



**SUSTAINABILITY
REPORT 2019**

ABOUT THE REPORT

About Kastamonu Entegre
Production Plants
Brands
Products
Mission Vision Strategic Priorities
Core Values
Governance
Awards
Memberships

5-14

PERFORMING OUR DUTY WITH A RESPONSIBLE MANAGEMENT APPROACH

Economic Performance
Ethics and Compliance
Audit and Risk Management
Innovation and R&D
Responsible Supply Chain Management
Supplier Evaluation
Product Quality and Safety
Product Quality and Safety Controls
Quality Management Systems Applied
Total Quality Management Journey
Customer and Dealer Satisfaction

18-26

PRESERVING THE BALANCE OF NATURE

Environmental Management
Environmental Policy
Sustainable Forest Management
Materials Management and Recycled Material Usage
Combating Climate Change and Energy Management
Forests and the Carbon Cycle
Replacement of Fossil Fuel
Thermal Efficiency
Water Management
CO₂ Emission
Energy Management
Energy Consumption
Energy Intensity
Our Energy Efficiency Studies
Waste Management

34-44

CONTRIBUTION TO SOCIETY

Community Investment

45-51

DOCUMANTATION

Carbon Footprint Calculations
Communication with Stakeholders

52-54

SUSTAINABILITY APPROACH

Sustainability Approach
Sustainability Strategy
Sustainability Policy
Sustainability Priorities
United Nations Sustainable Development Goals and Kastamonu Entegre
Stakeholder Dialogue

15-17

EMPLOYEE ORIENTATION

Human Resources Management
Human Resources Policy
Employee Profile
Equal Opportunity
Attracting and Retaining Qualified Labor
Employee Development and Training
Performance and Career Management
Occupational Health and Safety

27-33

► **About The Report**

As Kastamonu Entegre, we advance our vision of becoming a global brand with an ethical, transparent and accountable management approach. We carry out our activities that have ongoing for the past 50 years, with the awareness of our environmental, economic and social contributions and impacts.

The report you are reading includes the sustainability performance of our company's Turkish operations between January 1 and December 31, 2019.

This report has been prepared by the Kastamonu Entegre Sustainability Working Group, inspired by the Global Reporting Initiative (GRI) Standards and considering each stage of our value chain. At the same time, the United Nations Sustainable Development Goals have also provided important input to the report. Sustainability priorities are determined according to the feedback of the Stakeholder and Sustainability Committee.

We aim to continue our reporting activities over the coming periods and improve them in line with our stakeholders' expectations.

In order to minimize environmental impacts, we prepared the Kastamonu Entegre 2019 Sustainability Report digitally and present it to your valuable consideration at www.keas.com.tr address.

You can send your questions and suggestions via surdurulebilirlik@keas.com.tr.



CEO's Message

Dear Valued Stakeholders,

As a deeply rooted establishment with a fifty-year pedigree, our products deliver the warmth and purity of nature to the living environment. Indeed, and we remain a bridge between nature and daily life, not only in our country, but also in the lives of millions of people across different geographies.

During the pandemic era that has affected all countries, nature has once again reminded us of the fact that our biggest responsibility is to seek ways to achieve economic growth efficiently without consuming the natural resources, and to act with awareness of the environmental impact of our business processes. The work we have done in light of this sustainability approach, an integral part of our corporate governance principles, provides the best proof that we are on the right track.

In this period where ensuring public health is vital, we expanded our hygienic product range with our Hygiene+ featured laminate flooring and panel products developed as an outcome of our R&D studies in Technopark Istanbul. With these innovative products, we aim to

create safe living spaces by meeting not only aesthetic demands, but also the need for healthy design solutions.

The pandemic has also been an imperative test for the reliability, agility and ability of our supply chain in adapting to a new situation. In this sense, we have managed the process very successfully. We have benefited greatly from our localization project, which is important in terms of increasing employment and reducing CO₂ emissions based on distance by supporting local production. We continue to develop digital transformation projects that increase our efficiency and speed, and that provide a competitive edge in line with new technologies that rapidly change business processes.

As the second largest partner of ENAT A.Ş., the first and only organization operating in Turkey in the field of industrial forestry and sustainable forest management, we carry out exemplary studies in those regions in which our facilities are located. Accordingly, we have undertaken a plantation study in Bulgaria.

We are proud to bring you the second of our sustainability reports, which we prepared in a first for Turkey, and as one of the world's three largest companies in the wood-based panel industry. We will continue the work implemented thus far in step with our respect for, and responsibility to ensure future generations' right to a good life in the years to come.

On behalf of our country and the wider world, I wholeheartedly wish every success to the studies in the field of environment and sustainability, and that they advance rapidly in a healthier world where all living things are respected.

With my deepest wishes,

Haluk Yıldız
CEO



► About Kastamonu Entegre



ABOUT KASTAMONU ENTEGRE

SUSTAINABILITY APPROACH
PERFORMING OUR DUTY WITH A RESPONSIBLE MANAGEMENT APPROACH
EMPLOYEE ORIENTATION
PRESERVING THE BALANCE OF NATURE
CONTRIBUTION TO SOCIETY
DOCUMENTATION

About Kastamonu Entegre

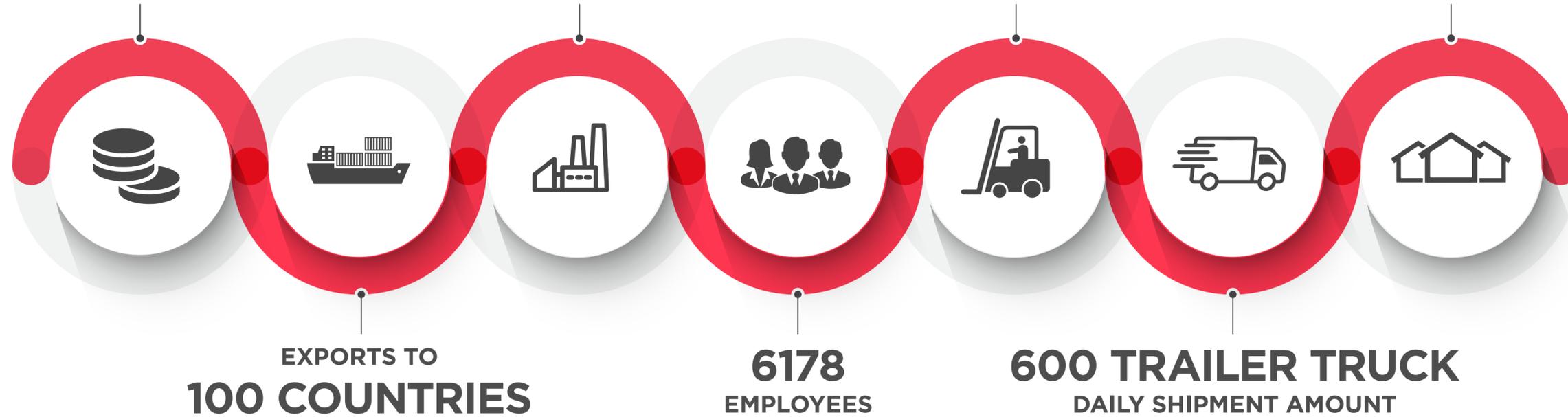
Established in Istanbul 50 years ago to operate in the wood-based panel industry with hundred percent domestic capital, our company today is the “Largest Turkish Investor in Italy” and “the largest MDF producer and exporter of the Russian market” with production facilities in six countries worldwide, and continues to be the producing force of Turkey and the world.

1,2 BILLION \$
CONSOLIDATED
TURNOVER

PRODUCTION IN
6 COUNTRIES

5,6 MILLION
m³/year
PRODUCTION CAPACITY

PRODUCTION IN VOLUME TO
CREATE LIVING SPACES FOR
4.500 RESIDENCES
EVERY DAY

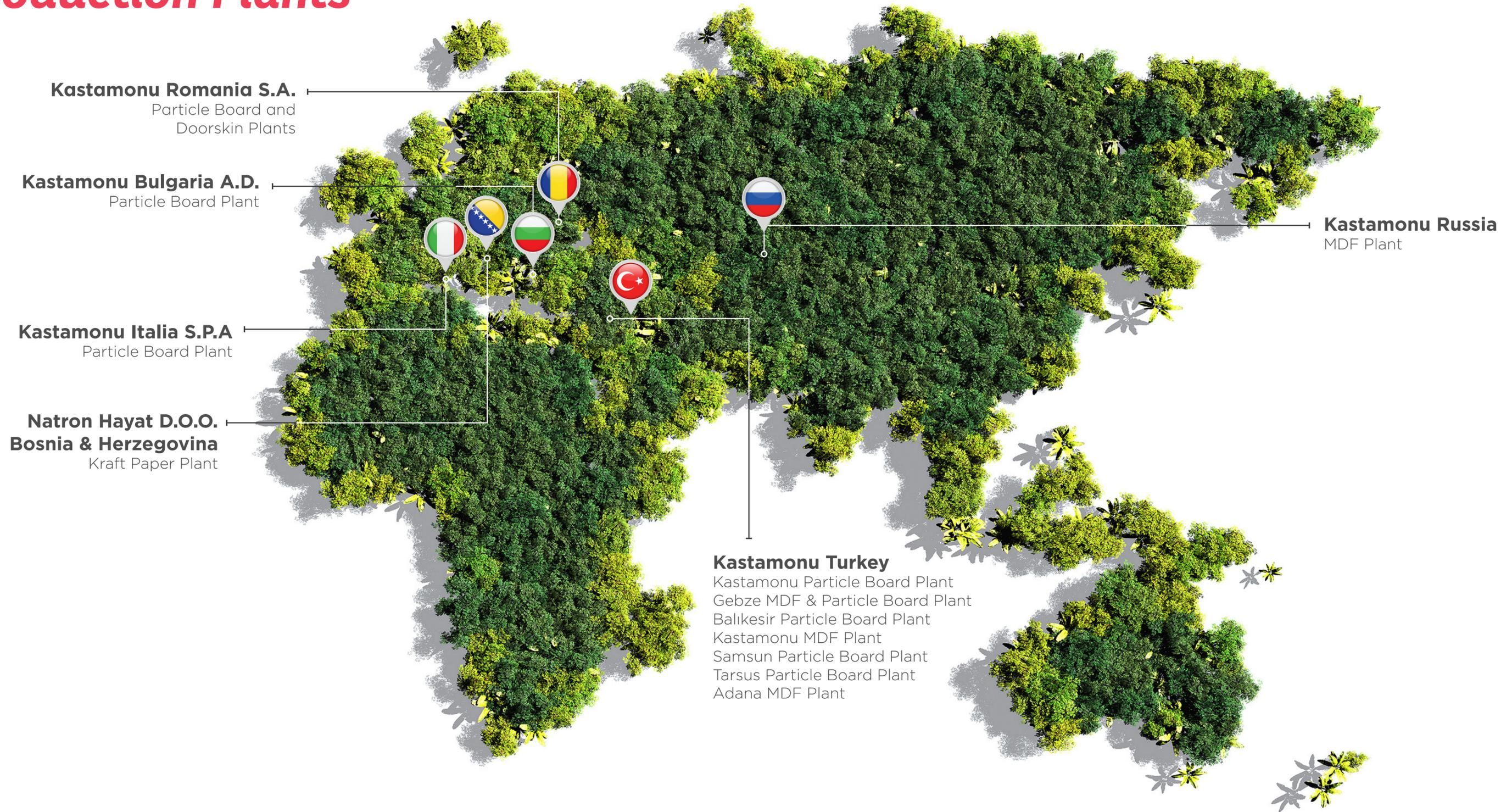


IN TERMS OF PRODUCTION,
1st IN TURKEY
4th IN EUROPE
7th IN THE WORLD
IN THE WOOD-BASED PANEL
INDUSTRY

**ONE OF THE WORLD'S
TOP 4 MANUFACTURERS**
OF MDF, PARTICLE BOARD,
LAMINATE FLOORING, DOOR
PANEL PRODUCTS

PRODUCES **6%**
OF THE WORLD'S LAMINATE
FLOORING

Production Plants



Brands

TEKNOPAN CHIPBOARD **YONGAPAN** CHIPBOARD **MEDEPAN** (MDF) MEDIUM DENSITY FIBERBOARD



TEKNOLAM MELAMINE FACED CHIPBOARD **YONGALAM** MELAMINE FACED CHIPBOARD **MEDELAM** MELAMINE FACED MDF



FLOORPAN 'Laminate Flooring' **Art FLOOR** 'Laminate Flooring'



PRINTPAN PRINTED PANEL **LIGHTPAN** DECORATIVE PANEL



DOORLAM MELAMINE FACED DOOR PANEL



DORPAN DOOR SKIN



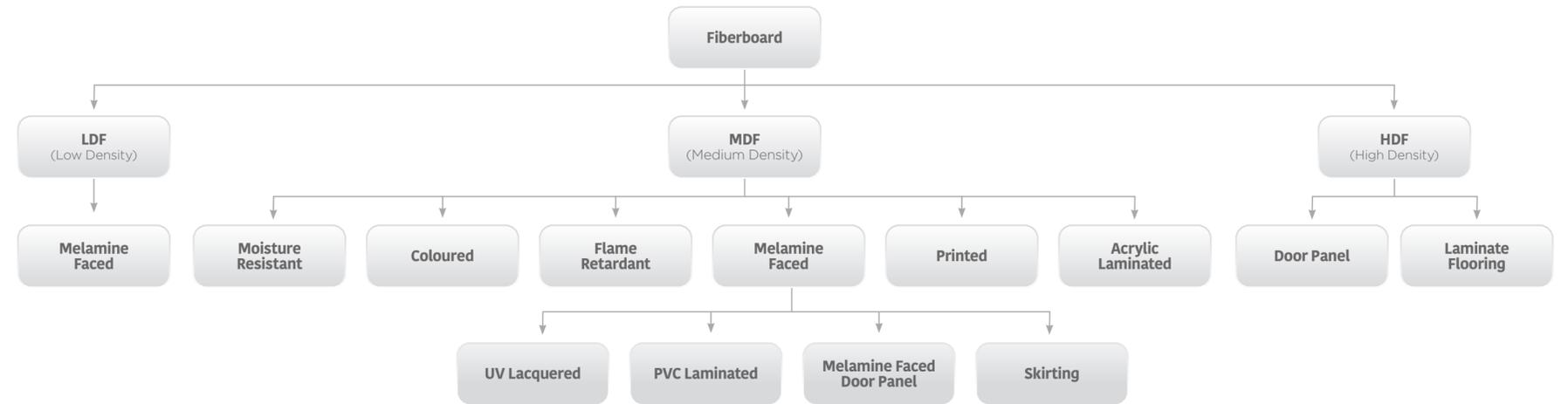
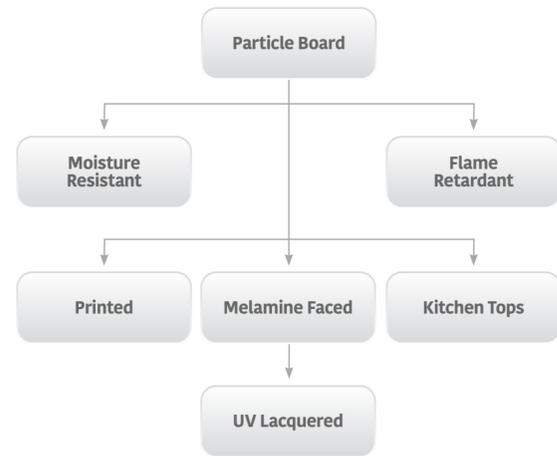
EVOGLOSS ACRYLIC LACQUERED PANEL **GlossMAX PRO** ACRYLIC LACQUERED PANEL **MATTPLUS** ACRYLIC LACQUERED PANEL **GLOSSMAX** ACRYLIC LACQUERED PANEL **NON SCRATCH ACRYLIC PANEL** ACRYLIC FACED PANEL



NEOTOP WORKTOPS **TECHNOTOP** WORKTOPS



Products



MOISTURE RESISTANT



FLAME RETARDANT



MELAMINE FACED



PRINTED



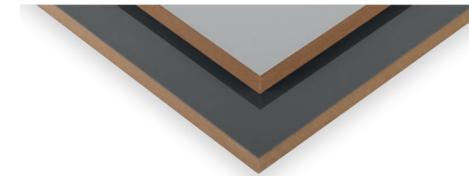
UV LACQUERED



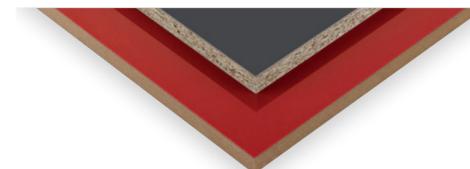
RAW AND LAMINATED



ACRYLIC LAMINATED



PVC LAMINATED



PRINTED



LAMINATE FLOORING



› Mission & Vision, Strategic Priorities



Misyon

To add value to the comfortable living spaces with high quality, innovative, reliable and environmentally friendly products which meet all stakeholders' expectations at the highest level in the wooden panel sector.



