### **Sustainability Report 2023**



# We Transform Waste into Value for a Livable World



# We strive to leave a better future for the next generations.

We are more than just a waste management company. We contribute to sustainable development by delivering solutions that benefit the environment, society, and the economy.

We believe in growing stronger together with all our business partners within our sphere of influence and focus on creating shared value with our stakeholders.





# With our circular business model, we create positive value.

In response to the resource-intensive nature of the linear economy, we adopt a circular economy approach, reintegrating waste into the economic cycle.

Inspired by nature, our circular business model transforms waste into energy and value added, aiming to play a leading role in the transition to a low-carbon economy.





With innovative solutions, we take an active role in addressing global crises.

With our investments in advanced technology and innovation, we actively contribute to addressing global challenges. By generating energy from biomass, we contribute to the fight against climate change. We direct waste heat to the greenhouses we build, enabling soilless agriculture, and we bring end-of-life plastics back into the economy through upcycling. We embrace innovative and future-compatible new business areas.





## **Table of Contents**

# Explore our sustainability performance by reviewing the Biotrend Sustainability Report 2023!

09	Abo	ut	the	Re	port	Ĺ
----	-----	----	-----	----	------	---

10 Letter from the Chairman

12 Letter from the CEO

14 Biotrend At a Glance

16 About Biotrend

18 Our Vision, Mission and Values

19 Capital and Shareholding Structure

20 Our Business Model

27 Plants and Operations

28 Milestones

30 Highlights of Our Performance in 2023

31 Key Financial Indicators

32 Sustainability Highlights

34 Sector Trends and Their Impact on

**Our Business** 

36 Sustainability at Biotrend

38 Sustainability Approach

42 Sustainability Governance

44 Material Topics

49 Stakeholder Communication

50 Corporate Governance

52 Board of Directors and Committees

54 Ethics and Compliance

56 Risk Management

58 Internal Audit

60 Responsible Business Model for the Future

**62 Circular Economy Practices** 

64 R&D and Innovation

66 Environmental Management

70 Emission and Energy Management

71 Emission Management

74 Energy Management

76 Water and Wastewater Management

78 Waste Management

80 Biodiversity and Land Use

82 Human-Centered Approach for the Future

84 Employee Profile

86 Diversity and Inclusion

88 Talent Management

89 Performance Management

90 Training Programs

92 Recruitment and Employee Separations

94 Employee Satisfaction and Wellbeing

96 Occupational Health and Safety

100 Social Impact

102 Annexes

104 Annex 1: Corporate Memberships

106 Annex 2: Climate Related Risks and Opportunities

112 Annex 3: Environmental Performance Indicators

115 Annex 4: Social Performance Indicators

120 Annex 5: ISO 14064-1 Carbon Footprint Verification Report

121 Annex 6: ISO 14046-1 Water Footprint Verification Report

122 Annex 7: GRI Content Index



#### **About the Report**

At Biotrend Çevre ve Enerji Yatırımları A.Ş. (Biotrend), we are pleased to present our first annual Sustainability Report 2023. This report reflects our commitment to sharing our sustainability vision within a broader perspective and transparently reporting on our environmental, social, and governance (ESG) performance. Prepared in accordance with the 2021 GRI (Global Reporting Initiative) Standards, it provides a comprehensive overview of our ESG performance, highlights the progress we have made in our sustainability journey and outlines the strategic initiatives we have set for the future.

The report covers the period from January 1 to December 31, 2023. To ensure consistency and enhance the comparability of our sustainability performance, we present quantitative data in three-year periods, wherever data quality from prior years permits. In addition to numerical data, we also highlight best practices in ESG that demonstrate our commitment to sustainable development.

In 2023, we obtained verification for our carbon and water footprint data in accordance with the ISO 14064 Carbon Footprint and ISO 14046 Water Footprint standards. The audit reports can be accessed in the Annexes section of the report. Verified indicators are marked with " " in the Performance Indicators section of the report.

We also share the results of our materiality analysis, which was conducted using a double materiality approach that incorporates the expectations of all our stakeholders. This analysis helps us build a stronger, more collaborative foundation for mutually beneficial partnerships as we advance on our sustainability journey.

Our commitment to continuously improving our sustainability efforts remains unwavering, and we greatly value the feedback of all our stakeholders. We invite comments, insights, and suggestions regarding this report and our sustainability initiatives at surdurulebilirlik@biotrendenerji.com.tr.

## Letter from the Chairman

At Biotrend, we believe that waste management is a cornerstone of our sustainability journey.



Dear Stakeholders,

In today's world, where the impacts of environmental challenges are becoming increasingly profound, managing resources responsibly has become an essential and inescapable topic. Climate crisis, pollution, and depletion of natural resources are pressing global issues that require immediate action—not only for individuals and societies but also for businesses. These challenges place greater responsibility on the private sector, making it imperative for us to lead in the efficient use of resources, management of waste in ways that do not harm ecosystems and adoption of circular economy practices.

The growing volume of waste driven by rising consumption poses a serious threat to natural systems. According to the World Bank, the amount of global waste generated annually is expected to rise from 2.01 billion tons in 2020 to 3.40 billion tons by 2050. This significant increase makes waste management and circular economy practices not merely a choice but an obligation. Failure to recycle or appropriately dispose of waste exacerbates the climate crisis, depletes water resources and disrupts environmental balance. Conversely, the principles of the circular economy offer a critical solution for achieving net zero targets by addressing 45% of emissions that energy transition efforts alone cannot tackle. In this context, circular economy emerges as a cornerstone of sustainable development, providing effective responses to environmental challenges by reintegrating resources back into the economy.

With an awareness of our responsibility toward the future, we will continue working to strengthen environmental sustainability and develop solutions to combat the climate crisis.

At Biotrend, we emphasize the goal of a livable world at the heart of our operations. By transforming waste into valuable resources, we minimize our environmental impacts while creating social and economic value. Prepared in line with the United Nations Sustainable Development Goals, our sustainability strategy reflects our ongoing commitment to continously improve our environmental, social and governance performance. Our approach to the circular economy not only generates environmental benefits but also enables us to play an active role in combating climate change through innovative initiatives, such as carbon credit projects.

As Türkiye's largest corporate circular economy platform, we believe waste management is the cornerstone of our sustainability journey. Through our waste-to-energy production, recovery of household waste and projects in the circular economy space, we are making steady progress towards our goal of creating environmental, social, and economic value. With an acute awareness of our responsibility to future generations, we remain committed to strengthening environmental sustainability and developing solutions to address the climate crisis.

One of the fundamental pillars of ensuring corporate sustainability and long-term success lies in robust corporate governance practices. Our Corporate Governance Compliance Rating Score of 9.4 is a testament to our strong governance approach.

These achievements reflect our commitment to fulfilling our responsibilities to stakeholders within the framework of transparency, accountability, and effective management principles.

We place significant emphasis on diversity and inclusion, actively supporting these values within our corporate culture. We prioritize the equal participation of women in the workforce and their increased representation in leadership positions. With targeted steps to elevate the proportion of women among our employees and leaders, we have achieved 33% female representation on our Board of Directors. As a member of the 30 Percent Club and signatory of the UN Women's Empowerment Principles (WEPs), we reaffirm our dedication to gender equality. Additionally, by joining Sabancı University Corporate Governance Forum's Business Against Domestic Violence (BADV) Program, we contribute to our goal of developing policies to ensure gender equality in the workplace.

I am proud to share Biotrend's first sustainability report with our esteemed stakeholders. This report not only reflects our sustainability performance in line with our principles of transparency and accountability but also serves as part of our strategic roadmap for the future. By maintaining sustainable growth and environmental responsibility, we will continue working with our stakeholders to build a better future.

I extend my gratitude to all Biotrend Energy employees, suppliers, business partners, and investors who have joined us on this journey.

Sincerely,

**İlhan Doğan** Chairman



# Letter from the CEO

In 2023, we generated
2.3 million USD in carbon credit revenue, taking another significant step in the field of sustainable finance.



Dear Stakeholders,

Growing environmental and social risks on a global scale are compelling the business world to reshape itself with a focus on sustainability. The climate crisis, rapid depletion of natural resources, increasing pollution, and loss of biodiversity pose threats not only to naturalsystems but also to social and economic stability. In this context, environmental sustainability has evolved from being merely a goal to becoming a fundamental responsibility that companies must integrate into their longterm strategies. Innovative approaches and circular economy models play a critical role inaddressing these global challenges.

The circular economy model, which minimizes waste generation while enabling the reuse of resources, offers a strong solution for sustainable development. As Biotrend Energy, we contribute to the environment, society, and economy through our waste-to-energy business model. Adopting an inclusive perspective on the circular economy model, we focus on creating positive social impact and supporting regional development.

As Turkey's leading circular economy platform, we conduct waste-to-energy production and integrated waste management activities. Through our biocircular business model, we enhance soil fertility by processing organic waste in composting facilities and accelerate recovery processes at MRF (Material Recovery Facilities), bringing value back to the economy.

The year 2023 was shaped by the challenges and slowdown in the global economy. Despite these difficult conditions, Biotrend sustained its growth through strategic decisions and robust operations. In 2023, we achieved revenue of 2.2 billion TRY and a net profit of 948 million TRY, reflecting a 64% increase compared to the previous year. In 2024, we remain focused on reducing our environmental impact and strengthening our business model further through new investments.

In line with our long-term strategies, we have completed a comprehensive greenhouse gas inventory verification process and taken concrete steps to reduce our carbon footprint. Additionally, we expanded our efforts to assess the risks and opportunities of climate change, providing a response to the CDP Climate Change questionnaire. Through this process, we analyzed both our environmental impact and the resilience of our business model against climate change, thereby strengthening our sustainability strategy.

Our materiality analysis, which was conducted with the participation of 210 internal and external stakeholders, has been instrumental in shaping our strategic decisions by considering the environmental and social impacts of our operational activities. This analysis enabled us to align our environmental, social, and governance (ESG) performance indicators with the priorities of our stakeholders. This approach supports our sustainable growth while helping us evaluate the impacts of our activities on the environment and society.

Plastic waste and the pollution it causes have become one of the most significant global threats to environmental sustainability today. In this context, as Biotrend Energy, we aim to contribute to addressing environmental challenges and adopt a proactive approach to combat the threats posed by plastic waste through the solutions we have developed for its transformation. As part of our collaboration with Honeywell, we will establish a new upcycling facility, implementing the UpCycle Process technology, which will be the first of its kind in Turkey. We received 9.2 billion TRY in state support for this investment. At our facility, planned to commence operations in the İzmir region by 2027, we aim to produce 55,000 tons of pyrolysis oil from 118,000 tons of plastic waste annually.

Carbon credit trading plays a vital role in contributing to the global fight against climate change and supporting a sustainable business model. Carbon markets provide a critical tool for companies to achieve their emission reduction targets and fulfill their environmental responsibilities while also strengthening sustainable financing. With our USD 5 million carbon credit sale in the last quarter of 2022, we made a strong entry into this field.

In 2023, we took another significant step in sustainable financing by generating USD 2.3 million in revenue from carbon credits. Guided by our innovative projects and circular economy strategy, we continue to support emission reduction efforts on both local and global scales.

Sustainable and innovative approaches in the agricultural sector are becoming increasingly important for global food security and environmental sustainability. At our Sivas facility, we established Türkiye's first modern glass greenhouse, SİVERA, which is heated using energy derived from waste. This greenhouse, utilizing heat generated from waste-to-energy production, has the potential to produce 2,500 tons of vine tomatoes and offers a bio-circular economy-based production process aligned with the European Union's "Farm to Fork" strategy. In our first harvest, we introduced 40 tons of SİVERA tomatoes to the local market and also exported them to international markets, bringing an innovative value to Turkish agriculture.

As a reflection of our achievements in the field of circular economy, we are proud to have been awarded in the circular economy category at the "Energy is Our Future" awards held as part of the Energy and Climate Forum. This award is a testament to the contribution of our waste management and energy production activities to environmental sustainability.

We are also delighted to present our first sustainability report to our valued stakeholders. By transparently sharing our environmental, social, and governance performance, we believe we will take strong steps together toward achieving our sustainability goals. I would like to thank you for your support and trust and emphasize that we will continue to work together for a sustainable future.

Sincerely,

Özgür Umut Eroğlu



# Biotrend At a Glance

At Biotrend, we contribute to a sustainable future by transforming waste into value through integrated waste management and renewable energy production.

Guided by our commitment to investing in alternative energy and driving impact through technological innovation, we fulfill our environmental responsibilities while delivering economic, social, and environmental benefits.



## **About Biotrend**

Our core activities encompass renewable energy generation through integrated waste management, circular raw material production, sustainable agriculture and sustainable fuel production.



Founded on May 5, 2017, Biotrend is driven by the mission to invest in alternative energy production and the vision to establish itself as a leading technological center for production and application. Our core activities encompass energy generation, integrated waste management, and carbon trading.

With 19 operational facilities across Turkey,<sup>(1)</sup> our portfolio includes 11 integrated waste management and energy production plants, 6 energy production plants (2 of which use incineration technology), 1 solid fuel preparation plant, and 1 greenhouse.<sup>(2)</sup> In addition, we operate fuel preparation and supply facilities for landfills and biomass plants.

Our approach to integrated waste management prioritizes environmental, social, and economic benefits through sustainable practices. We generate energy from biogas and biomass sources, construct power plants, and integrate them into the national grid.

As part of our waste-to-energy initiatives and integrated waste management operations, we manage mechanical separation, refuse-derived fuel (RDF), composting, anaerobic digestion, leachate, and wastewater treatment facilities, along with waste transfer stations. We collaborate with municipalities under long-term Build-Operate-Transfer (BOT) contracts, which have an average remaining term of 16.7 years.<sup>(3)</sup>

118.4 MWe

**Total Installed Capacity**(5)

181.2 MWe

Total Capacity of the Electricity Generation Licenses Held by our Company<sup>(5)</sup>

# We initiated carbon credit sales in 2022 and this initiative yielded USD 2.3 million in revenue in 2023.

We plan to broaden our scope of operations through strategic investments in the upcoming period. We are focused on areas such as advanced plastic recycling, steam sales, solar energy plants, and energy storage solutions.

Biotrend has established itself as a dominant player in Turkey's biomass market. In 2023, we enhanced our Ezine Biomass Power Plant and Giresun Landfill Gas-to-Energy Plant, leading to an increase in our installed capacity. (4) These investments have increased our total installed capacity from 99.2 MWe to 118.4 MWe. In 2023, we sold all the electricity we produced under the previous YEKDEM tariff. The total capacity of the electricity generation licenses held by our company has reached 181.2 MWe. (5)

In the regulated landfill sector, we process approximately 20% of Turkey's waste, contributing recyclable materials back to the economy. We facilitate this process through mechanical sorting and material recovery facilities located in İnegöl, İzmir-Harmandalı, İzmir-Bergama, and Uşak.

