

ENVIRONMENTAL MANAGEMENT PROCESS AND ENVIRONMENTAL PERFORMANCE INDEX

CONTINUOUS IMPROVEMENT

OYAK MINING METALLURGY GROUP HAS DEVELOPED THE ENVIRONMENTAL MANAGEMENT PROCESS PARALLEL TO THE PHILOSOPHY OF CONTINUOUS IMPROVEMENT.

The Environmental Management Process

OYAK Mining Metallurgy Group includes environmental factors that are important for the steel sector in its management strategies in accordance with the legislation in the country and in line with international developments. Parallel with the philosophy of continuous improvement and sustainable development, the Group has developed the Environmental Management Process, which includes the Environmental Management System.

Starting with the feasibility reports of the investments to be carried out and the equipment to be installed in all the Group plants, the Environmental Management Process continues throughout the life of the plant, where the environmental impact is kept at a minimum and which complies with environmental legislation, and ends with the decommissioning of the plant when it has reached the end of its operating life, in accordance with the legislation.

The effectiveness and success of the Environmental Management Process is monitored and evaluated by the Process Management Team working in coordination with the Environmental Management Units. The environmental objectives set out in the Group's strategic business plans are cascaded down to individual targets and, therefore, spread throughout the organization. The Process Management Team plays an important role in the implementation of improvement work and projects, which are determined according to the evaluation results, when decisions are made on the issues.



ERDEMİR AND İSDEMİR TAKE INITIATIVES AND PERFORMS EXTENSIVE WORK IN ORDER TO SYSTEMATICALLY REDUCE THEIR DIRECT AND INDIRECT IMPACTS ON THE ENVIRONMENT.

The Environmental Performance Index

The “Environmental Performance Index”, which is an original management model developed by Erdemir and İsdemir which expresses the success and effectiveness of the Environmental Management Process in a single numerical indicator, also allows a comparison of past and present environmental performances.

The Environmental Performance Index was prepared on the basis of the following criteria:

- To correctly define the impacts arising from production, products and services correctly,
- To demonstrate the sustainability of the Environmental Management System,
- To evaluate the impacts of the Group plants on the receiving environment in the regions where the plants are located,

- To include data concerning the environment at the local, national, or international level.

The Environmental Performance Index, which is calculated on the rates at which targets were achieved under three basic parameters - Permit and License Document, Legislation Compliance and Success Criteria - is reviewed by the Process Management Team. These parameters are continuously monitored and evaluated together with their breakdowns.

In line with this process, environmental performance is reported to the upper management. After the review by the upper management, environmental factors prioritized by the sector are included among the management strategies of Erdemir and İsdemir in accordance with legislation and international developments. This also enables employees to adopt environmental goals, internalize them and see the environmental goals as a target.

The Status of Environmental Performance and the Status of the Realization of Sustainability Targets

Environmental Permit and License Certificate

The validity of Erdemir and İsdemir’s Environmental Permit and License Certificate, which was obtained from the Ministry of Environment and Urbanization in 2015, on Wastewater Discharge, Air Emission, 1st Class Organized Storage, Waste Acceptance Facility and Non-hazardous Waste Recovery, was extended in 2017.

The Environmental Performance Index

Environmental Permit and License Certificate

Compliance with Environmental Legislation

Success Criteria

Solid Waste Recovery Rates

Water Management and Recirculation Water

Wastewater Analysis

Emission Measurements

EIA (Environmental Impact Assessment) Documents

Sustainability of the TS EN ISO 14001: 2015 certification

CO₂ Density

Environmental Investments

Training and Social Activities

ENVIRONMENTAL MANAGEMENT PROCESS AND ENVIRONMENTAL PERFORMANCE INDEX

AT THE SINTER PLANTS, A TOTAL OF 351,552 TONS OF WASTE WAS USED TO SAVE 258,754 TONS OF RAW MATERIALS AT ERDEMİR AND 253,485 TONS OF WASTE WAS USED TO SAVE 281,717 TONS OF RAW MATERIALS AT İSDEMİR.

Compliance with Environmental Legislation

OYAK Mining Metallurgy Group closely monitors the realization rates of waste water analysis, emission values, waste disposal methods, legislation compliance and the Environmental Impact Assessment of investments. Some of the activities that the Group has undertaken within this scope are listed below:

Solid Waste Recovery Rates

OYAK Mining Metallurgy Group aims to generate economic value and save natural resources by recovering all wastes released from its processes.

The Group conducts various activities aimed at minimizing waste output and maximizing recovery rates. Waste that cannot be recycled is given to authorized companies within the framework of the laws and regulations.

In 2017, a solid waste recovery rate of 80.1% was achieved at Erdemir and a 59.71% solid waste recovery rate was achieved at İsdemir, by delivering minor and hazardous waste for recovery and to companies producing alternative fuels from solid waste, as well as by using some of the waste as raw materials.

As a result of sending waste on the minor waste site for recovery, a total of TL 2,360,000 of earnings was realized at Erdemir and TL 3,985,000 at İsdemir.

At the sinter plants, a total of 351,552 tons of waste was used to save 258,754 tons of raw materials at Erdemir and 253,485 tons of waste was used to save 281,717 tons of raw materials at İsdemir.

In addition, in 2017 it became possible for waste to be placed in the by-product class or be used as a raw material alternative in other industries.

Examples from By-Product Documentation Activities

Iron Oxide: On 19 January 2017, the Group received the "TS EN ISO 1248 / AC Iron Oxide Pigments - Specifications and Methods of Test" certificate of conformity from the TSE Chemical Sector Directorate, Ankara. The surveillance audit conducted on 7 December 2017 resulted in success, and validity of the certificate was extended.

Tar: On 7 December 2017, the surveillance audit for the TSE Conformity Certificate was conducted by the TSE Chemical Sector Directorate, Ankara, and the decision was taken to extend the validity of the document.

Steel Mill Slag Recovery

The Compliance Certificates were obtained in 2016 following applications submitted to the TSE to use steel mill slag for the following purposes at Erdemir and İsdemir.

- Aggregates for non-binding and hydraulic binder materials used in civil engineering work and road construction
- Aggregates for bituminous mixtures and surface treatments for roads, airfields and other surfaces supporting traffic
- Concrete aggregates

Subsequently, the Ministry of Environment and Urbanization, the General Directorate of Environmental Management declared that it would be appropriate to make use of slag which was certified for its conformity to the standards set out below, as a by-product in road construction as specified in the standards, provided that the necessary measures were taken in order to stock, transport and use the slag to protect environmental and human health.

- TS EN 13043/Aggregates for bituminous mixtures and surface treatments for roads, airfields and other surfaces supporting traffic
- TS EN 13242+A1 Aggregates for non-binding and hydraulic binder materials used in civil engineering work and road construction

Under the General Directorate of Highways (GDH) ARGE 2012/7 Project, which is supported and conducted by the General Directorate of Highways, it was declared that artificial aggregate obtained from steel mill slag could be used as an aggregate in fillings, sub-base and foundation layers in highway construction. Slag from the Erdemir steel mill underwent the related tests and potential expansion tests under the 2013 Technical Specifications of the Highways.

As a result of the work carried out, the use of the slags, which were represented by the specimens and materials that form the basis of the GDH ARGE 2012/7 Project and the Specification, in the fillings, sub-base and foundation construction was assessed to be appropriate and material safety data sheets were prepared for steel mill slag.

After the slag generated during the steel production process was used in the cement sector as a raw material alternative for the first time in Turkey in 2016, a total of 125,000 tons of steel mill slag was sent to Ünye Cement in 2017, thus providing slag for use as fuel derived from waste and as an alternative raw material.

Glass and Paper Waste Bin Distribution and Collection Project

In 2016, the “Glass and Paper Waste Bins Distribution and Collection Project” was launched with the six pilot units in order to reduce waste at its source and to improve and promote recovery. The project was rolled out comprehensively in 2017 with waste bins widely provided. Within the scope of the project, a total of 573 kg of glass, 925 kg of A4 paper and 514 kg magazines and books were collected from the waste bins, proving an important contribution to improving waste efficiency.

A total of 2,620 wooden pallets, used to box refractory materials coming from the Refractory Directorate, were returned to the Kümaş Company and they were recovered.

The number of waste collection points at İsdemir, where the waste barrel system was launched in 2016, was increased in 2017. A total of 39 paper, 39 plastic and 34 glass waste boxes and 13 waste battery collection boxes, which are suitable for office use, were distributed. In addition to this, a total of 30 paper, 29 plastic and 23 glass waste collection barrels were installed on the operation site.