Vizyon

To become one of first 5 producers in the world in the wooden panel sector and to make Kastamonu Entegre become a global brand.



Strategic Priorities



Sustainable Growth

Managing turnover, profitability, production volume and supply chain in a balanced way; to sustain growth by using resources effectively.



Being Customer and User-Focused

To adopt meeting the needs and expectations of customers and users (craftsmen, architects, carpenters and end consumers) as the primary goal.



Operational Excellence and Agility

Performing tasks with optimum efficiency and quality to meet stakeholders' expectations; to adapt quickly to changing conditions.



Digital Transformation

Transforming into a digital business by implementing digitalization projects (big data, Industry 4.0, AI, etc.) that support the priorities and strategies of the company.



Innovation and Sustainability

Being competitive to generate value with new products, services and business models to meet customer/user needs; to develop projects to ensure economic, social and environmental sustainability.



Global Thinking

Designing activities and processes by considering the global structure of Kastamonu Entegre, and spreading best practice applications



Human-Based Approach

To prioritize the human focus in all operations engaged with internal and external stakeholders.

Core Values



Sense of Justice and Integrity

- ✓ We treat all our employees fairly and offer equal opportunities.
- ✓ We build relationships with all our stakeholders based upon integrity, fairness and trust.
- ✓ We are accurate, open and consistent in our words and behavior.
- ✓ We encourage everyone to express their ideas.



Transparency

- ✓ We work in open communication.
- ✓ We share our knowledge and experience.
- ✓ We work in a feedback culture.
- ✓ We share our ideas with a questioning culture.



Loyalty

- ✓ We ensure a working environment of high motivation.
- ✓ We encourage and reward success.
- ✓ We support each other.
- ✓ We are part of a strong and learning organization.



Responsibility

- ✓ We do not allow environments where we detect risks.
- ✓ We act within the framework of ethical values and principles.
- ✓ We perform our tasks with holistic responsibility.
- ✓ We anticipate the consequences of our words and behavior, and bear their responsibility.



Continuous Improvement

- ✓ We investigate and question in light of science.
- ✓ We monitor change and become part of it.
- ✓ We support our team members' potential and their activities that create value.
- ✓ We constantly renew ourselves and prepare for the future.



Teamwork

- ✓ As part of a global team, we work together towards the same target.
- ✓ We share ideas, technology and talent and reach targets as a team.
- ✓ We trust each other individually and as a team and share responsibility.
- ✓ We embrace difficulties; we learn from each other.



Respect for Human and Nature

- ✓ We care about each other.
- ✓ We approach differences with respect.
- ✓ We work with respect to the environment and nature, and are aware of our social responsibilities.
- ✓ We establish our relationships and communication with respect.

Governance

The basis of our Kastamonu Entegre corporate governance understanding is transparency, justice, ethical behavior and compliance with legal regulations. Our Board of Directors, the highest administrative body, consisting of 4 people, manages and represents the company by considering its long-term interests, with a rational and cautious risk management approach by optimizing the risk, growth and return balance of the company.

Our working committees, which come together periodically with proactive and synergetic participation around our core values of taking responsibility and teamwork principles, act in coherence to achieve the company's strategic goals.



Front Left
AHMET YAHYA KİĞİLİ
Chairman

Right Back
MEHMET AVNİ KİĞİLİ
Vice Chairman

Left Back
HALUK YILDIZ
Ağaç Grubu Başkanı
Kastamonu Entegre CEO'su

Front Right
MEHMET ORHAN İDİL
Board Member

Awards

inovalig

We ranked second in the “Innovation Strategy” category among 1216 companies in the InovaLIG award program held during “Turkey Innovation Week” organized by the Turkish Exporters Assembly (TIM) under the coordination of the Ministry of Trade.

Capital

We maintained our place among the top 10 in the “Overseas share in turnover” category in Capital Magazine’s “Largest Turkish Companies Founded Abroad” research. Kastamonu Italy entered the “Fastest growing companies abroad” list in 3rd place. In the category of “50 largest Turkish companies founded abroad”, Kastamonu Russia ranked 20th and Kastamonu Romania ranked 31st. Kastamonu Bulgaria and Natron Hayat (Bosnia and Herzegovina), on the other hand, ranked 11th and 17th among 50 companies in the “2nd League of Turkish companies established abroad”.

KalDer

We were deemed worthy of an award with our 2 projects in the “Quality Circle” category at the 22nd Quality Circles Sharing Conference organized by the Turkish Quality Association (KalDer). Our Romanian team was the first foreign team to attend the conference.

ISO 500

Our company, which has been among the top fifty of Turkey’s 500 Largest Industrial Enterprises (ISO 500) research for over a decade, did not break this tradition in 2019.

TÜSİAD SD²

In the TÜSİAD Digital Transformation in Industry (SD²) program, the project we developed with METU Technocity company, Büyütech, was awarded as a solution file with ‘commercialization potential’ by an independent jury at the 2019 Success Stories Ceremony.

10th Energy Efficiency Forum

Our Gebze and Balıkesir facilities received a certificate of achievement at the 10th Energy Efficiency Forum and Fair, one of the biggest and most important events in Turkey in the field of energy efficiency.

PERYÖN

We were deemed worthy of the jury special award with the practice of “Building an Innovation Culture in a Traditional Sector” in the “Digital Transformation and Innovation in Human Resources” category at the 11th “Value to People Award Ceremony” organized by the Turkish Human Management Association (PERYÖN).

Technology Development Foundation of Turkey

A Kastamonu Entegre employee, who works in the Business Planning and Innovation Directorate of the company, was selected as the youngest candidate for the Young Innovation Leaders Program organized by the Technology Development Foundation of Turkey (TTGV).

Harry Earl Memorial Award

This year’s recipients of the Harry Earl Memorial Award to commemorate Dr. Harry Earl at the “International Panel Products Symposium” were our two employees working at the Kastamonu Entegre R&D team.



Memberships

We care about our relations with the industrial associations and non-governmental organizations we cooperate with; we actively participate in meetings and events staged by these institutions and organizations.

MDF and Particle Board Industrialists Association (YOMSAD)

Turkey Forest Products Association of Industrialists and Businessmen (TORID)

Turkish People Management Association (PERYÖN)

Turkish Quality Association (KalDer)

Association of Ethics and Reputation (TEİD)

Foundation for the Preservation and Promotion of Environmental and Cultural Heritage (ÇEKÜL)

The Turkish Foundation for Combating Soil Erosion for Reforestation and the Preservation of Natural Habitats (TEMA)

Central Anatolia Exporters Association (OAİB)

Foreign Economic Relations Board (DEİK)

Istanbul Furniture, Paper and Forestry Products Exporters' Association

University - Industry Cooperation Centers Platform (ÜSİMP)

Turkey Materials Marketplace (TMM)

Adana Chamber of Industry

Adana Chamber of Commerce

Balıkesir Chamber of Industry

Balıkesir Chamber of Commerce

Istanbul Chamber of Industry

Istanbul Chamber of Commerce

Kocaeli Chamber of Industry

Kastamonu Chamber of Commerce and Industry

Tarsus Chamber of Commerce and Industry

Terme Chamber of Commerce

Food and Agriculture Organization (FAO) Sustainable Forest Industry Advisory Board

► Sustainability Approach



ABOUT KASTAMONU ENTEGRE
SUSTAINABILITY APPROACH
PERFORMING OUR DUTY WITH A RESPONSIBLE MANAGEMENT APPROACH
EMPLOYEE ORIENTATION
PRESERVING THE BALANCE OF NATURE
CONTRIBUTION TO SOCIETY
DOCUMENTATION

Sustainability Approach

Managing the risks and opportunities of our activities in environmental, social and economic areas forms the basis of our sustainability management approach. In the awareness of being a global brand, we have determined our sustainability strategy and started to implement it for the future with our stakeholders, with whom we form the links of a chain with our services that extend beyond borders.

We have established a “Sustainability Committee” to execute our sustainability efforts, based upon the action plans arising from our sustainability strategy, and to measure and monitor our performance in these endeavors. Our committee, operating under the leadership of our CEO, and consisting of representatives from different units and departments, is the highest executive authority in terms of sustainability activities.

Sustainability Strategy

We have determined our sustainability strategy, formed in parallel with the goals and objectives of our company, based upon four main themes.



Sustainability Policy

- As Kastamonu Entegre, we adopt an ethical, transparent, equitable and accountable management approach in the awareness of our environmental, economic and social contributions and impacts.
- We engage in activities that strengthen our corporate structure, and we take sustainable development-based growth as the basis, in line with our target of becoming a global brand.
- In determining our strategies, we always consider the expectations and opinions of our stakeholders and create a strong bond by ensuring their satisfaction.
- We conduct practices with an employee-oriented perspective that takes into account their expectations and needs, thereby creating an efficient and peaceful working environment.
- Besides ensuring the health and safety of all our employees, we also contribute to their training and development activities.
- Pursuant to our responsible purchasing approach, we perform our raw material supply processes based on sustainable forest management. We support initiatives related to this model and contribute positively to their development.
- Our innovation and R&D processes enable us to develop and manufacture products that create high quality, environmentally friendly and healthy living spaces using state-of-the-art technology.
- We respect human rights and encourage equal opportunity.
- We pay regard to energy and water efficiency; we implement renewable and innovative energy projects accordingly.
- We contribute to the welfare of the local community by creating employment and economic value in our geographic locations.

Sustainability Priorities

We have determined our sustainability priorities as a result of an effective stakeholder dialogue process that includes all stakeholder groups.



United Nations Sustainable Development Goals and Kastamonu Entegre

Through our responsible management approach, and in the awareness of fulfilling our duties, we aim to contribute to achieving sustainable development goals in line with our industry and the corporate priorities in which our company operates.

As the result of our evaluation, reflective of our sustainability strategy and sectoral dynamics, we have determined that the following global targets particularly overlap with our business processes.

Stakeholder Dialogue

We attach importance to the value that efficient stakeholder dialogue will bring to our sustainability performance. For this reason, the stakeholder dialogue is one of the main elements of our sustainability strategy.

We establish transparent and reliable relationships by reflecting the expectations of our stakeholders to our business strategies. Our main stakeholders are employees, customers, shareholders, end users, suppliers, public institutions and society at large. For each of our stakeholder groups, we have defined communication channels and processes to inform them and receive feedback through various platforms.

You can find the platforms we use to communicate with our stakeholders and the schedule showing our communication frequency in the documentation section.



► *Performing Our Duty With a Responsible Management Approach*



ABOUT KASTAMONU ENTEGRE
SUSTAINABILITY APPROACH
PERFORMING OUR DUTY WITH A RESPONSIBLE MANAGEMENT APPROACH
EMPLOYEE ORIENTATION
PRESERVING THE BALANCE OF NATURE
CONTRIBUTION TO SOCIETY
DOCUMENTATION

Economic Performance

In 2019, the year we concluded half a century since establishment, we maintained our industry leadership with production, turnover and export figures by demonstrating a performance in line with our targeted budgets.

We provide significant added value to the Turkish economy by exporting 30% of the production made in Turkey to 100 countries on 6 continents from China to America and from Australia to Canada. We have been the export champion of the industry since 2013 in the “Turkey’s Top 1,000 Exporters” report prepared by the Turkish Exporters Assembly (TIM).

In 2019, we increased the total turnover of domestic operations from 3.6 billion TL to 3.9 billion TL, achieving an 8% growth compared to the previous year.

We work with the goal of becoming one of the world’s largest manufacturers and a global brand in the wood-based panel industry. We were included in the Turquality® project in 2015, which was implemented by the Ministry of Commerce with the vision of “Creating 10 World Brands in 10 Years”. We successfully represent our industry abroad by supporting the positive Turkish-made image with our activities in international markets.



Ethics and Compliance

One of our core values, the sense of justice and honesty, forms the framework of our ethics management approach.

We fully and completely inform our stakeholders about our activities with a transparent and accountable management approach. All of our affiliates fully comply with the laws and regulations of the countries in which they operate. All our employees cooperate to support the internal audit efforts conducted to monitor the compliance of our activities with the relevant country laws and company regulations.

In 2018, we conducted our internal trainings for our employees with the consultant firm we worked with within the scope of the Competition Law Compliance Program. We will ensure that these studies are internalized by sharing with our employees the Competition Law Handbook prepared in this context.

Meanwhile, within the scope of the Personal Data Protection Law (KVKK) Compliance Program, we prepared the data inventory of our company with a consultant company, and continued our information and awareness trainings on KVKK in 2019. With the studies we conducted on KVKK, we secure the personal data of all our stakeholders such as employee candidates, employees, customers and suppliers, we constantly review and improve our personal data inventory and related processes within the framework of our obligations.

Our business ethics rules, which have been set in writing, draw on the framework of our business principles and responsibilities in our relations with all our internal and external stakeholders, ensuring that our employees are informed about competition laws and regulations and that our relations with our competitors are managed in this awareness. We publish our rules on our corporate website to ensure that they are adopted by all parties involved.

Audit and Risk Management

Through the Audit Unit, which carries out its activities independently under the Board of Directors, we ensure that assurance and consultancy activities are carried out independently and objectively in order to improve the activities of holding companies and to add value.

On the other hand, under the heading of Corporate Risk Management, we detect risks early in terms of strategy, finance, operations and compliance in order to ensure sustainability; we ensure that necessary measures are taken and controls are carried out by evaluating the effects and possibilities.

Innovation and R&D

As a company that has been serving in B2B for about four years, we have focused on establishing systems that will trigger innovation, which we see as the current tool of growth, and on building a corporate innovation culture. In our R&D center in

Technopark Istanbul, which we established in order to develop the technologies of the future, we carry out studies on product and process development, productivity increase, effective resource use and advanced material technologies.

We have created governance mechanisms for the systematic creation of innovation infrastructure, with reference to the three basic principles of “intellectual equivalence”, “empathy” and “collective intelligence”, geared towards developing the competencies of our employees, implementing tools and encouraging practices to create an internal climate that facilitates innovation, and monitoring related developments.

We have identified three basic strategies as focusing on the unmet needs of our customers, creating value-adding solutions by making sense of global trends, and developing new business models by using our competencies in new opportunity areas. We perceive innovation as a collective effort, and aim to accelerate innovation and increase its impact with the contribution of our stakeholders.