In 2022, we launched our first carbon credit sales, generating USD 2.3 million in revenue from these credits in 2023. Additionally, we expanded our installed capacity through further upgrades across our facilities.

Through waste-to-energy production and integrated waste management, we continue to strengthen our position in the industry and steadily expand our portfolio.

- (1) Including ongoing investments, the number of our facilities has reached I: with the completion of the transfer processes for our facilities in Aksaray and Giresun as of April 5, 2024, and the transfer of the Ayvacık Plant, which will be finalized by September 20, 2024.
- (2) As of December 1, 2024, our portfolio includes: 8 integrated waste management and energy production plants, 6 energy production plants (2 of which use biomass incineration technology), 1 greenhouse, 1 solid fuel preparation and supply plant, and 1 industrial RDF (refuse-derived fuel) plant.
- (3) As of September 30, 2024, our contracts have an average remaning term of 15.85 years.
- (4) The handover of the Giresun Landfill Gas-to-Energy Plant was completed as of April 5, 2024.
- (5) As of September 30, 2024, our total installed capacity is 114.2 MWe, while the total capacity of our electricity generation licenses is 167.1 MWe.



#### **Our Vision**

To implement high economic value projects that support a sustainable life cycle, both globally and nationally.



#### **Our Mission**

To contribute to the environment, society, and economy by generating renewable energy and converting all waste produced in our life cycle back into raw materials, thereby adding value to the global economy.

#### **Our Values**

#### Inclusivity and Diversity

At Biotrend, we drive sustainable initiatives with a skilled and diverse workforce across all regions, spanning our headquarters and facilities. We are committed to cultivating individuals who demonstrate a strong sense of responsibility toward personal, social, and environmental challenges, maintaining a workplace free from discrimination based on religion, language, race, or gender.

#### Valuing Our Employees

Biotrend's success stems not only from the strategic direction set by the Board and the pivotal decisions made by our leaders but also from the collective efforts of every team member, from field staff to management across all levels. We prioritize the continuous personal development of our employees through ongoing training, aimed at enhancing their contributions to the organization. To boost employee satisfaction and commitment, we foster a positive and supportive work environment, reinforced by practices designed for a harmonious workplace. Our recognition as a "Happiest Workplace" by Happy Place to Work is a testament to these efforts.

#### **Employee Safety**

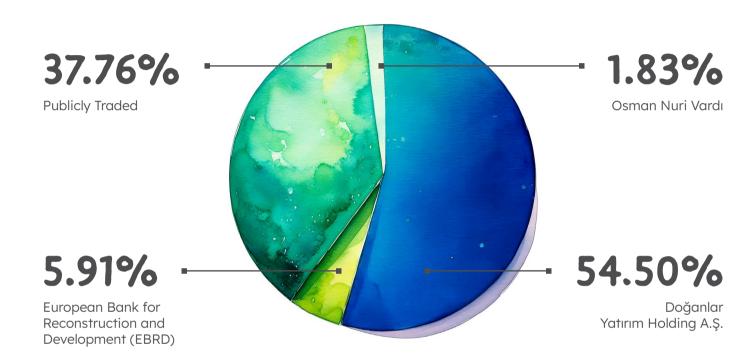
Quality, Occupational Health, and Safety Management are top priorities at Biotrend. Regular inspections are conducted to ensure a safe environment, especially for our facility staff, and ongoing training is provided to maintain high safety standards.

#### Social Responsibility

Biotrend's sustainable and inclusive projects, executed at our facilities, generate positive impacts for women, children, and the environment. Through our dedication to sustainability and awareness initiatives, we contribute meaningfully to our nation's reputation and societal progress.

#### **Capital and Shareholding Structure**

The issued capital of our company was increased to TRY 500,000,000 within the registered capital ceiling of TRY 625,000,000, as resolved by our Board of Directors in 2021.



SHAREHOLDERS	AMOUNT (TRY)	SHARE (%)
Doğanlar Yatırım Holding A.Ş. <sup>(6)</sup>	272,490,421.13	54.50
European Bank for Reconstruction and Development (EBRD)	29,574,693.04	5.91
Publicly Traded <sup>(7)</sup>	188,788,860.83	37.76
Osman Nuri Vardı	9,146,025	1.83
TOTAL	500,000,000.00	100

<sup>(6)</sup> During the period, as a result of share purchases conducted on June 9, 2023, through Borsa Istanbul, Doğanlar Yatırım Holding A.Ş. increased its stake in the company from TRY 272,440,421.13 to TRY 272,490,421.13, reaching a 54.50% share in the company's capital.

<sup>(7)</sup> As of December 15, 2024, the company's free float rate was 37.73%.

#### **Our Business Model and Areas of Operation**

At Biotrend, we materialize a circular economy model that adds value to waste, rather than the conventional linear economy that rapidly depletes and pollutes natural resources.

As one of Turkey's leading companies in waste management and renewable energy production, we operate with an environmentally friendly approach that emphasizes resource efficiency. For us, energy production is not merely an economic activity; it's a process that minimizes environmental impact, optimizes resource use, and reclaims value from waste.

Through our expertise in integrated waste management and energy generation from waste, we process collected waste using advanced technologies. By separating organic and inorganic materials, we ensure each type of waste is utilized in the most efficient way, significantly reducing waste volume. We recycle plastic and organic waste to obtain raw materials, feeding them back into the economy. Our compost production enriches the soil, and energy generated from waste contributes to sustainable production.

Each year, we expand our energy production capacity to meet the needs of more households and industrial facilities. Our operations not only focus on energy generation but also fulfill social responsibilities, such as supporting local communities and creating job opportunities.



#### **Energy Production**

At Biomass Energy Power Plants, we generate electricity and heat using biomass, biogas, landfill gas, and refuse-derived fuel (RDF).

#### PROCESS FOR ENERGY PRODUCTION FROM LANDFILL GAS

Municipal waste is accepted at a landfill.

Anaerobic fermentation of waste produces landfill gas

The collected gas is burned in gas engines to generate electricity

#### PROCESS FOR ENERGY PRODUCTION FROM BIOGAS

Organic waste, either source-separated or mechanically sorted, is processed in anaerobic fermentation units

The anaerobic fermentation produces biogas

Biogas is then used in gas engines to produce both electricity and heat

#### THE ENERGY PRODUCTION PROCESS FROM AGRICULTURAL AND ANIMAL WASTE

Agricultural and forestry waste is stored in designated fuel preparation areas

Fuel prepared from agricultural and forestry waste is fed into the boiler as per specified requirements

The boiler generates steam at the right pressure, temperature, and tonnage

The steam powers a turbine and generator, producing both electricity and heat

Integrated Waste Management

We conduct all our landfill operations in compliance with national regulations and with consideration for environmental factors.



#### **Landfill Operations**

We ensure that all of our landfill operations are fully aligned with national environmental regulations. Our approach integrates environmental considerations, including the design of disposal sites, soil impermeability, drainage systems, and leachate management processes, to minimize environmental impact.

Municipal waste received at our integrated waste management facilities is efficiently directed to the appropriate processing units based on its type. Specifically, municipal waste is directed to mechanical sorting and material recovery facilities, while park and garden waste is routed to composting units. Postsorting, waste suitable for biofuel production is transferred to anaerobic fermentation units, while materials suitable for energy recovery are directed to our Waste-to-Energy (WTE) plants. Industrial waste, along with any waste unsuitable for recycling after mechanical sorting, is disposed of in compliance with relevant regulations at designated landfill sites.

To minimize environmental risks, we have implemented comprehensive leachate and odor management systems at our sites. The design of our landfills, along with effective stormwater control, is critical in managing leachate. We have established an impermeable layer beneath the landfill areas to collect leachate, ensuring that underground and surface water sources remain protected from contamination. Leachate is captured via a drainage layer and stored in lagoons or settling ponds before being directed to our wastewater treatment facilities for further processing.

In addition to these measures, to safeguard the soil and groundwater, we install impermeable layers and utilize advanced leachate collection and drainage systems at our landfill sites, effectively preventing any potential environmental risks.



To prevent potential risks to soil and groundwater, we implement impermeable layers and efficient leachate collection and drainage systems at our landfill sites.

#### **Fuel Production**

#### Landfill Gas

Over time, municipal waste in our landfills generates landfill gas, which is rich in methane, through natural anaerobic decomposition. This gas contains greenhouse gases that would otherwise contribute to environmental pollution. By capturing and conditioning landfill gas, we convert this waste into an energy source, delivering both environmental benefits and economic value. We efficiently capture landfill gas from our waste storage sites, process it through gas conditioning, and repurpose it for energy production.

#### Biogas

In our integrated waste facilities, organic waste is separated during the mechanical sorting and material recovery of municipal waste. This organic waste is then conveyed to anaerobic fermentation units, where biogas production begins. The process takes approximately 28 days, during which the waste undergoes continuous horizontal mixing in a thermophilic environment to produce biogas. The biogas is then stored in specialized biogas balloons and conditioned to remove moisture, hydrogen sulfide, and solid particles before being used for energy production.

We use biogas in gas engines to generate electricity and heat. The electricity produced is fed into the grid, while the heat supports biogas production in anaerobic units, powers desulfurization unit heating, and heats office spaces. This approach optimizes our energy efficiency and supports sustainability across our operations.

At Biotrend, as part of our integrated waste management approach, we generate electricity from landfill has, biogas and agricultural and animal waste.

Agricultural and Animal Waste

At our Çanakkale Ezine and Aydın Çine biomass facilities, we process agricultural and forestry waste, converting it into energy through combustion in boilers. These facilities accept agricultural residues from the production of wheat, barley, corn, sunflower, cotton, and sugar beet, transforming this waste into economic value. By doing so, we support farmers while generating energy from local and renewable resources at our biomass power plants.

In addition to agricultural waste, we accept forestry residues generated through the Turkish Ministry of Agriculture and Forestry's annual activities. These residues are distributed to biomass energy plants nationwide based on installed capacity. Apart from forestry residues, no other forest products are accepted at our facilities.



#### **Compost Production**

As Biotrend we are committed to recycling municipal park and garden waste into compost, promoting its reuse in landscaping and horticultural applications. Within this context, our compost production process involves sizing and mixing park and garden waste collected by municipalities, followed by processing it based on raw material type to produce high-quality compost. We are preparing to start compost production at our Harmandalı, Bergama, and Balıkesir facilities in 2024.



#### **Greenhouse Agriculture**

In 2023, we completed a 54,000 m² glass greenhouse adjacent to the Sivas facility to conduct high-efficiency, protected agriculture. Using advanced soilless farming techniques, we aim to produce approximately 2,500 tons of vine tomatoes per year at the Sivas Greenhouse. Initial planting occurred in the fourth quarter of 2023, with the facility utilizing bioheat generated by Sivas Biomass Energy Plant (BEP). In addition, at Biotrend, we aim to establish greenhouse projects at our facilities, starting with our Uşak and İnegöl sites. By utilizing the heat generated from combined energy production, we seek to contribute to the national economy, support local development, and promote sustainable agriculture.

Using advanced soilless farming techniques, we aim to produce approximately 2,500 tons of vine tomatoes per year at the Sivas Greenhouse.

#### **Mechanical Sorting and Material Recovery**

At Biotrend, we process municipal waste through advanced mechanical sorting and material recovery methods, transforming it into valuable resources for fuel production and material reuse. Our facilities are equipped with an array of specialized tools, including overhead cranes, bag openers, rotary screens, ballistic and magnetic separators, optical separators, baling presses, and dedicated sorting cabins. These systems enable us to efficiently separate waste, recover metals, and generate circular raw materials. Organic waste is channeled toward biofuel production, while materials suitable for energy recovery serve as feedstock for producing refuse-derived fuel (RDF).

Circular raw materials find new life in recycled plastic and metal production, while biocircular inputs support biogas and landfill gas generation. Across our 11 Integrated Waste Management Facilities, we process an average of 9,000 tons of waste daily, continually enhancing the circular economy through responsible and efficient waste management.



#### Carbon Trading

We anticipate a continued annual potential of 2-3 million tons in carbon credits.



The positive environmental impact of our waste management and waste-to-energy operations is verified through audits conducted by independent third-party institutions. In 2021, we launched our first carbon credit projects with the Harmandalı, Balıkesir, and Uşak projects. In 2022, we expanded these efforts to include all of our facilities. Today, we have achieved greenhouse gas reduction certification projects across 16 facilities under the VERRA, GCC, and ICR certification programs.

Additionally, we received consultancy services for carbon asset certification processes under VERRA and ICR standards. On October 7, 2022, we signed a consultancy agreement to facilitate the sale of carbon assets whose certification processes had been completed.

This agreement has resulted in USD 7.3 million in revenue from voluntary carbon credit sales between 2022 and the end of 2023. Through these efforts, we have successfully prevented approximately 2.4 million tons of CO₂e emissions. Moving forward, we anticipate a continued annual potential of 2-3 million tons in carbon credits.

# 7.3 million USD

**Total Carbon Credit Sales Revenue for 2022-2023** 

Our carbon credit initiatives and certification details are provided below.

COMPANY	PLANT	ТҮРЕ	CERTIFICATION PROGRAM
Doğu Star	Orduzu Plant (Licensed)	BioGas	GLOBAL CARBON COUNCIL
Doğu Star	Orduzu Plant (Unlicensed)	Landfill Gas	<b>ICR</b> international carbon registry
Nov Enerji	Sivas Plant	Landfill Gas	<b>ICR</b> international carbon registry
Novtek Enerji	İnegöl-1 Plant	Landfill Gas	GLOBAL CARBON COUNCIL
Novtek Enerji	İskenderun Plant	Landfill Gas	GLOBAL CARBON COUNCIL
İzmir Novtek	Harmandalı Plant	Landfill Gas	Verified Carbon Standard A VERRA STANDARD
İlda (Landfill)	Balıkesir Plant	Landfill Gas	Verified Carbon Standard A VERRA STANDARD
Uşak Renewable	Uşak Plant	Landfill Gas - BioGas	Verified Carbon Standard A VERRA STANDARD
Doğu Star	İnegöl-2 Plant	BioGas	Verified Carbon Standard A VERRA STANDARD
İzmir Doğu Star	Bergama Plant	Landfill Gas - BioGas	Verified Carbon Standard A VERRA STANDARD
Biyomek	Çine Biomass	Biomass	GLOBAL CARBON COUNCIL
Yılbatu	Menderes Biyogas	Landfill Gas - BioGas	Verified Carbon Standard A YERRA STANDARD
Doğu Star	Malatya-2	Landfill Gas	Verified Carbon Standard A YERRA STANDARD
Mersin	Ezine Biomass	Biomass	GLOBAL CARBON COUNCIL
Ayvacık	Ayvacık	Landfill Gas	Verified Carbon Standard A VERRA STANDARD

#### **Plants and Operations**

As of the end of 2023, we have established operations across 19 plants in 11 provinces in Turkey, extending our reach from Çanakkale to Malatya and Sivas to Hatay, with investments actively progressing at each site.