Thus, in 2017, 110 tons of paper, two tons of glass and 12 tons of plastic were collected for reuse.

ENVIRONMENTAL MANAGEMENT PROCESS AND ENVIRONMENTAL PERFORMANCE INDEX

IN 2017, 110 TONS OF PAPER, TWO TONS OF GLASS AND 12 TONS OF PLASTIC WERE COLLECTED FOR REUSE.

Amount of waste recovered for Recycling at Erdemir and İsdemir and brought into the economy

Type of Waste	Amount of Waste (tons/year)	
	Erdemir	İsdemir
Plastic Wastes	62	117
Wood Wastes	200	1,240
Paper Wastes	21	92
Conveyor Belts	117	216
Electronic Wastes	38	6.8
Slider Plate / Refractory Brick	294	5,722
Mixed Metal Wastes	76	-
Waste Cable	114	74
Glass	-	-
End-of-Life Tires	46	-
Packaging Wastes	38	-

At İsdemir the ratio of recovered waste materials (1,131,879 tons) used in steel production (5,631,891 tons) was 20.09%.

Hazardous Waste

OYAK Mining Metallurgy Group fulfills legal requirements for hazardous waste produced during the course of its operations, both for its plants and its suppliers, and carries out notifications in a timely manner.

In 2017, at Erdemir, the Dangerous Goods Safety Advisor and Erdemir provided notification of the Dangerous Goods Safety Advisor to the Ministry. Unit visits / audits were undertaken and proactive measures were taken. All hazardous materials entering the factory in bulk form and which were packed were received under the control of the front desk upon

entering the site. An area was allocated in the vehicle waiting park to carry out checks of vehicles carrying dangerous substances. Checks were performed on 2,000 vehicles carrying hazardous substances during 2017. The annual volume of hazardous substances was prepared within the duration of the Annual Report and was notified to the Ministry.

Waste transformers with Polychloride Biphenyl (PCB) are stored in appropriate areas at the Ereğli Demir Çelik (Iron-Steel) plants. A total of 34 transformers with PCBs is planned to take place in the first half of 2018 as part of the project carried out in cooperation with the Ministry of Environment and Urbanization, the United Nations Development Program (UNDP) and the United Nations Industrial Development Organization (UNIDO).

Water Management and Recirculation of Water

Although 95-98% of the water used in the steel industry is recovered, the pressure on water resources resulting from population growth and climate change is placing ever greater importance on protecting the environmental capital, which includes water, air and soil. Acting with this awareness, OYAK Mining Metallurgy Group prepared action plans to achieve a neutral water footprint and reduce wastewater discharges.

The Group carries out work to maximize the rate of recirculation of water used during the production process. It reuses treated water in its production processes by treating a large proportion of the total amount of water used.

At Erdemir, which receives its entire water needs from reservoirs, a proportion of the water is diverted to drinking water facilities where clean water is piped to homes, while the rest is directed to production points to be used in the processes as service water. The plants have closed circuit circulation systems in order to prevent the formation of wastewater and to reduce water use.

Online measurements were carried out in 2017 for the parameters specified in the Continuous Wastewater Monitoring Systems Communiqué with the Continuous Wastewater Monitoring Systems installed at the Chemical Wastewater Treatment Plant, the Power Plant Cooling Water, the 1st and 2nd Blast Furnace Cooling Water discharges, and 91.3% of the data was conveyed to the Ministry.

The Continuous Wastewater Monitoring Systems integrated comparison tests, which should be performed every three months at Erdemir and İsdemir, were carried out with the Provincial Directorates of Environment and Urbanization. In order to monitor the temperature of coolant water extracted from the sea for use in the 1st and 2nd Blast Furnaces in the Power Plant at Erdemir, temperature sensors were installed at various points in the north collector and the south collector on the water intake structure. All results were sent to the Ministry of Environment and Urbanization database. The temperature data could then be monitored in real time by the Ministry of Environment and Urbanization.

In 2017, a total of 394,947,445 m³ of water was recirculated at Erdemir and 693,020,533 m³ at İsdemir.

Wastewater Analysis

Erdemir and İsdemir plants, as required the Regulation on Water Pollution Control, the pH, temperature, chemical oxygen demand, suspended solids, conductivity and dissolved oxygen parameters and emission measurements are monitored by the Ministry of Environment and Urbanization with the Continuous Wastewater Monitoring Systems at the wastewater and cooling water discharge points.

The analyses that are made on the samples, which are taken within the scope of internal monitoring within certain periods by the accredited laboratory, are reported to the Provincial Directorate of

Environment and Urbanization. In addition, daily analyses are carried out in the environmental laboratories located within the plants.

Emission Measurements

OYAK Mining Metallurgy Group monitors greenhouse gas emissions in accordance with the legislation of monitoring, reporting and verification, and continues its preparations for the implementation of greenhouse gas reduction mechanisms.

In accordance with the Regulation on the Control of Industrial Air Pollution, Continuous Emission Measurement Systems are constantly monitored at Erdemir and İsdemir plants, in order to monitor the compliance of the flue gases with the border values, and these systems are connected to the data network of the Ministry of Environment and Urbanization. The accredited laboratory conducts emission measurements at every flue on a regular basis every two years.

In line with the Erdemir and İsdemir greenhouse gas monitoring plans, for which approval was obtained from the Ministry of Environment and Urbanization, the Group takes part in workshops where the suitability of reduction mechanisms with Turkey's conditions is evaluated.

Carbon dioxide concentrations (tons of CO₂ per tonne of crude steel), which represent the parameter of the environmental performance monitoring, are monitored on a monthly basis and this is adopted as the reduction target

ENVIRONMENTAL MANAGEMENT PROCESS AND ENVIRONMENTAL PERFORMANCE INDEX

EIA (Environmental Impact Assessment) Documents

An Environmental Impact Assessment (EIA) is carried out for all new investments and renovation works of existing plants within OYAK Mining Metallurgy Group. In this vein, at Erdemir, the decision to carry out the EIA was not necessary for two projects in 2017, and the decision was taken to remove four projects from the scope of the EIA.

Success Criteria

The Sustainability of the TS EN ISO 14001:2015 Certificate

At Erdemir and İsdemir, The Turkish Standards Institute (TSE) conducted the transition audit of the ISO 14001 Environmental Management System to the 2015 version. Erdemir and İsdemir were the first companies in the sector to have transitioned to the new version of 14001 Environmental Management System.

- The scope, context, the related parties and their needs and expectations of the Erdemir Environmental Management System, internal and external issues and risks and opportunities were determined and related documents were created or revised.
- Integrated Internal Auditor training was offered in addition to the training on the ISO 14001: 2015 Environmental

Management Standard provided for the unit's environmental representatives and the internal auditors of the Environmental Management System. Internal audits were carried out successfully.

- The process-based Environmental Aspect and Impact Assessment studies were examined by taking into account the requirements of ISO 14001: 2015 and the risks and opportunities were included after carrying out revisions from a life cycle perspective.

CO₂ Density

With efforts to tackle climate change gaining ever greater importance and adapting to a low carbon economy becoming inevitable, policies and plans that can bring about a new and global-scale impact have been introduced.

Erdemir and İsdemir once again calculated CO₂ emissions and submitted them to the Ministry in 2017.

The Sinter Flue SO₂ Emission Optimization Project, which was carried out as an operational excellence (OPEX) project at İsdemir, was completed in 2017.

The project is aimed at increasing the waste utilization rate by complying with the border values specified for iron sintering plants in the Regulation on Control of Industrial Air Pollution.

The data sets of the process inputs and parameters and of the SO₂ emissions were prepared so that raw material savings could be achieved by using the maximum volume of waste by remaining within the limits set out in the SO₂ parameters. Methods to increase waste utilization were developed by using statistical process control tools.

With the software developed by the İsdemir Level-2 engineers and the raw material/waste dosing system located in the 2nd Sinter plant, the amount of waste fed into the blend could be adjusted automatically depending on SO₂ emissions. Thus, raw material savings were achieved, paving the way for economic as well as environmental gains.

Environmental Investments

OYAK Mining Metallurgy Group has been implementing environmental investment projects in line with its targets of increasing its environmental performance.

Continuing to invest in environmentally friendly technologies, OYAK Mining Metallurgy Group is working to minimize the amounts of waste that enters the soil, air or water, to provide raw material resource efficiency and to implement projects focused on recovery.

AT THE STEEL MILL DIRECTORATE OF ERDEMİR, A SCRAP CUTTING AND DUST COLLECTION SYSTEM WITH A DUST COLLECTION CAPACITY OF 250,000 M³/HOUR WAS ESTABLISHED.