We manage our innovation projects in three groups:

1 **R&D STUDIES
FED FROM
THE COMPANY
STRATEGY**

2 **PROJECTS
COMING FROM THE
IDEA SUGGESTION
PLATFORM**

3 **PROJECTS
GENERATED FROM
CUSTOMER DEMAND**



We have implemented the “Idea Suggestion Platform” to facilitate our employees to share opportunities regarding product, process, marketing method, etc. or their solution suggestions for the problems/needs they have identified. In 2019, internal circulation of 383 innovative ideas submitted to the Idea Suggestion Platform within the company continued to be coordinated. Each idea was

evaluated separately, and innovative ideas were supported with training and mentoring services within the scope of the five-week acceleration program. Three ideas, which have been tested practically to assess whether they are of mutual benefit for customers, have been developed into projects within the framework of the feedback received, and have reached the commercialization stage. For ideas not included in the acceleration program, but that have a promising potential, a workshop program has been implemented that enables the idea owner to approach the subject from different angles, reflect on the subject and develop the idea, through joint reasoning and the sharing of knowledge, ideas and experiences.



12 PHD STUDENTS WITH 4 UNIVERSITIES

2 TIMES INCREASE; IN THE 2019 INNOVATION BUDGET COMPARED TO THE PREVIOUS YEAR

383 NUMBER OF INNOVATIVE IDEAS SUBMITTED TO THE IDEA SUGGESTION PLATFORM (2019)



We established the “Idea Champions Platform” to develop an innovation community that will mature the in-house innovation culture, develop methods for presenting quality ideas, and implement mechanisms that encourage new participants. Within the scope of this platform where employees active in the online Idea Suggestion Platform take place, we organize events where current developments in innovation are explained by our internal directors and the experiences of start-ups who have achieved commercial success as an example of internal ventures are shared.

With the awareness of the importance of external collaborations, we make innovation-oriented visits to our trend-setter customers,

listen to their visions for the future and discuss innovation cooperation opportunities with them. We also conduct joint innovative studies by evaluating the technologies developed by our suppliers in line with customer needs.

An Innovation Culture Questionnaire (Inno-Quotient) study was conducted in six different locations to evaluate our innovation approach in 54 factors in order to measure the level of innovation culture of our company, to determine our strengths and openness to development, and to determine innovation strategies based on data. We became the first industrial

company in Turkey to implement the innovation culture index InnoQuotient in order to design innovation programs suitable for our corporate culture, and to get feedback from our employees on our innovation culture.

As a result of this study, “Kastamonu Entegre Innovation Culture Index Value” was classed in the “average” category – an encouraging result for a B2B company still in its infancy. We shared the results with all our employees at our six factories and determined areas that need improvement through shared wisdom workshops.

For our R&D studies, in 2019, we made an investment decision to relocate to the Yeditepe University R&D Building at the Technopark Istanbul campus and began the necessary infrastructure works. We are planning to register an application for an R&D Center in 2020.

OUR INNOVATIVE PRODUCTS CONSIDERED A FIRST IN TURKEY

- 1 **Moldable MDF**
- 2 **Fire resistant door inner filling panel (YL)**

Collaborations

We believe in the importance of university – industry cooperation, and we put our stamp on exemplary projects in the industry with the collective working principle. We regard the support provided by the Ministry of Industry and Technology and TÜBİTAK (Scientific and Technological Research Council of Turkey) as a great source of motivation.

TÜBİTAK 2244 Industry Doctorate Program: In line with our R&D priorities, we develop projects with 12 PhD students in cooperation with Istanbul Technical University, Sabancı University, Karadeniz Technical University and Bursa Technical University. We aim to further develop these studies with Koç University, with the project “Investigation of surface modifications in wood-based fibers and their effects on physical properties”.

TUBİTAK-TEYDEB 1501: We will develop environmentally friendly, formaldehyde-free bio-based resins with sustainable production systems with our project, which we have developed for effective use of resources and protection of the environment that aims to produce bio-based glue from tree bark produced during production.

TÜSİAD (Turkish Industry and Business Association) Digital Transformation in Industry (TÜSİAD SD2): We were among the 18 companies participating in the “TÜSİAD Digital Transformation in Industry (TÜSİAD SD2)” program, which aims to strengthen the digital transformation process in the industry and support the technology supplier ecosystem. We were deemed worthy of the “Best Commercialization Potential” award in the TÜSİAD SD² Program, with the solution created as a result of the cooperation actualized to elimi-

nate internal needs with the help of start-ups. As the company participating in the program from the wood-based panel industry, we use digital technologies not only in production, but also in all business processes from procurement and logistics, to sales and planning.

TTGV (Technology Development Foundation of Turkey) Xnovate Fellow:

We encourage our employees to participate in innovation programs. In this context, one of our employees was found eligible to become a TTGV Xnovate Fellow, and was accepted into the Innovation Leaders program, in which 12 professionals under the age of 35 were selected across Turkey.

ECOBULK: We are the only participant from the world’s wood-based panel industry in ECOBULK, one of the largest innovation projects funded within the context of the circular economy by EU Horizon 2020. As part of the project, we are working on composite board development from waste in our Adana facility.

EBRD – EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT: We are working with Sabancı University and Gebze Technical University on this project, which includes the transformation of biochar, a by-product of our renewable energy project, that covers the gasification of biomass-based wastes, into value-added products such as activated carbon and graphene. We conduct the necessary feasibility and technical studies to turn our wastes into new products that can be used in different industries.

Responsible Supply Chain Management

We develop our supply chain management strategies that we run on a global scale within the framework of our goals of our investments being close to raw material resources and the market, supported by high technology as well as delivering quality products to our customers on time and at a high level of service. We act with the responsibility of contributing to the economic development of our supply chain and our operational geography.

Our supply chain structure consists of three units.



As the Supply Chain Directorate, we work to deliver our products to our customers in line with the targeted service levels by considering the optimum stock level and minimum supply chain operation costs in the processes stretch all the way from demand estimation to delivery.

Supply Chain Directorate Strategic Focus Areas:

- Stock Optimization
- Customer Satisfaction
- Cost of Ownership
- Distribution / Logistics Costs
- Efficiency in Production
- Operational Excellence

Supplier Evaluation

- With the supplier evaluation form, we evaluate suppliers’ performance. Within the scope of the contracts we have made, we state our expectations for compliance with the environmental and occupational safety legal regulations.
- We verify the existence of the ISO 14001 Environmental Management System, OHSAS 18001 Occupational Health and Safety certificates in our raw material, packaging, energy and technical material suppliers.
- We also take into account criteria such as working in accordance with the law in forest products trade, relations with sub-suppliers, forest criminal record and tax debt inquiry.
- Supplier evaluations are carried out by the Purchasing Directorate over the corporate resource planning software, and cooperation is undertaken with suppliers that are on the approved supplier list as a result of the evaluation. They are evaluated according to quality, price advantage, legal compliance and delivery criteria.

We believe that our network of suppliers has made an important contribution to us in terms of sustainable growth. To this end, we also support the sustainable business success and development of our suppliers. For this purpose, we contribute to increasing the quality performance of suppliers by carrying

out R&D and efficiency projects that provide mutual gain with them.

Being careful and aware of the sustainability of our supply chain, we started the “Localization Project” in order to switch to using the local substitutes of imported products. This project is important in terms of increasing employment and reducing carbon emissions based on distance travelled, by improving local production while reducing our purchasing and logistics costs. Within the scope of the

naturalisation project, it was ensured the savings of 8.5 million TL in 2018 and 20 million TL in 2019 with an increase of 135% compared to the previous year.

TL 20 MILLION SAVINGS

The second of the “Kastamonu Entegre Global Procurement Meeting”, the first of which was held in 2018, was held in Bulgaria in 2019, in order to increase coordination and information exchange between purchasing units in different locations.

We realize digital transformation projects that increase our efficiency and speed in line with technology and digitalization that rapidly change business processes, and give us a competitive advantage. We implement

As the Purchasing Directorate, we implemented an e-catalog project that will automate purchasing processes and digitize routine manual work.

comprehensive digital transformation projects in order to increase the level of customer service and operational excellence at all stages of the supply chain.

In 2019, we started monitoring and performance measurement studies of the supply chain with the “SCOR” model with the “KESCO” project, which will enable instant and retrospective monitoring of all import, export and international shipping processes from end to end. We plan for both projects to come to fruition in 2021. In order to break the silo thinking under TZD and to align the units, we established a Supply Chain Academy in 2019. Participants who successfully completed training under 10 different topics were awarded certificates.

TOTALLY, 3353 TRAINING HOURS

Supply Chain School Training Topics

1. Logistics and Supply Chain Management
2. Stock Management
3. Purchase Management
4. Sales and Operations Planning (S&OP)
5. Warehouse Management
6. Transport Management
7. Seaway Transportation
8. Way-bill Law & Document Management
9. Foreign Trade and Customs Clearance
10. Cost and Finance Management

Product Quality and Safety

In order to offer high quality products to our customers, we carry out our production in accordance with national and international standards within the framework of our quality policy. Thanks to our integrated management systems applications, we have a holistic approach in all matters related to quality. In 36 laboratories and in-production quality control points established in our factories, we ensure the desired product quality and safety at the production stage with the controls made with reference to European Standards (EN-European Norm).

36 LABORATORIES



Our Quality Policy

- To be the sector leader by following developing technology, thereby increasing both product quality and variety,
- To produce products that meet customer expectations, consistently and in a timely manner,
- To meet customer demands at every stage, in order to ensure customer satisfaction,
- To increase quality and decrease cost by considering the quality management system in all processes as risk-based, and improving the same in line with productivity,
- To ensure continuous improvement with employees whose training and experience are continuously increased, and with a management approach open to dialogue,
- To sustain a team spirit among our employees, dealers and customers, who comprise our internal dynamics,
- To fulfill the applicable requirements of legislation and related parties while carrying out all our activities within the scope of, and pursuant to the objectives of the organization,

To take part in the world market and to be successful in line with these principles

Product Quality and Safety Controls

- ✓ Physical strength tests such as tensile, bending, elasticity, etc. for all products in order to ensure human safety during the use of products
- ✓ Formaldehyde emission control in all products to protect human health
- ✓ Special performance tests on flame retardant and moisture resistant special products
- ✓ Special performance tests on hygienic special products
- ✓ Surface tests for coated products
- ✓ Paint tests for dyed products
- ✓ Special performance tests and final flooring applications in laminate flooring products

We have standardized the improvement studies we have made on the input control system and the performance limits in tests and controls at all factories. We aim to guarantee the suitability and continuity of raw materials used for quality production with visits we frequently pay to our suppliers.

We provide key user trainings at all domestic and international factories, and we ensure that quality control performance results are accessible and traceable. We take actions to prevent recurrence by opening CPA (corrective and preventive action)

with an internal customer approach for nonconformities that occur during controls.

We can produce our products that have the certificate of conformity to the Turkish Standards, in line with customer demands, such as fire retardant (FR)¹, moisture resistant (MR)², FSC® certified³, CARB Phase II⁴ and F****⁵ standards. We have our products and tests checked in independent internationally accredited laboratories (WKI, IHD, RISE, CATAS, etc.). We can produce in accordance with the formaldehyde-free emission certificates required by our customers in international markets⁶.

We contribute to the development of our industry in this area by providing opinions to relevant institutions and organizations in determining quality standards.

We take decisions to increase product quality by reviewing the reasons for customer complaints, customer complaint resolution times, second quality reasons and rates of products, quality test performances and competitor data at Production & Quality & Stock Management meetings that are held periodically.

¹ FR - Fire Retardant

² MR - Moisture Resistant

³ FSC®-Forest Stewardship Council® (Orman Yönetim Konseyi) Bu sertifikaya aracılığıyla, orman emvallerini temin ederken, dünyadaki doğal ormanların ve diğer yaşam ortamlarının bozulması engellenmekte, ormancılık kuruluşlarının verimli çalışması sağlanarak yüksek kaliteli ormancılık faaliyetlerine destek vermektedir.

⁴ California Air Resources Board (Kaliforniya Hava Kaynakları Kurulu) ile uyumlu serbest formaldehit salım sınıfında ürünleri belirtmektedir.

⁵ Japanese Industrial Standards (Japon Sanayi Standartları) ile uyumlu serbest formaldehit salım sınıfında ürünleri belirtmektedir.

⁶ 2014 yılından bu yana şirketimiz ABD pazarı için geçerli CARB Faz II ile uyumlu üretim yapabilmektedir. 2019 yılı itibarıyla CARB sertifikası artık EPA ile uyumlu olarak kabul edilmeyeceğinden dolayı ABD pazarına ürün ihraç eden müşterilerimiz için EPA tarafından onaylı sertifikalandırma çalışmalarımızı 2019 yılında tamamladık ve ihtiyaç duyulan tüm sertifikaları aldık.

The first MDF facility (Gebze Factory) to receive TSE EO Certificate

The first company to receive EO, FR and CE Sisteml certificates in laminate flooring

The first company to receive the "Blue Angel (Blue Angel - Der Blaue Engel)" certificate for laminate flooring products

The first company to receive Hygiene Certificate with Floorpan/Artfloor Boutique series laminate flooring products.

FIRSTS IN TURKEY

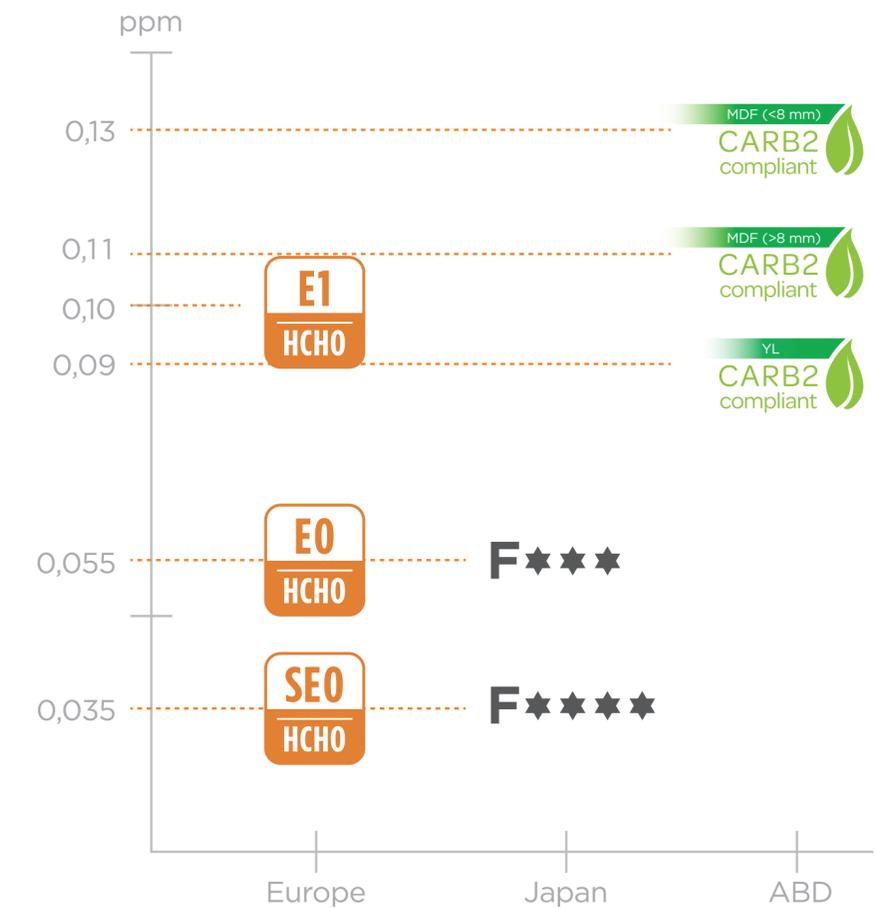
As a mirror committee member, we cooperated with the Turkish Standards Institute in the establishment of the value-added product standard starting with the "TSE K" code, with glossy surface plates, kitchen work tops and PVC/PET surface.

What is formaldehyde?

Formaldehit, hidrojen, oksijen ve karbondan oluşan basit bir kimyasal bileşiktir. Tüm yaşam formları (bakteri, bitki, ağaç, hayvan ve insanlar) doğal olarak hücre metabolizmasının bir parçası olarak formaldehit üretir.