19

**Total Plants\*** 

6

**Energy Production** 

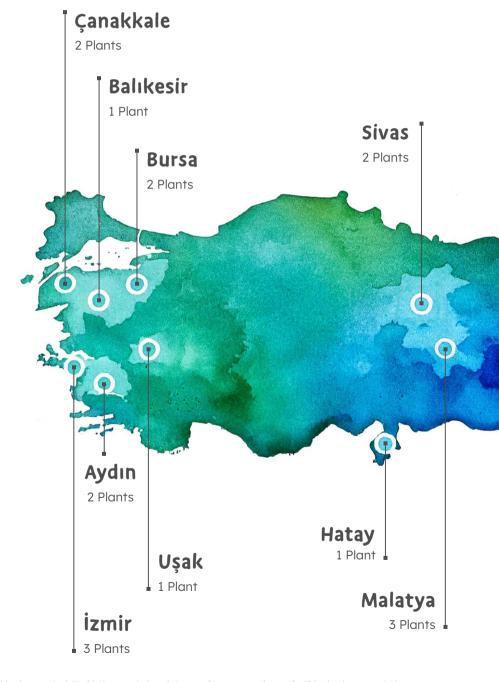
1

**Solid Fuel Preparation** 

Integrated Waste
Management and Energy
Production

Consumb

Greenhouse



<sup>(\*)</sup> Including ongoing investments, the number of our facilities has reached 17 with the completion of the transfer processes for our facilities in Aksaray and Giresun as of April 5, 2024, and the transfer of the Ayvacık Plant, which will be finalized by September 20, 2024. As of October 25, 2024, our portfolio includes: 8 integrated waste management and energy production plants, 6 energy production plants (2 of which use biomass incineration technology), 1 greenhouse, 1 solid fuel preparation and supply plant, and 1 industrial RDF (refuse-derived fuel) plant.

## Milestones

We continue to grow stronger and thrive with our mission of creating value.

la
Ma.
Faci.
Syste:
individ.

2015

We commiss:
operations at .
plants.

2016

We expanded the cap.
Malatya Orduzu and S.
increase operational eft

2017

Biotrend was officially establi.
partnership between Doğanlar
Holding and entrepreneurs Osmolar
Vardı, Murat Aslan, İsmail Şener C
and Naci İlker Mühürdar. In Octobe
we acquired full ownership of Doğu
Star (Malatya plant), Nov Enerji (Sivas
plant), and Novtek Enerji (İskenderun
plant).



commenced.







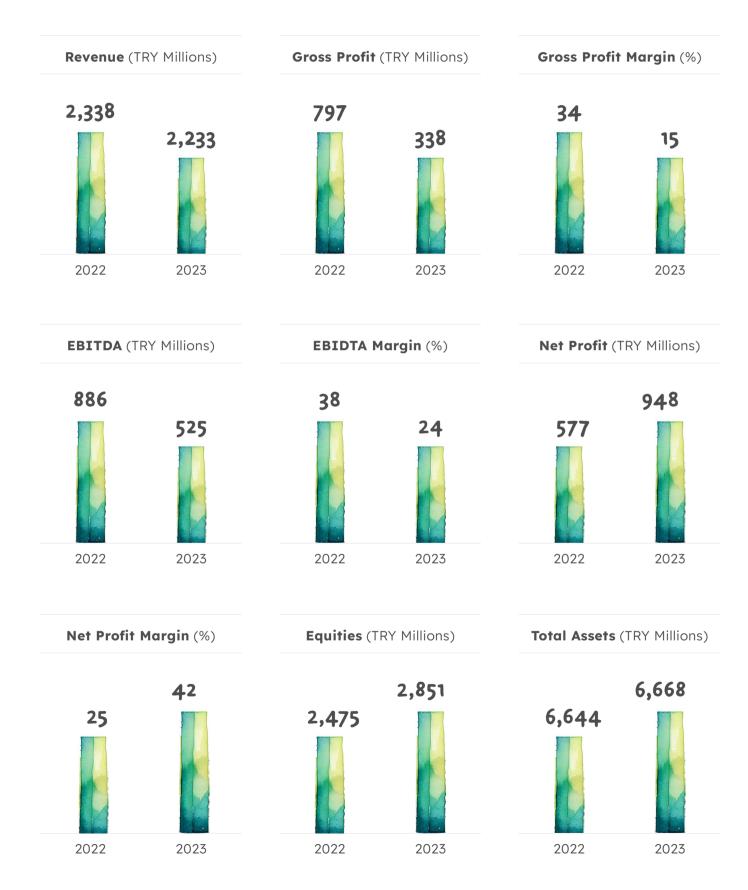
Biotrend At a Glance

# Highlights of **Our Performance in 2023**

At Biotrend, we reached a net profit of 948 million TL and a revenue of 2,233 million TL in 2023.



#### **Key Financial Indicators**



#### **Sustainability Highlights**

In 2023, we signed a contract to establish Turkey's first commercial-scale plastic upcycling facility. During the year, we conducted a materiality analysis using a double materiality approach and identified our climate-related risks and opportunities.

943,961 tons CO,e

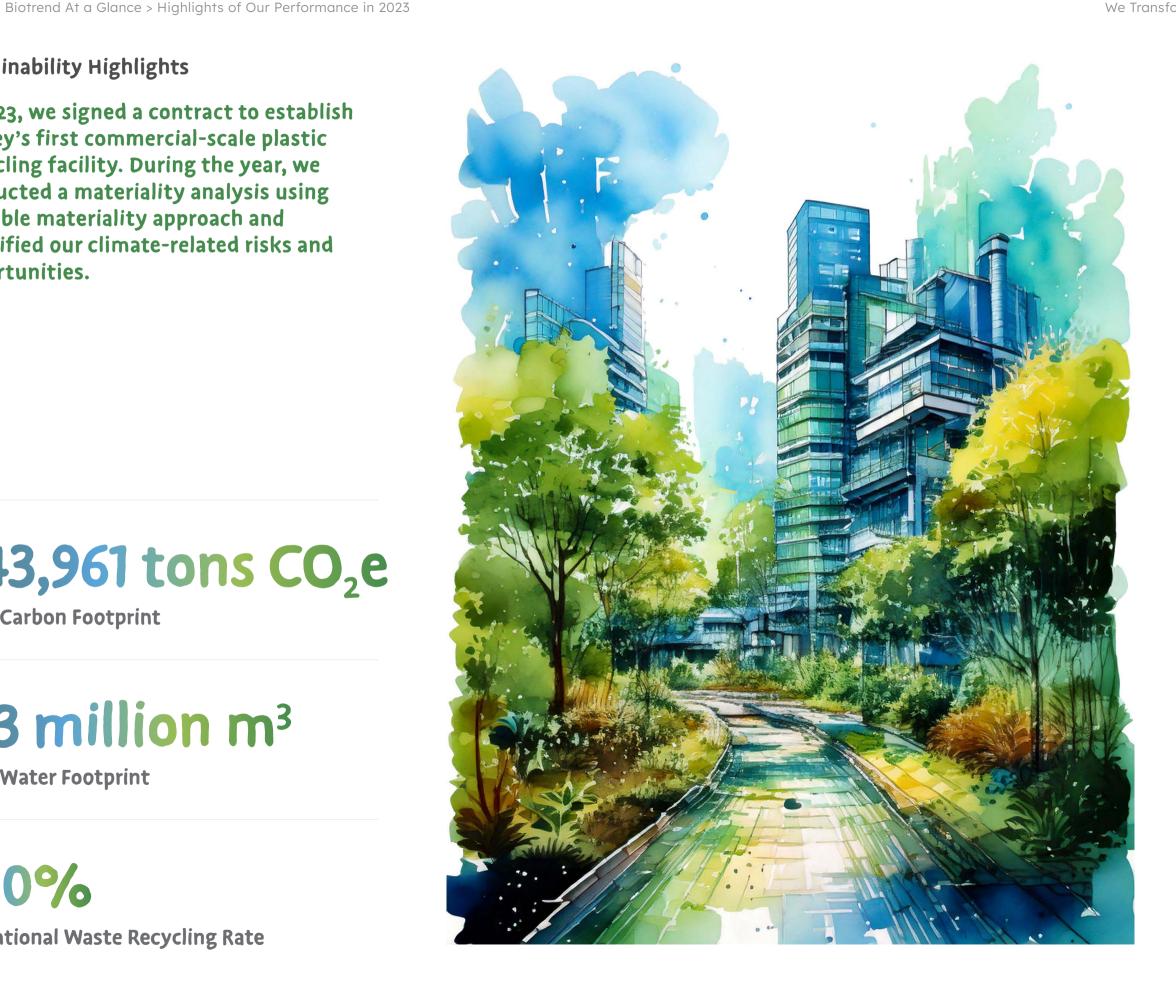
**Total Carbon Footprint** 

6.3 million m<sup>3</sup>

**Total Water Footprint** 

100%

**Operational Waste Recycling Rate** 



**Average Training Hours** Per Employee

38

**Average Occupational Health and** Safety (OHS) Training Hours Per **Employee** 

33%

Women Representation on the **Board of Directors** 

21%

Female Employee Ratio

15%

**Female Manager Ratio** 

30%

Employees Under 30 years old

# Industry Trends and Their Impact on Our Business

At Biotrend, we closely monitor industry trends and develop strategies aligned with their impact on our business.

#### **Combatting Climate Change and Net-Zero Targets**



The growing urgency to address global warming and climate change has led many countries to set net-zero emission targets by 2050. International initiatives such as the European Green Deal and the Paris Agreement are increasing pressure to reduce carbon emissions across all sectors. These developments are echoed in Turkey as well; the country's commitment to achieving net-zero emissions by 2053 is driving transformation in the local energy and waste management sectors. At Biotrend, we are committed to fulfilling our responsibility in the fight against climate change. To this end, we are adopting low-carbon technologies in our operations, reducing emissions, and developing projects aligned with circular economy principles.

#### **Rise of Circular Economy Approaches**



Traditional production and consumption models are becoming unsustainable due to resource scarcity and increasing waste. The circular economy approach emphasizes more efficient use of resources and repurposing waste. The European Union's Circular Economy Action Plan and Turkey's waste management strategies encourage companies to minimize waste and create value from it. Through its waste-to-energy production and recycling processes, Biotrend is at the forefront of this transformation. This circular business model enables Biotrend to both reduce operational costs and contribute to global environmental goals.

#### **Technological Developments and Digitalization**



New technologies and digitalization in the waste-to-energy sector offer significant advantages, such as improved efficiency and traceability. Biotrend aims to enhance operational efficiency by integrating advanced fermenters, digital monitoring systems, and process optimization software in its biogas facilities. These technological investments not only improve energy efficiency but also help reduce emissions and waste. Through digitalization, we can monitor our processes more effectively, quickly identify efficiency losses, and reduce operational costs.

#### Rising Water Stress and Sustainable Water Management



The pressure on water resources continues to increase due to climate change and excessive water consumption. In countries like Turkey, which face high water stress, water management has become a critical area of sustainability for companies. According to the WRI Aqueduct Water Risk Atlas, the regions where Biotrend operates are at high or extremely high risk of water stress. Accordingly, Biotrend is taking measures to reduce its water footprint. We conduct assessments under the ISO 14046 Water Footprint standard and take steps such as recycling wastewater for reuse in production processes and implementing new technologies that improve water efficiency.

#### **Green Financing Opportunities**



The rise of green financing globally has become a vital funding source for companies developing environmentally friendly projects. According to UNCTAD, the value of sustainable investment products, including bonds and funds, exceeded \$7 trillion in 2023, marking a 20% increase compared to 2022. In 2023, we conducted sales of 100 million TRY worth of sustainable sukuks in Turkey's capital markets. Green financing supports Biotrend's sustainable investments and contributes to our growth strategies.

#### Renewable Energy and Waste Management Policies in Turkey



Turkey's strategic goals for renewable energy and waste management regulations create opportunities for Biotrend in the waste-to-energy production field. The Ministry of Environment and Urbanization's sustainable waste management strategies support Biotrend's waste-to-energy production model. In line with renewable energy policies, Biotrend contributes to Turkey's energy transition through capacity expansions at existing facilities and new projects. Additionally, by complying with waste management policies, we are making our operations more environmentally friendly.



# Sustainability at Biotrend

With a strong sustainability governance framework, we are committed to continuously improving our performance in line with our action plans.

Through open, two-way communication with our stakeholders, we effectively manage our environmental and social impacts while developing innovative solutions to create value within the ecosystem we belong to.



## **Sustainability Approach**

# With a focus on green transformation and circular economy, we aim to amplify our positive impact on society.

The environmental and social crises we face today have underscored the critical need to protect and efficiently utilize natural resources. These challenges also remind us that without inclusivity and equality, sustainable development is not achievable. At Biotrend, we shape our operations to address the three core urgent issues identified by the United Nations - Climate Change, Pollution, and Biodiversity Loss - by developing solutions to mitigate these challenges. With a focus on sustainable development, green transformation, and the circular economy, we aim to amplify our positive impact on society. In line with this commitment, we became a signatory to the United Nations Global Compact in August 2021.

In 2022, we took another significant step by signing the United Nations Women's Empowerment Principles (UN WEPs) through our Social Inclusivity and Gender Equality Action Plan, which we developed to raise awareness and build capacity in this area. Moving forward, we aim to create greater stakeholder engagement by partnering with local governments—one of our key stakeholders—to increase the employment of women in waste management and energy production from waste.

To manage sustainability effectively, we established our corporate sustainability strategy and accelerated our efforts by founding a dedicated Sustainability Office.

We have been a signatory to the UN Global Compact since 2021.

# We have been a signatory to the UN Women's Empowerment Principles (UN WEPs) since 2022.

In line with our goal to transparently share our environmental, social, and governance (ESG) performance indicators with stakeholders, we responded to the CDP questionnaire for the first time in 2022. We have identified areas for improvement and, through necessary adjustments, we continued to participate in the CDP Climate Change Questionnaire in 2024.

Our expertise in circular raw materials and biomass energy is fundamental to our sustainability strategy. We leverage this knowledge in alignment with the UN Global Compact and the Equator Principles to support stakeholders in their green transformation efforts. Through integrated waste management operations, we offer infrastructure and technological solutions to municipalities for managing all types of waste and provide carbon credits to individuals and organizations to promote circular raw materials, sustainable fuels, renewable energy, and emission reductions.

Our operations focus on using the most advanced technologies for sustainable waste management, with the goal of generating high-value products. The sustainable solutions we provide contribute both technically and socially, creating significant positive impacts at the national level.