Environmental Investment Projects at Erdemir and İsdemir

	Number of Projects that have been Completed	Number of Projects for which Site Work is Ongoing	Total Number of Projects
Erdemir	19	19	38
İsdemir	34	1	35
Grand Total	53	20	73

Major Environmental Investments Completed at Erdemir

Dewatering of Steel Mill Sludge

The Steel Mill Sludge Dewatering Plant, consisting of 3 units of press equipment, was commissioned on August 4, 2017 and performance tests were initiated. As a result, the volume of sludge was reduced.

Scrap Preparation Dust Collection System

At the Steel Mill Directorate of Erdemir, the Scrap Cutting and Dust Collection System, which consists of new scrap cutting machines capable of automatic and manual scrap cutting with a dust collection capacity of 250,000 m³/hour, was established in the scrap preparation process. Once performance tests were completed, the system started to operate at full capacity from October 27, 2017.

As part of the 2017 emission measurements, the Flue No. 56 was designated as the flue of the scrap preparation plant. Dust concentrations of 0.25 mg/Nm³ were found as a result of measurements carried out in accordance with Annex - 1. b.1 of the Regulation on Control of Industrial Air Pollution - well below the limit of 50 mg/Nm³.

Greenhouse Gas Measurement Systems

The manufacture and installation of two fixed battery charge weighbridges at the coke plant with a 120 ton measuring capacity was completed, as well as work on the computerized recording systems of measurement data. Accordingly, greenhouse gas emissions were measured with the precision specified in the regulation and reported, as requested by the Ministry of Environment and Urbanization.

ENVIRONMENTAL MANAGEMENT PROCESS AND ENVIRONMENTAL PERFORMANCE INDEX

THE ENVIRONMENTAL MISSION OF OYAK MINING METALLURGY GROUP HAS BEEN STRUCTURED AROUND THE MAIN IDEA OF RAISING AWARENESS AND SENSITIVITY IN SOCIETY.

Oil and Sludge Separation System for Drainage Waters of the Scrap Field

The system was built to contain oil and sludge in the waste waters that will be discharged from the scrap fields that were concreted over.

Building Platform and Elevator onto the Sinter Flue and Other Flues

In accordance with the procedures and measurement methods specified in the Communiqué on Continuous Emission Measurement Systems of the Ministry of Environment and Urbanization, a platform and steps were built onto the flues where the Continuous Emission Measurement Systems were installed. In this context, the feasibility report of the Continuous Emission Measurement Systems installed at the 58 meter elevation, which was submitted to the Ministry on April 7, 2017, was approved on May 16, 2017.

Improvement of the North Collector Sampling Point

In accordance with the Regulation on Water Pollution Control, the sample taking location in the north collector, from which samples are taken at certain intervals, was brought into the project and was reorganized.

Major Environmental Investments Completed at İsdemir

Investments to contain dust arising during raw material handling activities and conveyor transport systems at their sources continued throughout 2017.

Measures under environmental investments continued to be taken in order to combat pollution caused by transportation within the plant.

191 Junction Tower Dust Collecting System

The system was established in the Sinter Plant in order to collect dust emissions that come out when carrying raw materials on conveyor belts.

Wheel Washing Area

Established in the Stock Area No: 130 this system aims preventing the dusts held on the wheels of the vehicles during loading and unloading materials in the stock area.

Installation of Spiral Staircases to Flues

Moreover, in order to ensure all occupational health and safety precautions in the emission measurement activities were taken within the scope of environmental management, spiral staircases were installed at five flues (the No. 1, 4, 5 and 6 Coke Battery Flues and the No. 6-7 Boiler Flue).

For detailed information concerning investments undertaken by OYAK Mining Metallurgy Group, please refer to OYAK Mining Metallurgy Group's 2017 Annual Report, pages 54-59

https://www.oyakmadenmetalurji.com.tr/Sites/1/upload/files/ERDEMIR_07_AR-2343.pdf

Training and Social Activities

The environmental mission of OYAK Mining Metallurgy Group has been structured around the main idea of raising awareness and sensitivity in society regarding the issues that pose risks to the future of our world and humanity, especially climate change.

Erdemir and İsdemir continued to provide their employees with training on the Group's environmental approach and the environmental impacts of its activities in 2017.

At Erdemir;

- Within the framework of the training to raise Environmental Awareness, a total of 1,259 blue collar employees received full-day environmental awareness training on issues such as major industrial accidents, global warming, waste management, the importance of recycling and the Erdemir Environmental Management System.
- 68 newly recruited white and blue collar employees and 1,135 sub-contractor employees were provided with the ISO 14001 Environmental Management System training and environmental awareness training.

At İsdemir;

- Environmental Awareness Raising training was given to 544 employees, the Legal Requirements and ISO 14001 EMS training was given to 4,273 employees, with ISO 14001 awareness training given to 737 employees.
- Sharing meetings on environmental activities were organized with the participation of white and blue collar employees at the main plant units. These meetings addressed issues such as correct waste disposal and the importance of waste recovery. In addition, 306 employees were provided with the training on sensitivity to the environment.

- Within the scope of Environmental Management System 14001: 2015 transition work, TS EN ISO 14001: 2015 Environmental Management System Awareness Training was provided to 65 employees and TS EN ISO 14001: 2015 Environmental Management System Basic Training was provided to 132 employees.
- Awareness Training on the Protection from Explosions document was given to 55 employees, Seveso-Risk Based Inspection (RBI) Corrosion Evaluation Training was given to 4 employees, and training for certified individuals preparing the Data Sheet (SDS/MSDS) was given to three employees and Oil Pollution Preparedness and Intervention Training Level-1 was given to 20 employees.

In addition, thanks to the activities listed below, further knowledge has been accumulated that can be deployed to develop applications compliant with the legislation.

- The National Authorization, Audit, Laboratory and Environmental Officer Workshop, in which one employee took part
- Environmental Technologies Specialization Fair, in which three employees took part
- The Latest Status in the Mining, Environment and Forestry Legislation, and the Applications Seminar, in which two employees took part

In addition to these;

- 106 Erdemir and 115 İsdemir employees were given general awareness training on Hazardous Material Safety Consultancy, while 228 Erdemir and 157 İsdemir employees were given job specific training, 51 Erdemir employees were given training on loading safety and 96 İsdemir employees were given training on safety.
- 110 employees from Erdemir and 97 employees from İsdemir participated in Awareness training, one of the areas of training provided within the scope of the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). A total of 93 employees from Erdemir and 85 employees from İsdemir participated in job specific training. 81 employees from Erdemir and 84 employees from İsdemir participated in safety training.
- 46 İsdemir employees received "Field Applied Expert Training" within the scope of the Safety Report concerning the requirements of the Regulation on the Prevention of Major Industrial Accidents and the Mitigation of Impacts.

ENVIRONMENTAL MANAGEMENT PROCESS AND ENVIRONMENTAL PERFORMANCE INDEX

OYAK MINING METALLURGY GROUP CONTINUES TO CARRY OUT ENVIRONMENTAL AWARENESS TRAINING AND COOPERATION WITH SCHOOLS IN ORDER TO RAISE ENVIRONMENTAL SENSITIVITY AMONG THE YOUNG.

Training activities outside the Company

- Environment awareness training, which highlighted the importance of recycling and the impact of waste on the natural environment, were provided to a total of 190 pupils in the Ereğli Primary School, the İsmet İnönü Primary School and Erdemir Children's Home.
- Environmental awareness training was provided in the Çilek Nursery and Day Care Centre located in the İsdemir

Lodging Zone in order to encourage environmentally friendly behavior among children. Activities related to waste sorting practices were carried out after the training.

OYAK Mining Metallurgy Group continues to carry out environmental awareness training and cooperation with schools in order to raise environmental sensitivity among the young.

The Erdemir Environmental Performance Index for 2017

Criterion	2015 Actual Realization (%)	2016 Actual Realization (%)	2017 Actual Realization (%)	2017 Targets (%)
Compliance with Environmental Legislation	100	100	100	100
Recirculation Water Ratio	91.6	92	92	91
Solid Waste Recovery Rate	72.1	72.3	80.1	76.6
Sustaining TS EN ISO 14001:2015 Management System Activities				
Actual Realizations of the Targeted Environmental Investments	100	100	100	100
Sustaining TS EN ISO 14001:2015 Certificate	100	100	100	100

WITHIN THE SCOPE OF THE LIFE CYCLE ASSESSMENT (LCA), WHICH IS CARRIED OUT BY THE WORLD STEEL ASSOCIATION (WORLDSTEEL), ERDEMİR AND İSDEMİR JOINED THE PROJECT BY DEFINING THE 2014 INPUT AND OUTPUT VALUES INTO THE SOFI SYSTEM.