Formaldehit, ağaç bazlı panel üretimi esnasında reçine olarak kullanılmaktadır. Formaldehit esaslı reçinelerle üretilmiş panellerden kaynaklanan formaldehit salımı ulusal ve uluslararası standartlar ile sınırlandırılmıştır.

Yanda özet halinde verilmiş Farklı Ülkelerde Serbest Formaldehit Limitleri tablosunu dokümantasyon bölümünde detaylı inceleyebilirsiniz.



Quality Management Systems Applied

Our company, which leads the industry in the implementation of Quality Management Systems in Turkey, uses the systems presented in the table below

YÖNETİM SİSTEMLERİ	MERKEZ	GEBZE	KASTAMONU YL	BALIKESİR	KASTAMONU MDF	SAMSUN	ADANA	TARSUS
ISO 9001 Kalite Yönetim Sistemi	✓	✓	✓	✓	✓	✓	✓	✓
ISO 45001 İş Sağlığı ve Güvenliği Yönetim sistemi	✓	✓	✓	✓	✓	✓	✓	✓
FSC® Orman Koruma ve Gözetim Zinciri	✓	✓	✓	✓	✓		✓	
ISO 50001 Enerji Yönetim Sistemi	✓	✓	✓	✓	✓	✓	✓	✓
CARB2 Kaliforniya Hava Kaynakları Kurulu Yönetim Sistemi		✓		✓	✓		✓	
ISO 27001 Bilgi Güvenliği Sistemi	✓	✓	✓	✓	✓	✓	✓	✓
Gümrük Yetkilendirilmiş Yükümlülük Belgesi	✓	✓						
ISO 14001 Çevre Yönetim Sistemi	✓	✓	✓	✓	✓	✓	✓	✓

We devise and update the procedures, instructions, forms, etc. required to ensure the standardization and continuity of quality management systems within the company in the QDMS⁷ system.

We provide regular annual training to our employees to make the effectiveness of management systems sustainable. We carry out internal audits with a strong group of internal auditors. As a result of these efforts, we successfully pass external audits to ensure the continuity of management systems documentation.

⁷ QDMS: Quality Documents Management System

52
THE NUMBER
OF SUCCESSFUL
EXTERNAL AUDITS
AT OUR DOMESTIC
FACILITIES



2
AWARDS
IN QUALITY
CIRCLES
CATEGORY

Total Quality Management Journey

Our Total Quality Management efforts, which we have been carrying out holistically for more than five years, continue increasingly every year with the participation of our white, gray and blue-collar employees at all our factories in Turkey and abroad. Having begun SMED⁸, trainings in 2016 and 5S and FMEA⁹ trainings in 2017, we began applications at pilot sites in 2018. In 2019, we increased the number of studies and regions and extended the applications.

The KEAS Global Quality Summit, been held with the participation of factory representative teams determined in the competitions held annually at factories since 2016, was successfully held again in 2019 with the participation of domestic and international teams.

At the Quality Circles Sharing Conference organized by the Turkish Society for Quality Kal-Der Ankara Branch, where we won two awards in 2018, we maintained the tradition again in 2019, receiving two of the three awards given in the category of quality circles.

⁸ SMED: Single Minute Exchange of Dies
⁹ FMEA: Failure Modes and Effects Analysis

3.324 MAN PER-HOUR TRAINING

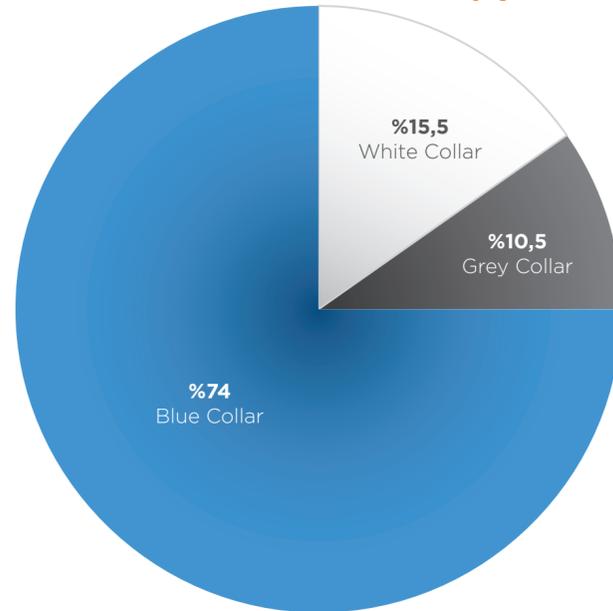
2.880 NUMBER OF SUGGESTIONS

180 QUALITY CIRCLE STUDY
(ROOT CAUSE ANALYSIS AND WITH SMED TECHNIQUE)

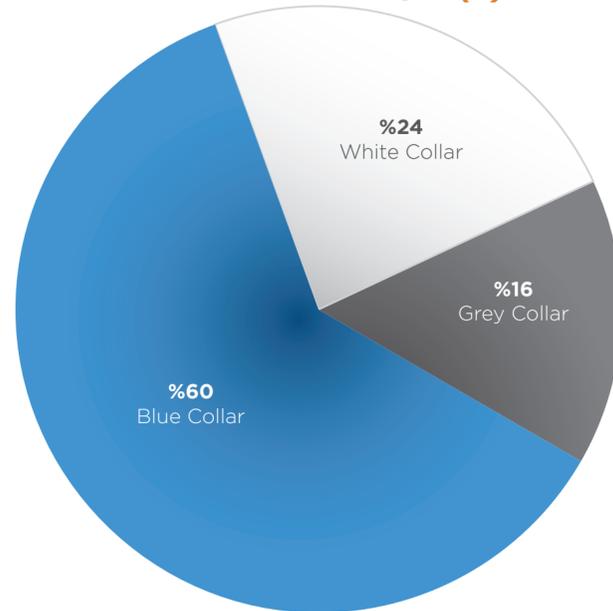
144 5S REGIONS STUDY

56 FMEA STUDY

2019 AG-TR Root Cause Analysis Quality Circle Personnel Distribution (%)



2019 AG-TR Quality Circle Personnel Distribution with SMED Technique (%)



Customer and Dealer Satisfaction

It is among the core strategies of our company to best understand the needs and expectations of our customers, and to maximize the quality of service rendered in an innovative and open-to-change manner.

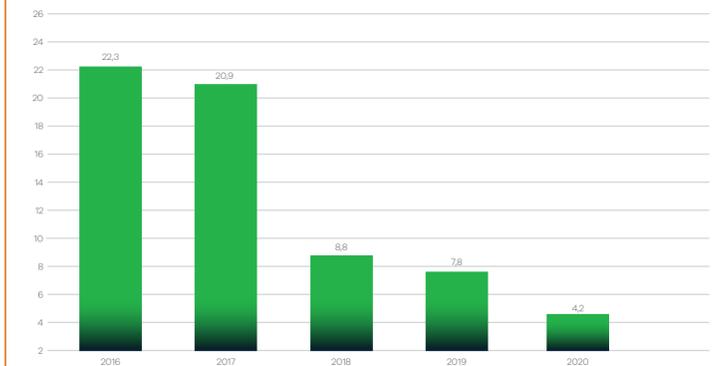
Our Customer Services department, which was established with the aim of constantly increasing the level of customer satisfaction and providing standard service by increasing the efficiency of sales order operations, launched the first SAP-GATP module in the industry in 2019 with the objective of improving customer order processes, as well as maximizing customer satisfaction and integrating it with the customer portal.

By ensuring the effective integration of newly activated systems in 2020, we aim to improve our order portal KEP according to new systems and customer needs.

We aim to maintain customer satisfaction by giving priority to the feedback received by the sales units by phone, KEP, e-mail, social media and during company visits. By ensuring customers open feedback records over REP and enabling them to be integrated into the CRM system, we monitor the complaint management system at every level through the system.

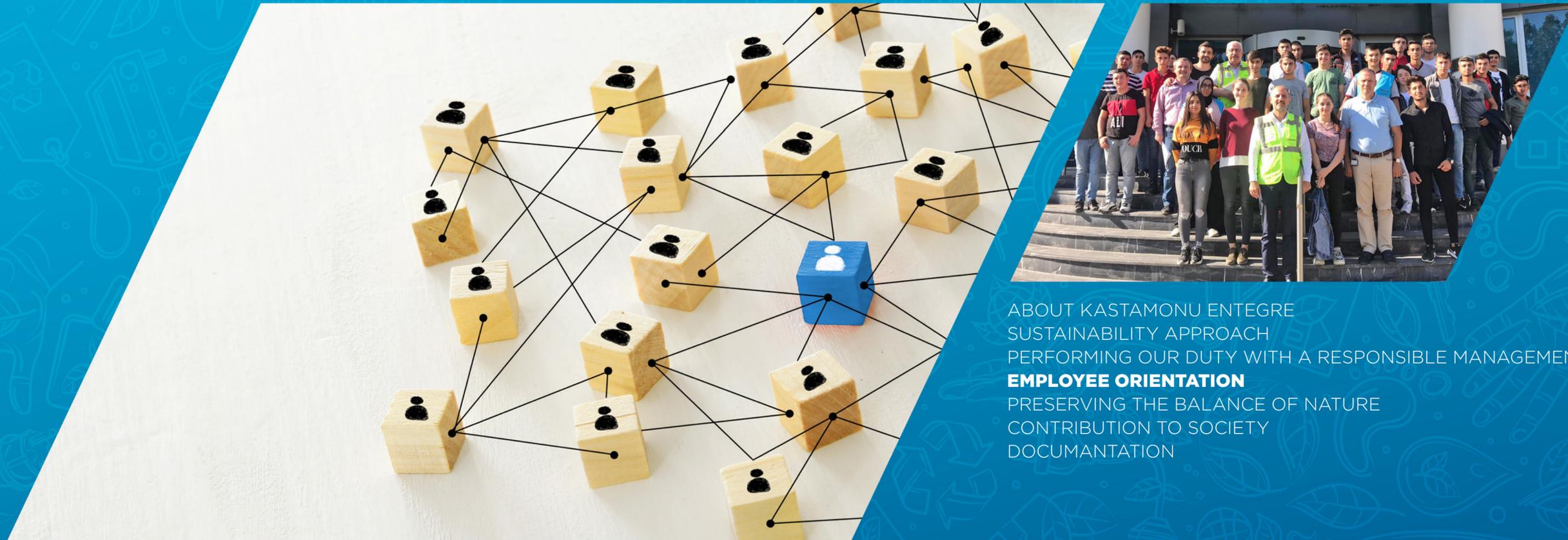
Over the past 4 years, we have improved the resolution times of customer complaints by 64%

Customer Complaint Resolution Time



We launched the SAP-GATP module in a first for the industry.

► *Employee Orientation*



ABOUT KASTAMONU ENTEGRE
SUSTAINABILITY APPROACH
PERFORMING OUR DUTY WITH A RESPONSIBLE MANAGEMENT APPROACH
EMPLOYEE ORIENTATION
PRESERVING THE BALANCE OF NATURE
CONTRIBUTION TO SOCIETY
DOCUMENTATION

▶ **Human Resources Management**

We continuously improve our human resources practices for our employees, who have been among the architects of our success spanning half a century, and whom we see as our most valuable asset.

Aims to provide career development and learning opportunities for its employees in different geographic locations in order to have a competent workforce.

Thanks to the globally adopted matrix organizational structure, it creates feedback and guidance mechanisms among the management staff that are separately linked in administrative and functional terms.

Enables a global strategy and culture to be adopted in the common functions of different organizations within the company thanks to this structure.

Our priorities include providing our employees with a safe and healthy work environment where they can develop their talents and participate in all processes of the company.

Providing a safe and healthy work environment where our employees can develop their skills and participate in all company processes is among our top priorities. We act in accordance with international conventions, especially the International Labor Organization (ILO), and regulations specified in local legislation in order to provide a suitable working environment for all our employees.

In order to convey our corporate culture, vision, mission and values to our employees loud and clear, in addition to our corporate website, we also communicate over LinkedIn and social media, including the accounts of foreign affiliates as well.

▶ **Human Resources Policy**

Kastamonu Entegre:

Acts in accordance with the protection of human rights and in compliance with the principle of respect for people within human resources processes.

Does not discriminate on ethnic origin, religion, language, race, age, gender, nationality, disability or cultural difference, nor does it act with behavior that will be qualified as discrimination.

Focuses on increasing the motivation and loyalty, as well as the continuous development of its qualified human resources.

Provides equal opportunities to all candidates in terms of training, knowledge, skills, competence and experience in recruitment processes.

Adopts the principle of equal pay for equal work. Similar salaries are determined for peer positions within the company and the salary difference between employees performing equivalent tasks only occurs based on differences in severance and performance.

In addition to fringe benefits such as maternity leave, shuttle service, dining hall service, workplace doctor, seniority incentive, our employees also benefit from various types of supports such as food, cleaning and hygiene, training, fuel, and diaper support.

We have determined market conditions, job evaluation outputs and performance evaluation results as our main criteria in determining the wages and fringe benefits of our employees. We adopt the principle of equal pay for equal work and apply fair wage principles.

We launched hobby clubs (alternative nature sports club, photography club, aquarium club,

etc.) as a pilot application at the Headquarters. In the production facilities, we have allocated areas where our employees can come together to socialize. We renewed breastfeeding rooms in all campuses considering the postnatal needs of our female employees.

Making life easier for our employees through digitalization constitutes an important part of our human resources policy. We transferred many transactions such as expense entries, leave, travel, advance requests and approval processes which were handled either in face-to-face meetings, or manually to the digital platform, and made those suitable accessible on mobile devices.



Employee Profile

As of the end of 2019, 2,587* people were working in the Turkish operations of Kastamonu Entegre.

Türkiye Çalışan Dağılım Tablosu

2019 YILI LOKASYON	Beyaz Yaka		Mavi Yaka		Genel Toplam
	Erkek	Kadın	Erkek	Kadın	
Adana	59	8	300	2	369
Balıkesir	54	7	241	1	303
Gebze	134	18	614	5	771
Genel Müdürlük	126	77	2		205
Kastamonu YL	20		139		159
Kastamonu MDF	93	1	326	1	421
Samsun	32	3	125	1	161
Tarsus	21	4	135	1	162
Ar-Ge	4	8			12
Ankara	5				5
İkitelli	1		2		3
İnebolu			3		3
İnegöl	2	1	6		9
İzmir	3	1			4
Genel Toplam	554	128	1893	12	2587

2019 YILI YAŞ	Beyaz Yaka		Mavi Yaka	
	Sayı	Yüzde	Sayı	Yüzde
<30	95	%13,93	217	%11,4
30-50	516	%75,66	1.620	%85
>50	71	%10,41	68	%3,6

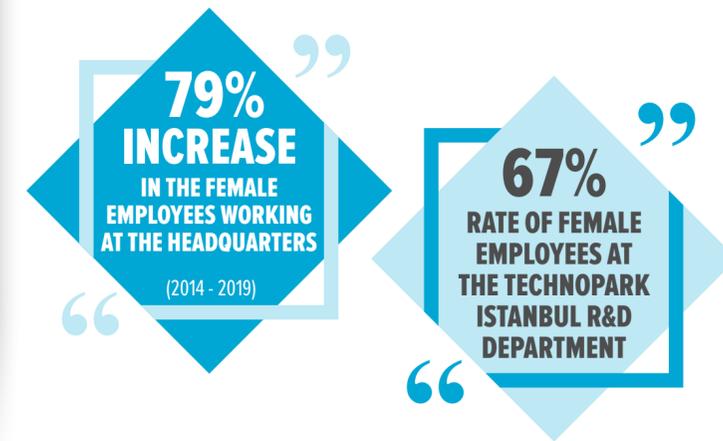
A total of 67 disabled colleagues works in positions suitable for their special abilities, both as white-collar and blue-collar workers. In parallel with our increasing number of employees, we are in an effort to increase the employment of disabled persons which we recruit in cooperation primarily with İŞKUR as well as other relevant public institutions and NGOs.