#### Strategic Framework

At Biotrend, we align our sustainability strategy with our corporate strategy, drawing on key global frameworks such as the United Nations 2030 Sustainable Development Goals (SDGs), the Paris Agreement, and the European Green Deal, which serve as the major drivers of economic and social transformation worldwide. Within this context, we prioritize aligning our efforts with global targets for 2030 and 2050 to ensure compliance with the demands of green, circular, and digital transformation. By supporting sustainable development across five key pillars, we aim to be a leading company in the transition to a low-carbon economy, both locally and globally.

STRATEGIC AREA	OUR APPROACH	SUSTAINABLE DEVELOPMENT GOALS WE CONTRIBUTE TO
Accelerating the Circular Economy	We are committed to integrating circular economy principles into our projects by focusing on recycling waste. We invest in innovative technologies and processes to recycle waste and convert it into high-value products. As a result, we ensure efficient resource use and reduce our environmental footprint.	12 PESPONSILE BOSCIOPPIN AN PRODUCTIN COMP
Reducing Greenhouse Gas Emissions	Through our integrated waste management and biomass energy initiatives, we aim to cut greenhouse gas emissions by effectively managing municipal, agricultural, and forestry waste. Additionally, we are contributing to both national and international climate goals by incorporating our projects into carbon credit certification programs. We also help promote renewable energy production through these efforts.	7 AFFORMALE AND GERM THERET
Facilitating the Transition to a Low- Carbon Economy through Innovation	We support the transition to a low-carbon economy by investing in sustainable technologies. Our innovation-driven business model focuses on expanding our portfolio of bioelectricity, bioheat, and sustainable fuels, while materializing the use of clean technologies in our operations to minimize environmental impact.	9 MUSTIV MONOMAIN MO PRASTRICTURE
Preserving Biodiversity	As of 2023, we have launched biodiversity programs at all our facilities, working in partnership with universities and NGOs. These programs help us monitor and improve the environmental impact of our operations, ensuring more effective environmental management.	6 GREAN WATER AND SANDINGTON  15 OFF.  OF CHANGE  TO SHARE  THE COLLING  THE COLLIN
Respect for People	We are dedicated to creating an inclusive, equitable, and diverse work environment for our employees and all stakeholders. With a zero-tolerance policy for workplace and environmental accidents, we uphold high standards in occupational health and safety. Our sustainability efforts are further strengthened by a commitment to human rights and fair working conditions across our entire value chain.	5 censer 10 resolution with the second resolution of the second resolut

## **Sustainability Governance**

At Biotrend, we have established a corporate governance structure based on the principles of transparency, accountability, and responsibility to build a sustainable future.

The Board of Directors is the highest body responsible for overseeing sustainability across the organization. Every three months, sustainability performance indicators, along with climate-related risks and opportunities, are presented to the Board for review.



#### **Sustainability Committee**

The Sustainability Committee, reporting directly to the Board of Directors, is responsible for shaping our sustainability strategy, setting short-, medium-, and long-term goals, and developing the governance structure for sustainability. The committee evaluates environmental and social performance indicators, identifies areas for improvement, and provides regular updates to the Board on the sustainability strategy and action plans, along with recommendations. In 2023, the Sustainability Committee convened five times. This structure ensures that our sustainability goals are consistently communicated to the Board and that decision-making processes are aligned with these objectives.

You can access the Sustainability Committee's Working Principles here

# Early Risk Detection and Audit Committees

In addition to the Sustainability Committee, the Early Risk Detection Committee and the Audit Committee play vital roles in monitoring and managing environmental risks. The Early Risk Detection Committee is responsible for assessing all risks that could threaten Biotrend's continuity, developing risk measurement models, and ensuring the effectiveness of the risk management systems. In 2023, the committee met six times, providing the Board with regular reports on risk management and overseeing the implementation of risk management policies throughout the company.

As a result of these efforts, Biotrend established its Energy Risk Inventory under the leadership of an independent board member, identifying transition and climate-related risks, which have been incorporated into the inventory. Our risk management processes are conducted in compliance with the Task Force on Climate-related Financial Disclosures (TCFD) standards.

For further details on the working principles of the Early Risk Detection and Audit Committees, please refer to the <u>Corporate Governance</u> section.

#### **Sustainability Office**

At the core of our sustainability strategy, the Sustainability Office was established in April 2022 to monitor and improve our environmental and social performance across all stakeholders. The office focuses on continuous improvement initiatives in areas like waste, water, energy, and resource management, aligning our operational processes with principles of environmental sustainability. In the social domain, we implement performance indicators centered around "Talent Management and Employee Well-being" and "Local Socioeconomic Development" for both internal and external stakeholders. Starting in 2023, we organized Environmental, Social, and Governance (ESG)-themed training sessions at all our facilities to boost internal awareness and facilitate knowledge sharing on sustainability. These trainings effectively communicate our sustainability goals to all employees.

# Environmental and Social Management System

In 2021, we embarked on our sustainability transformation journey in partnership with the European Bank for Reconstruction and Development (EBRD), with a goal of aligning all operations with the Equator Principles. In collaboration with technical and social experts, we developed tailored action plans and compliance roadmaps for each facility.

Biotrend's Environmental and Social Management System, founded on quality management standards, guides our activities in critical areas such as environmental stewardship, occupational health and safety (OHS), and information security. All our facilities have achieved certifications for ISO 14001, 45001, 27001, and 9001. This system supports our environmental sustainability goals through climate crisis mitigation, resource efficiency, and the management of environmental investments, while on the social front, it ensures the effective management of occupational health and safety, information security, and employee well-being.

# Material Topics

At Biotrend, we undertook a comprehensive materiality analysis to shape our sustainability efforts around the most critical Environmental, Social, and Governance (ESG) issues affecting both our operations and stakeholders.

In line with a double materiality approach, we evaluated both the impact of sustainability issues on our company's financial performance (outside-in) and the influence of our operations on the environment and society (inside-out).

Our materiality analysis aligns with international standards and incorporates in-depth studies, including stakeholder engagement, trend analyses, and impact assessments. This process involves the following steps:



#### Desk Research and Data Collection

In the initial phase, we developed a comprehensive list of relevant topics by analyzing global and industry trends, international sustainability standards, and competitor practices. This list, based on global research, industry requirements, legal frameworks, and peer benchmarking, served as the foundation for our materiality analysis.

#### Strategic Interviews with Executives

One-on-one interviews with senior executives from various departments helped us gauge the strategic importance of sustainability issues and their effect on our financial and operational targets. Through these discussions, we assessed the impact of key ESG issues on our business strategy and identified materiality areas where Biotrend can generate value in the short, medium, and long term.

#### • Stakeholder Engagement and Feedback

Through surveys with diverse stakeholder groups—including employees, suppliers, local communities, and NGOs—we gained insights into how Biotrend's activities impact our stakeholders. Feedback from internal and external stakeholders has guided Biotrend's sustainability strategy, helping us align expectations with our strategic goals. The analysis incorporated feedback from a total of 210 stakeholders.

#### External Trend and Peer Company Analysis

We conducted a trend analysis based on national and international sustainability developments and compared our approach with competitors in the sector. This analysis allowed us to identify strategic opportunities for Biotrend to maintain its competitive edge in sustainability and consider the impact of environmental regulations and legal compliance on our business processes.

#### Risk and Opportunity Analysis

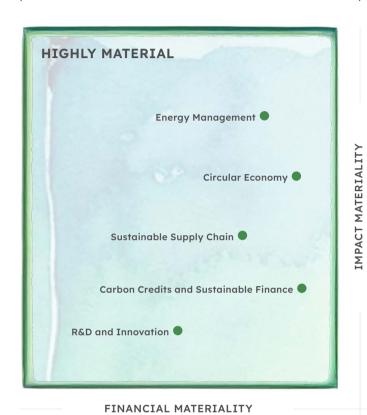
Desk analyses were used to evaluate the risks and opportunities associated with sustainability issues at Biotrend. Our risk analysis examined the effects of environmental and social risks on our operational processes, financial performance, and long-term strategies. Our opportunity analysis identified ways to enhance Biotrend's environmental and economic performance on material ESG issues, such as advancing a circular economy model and increasing renewable energy production.

#### Impact Analysis

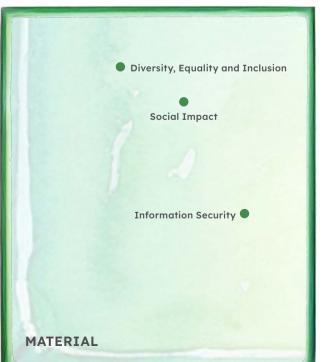
We conducted an impact analysis to evaluate both the environmental and social effects of Biotrend's material ESG issues. This assessment covered both positive and negative impacts across Biotrend's operations and value chain, considering their scale, severity, and reversibility.

#### **Materiality Matrix**

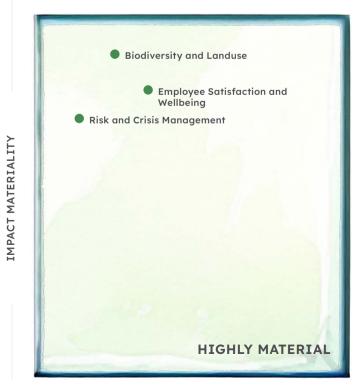
After gathering all data and completing the desk analyses, a materiality matrix was developed to categorize material sustainability issues based on both their relevance to Biotrend's financial performance and their environmental and social impact.







#### FINANCIAL MATERIALITY



VERY HIGH MATERIAL ISSUES	HOW DO WE MANAGE?
Emissions	As part of our emission management strategy, we are investing in renewable energy projects to reduce greenhouse gas and other air emissions across our operations. Furthermore, we are engaging in carbon credit certification programs and actively selling carbon credits in voluntary markets. As Biotrend, we are implementing innovative practices to reduce our emissions. In 2023, we reported our greenhouse gas emissions within the framework of ISO 14064-1 Carbon Footprint and obtained verification for the data.
Occupational Health and Safety	With our zero-tolerance policy on occupational health and safety, we provide a safe working environment for all our employees. Under the ISO 45001 Occupational Health and Safety Management System, we conduct regular audits, perform risk analyses to prevent workplace accidents, and enhance awareness through health and safety training programs. We are committed to minimizing workplace accidents and occupational diseases.
Vaste Management	Through our integrated waste management system, we aim to dispose of, recycle, and generate renewable energy from both hazardous and non-hazardous waste. We integrate circular economy models into our business processes by utilizing the latest technologies to convert waste into energy and enhance resource efficiency. We are also continuing our efforts to expand our capacity for producing fuels derived from waste.
Vater and Wastewater Ianagement	We utilize innovative technologies for the efficient use of water resources and the management of wastewater. We are developing water efficiency projects to optimize water consumption. For the first time this year, we conducted ISO 14046 Water Footprint calculations to improve data quality related to water management and assess our current status, obtaining validation for these efforts.
Adaptation to Climate Change	We conduct risk assessments to minimize the negative impacts of climate change on our business operations and develop strategies to address these risks. We identify and evaluate the risks associated with climate change, both transitional and physical, and create strategic plans to ensure the long-term sustainability of our business. We participated in the 2024 CDP Climate Change program to transparently report and improve our climate performance.
Clean Technology Investments	We are investing in clean technology opportunities such as renewable energy, bioenergy, and waste-to-energy production, while integrating energy efficiency projects into our business processes. We are developing innovative projects to accelerate the transition to a low-carbon economy and capitalize on clean technology opportunities. In this context, we are focusing on exploring and investing in new technologies that improve energy efficiency and reduce carbon emissions, with the goal of increasing our efforts in these areas.
Stakeholder Engagement	We engage in regular communication with our stakeholders, gathering feedback to gain insight into their expectations and priorities. We foster transparent and constructive interactions with our stakeholders through various methods, including surveys, collaborative projects, and meetings. In 2023, we evaluated stakeholder expectations through a materiality analysis and incorporated this feedback into our strategic decision-making processes. This process has enabled us to strengthen our sustainability approach and take concrete steps for the future.
thics and Compliance	In alignment with our ethics and compliance policies, we ensure that all our activities are conducted with transparency, integrity, and accountability. To maintain strict adherence to ethical standards, we offer regular training and carry out internal audits. Furthermore, we rigorously monitor all processes to ensure compliance with legal requirements and consistently apply continuous improvement practices.



#### **Stakeholder Communication**

At Biotrend, transparent and two-way communication with our stakeholders is key to shaping our sustainability initiatives.



By engaging with a wide range of stakeholders, including employees, suppliers, local governments, and NGOs, we aim to better understand the environmental and social impacts of our activities and define our sustainability objectives.

We are continuously working to ensure that our sustainability strategy meets the expectations of all stakeholders.

In 2023, we identified our material areas within environmental, social, and governance (ESG) issues by gathering feedback from diverse stakeholder groups through a comprehensive materiality analysis. This process has strengthened our sustainability approach and set the stage for actionable steps moving forward.

Our ongoing and proactive communication with stakeholders supports the improvement of Biotrend's sustainability policies and practices. In doing so, we aim to create lasting value for both society and the environment.

STAKHOLDER GROUP	COMMUNICATION METHODS
Employees	Field visits, surveys, internal communication platforms, regular feedback meetings, training, and awareness programs
Investors and Shareholders	Corporate website, investor presentations, annual activity reports, sustainability reports, and General Assembly meetings
Suppliers and Contractors	Supplier evaluation processes, sustainability meetings, performance and compliance audits
Press and Media Organizations	Press releases, press conferences, interviews, information sharing via social media platforms
Municipalities, Associations and NGOs	Joint projects, social responsibility initiatives, regular updates through sustainability reports, and collaboration meetings.



At Biotrend, we conduct our relationships with all stakeholders—especially our shareholders, employees, and customers—based on the core principles of accountability, fairness, transparency, and responsibility, which form the pillars of our corporate governance.

Through an effective governance and oversight framework, we embed these principles into our business operations to support a sustainable management model. This approach enables us to foster trust-based, robust relationships with our stakeholders, ensuring that transparency and ethical standards are upheld at every stage of our activities.



## **Board of Directors and Committees**

The Board of Directors operates in accordance with the principles of transparency, accountability, fairness, and responsibility.

The Biotrend Board of Directors is structured in line with the Turkish Commercial Code and Capital Markets Legislation. The Board is composed of 9 members, including 3 independent directors. Of these members, 4 hold executive roles, while the remaining 5 are non-executive. The representation of women on the Board stands at 33%, and all independent members meet the "independence" criteria as stipulated by the Capital Markets Law.

Operating in accordance with principles of transparency, accountability, fairness, and responsibility, the Board of Directors convened 13 times in 2023, achieving an attendance rate of 89%. Over the course of these meetings, 27 resolutions were adopted. Meetings are conducted in person or via remote access, as needs dictate.

For further information on the Biotrend Board of Directors, please refer to pages 24-26 of the <u>2023 Annual Report</u>.