İsdemir Environmental Performance Index for 2017

Criterion	2015 Actual Realization (%)	2016 Actual Realization (%)	2017 Actual Realization (%)	2017 Targets (%)
Compliance with Environmental Legislation	100	100	99.06	100
Recirculation Water Ratio	95.5	95	94.64	94.7
Solid Waste Recovery Rate	57.2	57.7	59.71	58.9
Sustaining TS EN ISO 14001:2015 Management System Activities				
Actual Realizations of Targeted Environmental Investments	100	100	38	100
Sustaining TS EN ISO 14001:2015 Certificate	100	100	100	100

Life Cycle Analysis (LCA)

OYAK Mining Metallurgy Group elaborated the Life Cycle Analysis studies that it has adopted in order to examine the environmental impacts of its products and processes, to formulate a plan for climate change and to provide efficient use of natural resources, and it continued this work in 2017.

Within the scope of the Life Cycle Assessment (LCA), which is carried out by the World Steel Association (worldsteel), Erdemir and İsdemir joined the project by defining the 2014 input and output values into the SoFi system. In 2017, worldsteel published global and regional steel life cycle inventory (LCI) data by completing the evaluation process for 16 core steel products. Erdemir and İsdemir joined this work in collaboration with more than 160 steel producers.

A work team was established at Erdemir in 2017 with the participation of the R&D and Sustainability Directorates and the Environment Directorate within the scope of the LCA work. In this context, in order to analyze the input and output data, the LCA was applied at the Sinter Plant. Work has been initiated for the products for which Environmental Product Declaration (EDP) certification will be obtained.

CLIMATE CHANGE AND ENERGY MANAGEMENT

TO TACKLE CLIMATE CHANGE

OYAK MINING METALLURGY GROUP FOLLOWS AN APPROACH THAT REDUCES THE IMPACTS AT THEIR SOURCE, WHICH CONTRIBUTES TO EFFORTS TO TACKLE CLIMATE CHANGE.

As one of the most important items on the world agenda, climate change is one of the factors shaping the environmental understanding of OYAK Mining Metallurgy Group.

The efforts to tackle climate change require carbon-reducing or substituting technologies to be rapidly rolled out around the world. It is projected that the world will have to produce twice as much energy as it does today in order to sustain global economic growth; thus keeping carbon dioxide (CO₂) concentrations at manageable levels will be of paramount importance going forward.

Total greenhouse gas emissions have surged since the 1950s, when industrialization gained momentum. Governments, corporations and NGOs achieved a broad consensus regarding this situation which could threaten the future of humanity if the increase in greenhouse gas emissions continue at the same rate, and have stepped up their efforts to tackle the problem.



OYAK MINING METALLURGY GROUP DEVELOPS PROJECTS TO REDUCE ENERGY LOSSES AND MAXIMIZE THE USE OF BY-PRODUCT GASES AND WASTE HEAT.

ERDEMİR AND İSDEMİR CLOSELY MONITOR TECHNOLOGICAL DEVELOPMENTS THAT INCREASE ENERGY EFFICIENCY AND ADAPT INNOVATIVE PRACTICES THAT ARE EXPECTED TO PROVIDE A BENEFIT TO WORK PROCESSES.

OYAK Mining Metallurgy Group follows an approach that oversees the environmental and social issues and reduces the impacts at their source through its production policy, which contributes to efforts to tackle climate change.

Erdemir and İsdemir are constantly increasing awareness regarding climate change and contribute to the process with the steps they have taken. When calculating CO₂ quantities, all fuel used and raw materials with carbon (C) content are taken into consideration. The carbon dioxide concentration (tons of CO₂ per ton of crude steel), which is the parameter for the environmental performance follow-up, is monitored on a monthly basis and CO₂ reductions is adopted as the target. The amount of CO₂ that will be emitted by each project being considered for investment is analyzed.

Erdemir and İsdemir again meticulously fulfilled their legal requirements set out in environmental regulations in 2017.

- The Greenhouse Gas Emission Reports for both Erdemir and İsdemir for 2015 and 2016 were approved by the verifying organization and uploaded to the Ministry system in accordance with the Regulation on the Amendment of the Regulation on the Establishment of Greenhouse Gas Emissions.

- In line with the objective of monitoring of international developments regarding climate change and ensuring their integration into the Group's plans, the Group participated in all workshops held under the Emissions Trading System (ETS) and the Partnership for Market Readiness for Carbon Markets (PMR) Turkey Project organized by the Ministry of Environment and Urbanization, and the opinions were delivered.

Erdemir and İsdemir are carrying out planned studies on saving energy use.

Both companies closely monitor technological developments that increase energy efficiency and adapt innovative practices that are expected to provide a benefit to work processes. Projects are developed to reduce energy losses at the Companies and maximize the use of by-product gases and waste heat. In the operating cycles, the by-product fuels revealed are used instead of main energy resources.

At Erdemir, the installation of LED bulbs, which were purchased in line with the Economic Analysis Report, in the 1st Hot Rolling Mill Engine Rooms and the 2nd Hot Rolling Mill Slab / Stock Area, was concluded in 2016. The LED conversion project installation work on the 2nd Hot Rolling Mill Line and the 1st Blast Furnace was completed in 2017. For both projects, the Efficiency Increasing Project (EIP) support application was accepted and

CLIMATE CHANGE AND ENERGY MANAGEMENT

IN ORDER TO ACHIEVE THE HIGHEST LEVEL OF ENERGY EFFICIENCY, ACTIVITIES WITHIN THIS SCOPE ARE CARRIED OUT THROUGH THE “ENERGY MANAGEMENT PROCESS”.

the support payment was completed for the first project in 2017. The post-implementation report of the second project was sent to the Directorate General of Renewable Energy.

Holding ISO 50001 Energy Management System certification, Erdemir and İsdemir are improving their energy performance every year.

In order to achieve the highest level of energy efficiency, activities within the scope of energy efficiency are carried out through the “Energy Management Process”. In OYAK Mining Metallurgy Group, which holds the TS EN ISO 50001 Energy Management System certification, within the framework of the process;

- Monthly targets are set for energy used throughout the plant, targets are followed-up on a daily basis and actual usage is examined.

- The energy management system is reported to the upper management at certain intervals, and targets and strategies are determined.
- Energy projections for the future are drawn up.
- Areas open to improvement are identified and studies are carried out for improvement.
- Significant studies considered to be necessary following the study are converted into projects.

OYAK Mining Metallurgy Group, which is among the most successful organizations in the iron and steel industry in terms of specific energy consumption, follows up the energy consumed per ton of crude steel and the energy targets become specific energy consumption parameters.

In addition, projects under the “Energy Review and Master Energy Plan” are monitored and systematically observed for their compliance with laws and regulations, and implemented.

DURING THE YEAR, AN ADDITIONAL 4,021,750 KWH OF ELECTRICITY WAS GENERATED AT THE POWER PLANT WITH THE OPTIMIZATION PROJECT AND 2,629,860 SM³ NATURAL GAS SAVINGS WERE ACHIEVED.

Power Plant Optimization and the Blast Furnaces Top Pressure Recovery Turbines (TRT1 and TRT2)

In 2017, the Power Plant Optimization and the Blast Furnaces Top Pressure Recovery Turbines were commissioned.

With the Optimization Project, optimum utilization of by-product gases and outsourced natural gas, efficient operation of steam boilers, and efficiency-based load production of steam boilers and steam turbines were provided.

The TRT Project aims to clean and cool the blast furnace gas obtained as a by-product of the process in the Blast Furnaces and to use the gas for electricity generation.

During the year, an additional 4,021,750 kWh of electricity was generated at the Power Plant with the Optimization Project and 2,629,860 sm³ natural gas savings were achieved. With the TRT

facilities, 54,787,279 kWh of electricity was generated and the electricity that is purchased was reduced.

The savings obtained through the previously completed projects, which are the Installation of Additional Combustion System at the Waste Heat Boilers of the Cogeneration Power Plants, the OG Fan Capacity Increase, the No. 3 Slab Oven Modernization and Cooling System (ECS) Improvement, were observed clearly in 2015, 2016 and 2017.

As of the year-end 2017, at Erdemir, the total annual energy saving of 243,400,215 kWh/year was achieved, while the total annual greenhouse gas reduction stood at 110,086 tons of CO₂.

As of the year-end 2017, total annual energy savings of 45,840,388 kWh/year were achieved at İsdemir. In addition, the total annual greenhouse gas reduction stood at 25,052 tons of CO₂.