*We recruit full-time employees.

Equal Opportunity

Regardless of religion, language, race, culture and gender, we offer equal career and development opportunities to everyone within the company. We prioritize efforts to increase women's employment. In recent years, there has been a significant increase in the number of female employees in the Headquarters and R&D department.

GENEL MÜDÜRLÜK ÇALIŞAN SAYILARI	2014	2015	2016	2017	2018	2019
Male	112	120	126	127	128	126
Female	43	49	56	63	74	77



We provide equal opportunities to all employees, regardless of gender, seniority, or location, in the development programs we implement within the organization and fringe benefits we offer. We announce our vacancy announcements to company employees as internal job listings through the company communication portal. We give priority to the applications made by our employees over those coming from other candidates similar in terms of qualification and competence.

Attracting and Retaining Qualified Labor

We maintain a two-way communication with our employees; we provide environments where everyone can share their opinions during performance feedback sessions, communication meetings and development meetings. With the Idea Suggestion Platform established within the company we include our employees in the company's change and development processes and offer all employees the opportunity to participate in projects in which they can take part.

Within the scope of our recognition and appreciation practices, we motivate our talented and high-performing employees. We encourage their development by making suggestions regarding their career goals through "Development Meetings" held with our employees. We assign those employees keen to improve their competence and professional knowledge and at the same time expand their experience, to work in domestic and foreign investment projects.



We organize long-term internship programs for the senior students of universities, or for potential employees who have recently graduated from these universities. We set up those internship programs according to the project demands collected from the departments at the beginning of the year. We prioritize successful students/new graduates who are included in the process to play an active role in the projects, in positions deemed appropriate.

In 2019, we made the necessary improvements to the rotation practice which we had carried out as a pilot practice in our domestic facilities in the previous year, in line with the output of the pilot application. In this program, carried out on a voluntary basis, the main determinants of the project are the current expertise and training of people, their development areas and future career goals. The key outputs of the project are the transferring of existing knowledge, sharing best practices and determining development areas. We plan to introduce and expand the new structuring of the application throughout the company over the coming years.

We have structured the rotation application under three main headings.

1. Those who carry out the same function at different campuses,
2. Those who carry out functions in successive and complementary processes,
3. Those who work in different, but overlapping functions at the same campus.

Employee Development and Training

Wishing to be a constantly developing, innovative and learning company, we care about the personal and professional development of those who work for us, and seek to create a rich learning experience for all our employees.

It is essential that training and development investments made for our employees create value both for them and our company, and that they are associated with strategic goals.

From young professionals to senior management, we implement development programs tailored to the diverse needs of various target audiences, based on learning by experience, applying new learning techniques and prepared with experts in the field, in a manner to encompass all blue-collar and white-collar employees in line with their target audience.

The trainings we offer to our employees;



We also opened the training module for our white-collar employees in 2019 through our online integrated human resources platform. In this way, we have created an education system where we can easily manage training

processes from end to end according to a specific plan or catalog. We established a system whereby our employees request training and follow their planned trainings, evaluation surveys and online trainings during the year. In addition to in-class learning, by offering our employees an e-learning option we have removed the physical obstacle to learning and development. Our employees can choose e-training in line with their needs from the e-learning catalog with a rich content and continue their development journey through the digital channel as well, regardless of time and place.

EĞİTİM SAATLERİ	GERÇEKLEŞEN	
	BEYAZ YAKA	MAVİ YAKA
2018	38	37
2019	42	30

Performance and Career Management

Tuition fee support is provided to our employees with undergraduate degrees who wish to receive postgraduate education within the limits, and in line with the determined criteria. In addition, our employees who continue their graduate education are given additional leave under certain conditions.

In our development journey, we implemented a “360 Degree Competency Assessment” in order to focus on our strengths and areas open to development, as well as to enable us to see our managerial competencies through the eyes of other employees. We prioritized 12 Competency assessments in five countries and five languages with a global perspective. With this 360° evaluation approach, the implementation and evaluation process of which is carried out by a completely independent company, we aimed at the development of the employee by receiving case-based feedback from a large group that can observe the communication and business behavior of the employee, rather than the traditional single feedback culture.

We launched the “KEAS Talks” event series in 2019, which aims to get together with our employees to learn about different issues and increase their performance and motivation. We bring together people with a say in their field, and who enthusiastically deliver their ideas in our activities grouped under the

sub-titles of Innovation, People, Technology, Globalization, Culture and Sustainability. In the coming periods we plan to organize periodic events that took place in our headquarters throughout the year at our other locations.

In our first event held under the title of “Innovation”, we hosted Nurus Board Member and Chief Designer Renan Gökyay, who took his business beyond a furniture company with the technologies he developed..

In the second period of our “Mentorship” work, which we implemented in order to spread the culture of learning from one another, in 2019, there was a 17% increase in the number of applications compared to the previous year. We offer all our white-collar employees a mentoring program that we have designed on a voluntary basis to support their individual and corporate development.

DÖNEM	MENTOR SAYI	MENTEE SAYI	TOPLAM	%17'LİK ARTIŞ
1.	28	41	69	
2.	30	51	81	

The performance management process is a process that aims to reveal the successful business results of employees, their behavior in accordance with corporate culture and values and their high performance, as well as making them sustainable.

The performance management system is our key tool with which evaluate the development of all our employees and their contribution to our company, starting from the recruitment process. To support this process, we offer an effective performance management system and career management program to ensure that our employees show high performance throughout their careers. All of our white-

collar employees evaluate their personal work and competency development goals related to the company goals set in Financial, Strategic, Human Resources and OHS categories with their managers at the end of the year according to their performance to this end.

In order for our employees to raise their potential still further, we provide training to promoted managers and existing middle and senior managers within the scope of the “Leadership Development Program”. “Career Development Plan Discussions” were put into practice as of 2017 in order to enable our employees to steer their own career development.



Occupational Health and Safety

OHS Management

We conduct our activities in all our facilities as well as in our Headquarters, including our subcontracted employees, in accordance with the requirements of the TS ISO 45001 Occupational Health and Safety Management System Standard and all legal regulations in force.

We conduct risk analysis studies at our facilities for activities classified as very dangerous work within the scope of legislation, and by taking all kinds of precautions against the risks we detect and keep those risks below acceptable levels through compliance with legal limits. While eliminating hazards comes first in our prevention hierarchy, for hazards that cannot be eliminated we apply engineering measures.



We carried out transition efforts to ISO 45001 Occupational Health and Safety Management System Standard at all our facilities.

All of our employees, especially our managers, are responsible for taking and implementing the necessary precautions in their fields of activity in order for the system, which we have structured in cooperation with all our stakeholders to be open to continuous improvement, to adapt to changing conditions.

Within our occupational health and safety organization, we have a strong health team with occupational safety experts suitable for our hazard group. Health examinations related to their respective duties are made annually for all employees by our workplace health unit.

OHS Policy

Kastamonu Entegre recognizes the human being as the preeminent asset in all its activities and undertakes:

- ✓ To comply with the entire legislation in force on occupational health and safety,
- ✓ To evaluate all kinds of new products, processes and facilities within the scope of occupational health and safety starting from the project stage,
- ✓ To identify and evaluate risks that have

a negative impact on occupational health and safety with the cooperation of employees, and to take necessary measures to prevent occupational accidents and occupational diseases,

- ✓ To develop systems that will minimize our losses in the event of an accident or emergency that may occur during our operations,
- ✓ To include our employees, sub-

contractors and guests within the scope of our health and safety practices, and to be open to technological developments that will ensure a safe working environment,

- ✓ To continuously maintain training activities in order to improve occupational health and safety awareness,
- ✓ To continuously improve, increase and supervise occupational health and safety performance.

Implementations of OHS

K-SAFE System: With this system, we ensure that “dangerous behavior” that causes occupational accidents and dangerous situations are detected through observations in the field, and are prevented from repeating through feedback to employees. We aim to prevent accidents from occurring by identifying and eliminating dangerous situations.

In 2019, the Kastamonu K-SAFE Behavior Oriented Occupational Safety Management System was established at all our facilities.

In this context, K-SAFE Managers, Leaders and Observers were selected from the relevant departments at our facilities and trainings were given. 2,500 K-SAFE observations have been made at our domestic facilities so far.

Kastamonu 10 Audit System: With the “Kastamonu 10 Audit System” that we have created internally and started to be implemented in 2018, we carry out OHS internal audits with our expert staff at international standards and identify our opportunities and risks for continuous improvement.



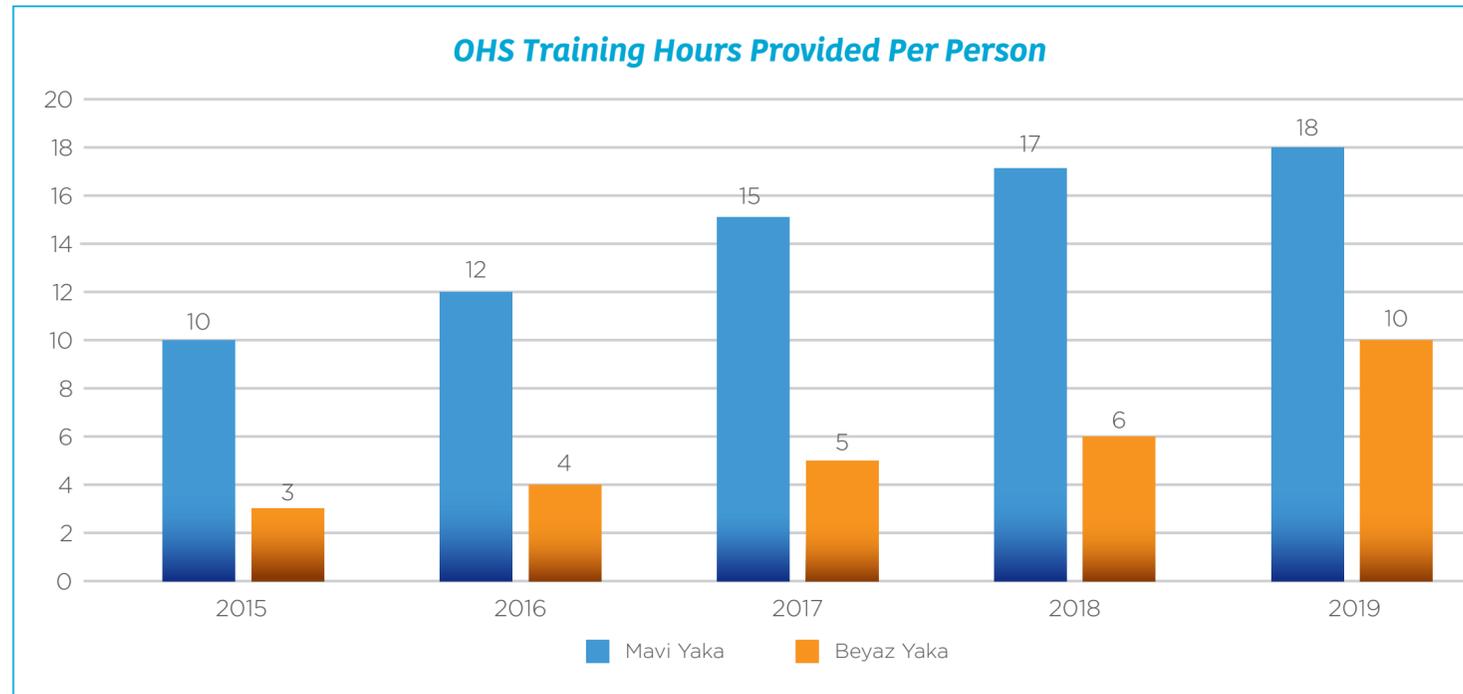
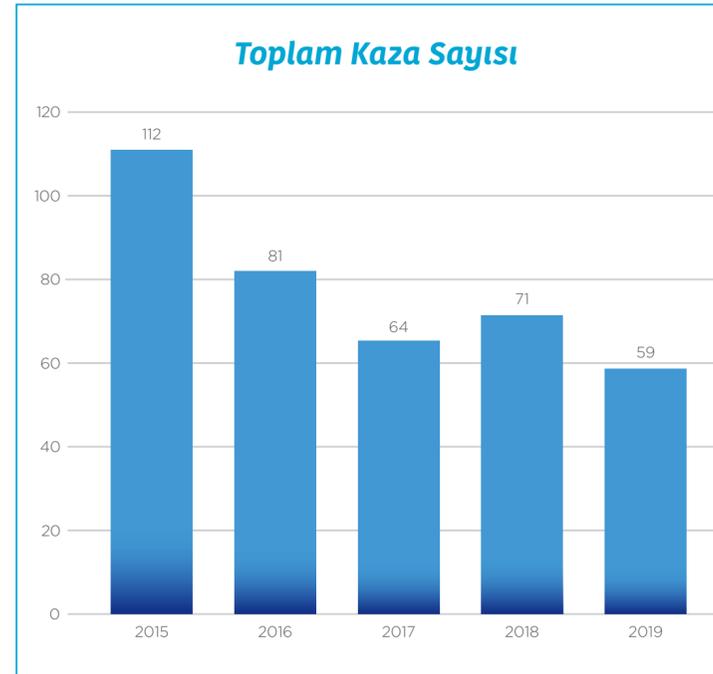
In 2019, by adding Process Safety components as well, we expanded the application area of the Kastamonu 10 Internal Audit System.

We are able to prevent minor or serious injuries through the feedback given by our employees through the near-miss system we have set up at all our facilities. Where any near-miss incidents or occupational accidents are encountered, we identify the existing root causes and create action plans for steps to eliminate them.

Within the scope of legislation, we take important decisions unanimously at monthly “Occupational Health and Safety Board” meetings, where the participation of our employees is actively ensured, and we review the OHS performance of our facilities weekly and monthly. Statistics of accidents are recorded at all our facilities and evaluated monthly at the directors’ meeting.

Measures taken for early detection of fires and prevention of losses were carried out with false alarm drills. These efforts aim to prevent the spread of dangerous chemicals and substances into the environment in an uncontrolled manner, as well as leakage and all kinds of explosion and potential toxic effects that may arise due to such accidents.

Thanks to the sustainable OHS programs and improvement plans implemented, the number of occupational accidents with lost days decreased by 47% in 2019, down from 112 in 2015, to 59 in our facilities across Turkey.



In 2019, we installed fire detection and extinguishing systems at the Adana and Pomposa facilities throughout the factory, and at the Gebze facility at the new production areas. We made improvements to the existing fire detection and extinguishing systems at the hot oil pump stations in light of technological innovations.

Based on the risk assessment conducted, we made investment plans for explosion evacuation and isolation systems at the Romanian and Bulgarian facilities.

We created lists for checks of personnel commuting service shuttles, and organized campaigns for seat belt use.

We updated the safety reports at all our facilities within the scope of the Communiqué on the Safety Report to be Prepared for Major Industrial Accidents published in April 2019.

By reviewing the machine safety measures in the melamine press, impregnation and laminate flooring lines, we made improvements in those areas where a need was observed in risk analyses.

At all our facilities, we subjected critical fire installations such as hot oil and methanol extinguishing systems to live tests without halting production.

► Preserving The Balance Of Nature



ABOUT KASTAMONU ENTEGRE
SUSTAINABILITY APPROACH
PERFORMING OUR DUTY WITH A RESPONSIBLE MANAGEMENT APPROACH
EMPLOYEE ORIENTATION
PRESERVING THE BALANCE OF NATURE
CONTRIBUTION TO SOCIETY
DOCUMENTATION

Environmental Management

We have established our environmental management system in line with our goals of minimizing our environmental footprint and fulfilling our responsibility in all of our activities. We have certified all of our factories under the “ISO 14001 Environmental Management System Standard”.

Within the framework of our environmental policy, we apply environmental risk assessments to all our processes and take the necessary precautions for those activities we consider risky. We aim to bring our performance to the highest level by preparing action plans for our areas open to improvement in the light of evaluations.