#### **Committees**

To enhance the effectiveness of its functions and responsibilities, Biotrend's Board of Directors has established several committees in accordance with the Capital Markets Board's Corporate Governance Communiqué (II-17.1). These include the Audit Committee, Corporate Governance Committee, Early Detection of Risk Committee, and Sustainability Committee. Each committee operates within the scope of relevant regulations and internal company protocols. Committee chairs and members are selected from among the independent Board Members in line with Corporate Governance Principles, while the CEO and General Managers do not participate in committee roles.

The Board of Directors conducts an annual performance evaluation, reviewing the performance of individual members, the effectiveness of meetings, and the roles of the Chair and CEO. In 2023, all committees fulfilled their roles and responsibilities in alignment with Corporate Governance Principles and their Terms of Reference.

#### **Audit Committee**

The Audit Committee ensures that the company's financial reports comply with applicable regulations and international accounting standards. It also monitors the effectiveness of internal internal audit systems, providing reports to the Board of Directors. The committee convened six times in 2023.

#### **Corporate Governance Committee**

The Corporate Governance Committee is dedicated to enhancing corporate governance practices, selecting suitable Board candidates, and establishing the compensation principles for company executives. In 2023, the committee convened nine times to fulfill its mandate. This committee also assumes the responsibilities of the Nomination and Remuneration Committees.



# Early Risk Detection Committee

The Early Detection of Risk Committee identifies risks that could threaten the company's continuity and growth, implementing processes to assess, monitor, and manage these risks. In 2023, the committee met six times, consistently reviewing risk management practices and reporting to the Board.

#### **Sustainability Committee**

The Sustainability Committee oversees the development of the company's sustainability strategy, sets both short- and long-term objectives, and evaluates environmental and social performance indicators. In 2023, the committee held five meetings, providing recommendations to the Board on enhancing sustainability performance.

For further details on sustainability governance, please see the <u>Sustainability Governance</u> section of this report.

# **Ethics and Compliance**

Corporate Governance

## We place great importance on confidentiality in our ethical processes, ensuring the protection of the identities of those who report concerns.

At Biotrend, we are deeply committed to upholding our code of conduct and corporate policies. We maintain open lines of communication to ensure that all employees and stakeholders feel empowered to raise concerns or report potential violations. Reports can encompass a range of ethical issues such as corruption, fraud, environmental harm, human rights violations, conflicts of interest. bribery, money laundering, anti-competitive practices, and child labor. For ethical notifications, our Biotrend Ethics Line (etik@ biotrendenerji.com.tr) serves as a secure and confidential channel accessible to both internal and external stakeholders.

Individuals found violating our code of conduct or company policies may face disciplinary actions, up to and including termination if necessary. This policy applies not only to those directly involved in violations but also to those who fail to report or overlook inappropriate behaviors. In 2023, we reminded all employees of our ethical procedures through quarterly emails, reinforcing their clarity and accessibility.

You can access the Biotrend Ethics Reporting Procedure here.

All internal and external stakeholders can report ethical violations via etika)biotrendenerji.com.tr

Reports can be directed to our Director of Risk and Compliance or the Internal Audit Department, Maintaining confidentiality is essential in our ethics process, and the identities of individuals making reports are protected. We also offer an option for anonymous reporting. In cases that require legal action, the identity of the reporter is shared only with the relevant authorities. Retaliation against anyone reporting in good faith is strictly prohibited. And disciplinary measures are taken against anyone engaging in retaliation. Similarly, individuals making malicious reports are subject to disciplinary action.

Our Internal Audit Department manages ethics investigations with the utmost confidentiality. Information and documents are requested only as necessary, and each investigation is strictly limited to the specific issue at hand. Investigations are completed as efficiently as possible, and the resulting report is submitted to the Ethics Committee. Decisions by the committee are implemented without delay, and results are communicated to the relevant departments.

To support effective management of these processes, we created a detailed document explaining the scope and procedures of ethics reporting, which has been shared with employees. In 2024, we will also introduce ethics and anti-corruption training to further inform and educate our staff on these critical topics.

In 2023, one report was submitted through our ethics hotline. This report was thoroughly reviewed, and, following the Board's decision, a verbal warning was issued to the relevant manager.

#### **Policies**

With a commitment to responsible and transparent business practices, we implement our corporate policies across the organization to quide all activities according to these principles. We also expect our suppliers, business partners, and all stakeholders in our value chain to adhere to these policies. The following policies establish the rules and standards that must be followed in Biotrend's business processes.

You can access all our Policies and Procedures here. **Disclosure Policy Remuneration Policy Profit Distribution Policy Donation and Sponsorship Policy Related Party Transactions Policy** Diversity and Equal Opportunity Policy Code of Business Ethics Anti-Money Laundering and Counter-Terrorism Financing Policy Anti-Bribery and Anti-Corruption Policy **Information Security Policy Environmental Policy Quality Policy** Occupational Health and Safety Policy

**Human Rights Policy Anti-Retaliation Policy** 

**Public Relations Policy** 

**Compliance Policy** 

Corporate Risk Management Policy

**Employee Compensation Policy** 

**Human Resources Policy** 

**Competition Policy** 

**Customer Satisfaction Policy** 

Gift and Hospitality Policy

**Supply Chain Compliance Policy** 

# Risk Management

## With a proactive risk management approach, we manage our financial and non-financial risks in an integrated manner.

At Biotrend, we believe that effective identification, assessment, and management of risks are crucial to achieving our goal of "sustainable growth." With this commitment, we prioritize risk management to create maximum value for our stakeholders. Our Corporate Risk Management process is applied across the company to cultivate a risk-conscious culture and ensure a systematic approach to risk management.

Our risk management strategy is based on identifying, assessing, materiality, monitoring and reporting the risks we may encounter in our operations. Based on COSO's 2017 "Enterprise Risk Management – Integrating with Strategy and Performance" framework, our system defines essential measures and strategies to mitigate and manage risks efficiently.



Corporate Risk Management encompasses all business areas and is integrated into our operational processes, enhancing decision-making in governance, strategy, goal-setting, and day-to-day activities. We address financial, operational, strategic, and external compliance risks, aiming to reduce or maintain these risks at an optimal level. This approach enables us to minimize deviations from our strategic, operational, and financial objectives, helping us deliver maximum value to our shareholders.

Risk management is overseen by the Early Detection of Risk Committee on behalf of the Board of Directors. This committee identifies potential risks and opportunities affecting company activities, analyzing each risk's root cause. We assess each risk by calculating its likelihood and impact, evaluating existing controls, and prioritizing actions based on a balanced cost-benefit analysis. When materializing risks, a cost-benefit balance is considered, and actions are planned accordingly.

The high-material risks in our risk portfolio are continuously monitored through Key Risk Indicators (KRIs), with acceptable thresholds aligned with our company's risk appetite, in coordination with relevant managers. Throughout 2023, improvement actions based on KRI performance were planned and implemented. Risk owners report KRI performance monthly, with adverse trends escalated to the Board by the Early Detection of Risk Committee if necessary.

Action plans within our risk management framework are developed in coordination with risk owners and functional managers to ensure rapid implementation. In 2023, a total of six risk performance and action-tracking reports were prepared and presented to the Early Detection of Risk Committee and the Board.

Biotrend takes all necessary steps to manage ESG (environmental, social, and governance) risks, including climate-related risks and opportunities, human resources, environmental concerns, occupational health and safety, and labor relations, in full compliance with applicable regulations. Effective management of these risks not only minimizes current risks but also positions us to seize future opportunities.

We are dedicated to the effective management of both financial and non-financial risks. A summary of Biotrend's key financial and nonfinancial risks is provided in the table below.



Financial Risk Management	Biotrend's operations are exposed to various financial risks stemming from fluctuations in exchange rates, interest rates, and capital market prices. The company's financial risk management policies are designed to minimize these risks and mitigate adverse market impacts.
Credit Risk	Biotrend faces credit risk from cash holdings, bank deposits, and outstanding receivables. The risk of counterparties failing to fulfill contractual obligations is an inherent risk when financial instruments are involved. To manage credit risk, the company monitors customer creditworthiness, secures collateral when needed, and establishes specific credit limits for each customer before making sales. Financial assets are continuously monitored to minimize potential collection issues.
Liquidity Risk	Liquidity risk pertains to the company's ability to maintain sufficient cash or liquid assets to meet debt obligations and ensure funding flexibility. Biotrend preserves its funding flexibility by maintaining adequate credit facilities, taking into account the dynamic business environment. By sourcing bank loans from financially robust institutions, the company effectively mitigates liquidity risk.
Market Risk	Market risk refers to the potential impact of fluctuations in interest rates, exchange rates, and other financial instruments on the company. These fluctuations can affect Biotrend's income statement and equity. The company employs various tools and strategies to limit the impact of adverse market developments and aims to minimize market risks.

## **Internal Audit**

All audit activities are closely monitored and assessed by process owners, company management, and the internal audit department.

Internal audit activities at Biotrend are carried out by the Internal Audit Department with the active participation of all employees. The primary goal of our internal audit efforts is to protect both the tangible and intangible assets of Biotrend, ensure that operations are conducted in compliance with internal and external regulations, improve the effectiveness and efficiency of business processes, and ensure that corrective actions are promptly taken when necessary.

Audit activities are conducted based on an annual audit plan, which is prepared and updated throughout the year by the Internal Audit Department. In addition to regular audits, when any event contrary to internal procedures occurs, our internal audit team conducts an impartial investigation, and the findings are reported to the Board of Directors and the Audit Committee.

The findings and recommendations from the internal audit are shared with the relevant departments. A corrective and preventive action report is then prepared to address any identified gaps. This ensures that appropriate solutions are implemented quickly, leading to the continuous improvement of processes. All audit activities are closely monitored and assessed by process owners, company management, and the internal audit department.

The Board of Directors and the Audit Committee are regularly updated on internal audit activities. The Audit Committee supports the Board by providing oversight and making recommendations on matters related to accounting, finance, and auditing. In addition, the Audit Committee reviews and evaluates financial reporting, operational risks, and both internal and external audit processes.

The primary aim of our internal audit activities is to ensure the protection of Biotrend's tangible and intangible assets, to guarantee that operations are carried out in compliance with internal and external regulations, to enhance effectiveness and efficiency in business processes, and to ensure timely corrective actions when necessary.





# **Circular Economy Practices**

Since our establishment, we have been dedicated to creating both environmental and economic value.



At the heart of our business model lies the biocircular economy concept, where we efficiently utilize waste to produce renewable energy and raw materials.

Using advanced technologies, we convert municipal, agricultural, and forestry waste into circular raw materials, sustainable fuels, and renewable energy. We particularly focus on transforming park and garden waste into compost, which improves the efficiency of agricultural fertilizers and enhances soil quality. In line with our commitment to adding value to waste, we also process organic waste in our biogas facilities to produce energy and raw materials. At our facilities in Harmandalı, Uşak, İnegöl, and Bergama, we produce biogas from organic waste and convert it into energy. Additionally, at our mechanical sorting facilities, we process recyclable materials like plastics and metals and market these products in response to market demands.

In line with our 2050 net-zero emissions goal, we continue to expand our portfolio of sustainable raw materials, fuels, and energy through bio-circular economyfocused investments. Alongside renewable energy, we are also investing in providing circular raw materials for the plastic industry. Starting in 2024, we will continue our efforts to supply sustainable raw materials and fuels to industries such as chemicals and cement. These investments will not only contribute to our country's green transformation but also help maintain the competitive strength of our economy.

We continue our investments in line with our goal of providing circular raw materials to the plastics industry.

#### Sustainable Greenhouse Farming

With the SiVERA brand tomato project, we were honored with the Circular Economy Category Award at the Energy and Climate Forum's "Green Century – Redesigning Today and Tomorrow" event.

As part of our circular economy initiatives, we integrate energy production processes into agricultural production, enhancing environmental benefits and supporting the local economy. At our Sivas plant, we use biogas to heat our greenhouse, focusing on soilless farming techniques. We also plan to expand these projects to our Uşak and İnegöl plants.

In 2022, we launched Türkiye's first modern glass greenhouse heated with energy derived from waste at our Sivas plant. We grow "SİVERA" tomatoes in coconut husks, using soilless farming techniques without any pesticides. With an annual capacity of 2,500 tons of vine tomatoes, our greenhouse is in line with the European Union's "Farm to Fork" strategy, offering a bio-circular economy-based production process. With the goal of producing energy-efficient, low-carbon footprint tomatoes, our first harvest produced 40 tons of SİVERA tomatoes. We distributed 11 tons to the domestic market, 10 tons to our stakeholders, and exported 19 tons to the Netherlands. We aim to increase our production capacity to 2,000-2,500 tons in 2024.

2,500 tons

Annual Vine Tomatoes Capacity of Sivas Greenhouse



## **R&D** and Innovation

# At Biotrend, we continuously improve our R&D and innovation processes by adopting the latest technologies, which enhances our competitive edge in the industry.

Innovation plays a crucial role in shaping the future of our business model and achieving our sustainability goals.

In addition to electricity sales, we focus on technological research in areas such as compost production, sustainable greenhouse farming, heat sales, biogas, alternative biomethane production from landfill gas, and creating sustainable raw materials from plastic waste. We are also concentrating on plastic credit projects.

In 2023, to keep pace with the digital age and lead technological innovation, we established the Digital Transformation Office (DTO), which reports directly to the CEO. The DTO has developed a detailed strategic portfolio of digital projects aimed at boosting efficiency and fostering innovation over the next four years. Our efforts to strengthen our technological infrastructure include optimizing Enterprise Resource Planning (ERP) systems and improving process efficiency. In the coming period, we plan to implement several projects under the DTO to improve data management, core maintenance, and production processes. These projects include scale integration, business intelligence dashboards, and data collection initiatives.

In 2023, we established the Digital Transformation Office, reporting directly to the CEO.



#### **Upcycling Technologies**

We have signed a memorandum of understanding with Honeywell UOP to establish Türkiye's first commercial-scale plastic waste chemical recycling facility, which will convert plastic waste into sustainable raw materials using advanced recycling technologies. The facility will process 60,000 tons of plastic waste annually, and we have already begun preparations for its commissioning in 2025. Under the agreement with Honeywell, we will utilize the licensed UpCycle Process technology to recycle plastic waste into recovered polymer feedstock. This upcycling plant, which we plan to establish in the İzmir region, is expected to be operational by 2027. Once up and running, it will process and clean 118,000 tons of economically unrecoverable plastic waste annually, producing 55,000 tons of pyrolysis oil.

To ensure that our facilities are operating at maximum efficiency, we work closely with our operational teams and central engineering office. We are executing projects aimed at improving processes, implementing new technologies, and upgrading equipment at the facility level. Some key initiatives we have already implemented or are planning to implement include:

#### Bergama and İnegöl Plants Eddy Separator Optimization

At our Bergama and İnegöl facilities, we updated the Eddy separator systems used for sorting ferrous and non-ferrous metals with newer technologies. A more efficient sorting system was integrated, increasing the aluminum content in recovered materials from 1.1% to 2.5%. This improvement reduced the amount of aluminum waste sent to landfill and generated an annual savings of TRY 875.000.