AWARDS GIVEN TO ERDEMİR AND İSDEMİR

WIDE ACCLAIM AND AWARDS

OYAK MINING METALLURGY GROUP'S WORK HAS WON WIDE ACCLAIM AND AWARDS ON THE NATIONAL AND INTERNATIONAL STAGE.

OYAK Mining Metallurgy Group's work has won wide acclaim and awards on the national and international stage, and has served as a clear demonstration that the Group plays a responsible role in the sustainable future in the world, as well as in Turkey.

OYAK Mining Metallurgy Group wins Sustainability Award from the EBRD.

OYAK Mining Metallurgy Group won the grand prize in the "Sustainable Energy" category at the 7th Sustainability Awards held by the European Bank for Reconstruction and Development (EBRD) with the TRT project, which will enable İsdemir to generate electricity by using pressure energy.



AS A RESULT OF OYAK MINING METALLURGY GROUP'S SUCCESSFUL PERFORMANCE IN SUSTAINABILITY MANAGEMENT, ERDEMİR WAS AGAIN ONE OF THE FEW COMPANIES TO BE INCLUDED IN BORSA ISTANBUL SUSTAINABILITY INDEX IN 2017.

Erdemir maintained its position in the Sustainability Index.

This year, Erdemir was once again included in the BIST Sustainability Index, which includes companies traded on the Borsa Istanbul (BIST) with a high corporate sustainability performance.

As a result of OYAK Mining Metallurgy Group's successful performance in sustainability management, Erdemir was again one of the few companies to be included in Borsa Istanbul Sustainability Index in 2017, and it maintained its position in the Index covering the period from November 2017-October 2018.

The BIST Sustainability Index ensures that companies' approach to sustainability, their operations and their decisions are assessed from an independent viewpoint.

The Group is participating in many national and international environmental projects.

In the "Project for Determining Cleaner Production Possibilities and Applicability in the Industry" (SANTEM) carried out by TÜBİTAK and the Ministry of Environment and Urbanization for the examination of clean production opportunities in the steel industry, İsdemir undertook the role of serving as the pilot facility.

The question of "how existing best techniques can be applied" in the iron and steel production processes at the İsdemir site" will be investigated jointly with the TÜBİTAK team. Sectoral regulatory impact analysis will be carried out by utilizing the results obtained. Incentive and financing models will be developed and a management plan report will be published.

On the other hand, the Company took part in activities carried out to improve the calculation methods for greenhouse gas emissions of iron and steel, calculated annually by The Turkish Statistical Institute (TUSI) in the reports submitted to the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC), within the scope of the TASK GHG Project (Technical Assistance Project for Supporting the Mechanism of Monitoring Greenhouse Gas Emissions of Turkey), which is carried out in partnership with the European Union and the Ministry of the Environment and Urbanization.

Within the scope of the Stockholm Convention on "Persistent Organic Pollutants (POPs)", of which Turkey is a party, İsdemir contributed to "the Removal of POPs Residues and Reduction of POPs Emissions Project", which is carried out in partnership with the United Nations Development Program (UNIDO), the United Nations Development and Industry Organizations (UNDP) and the Ministry of Environment and Urbanization, as a pilot facility.

The Ministry of the Environment and Urbanization provided training for priority industrial sectors in Iskenderun within the scope of the "Reduction of POPs unintentionally emitted in the Production process" component of the project. Technical specialists working in the plants operating in the region, authorities from the Provincial Environmental Directorate and personnel from the Ministry of Environment and Urbanization participated in these training programs and a field visit to İsdemir was carried out with the participation of technical specialists. Meanwhile, emissions measurements were carried out at the 1st Sinter Plant and national reduction plans were subsequently developed for POPs emissions. Work is ongoing in cooperation with İsdemir, the Ministry of Environment and Urbanization, UNIDO and UNDP within the scope of the project.

İsdemir won 1st prize in the "Projects to Increase Energy Efficiency in the Industry" (SEVAP-3) category in the "2017 Energy Efficiency in the Industry Project" (SENVER) competition held by the Ministry of Energy and Natural Resources.

BIODIVERSITY IN NEW INVESTMENTS

ERDEMİR AND İSDEMİR EXAMINE ALL ASPECTS OF BIODIVERSITY IN MODERNIZATION AND NEW INVESTMENT PROJECTS.

Biodiversity is defined as the diversity of species, genes and ecosystems that live on Earth. Biodiversity, which is one of the most important branches of sustainability, and which has grown in importance especially in recent years, is high on the agenda for major companies with a high volume of production and which operate in the global economy.

Erdemir and İsdemir also examine all aspects of biodiversity in modernization and new investment projects, which are subject to the Environmental Impact Assessment Regulation in detail, and take necessary measures with investments.

Support for cultivation of the Ottoman Strawberry

Erdemir, one of the Group companies, continued in 2017 to work on the project to support Ottoman Strawberry farming, which was launched in 2016 with the aim of preserving biodiversity in Ereğli. Erdemir is undertaking the project together with the Black Sea Ereğli District Directorate of the Ministry of Food, Agriculture and Livestock, the Ereğli District National Education Directorate, the Association to Expand the Ottoman Strawberry and Protection of its Farmers. The project is of importance in preserving and increasing the production of the Ottoman Strawberry, which distinguishes itself from other strawberry varieties with its



ERDEMİR PLANTED 5,000 STRAWBERRY SEEDLINGS IN APRIL 2017 WITH THE GOAL OF RAISING THE NUMBER OF SEEDLINGS TO 15,000.

color, smell and taste, and is identified with Ereğli in the Black Sea region, due to its decline in recent years.

The project is primarily focused on quality seedling production and reproduction, addressing one of the main reasons for the decline in production, and strawberry seedlings were sent to Antalya to be reproduced in culture laboratories. Simultaneously, land in the Ahmetçikler region of Ereğli's Kocaali district, which was determined as the Black Sea production area, was prepared for cultivation with soil enrichment and an irrigation system was established. Erdemir planted 5,000 strawberry seedlings in April 2017 with the goal of raising the number of seedlings to 15,000.

Construction and renovation work was carried out to transform a disused school building located in the area into a training hall and rest area for the farmers who will carry out the production, which will include a Strawberry Centre that includes a refrigerated chamber for the protection of seedlings. The company also purchased agricultural equipment. The farmers who will carry out the production in the project area were appointed and the reproduced seedlings were planted in the ground in October 2017.

The first strawberry harvest in the three-year project will be realized in 2018. While production is carried out in the project area, the frigo seedlings, which are reproduced and protected in a refrigerated environment, will be distributed to the grower families. In addition, training will be provided to the growers at the Strawberry Center, which is also planned to function as a training building.

The first fruit will be collected in May and June, 2018. Meanwhile, the frigo seedlings, which have been protected in a refrigerated environment, will be distributed to families as set out by the District Directorate of Food, Agriculture and Livestock. Training for growers will be provided at the Strawberry Cultivation Centre. The families who were given the seedlings will then plant the seedlings on their own land in June. Activities in the project area are then planned to continue.

The project has played an important role in encouraging the cultivation of the Ottoman Strawberry in Ereğli in the Black Sea region, increasing its production and ensuring the sustainability of this species, which is identified with the region.

Forestation activities

OYAK Mining Metallurgy Group carries out projects aimed at reducing the direct and indirect environmental impacts arising from its activities to a minimum, while contributing to efforts to reduce carbon emissions.

The Group carries out measures for the protection of existing areas and to increase the area of forest and woodland, which are the most important areas to absorb and store carbon.

In order to achieve the goals of improvement and conservation, the possibility of using areas designated for afforestation for another purpose is taken into consideration before carrying out afforestation of the land, and the land structure and soil characteristics are determined.

In addition, every item of detail from the dimensions of the trees to be planted to the planting spacing is taken into consideration in the steps to be followed in the planting process. The tree is brought together with the soil once the land is prepared for forestry.

Erdemir and İsdemir continued their work to protect green areas and increase the presence of trees in the areas where they operate, and planted a total of 19,659 trees during 2017.

The Group also provided 11,800 trees to be planted in the Çanakale Doğandere region.

DEVELOPMENT OF EMPLOYEES

OYAK MINING METALLURGY GROUP IS AN ORGANIZATION THAT CONTRIBUTES TO THE INDIVIDUAL AND PROFESSIONAL DEVELOPMENT OF ITS EMPLOYEES.

Adopting a creative corporate culture that is open to new ideas and based on trust, OYAK Mining Metallurgy Group is an organization that contributes to the individual and professional development of its employees and aims to transform potential into productivity.