We have a very strong internal audit system that enables us to identify areas for improvement in our factories. We have teams of environmental engineers who are experts in compliance with legal regulations and monitoring environmental performance. We set new environmental targets every year and spread these targets on the basis of all directorates.

In order to minimize our environmental impact, we allocate a significant investment and expenditure budget in this area every year. We organize training activities that will strengthen environmental awareness for our employees. In 2019, we trained 1,901 people within the scope of “How to Become Environmentally Friendly”. We take the necessary actions by evaluating the environmental notifications received from our stakeholders at the earliest time.

During the reporting period, no legal environmental non-compliance has been detected in our company.

Environmental Policy

As Kastamonu Entegre, we will strive to continuously reduce the environmental impact arising as the result of our activities, in order to protect our environment and leave a more viable world for future generations, and will endeavor to raise and extend environmental awareness.

For this reason, we undertake:

- To fulfill all environmental compliance obligations,
- To include practices that will not cause climate change, protect biodiversity and ecosystems in our processes,
- To increase the efficiency of our processes, use sustainable resources and decrease our natural resource consumption continuously to leave a more viable environment for future generations,
- To continuously improve and maintain our environmental performance,
- To raise environmental awareness among all our employees by organizing continuous training activities.

Sustainable Forest Management

Forests are the most significant natural assets of the earth given their social and ecological functions. The most important condition in ensuring forest continuity is the provision of economically, socially and ecologically sustainable forest management.

Like every living creature, trees spring up,

grow, mature, age and die. At the end of the maintenance activities carried out in forests, trees that have completed their life cycle (management period) are regenerated in a planned manner by using techniques that vary according to species and biological structure. The raw materials used at our facilities



consist of products obtained during these regeneration and maintenance activities, which are essential for the continuity of forests. As Kastamonu Entegre, on one hand, we process these products and convert them into economic value, while on the other, we ensure forests achieve a healthy structure.

Failure to carry out regeneration and maintenance activities in forests poses a danger in terms of ensuring the continuity of forests and increasing their productivity, as it prevents the development of young and healthy trees.

There are different practices in the management of forests around the world. The organization responsible for forest management in Turkey is the General Directorate of Forestry (OGM). It allocates a part of the forest resource in a certain region to companies in proportion to the capacities of their facilities located in the same region. Apart from this, we purchase wood by entering tenders for forest resources in various regions in proportion to our needs. In addition, we utilize wood industry by-products (sawdust, lath, cover, etc.) in production. The share of these products in the total product reached 17% in 2019 from 13% in 2016.

As Kastamonu Entegre, we are the second largest partner of the Industrial Tree Agriculture Industry and Trade Corporation (ENAT), established in 2005 to develop industrial forest plantations in Turkey, with our 21.83% share.

ENAT, which is of great importance for the development of the forest products industry in Turkey, ensures that an average of 300 hectares of plantation per year is made with rapidly growing tree species, and this is developed and extended by the private sector. Thus, the aim is to better protect natural forest areas, to sustain the uninterrupted supply of raw materials in the forest products industry, and to prevent erosion and reduce CO₂ emissions.

ENAT, which has planted 1 million 801 thousand saplings on 14,550 decares of land (approximately the size of 2,100 soccer fields), started to supply wood to the sector as of 2016.

Within the framework of our strategy of preserving the natural balance, we observe the supply and efficient use of wood raw material, the main input of our production processes, from sustainable sources. In accordance with

our raw material procurement policy, we do not supply raw materials from sources that are unregistered and have a high protection value, or that are in regions where fundamental human rights are being violated.

PLANTING OF SAPLINGS
ON AN AREA AS BIG AS 2,100 SOCCER FIELDS



In 2019, we planted 92,000 industrial poplar saplings on an area of 1,100 decares, which we rented for 32 years in the Plovdiv region of Bulgaria. We aim to enlarge the project by planting a further 20,000 saplings by the fall of 2020.

Since 2013, we have been producing in accordance with the FSC® (Forest Stewardship Council® - Sustainable Forest Management) chain. This chain certifies that forests are managed in a sustainable manner, starting from the chopping of the wood to it becoming a wood-based panel, entering into the distribution network, becoming furniture and finally reaching the end user, and that this is audited and approved by an independent board. According to 2019 OGM data, 4.3 million hectares out of 22.3 million hectares of forest in Turkey have FSC® certification, which corresponds to 19.3% of all forest assets. Our facilities in the Gebze, Balıkesir, Kastamonu and Adana provinces in Turkey, and plants in Romania, Bulgaria and Russia hold this certificate.

Based on the 100% recyclable nature of wood, the main input of our production, we made an important investment in Italy in 2017. The wood-based panel industry in Italy uses recycled materials in its production. We started manufacturing in Italy in 2018 after purchasing the particle board plant belonging to Gruppo Trombini and making the necessary upgrades to those facilities. This investment in recycling is a considerable development in terms of adopting an environmentally friendly methodology, creating employment in a new country and augmenting our economic growth as a company. The title of “Recycling” is included in the Technology Roadmap of our R&D organization, which continues its



activities at our headquarters in Technopark Istanbul. Projects are developed using internal and external resources, depending on the products in which industrial and non-industrial wastes can be used. In 2019, a total research budget of 2.2 million TL was allocated for the recycling and utilization of industrial/non-industrial waste.

According to OGM data, the actual use of the wood-based panel industry in 2019 was at the level of 11.7 million tons. While the portion of this usage covered by imports was 3.2 million tons in 2015, it decreased to 370,000 tons in 2019 and remained at 3% levels. In the coming years, the aim is to meet all needs from domestic resources.

We take care to supply the wood raw material required for our facilities from sources as close as possible. At our domestic facilities, the average distance to the forest in the relevant region and to the required tree species varies between 100 and 225 km. However, we optimize these distances by evaluating wood raw material from an integrated perspective in order to reduce both transportation cost and carbon footprint.

Due to the limited forest resources in the region and rising production capacities, we occasionally use imported raw materials at our Gebze and Adana facilities. In this context, we established Kastamonu USA (KUSA) in 2015 to manage the procurement and logistics processes of wood chip.

Bioenergy and wood-based panel industries are in competition in Turkey as they use similar raw materials as elsewhere in the world. The bioenergy industry, which is encouraged by the state in order to increase the share of renewable energy in Turkey's energy composition, poses a risk for part of the wood-based panel industry with the increasing use of wood raw materials in addition to agricultural waste. Wood raw material, which is transformed into a product in our industry by taking into account the value chain, is burned once only to generate energy in the bioenergy industry, thereby completing its life cycle.

By closely following these organizations related to the development of national environmental policies, we continue to share our knowledge and experience on this issue with the relevant parties. Our raw material procurement unit regularly participates in the “Forest and Water Council” organized by the Ministry of Agriculture and Forestry in order to develop national policies and strategies on the sustainable management of forest and water resources, and to adapt to global changes. Our Business Planning and Innovation Director is also among the members of the Sustainable Forest Industry Advisory Board of the Food and Agriculture Organization (FAO).

Materials Management and Recycled Material Usage

We are working to bring raw material usage and material management to the highest level of efficiency. We produce innovative, competitive, high-quality, environmentally safe and user-friendly products with sustainable and renewable raw materials.

All kinds of improvements in materials management processes contribute to both reducing environmental impact and lowering operational costs. We have a strict monitoring system regarding the amount of raw materials and supplies consumed per product unit. We rapidly implement various actions to improve our performance in this area.

We strive to implement all recycling opportunities in all our factories. We train our employees and increase awareness on this issue.

Our products are recyclable. The package cartons on which our product labels are placed and the straps used to hold the packages together are all made from recycled raw materials. The inclusion of industrial by-products in the production at all our facilities and production that uses 100% recycled materials in our factory in Italy confirm our environmentally friendly waste management approach in the wood raw material procurement process.

Wood is the only natural material that is “renewable”. It grows back again after it is harvested. Natural resources such as oil, natural gas, coal, minerals and metals cannot be recovered. With the philosophy of “reduce - reuse - recycle”, we can all take responsibility in this regard.

Renewable natural resources are those that, after use (harvest), can return to their previous natural stock levels through natural growth or regeneration processes. These resources are rapidly replenished by ecological cycles or agricultural processes. Therefore, materials and services derived from these sources are also not compromised and remain available for future generations.¹⁰

In addition to the wood raw material that makes up the majority of our products, we develop projects to produce glue, another main component of our products, normally produced from fossil resources, from renewable natural resources.

Combating Climate Change and Energy Management

Climate change, which has become a global problem, causes adverse effects almost everywhere on our planet, threatening the lives of living organisms, biodiversity and socio-economic systems. We work sensitively on carbon and energy management issues with the awareness of our responsibility in line with Climate Action, a UN Sustainable Development Goal.

The fact that the use of wood reduces the amount of CO₂ in the atmosphere is one of the most important indicators of the contribution we make to the fight against climate change as an industry.

¹⁰ GRI Standards (2016), GRI 301 - Materials

Forests and the Carbon Cycle

Forests, the most important carbon sinks in nature, grow by storing atmospheric carbon in the trunks of trees. They play an important role in climate change with the dual effect of isolating and storing CO₂ emissions. Although wood products do not continue to absorb carbon dioxide from the atmosphere, they increase the time during which carbon dioxide held by the forest is removed from the atmosphere, and by promoting the growth of the forest, allow it to absorb more carbon.

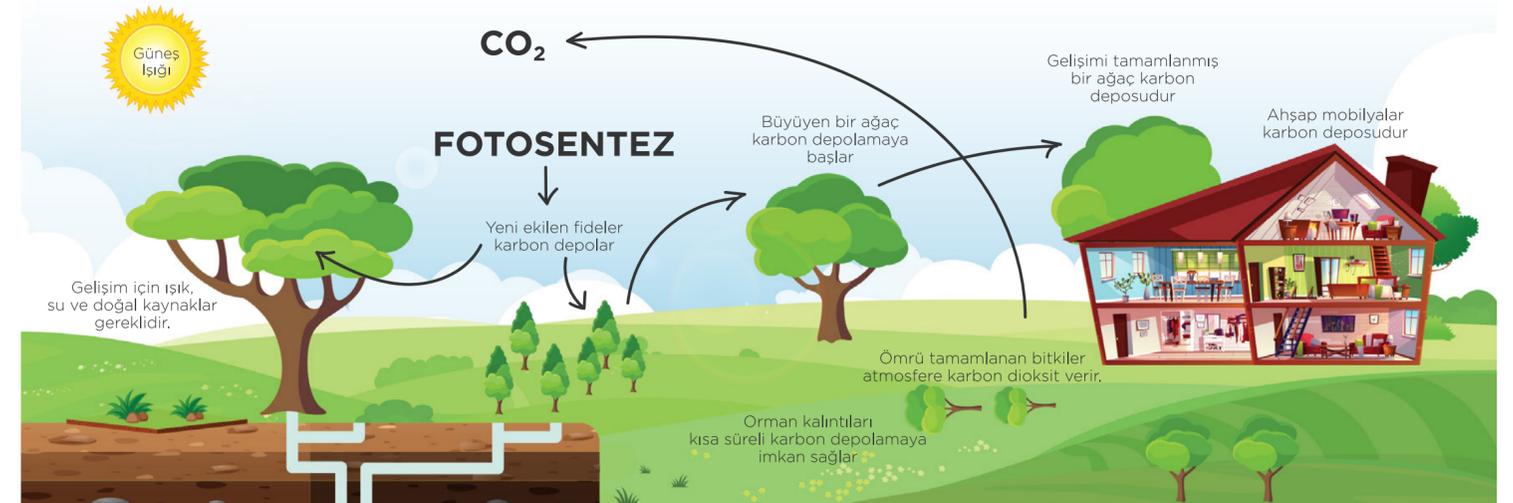
By means of photosynthesis, trees can capture CO₂ in the air, and combine it with water from the soil to produce wood, which is an organic material.

Growing trees absorb CO₂ and produce O₂. A typical tree absorbs an average of 1 ton of

carbon dioxide per ¹ cubic meter of growth through photosynthesis, while producing oxygen equivalent to 0.7 tons¹¹

However, this situation continues until the tree reaches maturity, at which point it no longer stores CO₂. Dying trees, on the other hand, begin to emit back into the atmosphere what they have stored from it.

While wood retains carbon, it also replaces materials that cause very high carbon emissions such as metal in furniture and cement in construction. Wood makes a two-way and powerful contribution to preventing climate change, as it both retains carbon and replaces carbon-emitting materials.¹²



While wood retains carbon, it also replaces materials that cause very high carbon emissions such as metal in furniture and cement in construction. Wood makes a two-way and powerful contribution to preventing climate change, as it both retains carbon and replaces carbon-emitting materials.



Wood and CO₂ Reduction

There are two ways to reduce the amount of in the atmosphere; Reducing emissions, or isolating and storing CO₂. Wood has a unique ability to do both.

➤ Replacement of Fossil Fuel

When wood cannot be reused or recycled, it can still generate energy through incineration. The energy generated is an efficiently stored solar energy. Wood incineration is a carbon-neutral process, since the amount of CO₂ emitted during the incineration process is no more than that previously stored.

➤ Thermal Efficiency

The use of wood also helps save energy over the lifetime of a building, because its cellular structure provides perfect thermal insulation 15 times better than concrete, 100 times better than steel and 1,770 times better than aluminum. A 2.5 cm thick wooden board has better thermal resistance than an 11.5 cm thick brick wall.

Using a cubic meter of wood instead of other building materials (concrete, block, or brick) saves an average of 0.75 tons of CO₂ per 1 ton.

(International Institute for Environment and Development, Wood Products to Reduce Climate Change, 2004)

We believe that the behavioral attitudes of all our employees regarding climate change are important both within and beyond the company. In this context, with the awareness-raising trainings provided within our Environmental and Energy Management Systems, we turn all our employees into warriors who address this global problem.

Best practice example:
Monitoring chimney emissions

We take care to ensure that smoke from the chimneys of our production facilities remains constantly within the limits set by the Ministry of Environment and Urbanization. At our facilities located close to residential areas the Provincial Directorate of Environment monitors data continuously and simultaneously through the emission measurement system.

➤ Water Management

In our world where natural resources are rapidly depleting, we take all our steps with the responsibility to consume these resources efficiently and consciously. We focus on minimizing water consumption in our production processes and reusing water. We regularly calculate our water consumption per unit product annually in order to monitor our performance in this area.

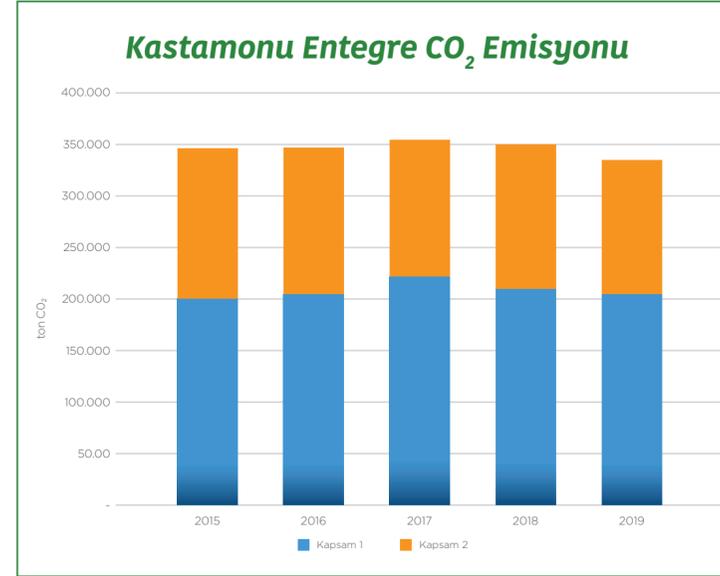
The recycling of wastewater is an important issue for our company within the scope of our goal of reducing the use of natural resources. A total of 490 thousand m³ of wastewater was recovered from waste water recovery units at our domestic facilities between 2015-2019. As of 2019, our wastewater recovery, reaching an average of 110 thousand m³ annually, is correspond to meet the annual water needs of approximately 1,400 households. We aim to recycle 1.7 million m³ of wastewater between 2019-2030.