### Compost Technology Use and Treatment Sludge Disposal

One of the major challenges faced by municipalities is the disposal of treatment sludge. Our Bergama plant has been selected for a pilot project to use compost technology for sludge disposal. We plan to begin investments in this project in 2024, which aims to reduce the harmful environmental impact of waste while producing valuable fertilizers.

#### **Leather Industry Waste Utilization**

We are working to process leather industry waste at our Uşak, Bergama, and İnegöl biogas plants. In addition, by performing preliminary processing, by-products with high oil content, such as animal derived leather waste are incorporated into organic inputs at specific ratios. This project helps reduce the disposal of local leather industry waste and reintegrates it into the economy.

## Development of an Application for Recycled Packaging Materials

We have begun developing an application to reintroduce recycled products—such as plastic, metal, and PET—back into the economy. The app will facilitate faster and more efficient delivery of recycled products from vendor facilities to customers. Through this application, customers will be able to access daily production data from vendor facilities, ensuring better alignment between supply and demand, and preventing disruptions. The goal of this project is to enhance transparency and efficiency within the recycling sector.

#### 66

# **Environmental Management**

At Biotrend, we align our waste management, energy production, and environmental protection activities with our sustainable development goals, following an integrated approach.



All our facilities are certified with the ISO 14001 Environmental Management System, and we are committed to conducting our operations in an environmentally responsible manner to ensure efficient resource use. Additionally, we shape our activities to support a sustainable future, following the core principles of the United Nations Global Compact, to which we are signatories.

Our environmental management strategies are based on the following principles:



#### Continuous Improvement of Our Environmental Management System

We establish measurable goals and regularly assess our performance to ensure continuous improvement of our environmental management system.



#### **Pollution Prevention**

We implement all necessary measures to prevent environmental pollution.



#### Compliance with Legislation and Public Health

We aim to protect the environment and public health by strictly complying with legal regulations.



#### **Combating Climate Change**

To contribute to the fight against climate change, we work to improve energy efficiency, reduce energy consumption, and lower our greenhouse gas emissions.



#### **Emission Control**

We continuously monitor air and wastewater emissions and make efforts to minimize them.



#### **Biodiversity Protection**

We prioritize the protection of biodiversity, both directly and indirectly, in the areas where we operate.



#### **Raising Environmental Awareness**

We conduct training and awareness campaigns to increase environmental consciousness among our employees and the public, ensuring the sustainable spread of this awareness.



#### **Innovative Waste Management Technologies**

We focus on using innovative technologies in waste management to improve our environmental performance and develop effective solutions.

Our supply chain policy places a strong emphasis on environmental criteria, and we expect our suppliers to comply with legal regulations and international environmental standards. We terminate relationships with suppliers who harm the environment or fail to meet their environmental responsibilities, as this aligns with our ethical business conduct. We aim to achieve excellent environmental performance at every stage of our supply chain, focusing on climate change, water management, waste management, and biodiversity protection.

You can access our Supply Chain Compliance Policy here.

Environmental investments play a key role in our strategy. In 2023, we invested a total of TRY 623 million in environmental projects, including biometanization facilities, waste disposal initiatives, landfill projects, leachate treatment plants, and organic waste management.

In 2023, we received environmental administrative fines totaling TRY 1,234,232 for our Harmandalı, Uşak, Ezine, and Giresun facilities due to issues such as waste disposal, knowledge gaps, dust-related damages, and water pollution caused by rainfall. We actively manage these fines by identifying areas for improvement and swiftly implementing the necessary changes to enhance our processes.

You can access our Environmental Policy here.



# 623 million TRY

# **Emission and Energy Management**

We are committed to renewable energy production through a comprehensive emissions management approach.

We aim to reduce our greenhouse gas emissions and utilize renewable energy sources in the most efficient way possible. We are reducing emissions from our operations while increasing our energy production capacity from waste, offering innovative and low-environmental-impact solutions.



#### **Emission Management**

# Through our business model, we prevent methane emissions by converting organic waste into energy.

At the heart of our business model is converting waste into energy. We transform organic waste from Mixed Municipal Solid Waste (MSW) into biogas, and then into electricity, preventing the release of methane gas into the atmosphere.

In 2023, we successfully prevented 5.2 million tons of  $CO_2e$  emissions. Our Harmandalı facility in Izmir contributes the largest share, with the potential to prevent 1.4 million tons of  $CO_2e$  emissions annually.

To enhance our capacity and efficiency in preventing methane emissions, we are investing in integrated waste management facilities. These include mechanical separation plants, fermentation units, RDF/SRF plants, and wastewater management units. Our fermentation units are fed with the organic fraction of MSW from our mechanical separation plants, which accelerates the gas production process and reduces the storage of organic waste.

As of 2023, we have eight active fermentation units, with a daily capacity to process 150 tons of organic waste. These units contribute to the disposal of 1,200 tons of organic waste each day. In addition, our RDF plants help utilize inert waste and the remaining organic fraction as an energy source.

# 5,2 million tons CO<sub>2</sub>e

Total Greenhouse Gas Emissions
Prevented in 2023

# 1,200 tons of waste

We have a daily waste processing capacity of 1,200 tons across 8 fermentation units.

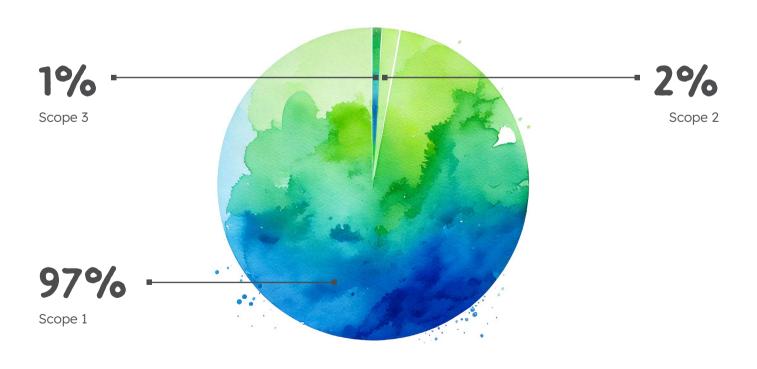
#### **Emissions from Operations**

Beyond the emission reductions achieved through waste-to-energy production, we also track and manage both direct and indirect emissions from our operations. In 2023, we conducted a detailed Greenhouse Gas (GHG) Inventory, analyzing our emissions.

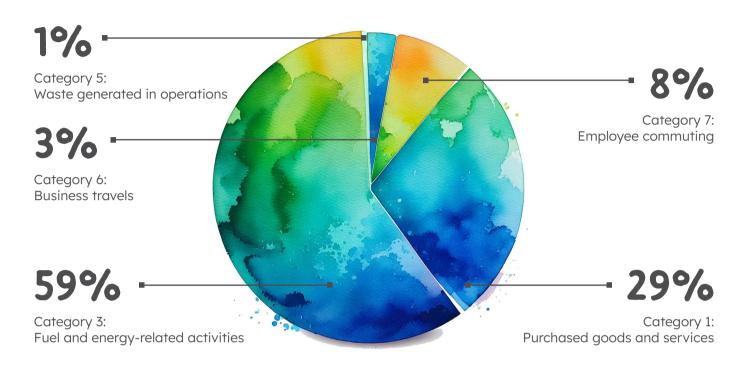
As a result, Scope 1 emissions were 919,066 tons  $CO_2e$ , location-based Scope 2 emissions were 14,415 tons  $CO_2e$ , and Scope 3 emissions were 10,481 tons  $CO_2e$ . Scope 1 emissions make up 97% of our total emissions. As a result, we are focusing on reducing Scope 1 emissions and accelerating projects to address high-emission areas.

Additionally, due to our business model, we also produce biogenic emissions. In 2023, our total biogenic emissions were 1,090,297 CO₂e. We use landfill gas (LFG) as an energy source in our operations. As a result, energy is generated from biomass at our LFG, Biogas, and Biomass Combustion plants, and these processes are categorized as biomass. In our 2023 emission calculations, emissions from energy production from biomass were included, but energy consumption at facilities using this energy source was excluded from the scope.

#### GREENHOUSE GAS EMISSIONS (ton CO2e)



#### SCOPE 3 EMISSIONS BY CATEGORY (ton CO2e)



Biogenic emissions are generated from the following three processes, with the corresponding emission values as follows:

**LFG (Landfill Gas):** 728,403.9 tons  $CO_2e$ 

**Biogas:** 94,983.8 tons CO<sub>2</sub>e

**Biomass Combustion:** 272,909.6 tons CO<sub>2</sub>e

In 2023, we calculated our Scope 3 emissions across five categories: purchased products and services, fuel- and energy-related activities, waste, business travel, and employee commuting. The total Scope 3 emissions for the reporting year amounted to 10,481 tons of CO₂e. In the coming years, we plan to expand the scope of our calculations and include all relevant Scope 3 categories in our greenhouse gas emissions assessments. Consequently, we anticipate an increase in Scope 3 emissions in the years ahead.

When evaluating the distribution of our indirect Scope 3 emissions for 2023, Category 3: Fuel- and energy-related activities (59%) and Category 1: Purchased products and services (29%) stand out. In line with our goal to reduce all direct and indirect emissions, we will focus primarily on Category 1 and Category 3 emissions within Scope 3. We will identify key areas where significant reductions can be achieved and develop effective strategies to address them.

#### **Energy Management**

At Biotrend, we prioritize sustainability and efficiency principles in our energy management processes, continuously improving our energy production operations.

In our energy management processes, we focus on sustainability and efficiency, continuously improving our energy production systems. While maximizing the use of renewable energy sources, we also implement various projects to enhance the energy efficiency of our operations.

We have made significant progress in reducing Biotrend's operational carbon footprint by transitioning part of our company vehicles to electric and purchasing electric forklifts. This shift to electric vehicles is a key step in reducing emissions from employee transportation. We are also working to minimize energy losses and optimize the performance of our biogas and landfill gas power plants, which generate renewable energy.

In line with updated regulations, we have started hybridizing our biomass power plants with Solar Energy Systems (SES). This will allow us to increase our renewable energy capacity, providing more environmentally friendly and efficient energy production solutions. Once our rooftop and ground-mounted solar projects at our facilities in Balıkesir, Uşak, Aydın, Sivas, İnegöl, and Çanakkale are completed, we expect to have a total installed capacity of 7.5

In 2023, our total energy consumption reached 85,227.9 MWh. Of this, 52,392.1 MWh came from the energy we generated, while we purchased 32,835.9 MWh of electricity during the reporting vear.



7.5 MW

Total Installed Capacity to be **Achieved Upon Completion** of Our Rooftop and Ground-**Mounted Solar Projects** 

#### To improve energy efficiency and minimize our environmental impact, we are running several projects at our facilities:

#### Waste Heat Recovery and Utilization

Our biogas engines release significant amounts of waste heat during energy production. We have implemented various strategies to capture and utilize this waste heat:

#### **Heating Fermenters**

Maintainina a stable temperature in our fermenters during biogas production is essential. We use the waste heat from our engines to heat the fermenters, which increases energy efficiency and reduces the need for additional energy.

#### **Compost Production**

We use waste heat from our gas engines to heat our rotary drum reactors, improving the efficiency of compost production. By processing organic waste in a controlled manner, we produce natural fertilizers, contributing to agricultural production.

#### **Heating Offices and Administrative Buildings**

We also use waste heat to warm the offices and administrative buildings at our facilities. By 2023, our Uşak, Bergama, İnegöl, Harmandalı, and Sivas plants had generated a total of 81.6 MWh of energy annually from waste heat, covering the heating needs of these buildings.

#### **Greenhouse Heating**

In our agricultural activities, we use waste heat to maintain optimal temperature conditions in our greenhouses. We also store waste heat using buffer tanks and use it when necessary to heat the greenhouses. This application boosts energy efficiency while supporting healthy and rapid plant growth.

#### Energy Savings **Applications**

#### **LED Lighting Implementation**

We have upgraded the lighting systems in our facilities to energyefficient LED lights. LEDs consume less energy compared to traditional lighting and have a longer lifespan, reducing both energy costs and maintenance expenses.

#### **Maximizing Natural Lighting**

In our mechanical sorting buildings, we use transparent materials on the roofs and walls to capture as much natural sunlight as possible. This reduces the need for artificial lighting during the day, thereby minimizing overall energy consumption.

#### **Insulating Heat Lines**

our heat lines using materials with low thermal conductivity. By employing high-performance insulation products such as rock wool and ceramic-coated materials, we reduce heat loss, ultimately improving our energy efficiency.

#### Technological Investments to **Boost Efficiency**

#### **Upgrading Motor Efficiency**

We have upgraded our electric generation motors from IE2 to IE3 class, resulting in greater efficiency in biogas utilization. This change allows us to produce more energy with the same amount of biogas, lowering operational costs and reducing environmental impact.

#### **Biogas Conditioning Systems**

We are installing biogas conditioning systems to remove impurities like sulfur from the gas. These systems help our gas engines run more efficiently, extend their lifespan, and lower maintenance



## Water and Wastewater Management

## We are actively working to develop responsible resource usage practices within our water and wastewater management processes.

In 2023, we calculated our water footprint following the ISO 14046:2014 standard. This calculation covered blue, green, and gray water footprints, resulting in a total water footprint of 6,351,792.4 m³. Additionally, we obtained reasonable verification for our water footprint calculations for the year 2023.

Our blue water footprint was measured at 1,380,130.9 m³, with the majority coming from municipal water networks and purchased water. Specifically, our consumption of network and well water totaled 405,628.96 m³, while we purchased 974,502 m³ of drinking water. Therefore, the largest portion of our blue water footprint comes from the drinking water we purchase.

Our green water footprint amounted to 2,150,500.6 m³. We efficiently use harvested rainwater in various processes, significantly reducing our need for wastewater by collecting rainwater at designated storage sites.

Our gray water footprint was calculated at 2,821,160.9 m³. Wastewater resulting from domestic use in our facilities is directly discharged into the sewage system, where it is treated by the relevant water and sewage authorities. Additionally, we have wastewater treatment facilities at our Balıkesir and Giresun sites, where gray water is treated and safely discharged into the environment.



# BIOTREND'S WATER FOOTPRINT FOR 2023 (m³) Blue Water Footprint 1,380,130.9 Green Water Footprint 2,150,500.6 Gray Water Footprint 2,821,160.9

Total

6.351.792.4

We are focused on improving our water management processes and reducing our water footprint. We have installed a Reverse Osmosis System to improve the quality of raw water used in cooling towers, which has helped reduce both our chemical consumption and blowdown volume. In line with our water consumption reduction goals, we collect all wastewater at our facilities and reuse it for processes such as wet ash handling, wet ash conveyors, and site cleaning.