OYAK Mining Metallurgy Group adopts a culture of “being us” as the basis of the human resources approach.

OYAK Mining Metallurgy Group, which acts with the belief that its employees are the most important asset, adopts a culture of “being us” as the basis of the human resources approach. It takes into account the needs and expectations of its employees in order to establish and maintain this culture, and attaches importance to shaping working conditions in this direction.

OYAK Mining Metallurgy Group Human Resources Policy is based on the following.

- To adopt the vision, mission and values of OYAK Mining Metallurgy Group,
- To create a creative and trustworthy corporate culture that is open to new ideas,
- To contribute to the individual and professional development of its employees and to transform potential into productivity



OYAK MINING METALLURGY GROUP'S HUMAN RESOURCES PRACTICES INCLUDE INCREASING EMPLOYEE COMMITMENT.

SOCIAL PERFORMANCE

With its qualified human resources, the Group believes that it will be able to focus more strongly on its corporate goals and achieve success by raising the added value of its employees.

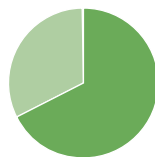
OYAK Mining Metallurgy Group employees move forward in line with the common goals as part of a large family.

OYAK Mining Metallurgy Group's human resources practices include increasing employee commitment, supporting the development of its employees and providing career opportunities that offer equal opportunity for all. Our employees produce and share information, are open to development, are responsible, generate solutions, are innovative and are able to work in teams, and progress in line with the common goals as part of a big family which develops and grows with the strength of its newly recruited employees.

Right from the moment they join the Group, employees act with the awareness of being part of a leading family, which is held up as an example in every area.

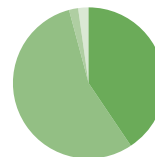
As of December 31, 2017, OYAK Mining Metallurgy Group employed a total of 11,975 people, including 8,096 blue-collar workers, 3,872 white collar employees and 7 contracted personnel.

Number of employees



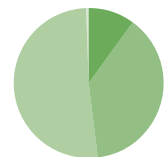
- Blue collar 67.61%
- White collar 32.33%
- Contracted 0.06%

Tenure of office



- Less than 10 years 40.63%
- 11-20 years 55.25%
- 21-25 years 2.17%
- 26 years or more 1.95%

Age distribution



- 18-30 age group 10%
- 31-40 age group 38.12%
- 41-55 age group 51.4%
- 56 age and above group 0.48%

HUMAN RESOURCES

OYAK MINING METALLURGY GROUP STRIVES TO ENSURE THAT EMPLOYEES ARE MOTIVATED IN THE RIGHT DIRECTION, CARRYING THEIR POTENTIAL TO THE HIGHEST LEVEL.

In the sector, where the number of male employees outweighs women at the management level, the ratio of female executive directors reporting directly to the Chairman of OYAK Mining Metallurgy Group stood at 18% at the end of 2017.

Evaluating human resources processes under a holistic approach

OYAK Mining Metallurgy Group treats strengthening the high performance culture as one of its priority strategies. The Group strives to ensure that employees are motivated in the right direction, carrying their potential to the highest level and undertaking improvements by operating feedback mechanisms in an effective manner.

With the performance management applied to all employees within the company, OYAK Mining Metallurgy Group aims to determine the individual targets that are consistent with the goals of the company and to plan their development according to their needs by measuring their contribution to the corporate targets.

Within the scope of the performance management, the Group is evaluated at the year-end based on the business target realization rates and basic / managerial competencies.

The aforementioned evaluations support the following:

- They help employees understand the mission and values of the organization,

- They ensure that each employee's individual targets work in tandem with the corporate goals,
- They provide employees with motivation to perform better,
- With the culture of feedback, they allow employees to better know and understand each other.

OYAK Mining Metallurgy Group evaluates human resources processes in a holistic approach from A to Z. Talent management processes are fully defined in the direction of group strategies and the development of employees is supported by the competence model. In addition to retaining new and existing human resources, the development activities are carried out in order to bring out the potential of employees through applications such as classroom training, mentoring and learning based on experience.

Applying the principle of “equal pay for equal work”

At OYAK Mining Metallurgy Group, the remuneration policy is based on the principle of “equal pay for equal work” in line with the business cascading infrastructure. The work levels are determined by taking into consideration of the extent of the work being done, and salaries are determined for these levels based on market research and internal analysis. With this system, it is possible to assign wages that are fair and competitive in the market.

OYAK Mining Metallurgy Group companies, whose main target of the remuneration policy is to maintain internal and external balance in the wage structure, are provided with the principle of “equal pay for equal work” principle. In the external balance (market sentiment), sector dynamics and inflation developments are taken into account.

The vested benefits provided to OYAK Mining Metallurgy Group employees are as follows:

- Group companies receive 12 salaries per year, wage increases are made at the beginning of each year.
- Monthly paid employees are given a premium per year based on company performance and individual performance.
- All monthly salaried employees are covered by private health insurance.
- The contribution of the Individual Pension System is provided to the Chief Engineer / Chief and the staff working above them.
- Employees benefit from the dining room inside the building for lunch.
- Companies are provided with transportation services.
- The memorandum of the person who has fulfilled a certain service year is given a memorial pad.

- Corporate vehicles and mobile phones are provided to employees who work in top management positions or who meet the requirements of the position they are in.

Carrying out industrial relations in a dialogue with mutual understanding

OYAK Mining Metallurgy Group conducts industrial relations by establishing a robust, constructive, development oriented and mutually understanding dialogue that respects the rights of its employees to organize themselves in trade unions and maintains workplace harmony with both employees and authorized trade unions. In this context, the Group adopts a mentality that supports the development of the trade union concept that is expected to be needed in the future and to create a model of modern industrial relations.

The rights and responsibilities of Group employees, the rules to be followed, prohibitions and disciplinary law, Collective Bargaining Agreement for the blue collar workers and the personnel regulation and its addendum, which was prepared and published in accordance with labor laws, for white collar employees are included in the procedures.

There are no practices of discrimination, child labor, forced or compulsory labor in the Group. At the same time, suppliers and the business partners are expected

to meet similar working norms. Human resources policies and processes are managed by expert units, employees are encouraged to participate in the management and practices are developed for employees to share innovative ideas which make a difference.

At the end of 2017, 67.61% of employees were registered with a trade union in OYAK Mining Metallurgy Group.

Systematic measurement of employee commitment

Employee commitment within OYAK Mining Metallurgy Group is determined through systematic measurements and various measures aimed at improvement are carried out, depending on the results. The measurements conducted in 2014 and 2015 produced a result that was above the world average for the blue collar workers. Improvement plans were prepared for the areas where the measurements indicated required development. In this context, the year 2016 was used as a year of implementation for the improvement actions.

The level of commitment among those employees drawing a salary was found to be 84%, identified to be at the same level as the average level of commitment of the best employers globally and throughout Turkey.

HUMAN RESOURCES

Communicating with employees through different platforms

Within the scope of internal communication activities and for the purpose of interaction, OYAK Mining Metallurgy Group establishes dialogue with its employees through different platforms at certain periods.

These platforms are as follows:

- Steel Portal
- Informative presentations regarding human resources systems and sharing meetings
- Group Academy Portal
- Employee activities
- OYAK Mining Metallurgy Group TV
- Individual interviews

OYAK Mining Metallurgy Group provides its employees with training and development opportunities during their careers.

Being one of Turkey's foremost and largest employers, Erdemir and İsdemir provide their employees with training and development opportunities during their careers from the very moment they start working in the Group.

The Group continues to progress by investing in new practices and methods in talent management and with its training

and development activities. Through its talent management, the Group aims to meet the existing organization's need for skills and talent, and to ensure the organization's human resources are competitive by supporting the employees through the appropriate development plans.

In the training activities, technical, personal and leadership development training is supported through internal training and outsourced training programs.

Erdemir and İsdemir training and development activities have the following aims:

- to be able to follow the growth and development of the group companies in terms of human resources,
- to contribute to employee motivation and commitment by offering development plans and opportunities, which are suitable to the individual,
- to create a corporate culture where performance and talent are recognized, and which are developed for leadership positions,
- to raise human resources who will help the group become a world-class company and make this sustainable.

In 2017, Erdemir conducted 303,715 training hours and 54.6 training hours per person with 47% of the training provided by in-house sources. Occupational health and safety accounted for 37% of the training and professional development comprised 33% of the total, as the biggest categories.