Wastewater generated at our facilities is treated and discharged within the limits in accordance with legal regulations. At our facilities where chemical and biological treatment systems are available, we constantly monitor the performance of these systems and keep them under control.



CO₂ Emission

In order to see the direct and indirect impacts of our activities on climate change, and reduce them, we began calculating CO₂ emission in 2015.

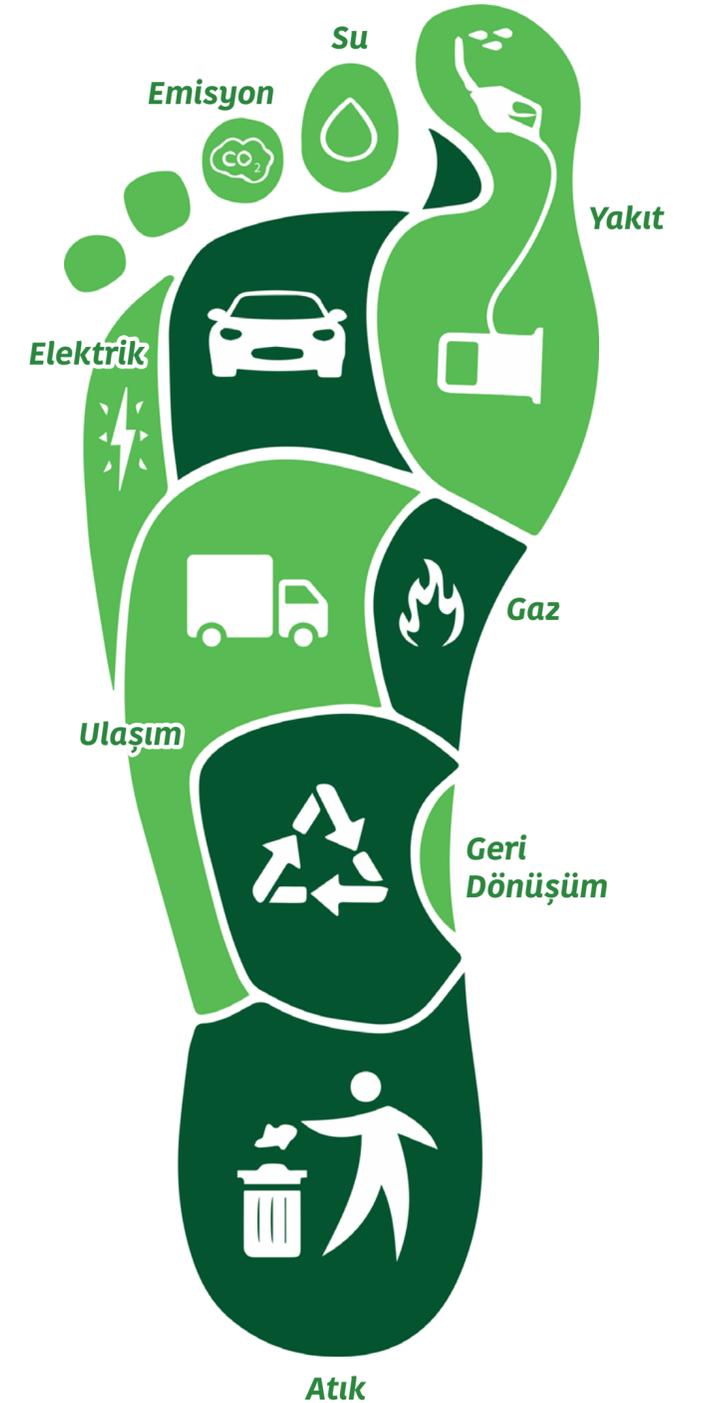


CO₂ emission details of domestic factories are given in the table above.

We calculate CO₂ emissions per unit product in our domestic factories and set CO₂ emission targets in accordance with changes planned by the factories in their energy portfolios.

By converting waste wood, which is not suitable for increasing value, into environmentally friendly electrical energy and heat at our biomass power plants, we prevent an average of 240 thousand tons of CO₂ emission every year compared to the energy production to be obtained by using natural gas.

“
WE
PREVENT 240
THOUSAND
TONS OF CO₂
EMISSION.
”



Energy Management

The basis of our understanding of energy management is a considering of all factors that may affect our energy performance. Electricity and Energy Systems and Renewable Energy Directorates affiliated to the Technical Directorate, in coordination with the energy managers at our facilities, work on setting energy-related targets and long-term planning.

We launched the ISO 50001 Energy Management System at all our facilities in 2014 in order to carry out and follow up our energy efficiency studies, which we have carried out in light of quality of life and sustainable production to international standards.

Our company's renewable energy investments come into contact with both the "Clean Energy" and "Responsible Production and Consumption" articles of the UN Sustainable Development Goals. In addition to the fact that the main raw material constituting our product is renewable, we focus on increasing the share of renewability in our energy consumption. We aim to take advantage of all opportunities by closely monitoring of the full range of innovations in this regard. Our main renewable energy investments are as follows;

ORC (Organic Rankine Cycle) Turbine: From a highly energy efficient ORC cycle, electrical and heat energy is obtained with very low losses (2%). Our Gebze production facility was the first facility established in Turkey and received qualification (CE) certificate with the ORC Turbine commissioned at the start of 2015. The annual energy production of our facility with a thermal input power of 6.5 MW is 6.5 million kWh.

Energy Policy

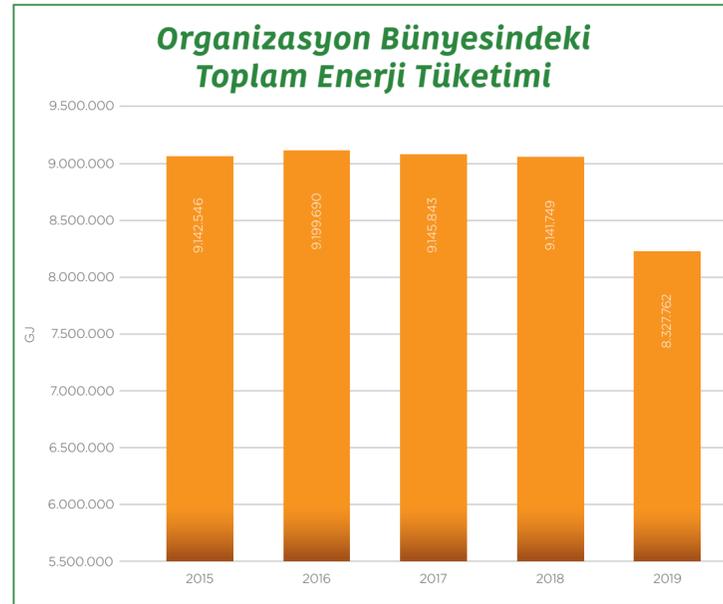
- To increase energy performance values including energy efficiency and intensity in all processes,
- To reduce costs by making improvements in all processes in step with energy efficiency,
- To be the most energy efficient company in the sector by increasing the energy management quality through constant monitoring of developing technologies,
- To ensure continuous improvement with employees, whose training in and experience of energy efficiency are continuously increased, with a management approach open to communication,
- To comply with national and international legal obligations on energy management,
- To take care of the environment by reducing the emission values based on efficiency, while producing and consuming energy,
- To ensure sustainability in energy by diversifying our fuel types and supply resources,
- To be traceable by realizing our energy measurement, evaluation and reporting in the most effective manner,
- To ensure the purchase of energy-efficient products, services and designs to improve energy performance, and to allocate budget for necessary improvements,
- To reduce fossil fuel consumption by increasing production opportunities using renewable energy resources.

Solar Power Plant: The solar power plant installed on the roof of our Adana MDF facility was commissioned in March 2016. The panel power of the facility built using 4,356 PV modules is 1.113 kWp and it produces approximately 1.4 million kWh energy per year.

Gasification Plant: Our TÜBİTAK-TEYDEB project on "Gasification of Waste Biomass and Renewable Clean Energy Production (ABİGAS)" for energy recovery from waste biomass resulting from our processes has been successfully completed. In the project, in which gasification technology was used as an alternative to combustion technology, renewable energy generation was achieved through the development of gasification reactors, synthesis gas production and the use of organic cycle (ORC) turbines that generate energy from synthesis gas. Thanks to this facility, which commenced operations in 2017, a total of 20 thousand tons of biomass waste generated as a result of production is used in energy recovery, while in return, 6.5 million kWh of electrical energy and 43.6 million kWh of thermal energy are produced.

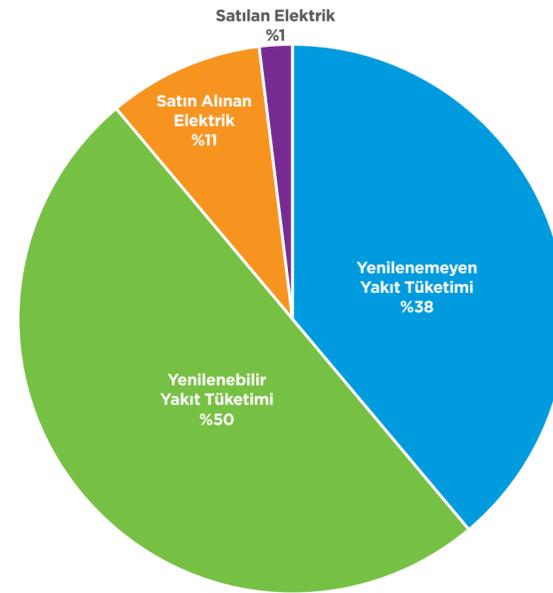
Energy Consumption

The values for energy consumption in 2015, 2016, 2017, 2018 and 2019 are given below. Within the scope of the projects carried out in our factories to conserve energy, we achieved an 8.9% reduction in energy consumption in 2019 compared to 2015.

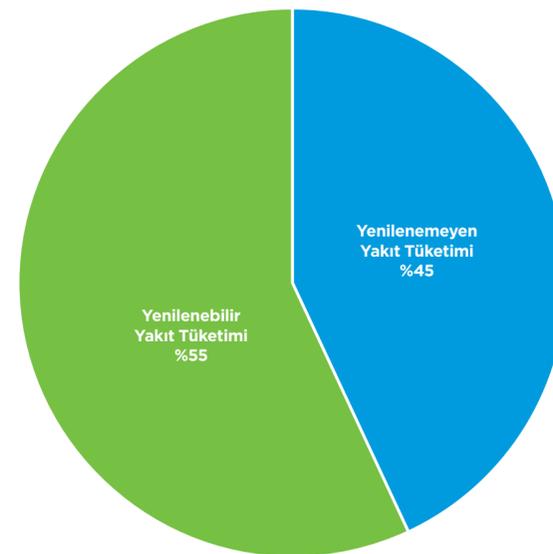


While the share of renewable energy in our total energy consumption in 2019 was 50%, the rate rises to 55% levels when our direct energy consumption alone is taken into account..

Yakıt Türüne Göre Tüketimler (Doğrudan ve Dolaylı) 2019

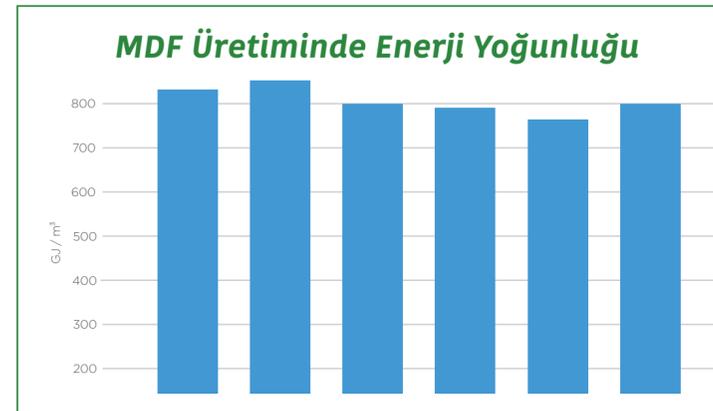
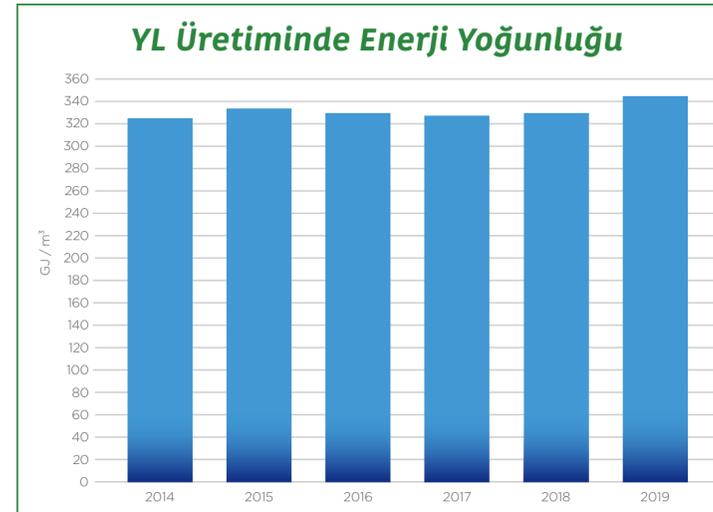


Yakıt Türüne Göre Tüketimler (Sadece Doğrudan) 2019



Energy Intensity

Energy intensity is calculated as the ratio of the total energy consumption of the relevant facility to the total production amount in a year. Energy density in 2019 was 347 GJ / m³ for chipboard production and 799 GJ / m³ for MDF (fiberboard) production. The high electricity and steam requirement of the unit (refiner) where the fiberboard production is realized results in increased density compared to chipboard production.



Our Energy Efficiency Studies

We carry out numerous energy efficiency studies on our production lines, compressors and compressed air systems, water lines and hot oil lines with the help of pumps, and air lines with the help of fans, lighting and compensation systems in our all locations. Improvements to heat generation and transfer systems and the recovery of waste heat generated during production play an important role in reducing energy consumption.

Since 2013, we have been producing efficiency-enhancing projects supported by the Republic of Turkey Ministry of Energy and Natural Resources General Directorate of Renewable Energy.

As of the end of 2019, a total of 25 efficiency-enhancing projects, 22 of which were completed, were worked on. Within the scope of these projects, a total of 45.9 million kWh in energy savings are predicted annually.

Examples of efficiency enhancing projects carried out at our facilities

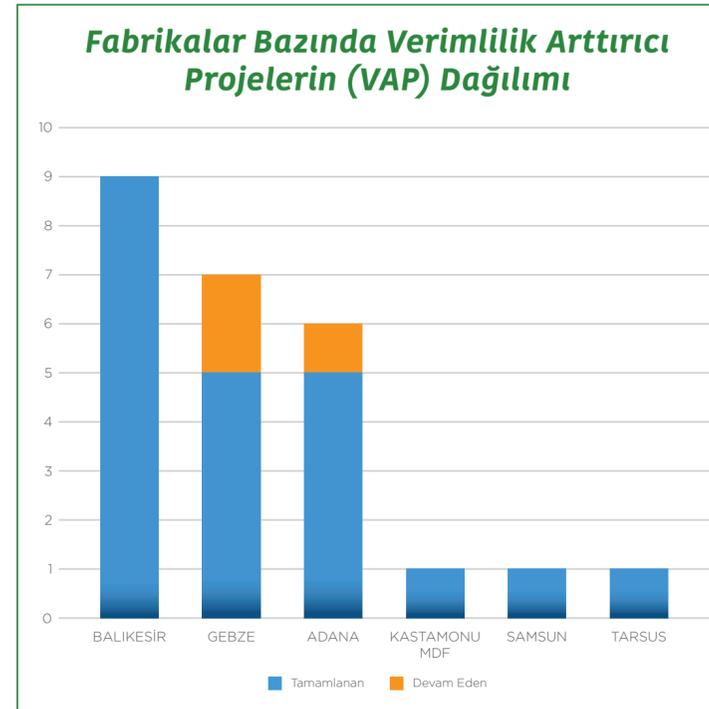
Tripper tape application to the outer wood chip storage area: With the project implemented at our Balıkesir facility, the need for excess equipment and construction equipment in use was eliminated, and wood chips were transferred directly to the external stock area for storage where not be directly processed. As a result of the project, 81 thousand kWh of electricity and 725 thousand kWh of diesel fuel energy savings were achieved annually.