We also implement effective leachate water management practices. In our facilities, we manage landfill leachate and odor to prevent environmental harm. Key measures in managing leachate include proper landfill design and rainwater control. In 2023, the total leachate volume across all our facilities was 273,759 m<sup>3</sup>. To minimize the environmental impact, we have installed an impermeable layer at the bottom of our landfills, which collects leachate and prevents contamination of groundwater and surface water. This leachate is then collected via a drainage layer, stored in lagoon ponds, and sent to wastewater treatment plants. All of these processes are carried out in full compliance with national environmental regulations.



## 6,351,792.4 m<sup>3</sup>

#### **Total Water Footprint of 2023**

In addition to optimizing resource usage, we also run awareness programs for our employees. Beginning in 2024, we will launch training and activities focused on promoting the efficient use of water.

At Biotrend, we approach water and wastewater management with an integrated strategy aimed at reducing our environmental impact. We started this process by calculating our water footprint and will continue by identifying high-impact areas and implementing water efficiency measures.

## **Waste Management**

Responsible Business Model for the Future

Waste generated from Biotrend operations is categorized as hazardous and non-hazardous, with management processes implemented in compliance with environmental regulations for both types.

In our approach to waste management, we prioritize environmental sensitivity, as well as social and economic benefits. We adopt an integrated waste management system, where waste generated in a specific area is separately collected, transported, transferred, sorted, recycled, recovered, and ultimately disposed of. We apply this comprehensive approach to both the waste generated by our own operations and the waste we collect as part of our business model.

At Biotrend, our business model is focused on processing waste efficiently, particularly waste collected from municipalities and industrial facilities. In 2023, the total amount of waste received by our facilities was 3.2 million tons. This figure includes fuel accepted by our biomass facilities and municipal waste delivered to our mechanical sorting plants.

Details regarding our waste management processes under Biotrend's business model can be found in the <u>Our Business Model and Areas of Operation</u> section.

Waste generated as a result of Biotrend's operations is categorized into hazardous and non-hazardous waste, with management processes compliant with environmental regulations applied to both types.

According to 2023 data, non-hazardous waste, such as metal slags, shavings, and plastic chips, was fully sent to recycling companies, contributing to the economy.



## 457.5 tons

## Total Amount of Waste Recovered in 2023

For hazardous waste management, a total of 151.7 tons of hazardous waste was directed to recovery firms for disposal. The recovery process for hazardous waste involves procedures like interim storage and processing prior to reuse, minimizing the harmful environmental effects of the waste.

Through our sustainable waste management approach, we effectively handle the waste generated by our operations in an environmentally responsible way and transform waste into energy, helping to meet the energy needs of hundreds of thousands of households.



We Transform Waste into Value for a Livable World

RECOVERED WASTE (TONS)	2022	2023
Recovered/Reused Non-Hazardous Waste	212.2	305.8
Recovered/Reused Hazardous Waste	159.5	151.7
Total Recovered Waste	371.7	457.5

## **Biodiversity and Land Use**

## We recognize the importance of efforts aimed at biodiversity to ensure the healthy functioning of natural ecosystems.

We place great importance on our responsibility for biodiversity conservation and ecosystem restoration. We understand that maintaining healthy natural ecosystems is crucial, and the actions we take to protect biodiversity play a key role in this. Our biodiversity monitoring projects conducted in 2021 and 2023 in the Çavuşlu Municipality of Görele District, Giresun Province, and in the İzmir-Menderes region in 2020 are a reflection of our commitment to this cause. These projects allowed us to carry out comprehensive studies on the local flora and fauna, helping us assess our potential impact on the ecosystem.

As a result of the field studies conducted during these projects, we identified specific measures to protect the plant and animal species in these regions. In the areas covered by the projects, we took steps to preserve and enhance the natural vegetation, taking into account the diversity of plant species. We also analyzed the impact of our facilities on bird populations, specifically focusing on migration routes and breeding areas, and took steps to minimize activities that might negatively affect these areas. Moreover, these studies provided us with an opportunity to assess our sites in terms of international agreements. Regarding biodiversity risks, we identified the measures to be taken during the construction, operational, land preparation, monitoring, and postoperation stages.

We conducted biodiversity monitoring studies in Izmir-Menderes in 2020 and in Giresun-Gorele in 2021 and 2023.



#### Giresun Biodiversity Monitoring Studies (2021 & 2023)

The Giresun Biodiversity Monitoring Project, covering studies on flora, fauna, hydrobiology, hydrogeology, ornithology, and agriculture, was carried out by academics from leading universities in Turkey.



In 2023, as part of the planned capacity expansion project at the Giresun Solid Waste Union Facility, comprehensive environmental monitoring studies were conducted. These studies, which were carried out by academics from Turkey's leading universities, focused on the local flora, fauna, ornithology, hydrobiology, and reptilian ecosystems. The primary goal of these studies was to observe the local ecosystems, identify any changes in the environmental conditions of the area, and define the necessary measures to mitigate potential negative impacts.

One of the main areas of focus during the fieldwork was the monitoring of aquatic ecosystems. Water quality in nearby Çıkmaz Stream and Çavuşlu Creek was analyzed, and it was confirmed that these water sources contained no pollutants harmful to aquatic life. The study also examined organisms such as algae, zooplankton, benthic organisms, and fish that form the aquatic food chain. The findings showed high diversity and healthy populations across all levels of the food chain.

The presence of benthic organisms, which are indicators of clean water, confirmed the high water quality and healthy state of the ecosystems. Additionally, it was determined that the operational system of the facility does not pose any threats to the aquatic ecosystems, as the wastewater is treated using advanced techniques and discharged in compliance with established standards.

We remain committed to continuing our efforts to protect biodiversity and restore ecosystems. As outlined in our Environmental Policy, we are dedicated to ensuring that our projects fully comply with legally designated protection areas, manage biodiversity impacts sustainably, and take proactive measures to minimize those impacts. We also commit to planning our projects and operations in a way that preserves the habitats of protected and endangered species. Our biodiversity monitoring projects represent the first steps in fulfilling our environmental and social responsibilities, and we are determined to take the necessary actions to ensure the continued health and sustainability of ecosystems moving forward.



## **Employee Profile**

# We aim to continuously improve our employee profile and management distribution to promote diversity and inclusion.

At Biotrend, we are proud of our strong and diverse workforce. As of 2023, our team consists of 787 employees, including 194 white-collar and 593 blue-collar workers. (8) Of our workforce, 21% are women and 79% are men. The gender distribution varies across employee categories: women are more represented in white-collar positions, while blue-collar positions are predominantly filled by men.

The age distribution of our employees further highlights the demographic diversity within our workforce. In 2023, 30% of our employees were under 30 years old, 56% were between 30 and 50 years old, and 14% were over 50.

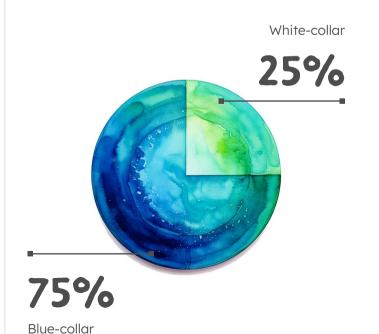
Regarding our management team, as of 2023, women managers make up 14% of the total leadership. The age breakdown of our management team shows that 1% are under 30, 64% are between 30 and 50 years old, and 35% are over 50. This blend of young leaders and experienced managers adds value to Biotrend by fostering an innovative and strategic approach to our operations.

We are committed to continuously enhancing our employee profile and management distribution to foster diversity and inclusivity. The demographic diversity of our workforce plays a crucial role in contributing to Biotrend's growth journey.

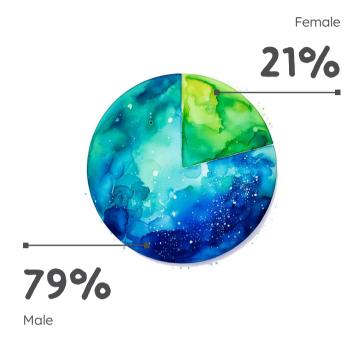
(8) The employee count shared in Biotrend's 2023 Annual Report has been recalculated due to the identification of duplicates.



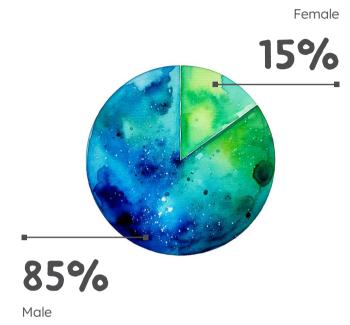
#### **EMPLOYEES BY CATEGORY**



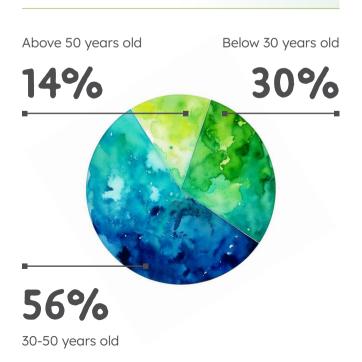
#### **EMPLOYEES BY GENDER**



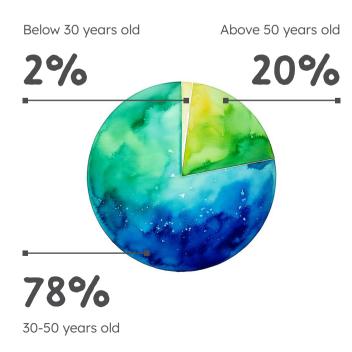
#### **MANAGERS BY GENDER**



#### **EMPLOYEES BY AGE**



#### **MANAGERS BY AGE**



## **Diversity and Inclusion**

We view diversity and inclusion as fundamental pillars of our corporate culture and actively support workplace diversity by offering equal opportunities to all our employees.

To achieve this, we promote equal opportunities across all our operations in line with our Diversity and Equal Opportunity Policy.

We are committed to a comprehensive approach to ensuring equal opportunities and gender equality. As part of our efforts, Biotrend is a member of the 30 Percent Club and a signatory of the UN Women's Empowerment Principles. In line with our Social Inclusion and Gender Equality Action Plan, we have made significant strides in increasing the representation of women in our management team. We have successfully tripled the number of independent women members on our Board of Directors, reaching a 33% women representation, thus starting the transformation at the highest level. This initiative promotes gender diversity in leadership and drives an equal approach throughout the organization.

In 2024, we participated in the Business Against Domestic Violence (BADV) Program, organized by Sabancı University's Corporate Governance Forum. Through this program, two of our representatives were trained on gender equality and the fight against domestic violence. They will disseminate this knowledge within our organization and assist in developing internal policies on these important topics. By the program's conclusion, our goal is to implement a comprehensive workplace policy to combat domestic violence, fostering a fairer and safer work environment.

At Biotrend, we are dedicated to promoting diversity and inclusion. Our goal is to maintain a workplace culture where every employee feels valued and respected. With our zero-tolerance policy against discrimination, we create an environment where everyone has equal opportunities to succeed.



33%

Percentage of Women on Biotrend's Board of Directors



## **Talent Management**

Human-Centered Approach for the Future

We implement a comprehensive talent management strategy aimed at supporting the career development of our employees and fostering a productive and fulfilling work environment.

Our talent management policy includes recruitment processes, performance evaluations, training and development programs, as well as initiatives to enhance employee satisfaction and well-being. Our goal is to provide ongoing support throughout our employees' careers, ensure a fair and equal workplace, and help every individual realize their full potential.





#### **Performance Management**

In 2022, we introduced our Performance Management Procedures to streamline and enhance our performance management processes, while also recognizing and rewarding individual contributions. Initially, we are focusing on team-based evaluations, and by 2024, we plan to transition to individual performance assessments.

Our performance management system is based on Key Performance Indicators (KPIs) and position-specific bonus structures.

Throughout the year, performance results are regularly monitored by both managers and employees, with final performance scores being determined through year-end evaluations. Different bonus components are used for site and headquarter staff, ensuring that incentives are tied to performance.

With this performance management approach, we aim to boost employee engagement, strengthen team motivation, and encourage employees to contribute more effectively toward achieving the company's goals.

#### **Training Programs**

We are dedicated to investing in our employees' development by continuously enhancing their skills and knowledge. Each year, we expand our training programs to help employees grow in their careers, improve their competencies, and adapt to changing business needs. Our training offerings range from technical and leadership skills to professional certification programs, all designed to contribute to both the personal and professional growth of our employees.

In 2023, we made significant progress in employee training, providing a total of 28,813 training hours—more than three times the amount provided in 2022. The average training hours per employee increased from 15 hours in 2022 to 37 hours in 2023. In total, we spent TRY 356,000 on training, with an average training cost of TRY 452 per employee.

Our 2023 training programs focused on enhancing both technical and managerial skills. The goal is not just to support existing competencies but to help employees grow in their careers over the long term. For instance, we offered specialized training such as EKAT (Electricity High Voltage Systems Training) for power plant operators and electricians, as well as HAZOP (Hazard and Operability Analysis) training for all employees to improve their professional qualifications. Additionally, we provide targeted training for employees who do not yet hold the necessary professional certifications for their roles.

We also launched large-scale management meetings in 2023 to foster collaboration and promote a culture of holistic leadership. Since December, we have been holding CEO Shareholder Meetings every three months to keep all employees updated on current processes. Information sessions on the Donation and Sponsorship Policy were held in June, July, and December for the Board of Directors, Executive Committee, and management staff.





Additionally, we provide orientation programs for all new hires. As part of these programs, employees receive training on our Donation and Sponsorship Policy, as well as other Compliance Policies. In 2023, we conducted 2,214 personhours of orientation training for 123 new employees, with each employee receiving an average of 18 hours of training. Our orientation program covers essential company processes, including Human Resources, Administrative Affairs, Management Systems, Occupational Health and Safety, Risk and Compliance, and Information Technology. This program ensures that new employees can quickly adapt to our company culture.

#### Leadership Training

To support the leadership and self-development skills of our employees, we launched new training programs in the latter half of 2023. Starting from December, we organized leadership skills training for all directors, managers, and department heads. These sessions focused on performance management and feedback, while the Self-Leadership Training emphasized key competencies such as emotional intelligence and conflict management. In 2024, we plan to continue offering training programs on topics like feedback, time management, and conflict resolution to further support the professional growth of our employees.

#### Training Objectives

In line with the goals we have set for employee development in the upcoming period, we aim to strengthen our training programs in the following areas:

#### **Increase the Number of In-House Trainers**

We aim to expand the number of internal trainers to ensure the transfer of knowledge and experience directly to our employees.

#### **Increase Leadership Training Hours**

Focusing on enhancing the leadership skills of our managerial staff, we plan to extend the duration of leadership training sessions.

#### **Emphasize Wellbeing Training**

We are committed to providing more wellbeing training to support the physical and mental health of our employees, helping them achieve a balanced and healthy work life.