The Group Academy - Raising future leaders of OYAK Mining Metallurgy Group

The Group Academy manages the training needs and activities of OYAK Mining Metallurgy Group under one roof, which will serve corporate strategies and goals. The Group Academy, which was transformed into a corporate university structure in 2015, continues to provide high quality education and development programs in line with the positions of the employees, their competencies and the departments they work in.

Acting with the awareness that one of the key factors of being a team that displays a strong and successful performance is leadership, OYAK Mining Metallurgy Group founded the Faculty of Leadership in 2015 with the aim of raising leaders who will help the Group reach its future goals, in addition to creating a common management culture within the Group.

In 2016 and 2017, the Faculty - which operates within the Group Academy - offered development programs designed to complement each other on the basis of levels. The development follow-up process was monitored through the marking system and graduation requirements.

Executives who participated in the program had the opportunity to develop their leadership competencies through a variety of methods. These methods included in-class training, the 360-degree evaluation, one-to-one coaching, follow-up activities, learning from each other.

IN 2017, THE GROUP ACADEMY CONTINUED TO SUPPORT INDIVIDUAL DEVELOPMENT BY OFFERING DISCOUNTS TO EMPLOYEES IN THEIR POST GRADUATE AND CERTIFICATE PROGRAMS APPLICATIONS THROUGH THE COLLABORATION WITH UNIVERSITIES.

More than 400 managers had completed the program in this faculty by the end of 2017.

In 2016, the Group Academy also focused on Technical Faculties by prioritizing the needs focused on corporate strategies, in addition to the Faculty of Leadership. The first step in this context, the Marketing and Sales Faculty, was completed in 2017 with the participation of 82 people.

Also in 2017, the Group Academy continued to support individual development by offering discounts to employees in their post graduate and certificate programs applications through the collaboration with universities.

The 2017 training programs, which were designed by the Group Academy in order to share the Group's knowledge and experience with its customers and in line with the training participation requests received from customers, were successfully completed.

The Foremen Development Program, which was launched at the Ereğli location in 2016 and in which 214 people attended, continued with the attendance of 82 people in 2017. A follow-up program of 186 employees, who completed the program in the previous year, was conducted and they were therefore able to complete the Development Program.

OYAK Mining Metallurgy Group employees participate in many national/international conferences, congresses and summits.

OYAK Mining Metallurgy Group provides its employees with the opportunity to participate in national/international conferences, congresses and summits in order to help them share their knowledge and experience and also for them to follow up on current topics and studies related to the sector and the Group's operations.

In this vein, a total of 355 employees attended 197 different congresses, summits, conferences, seminars and non-corporate training programs in 2017. At Erdemir, 15 oral and poster presentations were provided in four different congresses on the topic of Occupational Health and Safety and at Isdemir, and 10 oral and 10 poster presentations were given by the employees.

The In-Unit Training System

The In-Unit Training System enables the continuous development of work methods through the transfer of knowledge and experiences as a dynamic training model. In this context, a total of 1,273 Erdemir employees and 10,217 Isdemir employees were provided with 40,028 hours of training.

HUMAN RESOURCES

Internship opportunities

OYAK Mining Metallurgy Group continued to offer internship opportunities within the quota in 2017. Erdemir realized its 2017 internship program with the Iron and Steel Program brands with an approach oriented towards meeting the needs of the workforce. The Iron Program provided 188 vocational high school students with on-the-job internship opportunities in the skills internships. The Steel and Ore Class Programs offered summer internship opportunities to a total of 130 students from the Faculties and Vocational Junior Colleges.

On the other hand, 185 vocational high school students at Isdemir were provided with skills training, 40 Vocational Junior College students and 151 university students were provided with summer internships and 15 graduate engineer / specialist students (interns) were provided with internships.

Enriching the social lives of its employees

OYAK Mining Metallurgy Group aims to enhance its employees' dialogue with each other, enrich their social lives and strengthen their loyalty. In this context, all employees – and their families - are offered access to various facilities such as associations and social clubs, accommodation, sports clubs, swimming pools and beaches in Ereğli (on the Black Sea) and Iskenderun.

Sporting events organized within the company include all Group companies

and social platforms, thus offering support to employees' sporting activities. Various and regular social events are held on special days such as the Plant anniversary, Mother's Day, and World Women's Day. For women employees, there is a fully equipped nursery service located in the facilities.

The other benefits offered to Erdemir and Isdemir employees are as follows:

- Provision of preventive medicine, periodical examinations, prevention of work accidents and occupational diseases, emergency intervention and first aid services through health centers.
- Private health insurance packages and an individual pension system are offered to employees within the Group.
- Under the program where employees are given time off to pursue post graduate education, employees are offered support to participate in classes and prepare for the tests.
- The employees who have completed their 10-15th and 20th year of service are offered a piece of gold memorabilia as a reward for their time in the Company, in the foundation anniversaries.
- Blue collar workers are provided with assistance such as fuel support, an allowance for festivities (such as bayram), and an annual paid leave allowance, as required by the collective bargaining agreement.
- The food and transportation needs of the employees are met.

Employee participation is considered to be of paramount importance at OYAK Mining Metallurgy Group.

OYAK Mining Metallurgy Group regards employee participation as an indispensable requirement in terms of achieving its objective of long-term, profitable and sustainable growth.

From knowledge to experience, from new ideas to sharing in the proposal system, the Group makes use of every contribution from its human resources. These contributions pave the way for improvements and savings in a wide range from environments, in customer satisfaction, in OHS and in operational activities.

The OPEX Projects, which were commissioned for the purposes of lower cost production, prolonging the life of equipment, energy savings, raw material optimization and improving product quality also continued in 2017. The project is expected to pave the way for annual revenues or savings of USD 1.6 million for Erdemir and USD 9.32 million for Isdemir.

Within Erdemir and Isdemir, support for the following training programs continued with the Minitab® program in order to spread the operational excellence projects.

- Statistical Data Analysis (SDA)
- Design of Experiments (DOE)
- Statistical Modeling for Managers
- Measurement Systems Analysis (MSA)

IN 2017, A TOTAL OF USD 13 MILLION OF REVENUE WAS GENERATED FROM THE CALCULABLE SUGGESTIONS THAT REACHED THE ERDEMİR SUGGESTION SYSTEMS.

Within this framework, training was provided to a total of 44 employees at Erdemir and 55 employees at İsdemir.

In 2017, Erdemir and İsdemir employees offered their support by sharing their improvement suggestions in various fields such as occupational health and safety, environmental performance, customer satisfaction and saving energy within the scope of the suggestion systems application.

In 2017, a total of USD 13 million of revenue was generated from the calculable suggestions that reached the Erdemir suggestion systems.

In 2017, a total of 44,176 suggestions were submitted at İsdemir and 13,703 of these suggestions were applied. The number of mentioned suggestions decreased by 14.5% when compared to

2016, and the number of suggestions per person stood at 9.07. At İsdemir in 2017, a total of USD 12 million in revenue was obtained from the suggestions that came to the suggestion systems and whose return was calculated.

In 2017 at Erdemir, 233 improvement teams (ERIT) were established within the framework of teamwork, and 149 teams announced the results of the work done.

At the 20th Quality Circles Sharing Conference, the 7th Line Argon Production Increase Team from Erdemir provided a presentation.

In 2017, 520 of the 864 Kaizen, which were established at İsdemir, were completed, providing USD 16.7 million in annual revenue.

The human resources targets of OYAK Mining Metallurgy Group determined in the direction of its 2020 vision:

- To develop organizational structures within the framework of corporate vision and targets,
- To employ and retain talented young people within the Group,
- To increase the education level of employees,
- To develop a human resource that is happy, flexible, agile, development-oriented, respectful of the society, people and environment,
- To increase employee satisfaction and loyalty,
- To identifying needs in line with the Group objectives and to take the necessary actions for career development plans within the scope of Talent Management and Backup Planning Process,
- To enhance competitiveness with effective human resources planning, and to train the leaders of the future,
- To develop a targeted management culture through bolstering individual goals apart from the group strategies and creating a profile of employees who are aware of their own potentials.

Professional, Technical, Compulsory Training / Personal Development and Management Training

Company	No of People	Total Hours of Training
Erdemir	41,539	303,715
İsdemir	42,211	237,841

Company	New Recruitment Retention Rate (%)
Erdemir	98
İsdemir	98

OCCUPATIONAL HEALTH & SAFETY (OHS)

“PEOPLE FIRST”

GUIDED BY THE PRINCIPLE OF “PEOPLE FIRST”, OYAK MINING METALLURGY GROUP AIMS TO DEVELOP AN AWARENESS OF SAFETY WHICH STARTS FROM THE INDIVIDUAL.