Installation of absorption chillers using waste heat instead of mechanical chillers: With the "Installation of Absorption Chiller Using Waste Heat Instead of a Mechanical Chiller" project at our Balıkesir facility, instead of the mechanical chiller being used for process cooling, an absorption chiller operating with steam produced from gas turbine exhaust gas waste heat was installed. Thus, a saving was made on the electrical energy used by the mechanical chillers. With this project, 1.9 million kWh of electrical energy is saved annually.

The project of converting paint line UV lamp ballast to electronic drivers: With the project implemented at our Gebze facility, the ballasts of 13 UV lamps used in the panel painting line were replaced with electronic lamp drivers. Electronic drivers allowed the lamps to operate at intermediate load, providing side benefits such as operational flexibility, stand-by mode operation in incidental cases and increased lamp life. With this project, 314 thousand kWh of electrical energy was saved annually.

Project to save energy lost in bluff with water purification system revision: With this project implemented at our Gebze facility, 5260kg/h of water discharged with surface and bottom blowdown in our steam boilers was passed through the reverse osmosis system, and both energy and waste water were recovered. With this project, 9 million kWh energy savings per year and 47 thousand tons/year in water savings were achieved.

Fabrikalar Bazında Verimlilik Arttırıcı Projelerin (VAP) Dağılımı



Another important project we need to underline in terms of energy efficiency is the replacement of diesel forklifts at all our facilities with electric type alternatives. With this change, we both reduced our energy costs and eliminated the CO₂ emissions associated with the use of diesel fuel. Within the scope of the project that we began at the end of 2015 and gradually realized, we have replaced 136 diesel forklifts with electric units.

The diesel fuel consumption of our factories in Turkey decreased by 24% in 2016, 85% in 2017, 94% in 2018 and 95% in 2019 compared to 2015. In this 4-year transformation process, we prevented 11,265 tons of CO₂ emissions.

Separately, working with diesel forklifts on our work sites (especially in closed areas) also means that these areas are negatively affected by exhaust fumes. With electric forklifts, both exhaust smoke and engine-related noise are eliminated. Considering the scope of the project in terms of fuel consumption and occupational health and safety, this transformation has been an important step for our company, as well as for our industry.

25
EFFICIENCY
ENHANCING
PROJECTS

45.9
MILLION
KWH
ENERGY
SAVINGS

Waste Management

Our waste management approach is based on the reduction, separation, collection, storage, disposal and recovery of waste at its source, and possesses a structure that supports the circular economy.

In the first stage, we aim to prevent waste generation. Where this cannot be achieved, waste minimization is aimed at. Later, the waste is reused, and where not possible, it is first recycled and finally is used in energy recovery. We dispose of wastes that cannot be reduced, reused and recycled in accordance with environmental legislation in a manner that does not harm human and environmental well-being.

We implement the necessary measures in all our factories to prevent leaks and spills in terms of soil and water health. We have emergency management plans for possible leaks and spills. There were no significant leakages or spills recorded during the reporting period.

Within the scope of our environmental management system, we provide trainings for all our employees to convey our practices for waste management.

Waste density per cubic meter of product decreased by 11% compared to 2015 (excluding biomass).

Biomass wastes (emery dust, shell, etc.) originating from production are formed in our facilities and are used as fuel in our factories upon obtaining approval from the Ministry of Environment and Urbanization in accordance with the TS EN ISO 17225-1 standard.

We cooperate with 3rd party institutions to collect the packaging materials (package cardboard, stretch film, pallet, etc.) that we put on the market in accordance with the Regulation on Control of Packaging Waste.

Best Practice Example: Electrostatic Dust Collection Filter

Electrostatic dust retention filters (WESPs) are typically used to control particulate matter releases in exhaust gas streams that contain sticky, condensable hydrocarbon pollutants, or where explosive potential is high. With this filter, used in our Gebze factory, waste gas at the flue outlet of the chipboard drying facility is purified. The same application was designed for the particle board facility of the Balıkesir factory and was commissioned in 2019.

R&D Work For Waste Ash

Another waste that is generated in our production facilities in direct proportion to production, and that we cannot prevent is ash. Our R&D team, together with Istanbul University, conducted tests on the waste ash generated at our facilities, and have expressed opinion the Ministry of Environment and Urbanization to removal of this waste from the waste class within the scope of the “Zero Waste” project in terms of material content.

The waste ash from our production can be used as fertilizer.



➤ Contribution To Society



ABOUT KASTAMONU ENTEGRE
SUSTAINABILITY APPROACH
PERFORMING OUR DUTY WITH A RESPONSIBLE MANAGEMENT APPROACH
EMPLOYEE ORIENTATION
PRESERVING THE BALANCE OF NATURE
CONTRIBUTION TO SOCIETY
DOCUMENTATION

Community Investment

With our facilities in different geographies and the ties we have established with local people, we are aware that environmental and community needs are not only regional, but universal. We support the economic growth and social development of locations not only through production, but also with the employment and social opportunities we provide. For fifty years, we have held the principle of “being beneficial to society” at the heart of our work, and have been integrating our endeavors at the juncture of people and wider and society into all our operations in step with our corporate values

6.750
YABANIL
FIDAN

We contributed to the nationwide “Breath to the Future” campaign organized by the Ministry of Agriculture and Forestry by planting 11 thousand trees in Istanbul and 6,750 wild saplings in Kastamonu.



11 BİN
AĞAÇ

25 BİN
ÇOCUK

5 TON
METAL VE 4
TON AHSAP
HURDASI

Within the scope of the Recycling Gardens for 50 Schools on our 50th Anniversary we created recycling gardens for 25 thousand children. 5 tons of metal and 4 tons of wood scrap were used in these gardens.





We organized a blood donation event for the Red Crescent.



We organized the introduction of the poem book titled "Blindness of the Senses" by Professor Evgeni Velev and the opening of the exhibition titled "The Oriental Tale of the Russian Poet-Erzurum and Kars" by the artist Aygül Okutan.





We carried out improvement work in the secondary school in Cumaköy and renovation and renovation work in the primary school in Seyhan.

As Tarsus factory, we contributed to the “Let This Be the Kicker for the Obstacles of Life” project, implemented by the Spinal Cord Paralytics Association of Turkey. In the project, where plastic covers were recycled, battery powered and manual wheelchairs were delivered to those in need.

Within the scope of the project developed to support women entrepreneurs, we started the Amigurumi course for the spouses of factory employees in Adana.



We organized award ceremony for employees who quit smoking in Adana Factory. At the event held within the scope of the project carried out in cooperation with the Ministry of Health, we drew attention to the topic of healthy living.

We care about the happiness of our employees in their social life outside of work as well. In this sense, we supported our employee, who is interested in paragliding, to realize his dream.



In line with our vision of supporting cultural and social activities locally, we have been among the proponents of the International Kazanlak Rose Festival this year.



With the Mobile Earthquake Simulation Training Truck, we initiated awareness training at our headquarters and local facilities.

As Kastamonu Romania we supported the establishment of a newborn intensive care unit with donations we received from the Mureş Half Marathon.



We supported the Tree Brotherhood Project of TEMA Foundation at the 41st Istanbul Marathon with the KEAS Running Team.

As part of the “Educational Support to Village Schools” project, we sent support packages consisting of books, stationery and educational materials to primary school in Eyyübi, Şanlıurfa on Mother’s Day.



As Kastamonu Russia, we participated in the “Earth Hour” application organized annually by the World Wildlife Fund (WWF).

We were the guest visitors of the entrepreneurship courses of Çukurova University Technical Sciences High School.



We organized events where we came together with high school and university students at our facilities.



► *Documantation*



ABOUT KASTAMONU ENTEGRE
SUSTAINABILITY APPROACH
PERFORMING OUR DUTY WITH A RESPONSIBLE MANAGEMENT APPROACH
EMPLOYEE ORIENTATION
PRESERVING THE BALANCE OF NATURE
CONTRIBUTION TO SOCIETY
DOCUMANTATION

Carbon Footprint Calculations

While calculating the carbon footprint of Kastamonu Entegre production facilities in Turkey, Intergovernmental Panel on Climate Change 2006 (IPCC 2006)¹³ Guidelines were adhered to and direct and the indirect emissions of the company were calculated

The Tier 1 method was used in the calculation and the following steps were followed:

1. Determination of annual consolidated fuel amount values consumed by plants
2. Finding the carbon emission factor according to the type of fuel/energy consumed
3. Determination of carbon emission arising from oxidation and combustion
4. Multiplication of the above 3 data sets for the respective consumed fuel/energy type

Formulation of the method in question is;

$CO_2 \text{ emission} = \text{Fuel consumption} \times \text{Emission factor} \times \text{Oxidation factor}$

$CO_2 \text{ emission}$: Amount of greenhouse gas (kg CO_2) depending on fuel type

Fuel consumption : Consumed fuel amount (kg, lt fuel)

Emission factor : The default greenhouse gas (SG) CO_2 emission factor (kg CO_2 /kg fuel) based on fuel type

Oxidation factor: In the Intergovernmental Panel on Climate Change, the oxidation factor is considered and accepted as 1. Since carbon is readily oxidized, it converts to CO_2 and the oxidation factor is considered as 1 based on CO_2 .

The table below shows the emission factors by energy resource. IPCC 2006 Guidelines are taken as the reference for natural gas, diesel oil, coal and methanol. In the calculation of CO_2 emissions arising from electricity consumption, the emission factor calculated by Climate Transparency depending on country conditions has been used instead of IPCC data considering the resources and technology of electricity production in Turkey¹⁴.

For biomass, the thermal values of bark and sanding powder were calculated in the first instance based on the article by Uçar, G. dated 1988, whereupon the emission factor in the NCASI 2009 Guideline was used^{15,16}.

Enerji Kaynağı	EF Unit	Emission Factor (EF)	Net Calorific Value (TJ/Gg)	Information Source
Diesel	ton CO_2 / TJ	74,1	43	IPCC 2006
Coal	ton CO_2 / TJ	94,6	25,8	IPCC 2006
Natural Gas	ton CO_2 / TJ	56,1	48	IPCC 2006
Methanol	ton CO_2 / ton	0,375	-	IPCC 2006
Electricity	kg CO_2 / kWh	0,497	-	Climate Transparency, 2017
Wood Chips	ton CO_2 / TJ	1,47	-	NCASI, 2009

¹⁴ <https://www.climate-transparency.org/wp-content/uploads/2017/07/B2G2017-Turkey.pdf> (Erişim tarihi: Nisan, 2019)

¹⁵ Uçar, G., (1988), Odun ve orman atıklarının enerji ve kimyasal madde kaynağı olarak değerlendirme olanakları, İÜ Orman Fakültesi Dergisi, seri b, Cilt:38, Sayı: 1, sayfa 80.

¹⁶ <https://www.ncasi.org/resource/ghg-calculation-tools-for-wood-products-facilities/> (Erişim tarihi: Nisan, 2019)

¹³ IPCC: Intergovernmental Panel on Climate Change

Communication with Stakeholders

STAKEHOLDER GROUP	COMMUNICATION CHANNEL	FREQUENCY
Employees	Intranet	Continuously
	Social Media	Continuously
	KEAS Global Magazine	Quarterly
	Announcements	Continuously
	Employee Loyalty and Satisfaction Survey	Updating
	Hayat Academy	Continuously
	Seniority Incentive Ceremony	Annual
	Global Quality Summit	Annual
	Global Procurement Meeting	Annual
	KEAS Blog	Continuously
	CEO Factory Visits	Continuously
	Idea Suggestion Platform	Continuously
	Open Door	Continuously
	Dealer Order System	Continuously
Customers	Social Media	Continuously
	Websites	Continuously
	KEAS Global Magazine	Quarterly
	Customer Satisfaction Survey	Annually
	Meetings	Periodically
	Announcements	Periodically
	KEAS Blog	Continuously
	Showroom Visits	Periodically
	Innovation Focused Customer Meetings	Periodically
	Fairs	Continuously
	Customer Visits	Continuously
	Supplier Entry System	Continuously
	Social Media	Continuously
	Websites	Continuously
Business Partners (Suppliers, Subcontractors, Service Providers, Finance Institutions, Consulting Firms, etc.)	Meetings	Periodically
	Annual Report	Annually
	KEAS Blog	Continuously
	Meetings with Architects	Periodically
	Technology Days	Periodically
	Stakeholder Visits	Continuously

STAKEHOLDER GROUP	COMMUNICATION CHANNEL	FREQUENCY
Social Stakeholders (Media, NGO and Local Communities)	Social Media	Continuously
	Marketing Communication Activities	Continuously
	Websites	Continuously
	Meetings	Periodically
	KEAS Blog	Continuously
	Social Media	Continuously
Public Institutions (Governments, University and Academic Institutions, Local Authorities)	Communication Activities	Continuously
	Websites	Continuously
	Meetings	Periodically
	Audits	Periodically
	Annual Report	Annually
	Memberships	Biennially
	Türkiye Odalar ve Borsalar Birliği (TOBB) Orman Ürünleri Meclisi	Belirli Aralıklarla
	Foreign Economic Relations Board (DEİK)	Periodically
	MDF and Particle Board Industrialists Association (YOMSAD)	Periodically
	Turkish Exporters Assembly (TİM)	Periodically
	Chambers of industry	Periodically
	KEAS Blog	Continuously
Official correspondences	Continuously	

FREE FORMALDEHYDE LIMITS FOR DIFFERENT COUNTRIES		TS EN ISO 12460-5	TS EN ISO 12460-3	TS EN 12460-1	TS EN ISO 12460-4	ASTM E1333
		PERFORATOR METHOD	GAS ANALYSIS METHOD	CHAMBER METHOD	DESICCATOR METHOD	LARGE CHAMBER METHOD
		mg/100g	mg/m ³ saat	mg/m ³ hava	mg/L	ppm
EUROPE (EN)	E2 YL, MDF	≤30				>0,1
	E1 YL, MDF	≤8	3,5	0,124	1,5	≤0,1
	EO YL, MDF	2,5 _A	1,75 _B	0,062 _B	0,5	
	Süper EO YL, MDF	1,5 _A	0,3	
IKEA IOS-MA-0003	YL	4				0,09
	MDF (all thicknesses except flooring)	5				0,11
	MDF (thicknesses ≤8mm used for flooring)	8				0,13
USA (EPA-CARB)	TSCA Title 6 YL					0,09
	TSCA Title 6 MDF (8 up to 18 mm)					0,11
JAPAN	TSCA Title 6 MDF (2,5 up to 8 mm)					0,13
	F**	6,5 _A			≤1,5	0,143 _C
	F*** (EO)	2,5 _A			≤0,5	≤0,055 _C
AUSTRALIA	F**** (SEO)	1,5 _A			≤0,3	≤0,035 _C
	E2 YL, MDF				≤4,5	
	E1 YL				≤1,5	
	E1 MDF				≤1	
	EO YL, MDF				≤0,5	

A - SUBSPORT Specific Substances Alternatives Assessment - Formaldehyde, 2013
 B - TSE EO Föyü
 C - Alves da Costa N.J. (2013): Adhesive system for low formaldehyde emission wood-based panels. PhD Dissertation, University of Porto



www.keas.com.tr