OYAK Mining Metallurgy Group aims to create proactive awareness with regard to Occupational Health and Safety (OHS).

Guided by the principle of “people first”, OYAK Mining Metallurgy Group aims to develop an awareness of safety which starts from the individual and then extends to their entire environment, and which goes far beyond the protective equipment provided in the OHS field and by legislation. The Group strives endlessly to ensure that the understanding of occupational health and safety, which is developed by the participation of the employees at all levels, is put into practice.

In the future, OYAK Mining Metallurgy Group plans to bring together the experience and achievements gained from the work in this field with stakeholder groups such as employees’ families, regional producers and students, and to encourage a behavior-oriented safety culture.

The Group designs projects aimed at ensuring that the work carried out in the field of OHS does not remain only at the management level, and ensures that it is handled together with employee initiative.



OYAK MINING METALLURGY GROUP TAKES THE ISSUE OF OCCUPATIONAL HEALTH AND SAFETY BEYOND A MANAGERIAL FOCUS AREA AND TREATS IT AS A CORPORATE SOCIAL RESPONSIBILITY PROJECT.

OHS policy at OYAK Mining Metallurgy Group

- To produce “Accident Free Steel” by applying risk management,
- To safeguard the health of employees by making working environments safe,
- To ensure that the employees have a stake in the sustainable “safety culture”.

In 2017, work has carried out to ensure the continuity and development of OHS system.

Erdemir and İsdemir, which fulfilled the requirements of the TS-OHSAS 18001 Occupational Health and Safety Management System, ensured the continuity and development of the system in 2017.

At İsdemir, the year 2017 witnessed the best values of the last 16 years in the general accident occurrence, accident frequency-weight ratios, total lost work days and accident figures, and the accident frequency stood at 0.99.

Different training programs held to cover different risks in the field of OHS.

In order to create and maintain a culture of safety in all of its companies, OYAK Mining Metallurgy Group continues to organize various training programs to deal with the various risks facing both employees and sub-contracted employees, depending on the characteristics of their work that they carry out.

In 2017, at Erdemir, 164,157 man*hours of OHS training was provided to employees, and 10,332 man*hours of OHS training was provided to sub-contracted employees. At İsdemir, 145,775 man*hours of OHS training was provided to employees and 29,914 man*hours of OHS training was provided to sub-contracted employees.

OYAK Mining Metallurgy Group companies are systematically monitored for their OHS performances.

OYAK Mining Metallurgy Group companies are systematically monitored for their OHS performances through the applications such as the OHS board, committee and sub-committee meetings, both pre-announced and surprise safety tours, accident near miss practices, and accident root cause analysis. Measures that will eliminate the identified non-conformances are rapidly taken and implemented.

In 2017, at Erdemir, a total of 141 pre-announced and 91 surprise safety tours were carried out. At İsdemir, 26 pre-announced safety tours and 136 in-unit safety tours were carried out. Necessary improvements were carried following an evaluation of the potential dangers and risks identified during the safety tours.

In the prevention of accidents, near miss applications are used as an important tool in the Group. This application is intended to identify situations that do not affect employees, but could cause injury and damage in case of repetition.

OHS Training Table

Company	The Number of Participants	Man*Hours	Ratio in Total Training (%)	Average OHS Training Hours per Employee
Erdemir	65,238	164,157	37	20.28
İsdemir	29,261	145,775	61	29.92

OCCUPATIONAL HEALTH & SAFETY (OHS)

IN 2017, AT ERDEMİR, A TOTAL OF 141 PRE-ANNOUNCED AND 91 SURPRISE SAFETY TOURS; AT İSDEMİR, 26 PRE-ANNOUNCED SAFETY TOURS AND 136 IN-UNIT SAFETY TOURS WERE CARRIED OUT.

In 2017, at Erdemir, improvements were carried out following 2,278 danger and 92 near miss notifications. At İsdemir, rectifying work was carried out following 14,456 near miss incidents during the year, and 96% of the items determined as requiring improvement were completed.

In order to provide order and discipline in the workplace by increasing participation and motivation of the employees through improvements in work safety, the working environment, efficiency and in machine performance, the 15th period 5S Scoring audits were carried out at 526 sites throughout İsdemir. During 2017, a total of 11,326 areas requiring improved, which were identified and monitored through the OHS Systematic (HGT, Non-Compliance, Accident Reports, Drill, the OHS Board Meetings) were again systematically followed up.

At İsdemir, work accidents and near miss incidents which occurred in workplaces and which could be taken as examples, were used to prepare the Accident Sharing Presentation. The Presentation was shown to 862 employees by drawing lessons from the same type of work accidents and near miss incidents, in order to ensure these accidents were not repeated.

At İsdemir, the "Programmed Inspection of Occupational Health and Safety in the Main Metal Industry" started to be carried out on February 14, 2017 by the Ankara

Group Presidency of the Labor Inspection Board of the Ministry of Labor and Social Security, and the inspection was successfully completed on November 21, 2017.

Sharing information about examples of good practice in the field of OHS

Erdemir and İsdemir carried out safety tours and audits in 2017 in line with the criteria determined by the World Steel Association. Erdemir reported 239 incidents of non-conformity and 29 incidents of good practices through these activities. Examples of good practices were shared with the World Steel Association, while the non-conformities were addressed with the improvement plans created. At İsdemir, the improvement plans related to 467 items, which were identified during the audits carried out, were implemented.

Within the framework of the Prevention of Major Industrial Accidents and Mitigating their Effects (SEVESO II Directive), the second of the "Process Safety Workshop" (Process Safety Workshop-2), organized by the World Steel Association, took place in Amsterdam Hampshire between May 23-24, 2017. Information about the work and applications of Erdemir and İsdemir with regard to Process Safety were shared during the workshop.

Erdemir attended the “Workshop on Safe Work at Height” which was held by the Ministry of Labor and Social Security on December 12, 2017. During the workshop, information was given about the work area and work platform, which was built to carry out the practical sections of the Safe Work at Height training program at Erdemir, and information was also provided about the training which was provided. Furthermore, information was provided about the lifelines that allow safe working at height, which are connected to the chimney and crane routes.

İsdemir participated in the Ninth National Occupational Health and Safety Congress held in Adana between November 30 and December 2, 2017 with three oral and three poster presentations.

Emergency Management

As required by the Regulation on the Protection of Employees from the Dangers of Explosive Atmospheres” and the “Regulation on Equipment and Protective Systems Used in Possible Explosive Atmospheres”, which are part of the SEVESO activities, during 2017 Explosion Protection documents were renewed in the regions where there was deemed to be a risk of explosion at the Erdemir and İsdemir sites. In line with the recommendations of the renewed reports, regions with explosion risk were detailed. The exproof properties of the equipment used in these regions and their conformity to the zone classifications were re-

ported and improvement activities were initiated for the exproof equipment, which were found to be non-conformant.

The company completed the drawing up of P&ID (piping and instrumentation diagram) diagrams, which are inputted into the safety report, for facilities where there were either no up-to-date P&ID diagrams or where there were none at all, as well as P&ID diagrams of hazardous fluid pipelines which are within the scope of SEVESO, of the units under the mediation and coordination of Erdemir Engineering in 2017. By using the P&ID diagrams, which are to be completed in 2018, the Erdemir Safety Report will be updated together with the consultant company.

A protocol was signed between Erdemir and ÇASGEM, the education and research unit affiliated to the Ministry of Labor and Social Security, in 2016. Within the scope of the protocol, in 2017, Bowtie Analysis, Failure Mode and Effect Analysis, Fault Tree Analysis, Event Tree Analysis, Preparation of the Protection from Explosion Document and BEKRA (Major Industrial Accident) training programs were provided by ÇASGEM.

In 2017, 82 Emergency drills took place at Erdemir. In order to provide training for the personnel who will be on duty in emergency search and rescue operations, according to the protocol made with AFAD (Disaster and Emergency Management Authority), 19 employees were sent to the AFAD Sakarya Regional Directorate for training.

Emergency training programs, plans and equipment were reviewed at İsdemir in 2017. In total, 57 Emergency Managers, 475 Incident Scene Administrators and 620 employees who will take part in Emergency Response teams were trained. Emergency Awareness training programs were provided for all employees. In addition, 28 successful employees were provided with the National Emergency Response training. One general drill and 74 in-unit drills were carried out at İsdemir within the scope of Emergency Management System.

Personal Protective Equipment

OYAK Mining Metallurgy Group continued to provide world-class equipment for its employees which was appropriate to their working conditions, and carried out improvements when necessary, by constantly monitoring the performance of this equipment during their use.

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