## Recruitment and Employee Separations

## Our recruitment processes are guided by the principles of equal opportunity and non-discrimination.

In alignment with our values of diversity and inclusion, we strive to enhance the representation of women employees, both within the general workforce and in leadership roles. To achieve this, we are constantly improving our recruitment strategies and actively supporting women candidates for managerial positions. To promote internal advancement, we prioritize internal candidates for our open positions and are actively working to increase opportunities for internal promotions. For open positions, we prioritize internal candidates to encourage career growth within the organization. By increasing internal promotion opportunities, we aim to foster employee loyalty and support the career development of our existing workforce.

In 2023, we hired 416 new employees, with 272 men and 144 women hires. Additionally, 817 employees left the company, with voluntary turnover accounting for 56% of these separations.

416

**Total New Hires in 2023** 

272

Male New Hire in 2023

144

Female New Hire in 2023



## **Employee Satisfaction and Wellbeing**

## We offer a range of social benefits and flexible working models to improve our employees' work-life balance and overall wellbeing.

Through continuously developing our programs, we aim to create a healthier and more balanced work environment that supports the physical, mental, and social health of our employees.

#### Benefits and Healthcare Services

Our employees have access to Private Health Insurance, which covers not only the employee but also their spouse, dependents, and children. Additionally, we provide social benefits such as transportation and meal allowances. Depending on the position, employees may also receive additional perks, including company vehicles, phones, supplementary health insurance, meal vouchers, and discounts on furniture.

#### Wellbeing Programs

To enhance both the mental and physical health of our employees, we organize various wellbeing-focused initiatives. For example, on March 8, we hosted a seminar titled "Take Control of Your Life's Direction" for all white-collar employees. These activities are designed to help our employees feel better and more supported in their personal and professional lives.

#### Maternity and Parental Leave

Maternity and parental leave play a key role in supporting a healthy work-life balance. In 2023, one women employee and 18 men employees took maternity and parental leave. We track the return-to-work rates after leave and continue to develop policies that best support our employees during this transition.

#### Remote Work Model

To further support work-life balance, we introduced a remote work model at our Kavacık Headquarters in August 2023. Employees can work remotely up to two days a week. This model enables office-based employees to maintain a more balanced and productive work-life experience.

#### Employee Engagement and Satisfaction Surveys

Starting in 2024, we plan to implement regular employee satisfaction and engagement surveys. These surveys will help us gather valuable feedback from our employees and provide insights that will enable us to continually improve our workplace environment.



## Occupational Health and Safety

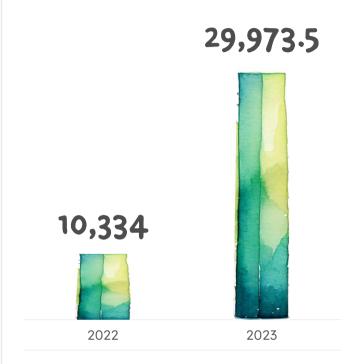
We provide regular training to raise awareness of occupational health and safety among our employees.

In all our operations, we are committed to the goal of "Zero Work Accidents" and implement a comprehensive Occupational Health and Safety (OHS) management system to ensure a safe working environment for our employees and stakeholders. This system is shaped in line with our OHS Policy and is effectively implemented across all our facilities. To continuously improve our OHS efforts, we conduct regular training, risk assessments, and improvement projects.

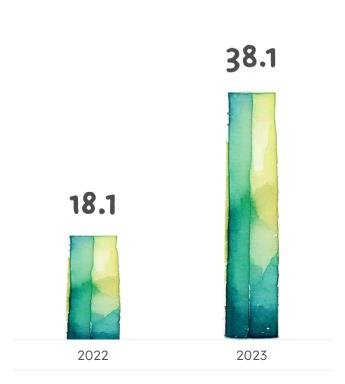
We manage our OHS processes in compliance with international standards, through the ISO 45001 Occupational Health and Safety Management System that we hold at all our facilities. Based on the OHS Annual Work and Training Plans we have created for each facility, we define and execute our OHS roadmap. This roadmap includes systematic steps for identifying, assessing, and mitigating risks.

To increase the occupational health and safety awareness of our employees and subcontractors, we provide regular training sessions. In 2023, we provided a total of 29,973.5 hours of OHS training to our employees and 7,120 hours of OHS training to our subcontractors. These training sessions include specialized topics such as Basic OHS Training, Emergency Response Team Training, Fire Safety Training, Working at Heights Training, and Lockout-Tagout procedures. We promote a stronger safety culture among our employees through awareness-raising activities, including near-miss reporting initiatives.

**Employee OHS Training** (Person\*Hours)



#### **Average OHS Training per Employee**



We regularly monitor our occupational health and safety (OHS) performance and take the necessary steps to improve it. As of 2023, the number of accidents was 122, and the accident frequency rate (AFR) was 62.1. We maintain the fatal accident and occupational disease rate at zero. The number of lost days due to workplace accidents was 608, with a lost day rate (LDR) of 309.5.

At each of our facilities, OSH (Occupational Safety and Health) Risk Assessment Teams, led by the employer's representative and OSH experts, regularly assess occupational health and safety risks. Every two years, we update our risk assessment reports, which are reviewed immediately in cases of emergencies, workplace accidents, or process changes. By analyzing the current situation, we identify necessary precautions and implement a customized risk management process for each facility. In this context, we take steps to reduce all risks in order to create a safe working environment.



OHS PERFORMANCE	2022	2023
Number of incidents	64	122
Accident Frequency Rate (AFR) <sup>(9)</sup>	44.8	62.1
Fatal Accident Rate	0	0
Occupational Disease Rate (ODR)	0	0
Lost days due to accidents	476	608
Lost Day Rate (LDR) <sup>(10)</sup>	333.4	309.5

(9) Accident Frequency Rate = (Number of Accidents / Total Working Hours) \* 1,000,000
 (10) Lost Day Rate = (Number of Lost Days / Total Working Hours) \* 1,000,000

#### We are implementing various initiatives to improve our OSH performance and raise OSH awareness in our operations:

#### **Lockout-Tagout System Implementation**

In all our facilities, we implement the Lockout-Tagout (LOTO) system to prevent potential workplace accidents during maintenance and repair work. This system ensures the safe deactivation of electrical, hydraulic, and mechanical equipment, reducing the risk of accidents and injuries. We have equipment such as miniature circuit breakers, switch disconnectors, emergency stop button locks, valve locks, plastic multipliers, and cable locks in all our facilities.

#### **OSH-Environmental Boards**

To inform our employees and visitors, we place OSH and environmental informational boards in all our facilities. These boards contain content such as policies, emergency information, and risk analyses, ensuring quick communication during emergencies.

#### **Near Miss and Complaint Boxes**

To increase employee participation and support a safe working environment, we have established "Near Miss and Complaint Boxes" in each facility. This initiative collects feedback from employees to prevent workplace accidents and ensure continuous improvement. The Near Miss and Complaint Boxes are opened weekly by the facility managers. Near miss reports are shared with the Quality and Occupational Health and Safety (OHS) department, while complaint forms are shared with the Human Resources department.

#### **Horizontal and Vertical Lifelines**

To enhance the safety of working at heights at our İnegöl and Usak facilities, we have installed horizontal and vertical lifelines on ship ladders, crane walkways, fermentation tanks, and desulfurization tanks. Additionally, we have provided training on the proper use of these lifelines. We have provided training on the use of these lifelines, ensuring that the work is performed safely and prioritizing the safety of our employees. Installation is still ongoing at our Bergama facility.

#### P&ID and HAZOP(11) Studies

In 2023, we completed the HAZOP study at our İnegöl Doğustar facility and began updating P&ID drawings across all our facilities. These studies aim to prevent emergencies and workplace accidents.

#### **Health Unit Installations**

Health units have been set up in our Bergama, İnegöl, Uşak, Malatya, and Aksaray facilities. These units ensure that our employees have quick access to medical services, minimizing time loss and enhancing their well-being.

In line with the Occupational Health and Safety (OHS) Annual Work and Training Plans created for each of our facilities, we regularly review and improve our OHS roadmap. We continuously enhance all OHS processes to ensure employee safety, minimize workplace accidents, and strengthen the safety culture.



#### Social Impact

In line with our sustainability approach, Biotrend develops projects and initiatives aimed at creating a positive social impact. Through our corporate social responsibility projects, we aim to raise social awareness, support local economies, and promote environmental consciousness.

Human-Centered Approach for the Future > Occupational Health and Safety



#### Community Projects

**Biomass Energy Journey Workshop** At our Aydın Çine Facility, we hosted the "Biomass Energy Journey Workshop" as part of the "Sustainable Biomass Usage Project to Support Green Growth in Turkey's Economy." During the workshop, we introduced modern bioenergy technologies within the agricultural industry, discussed energy efficiency measures, and explored policy development and the conversion of agricultural waste into economic assets.

#### **Turning Waste into Energy**

Through our YouTube series "Turning Waste into Energy," we highlight the importance of waste management with the slogan "From Waste to Electricity, From Electricity to the Future." While the series initially started as a traditional travel and food format, it now focuses on collecting waste with the host and notable guests, which is then brought to the Biotrend facility. Notably, we use only electricity generated from waste during the filming, showcasing the critical role of the circular economy.

#### From Waste to Art Journey

Our "From Waste to Art Journey" project seeks to establish a museum that transforms metal waste into art. Led by art director Rüchan Keçeci, this initiative brings sustainable art to the public. Through workshops and exhibitions focused on waste as a theme, we aim to inspire the community and raise awareness on the importance of sustainability in the arts.

#### **Butterfly Effect**

At our Bergama facility, we launched the "Butterfly Effect" initiative through Violence Awareness Training. This program fosters a social transformation among employees, creating a ripple effect of positive change. By raising awareness on preventing violence against women, we aim to cultivate a culture of respect and responsibility both in the workplace and in broader society. As part of the project, we have trained 161 employees.

#### **Seedling Distribution**

In our Malatya Orduzu facility, we organized a seedling distribution event where we introduced the first 100,000 seedlings, produced using heat derived from waste. This initiative, in collaboration with the Malatya Metropolitan Municipality, supports local agriculture while also promoting environmental sustainability.

101

#### **Eco Climate Summit Sponsorship**

Together with Doğanlar Holding and its Group companies, we participated as a "Nature Sponsor" in the 2022 Eco Climate Summit. During the summit, we shared our contributions to sustainable living under the theme #ThisIsATransformationStory. The event aimed to raise awareness on climate change and green transformation, providing Biotrend an opportunity to represent its environmental responsibility on an international platform.

#### Tree of Life Library

At our Bergama Landfill Gas Electricity Production Facility, we established the Tree of Life Library, which serves as a reading space for both our employees and the local community. The library, created entirely from tree waste, is stocked with books donated by volunteers and underscores the importance of recycling and community sharing.

#### Gazebo Project

To strengthen communication and foster a sense of belonging among employees, we launched the Gazebo Project. This initiative provides a space where employees can relax during lunch breaks. Built entirely from recycled materials, the gazebo serves as a physical representation of the value of sustainability and recycling, demonstrating these principles to our employees and visitors.

#### **Facility Libraries**

Our Biotrend Libraries, crafted entirely from tree waste, aim to inspire a love for reading and nature in children. With the support of our volunteers, these libraries are distributed to schools across Turkey. Through this project, we seek to instill environmental awareness in the next generation while also promoting a culture of reading.

## Annexes



## **Annex 1: Corporate Memberships**

UN Global Compact

Integrated Reporting Turkey Network (ERTA)

Turkish Plastics Industry Foundation (PAGEV)

Waste and Environmental Management Association (TAYÇED)

30 Percent Club











## Annex 2: Climate Related Risks and Opportunities

### Climate Related Physical Risks

RISK TYPE	RISK FACTOR	DESCRIPTION OF THE RISK	IMPACT	HOW DO WE MANAGE THE RISK?
Acute Physical	Increasing frequency in forest due to rising temperatures	The increasing frequency and intensity of forest fires due to rising temperatures pose a significant risk to Biotrend's operations. In 2024, a fire originating in the surrounding vegetation, fuelled by extreme heat and strong winds, directly impacted Biotrend's İzmir Harmandalı facility. This incident highlighted the necessity for Biotrend to take additional measures to address the growing threat of forest fires exacerbated by climate change.  The fire in İzmir caused operational disruptions at the Harmandalı facility, resulting in temporary shutdowns, infrastructure damage, and heightened safety risks.  Consequently, the need for investments in fire prevention strategies, damage mitigation efforts, and infrastructure resilience has become evident.	Reduction in production capacity  Increase in operational costs and revenue loss due to unplanned disruptions	We are taking proactive measures to protect our operations against the risk of forest fires. We have prioritized updating fire risk assessments and improving emergency action plans at all facilities, focusing on fire prevention strategies.  We have strengthened our collaboration with local authorities and the Fire Department. Measures such as improving fire prevention infrastructure, creating firebreaks, and enhancing fire hydrant systems around the facilities are being implemented. Additionally, we plan to clear dry vegetation around the Novtek storage area and install soil barriers.  Furthermore, we aim to increase fire safety training sessions for employees and subcontractors. Special training programs are being organized to teach quick and effective responses during fire incidents. Through these initiatives, we aim to mitigate the impact of fires on Biotrend's operations, safeguard infrastructure, and ensure operational continuity under challenging climate conditions.
Acute Physical	Extreme weather events	The increase in the frequency and intensity of storms, particularly severe winds due to climate change, poses a significant risk to Biotrend's operations. In 2024, a severe storm impacting the Harmandalı facility caused substantial damage to a gas storage balloon.  Storms can result in widespread infrastructure damage, temporary shutdowns, heightened safety risks, and costly repairs. Damage to critical equipment such as gas storage balloons not only disrupts gas storage and energy production but also necessitates expensive repairs and infrastructure reinforcements. The damages caused by extreme weather events lead to higher operational costs and potential interruptions in business activities.	Reduction in production capacity  Increase in operational costs and revenue loss due to unplanned disruptions	Following the storm that damaged the gas storage balloon at the Harmandali facility, we are reviewing and updating risk assessment and emergency response protocols across all facilities.  We are collaborating with structural engineers and local authorities to reinforce critical infrastructure. As part of this effort, we are evaluating storm-resistant designs for gas storage balloons and other essential equipment. Additionally, we are conducting specialized training sessions on storm emergency procedures for facility personnel and subcontractors, focusing on protecting equipment and minimizing operational downtime.
Chronic Physical	Drought and water stress	The increasing drought and water stress driven by climate change could pose a significant long-term risk for Biotrend. According to the WRI Aqueduct Water Risk Atlas, under the baseline scenario, water stress levels in the areas where all our facilities are located are classified as high or extremely high. This situation could lead to disruptions in operational processes, increase water usage costs, and reduce efficiency in production processes. In the upcoming period, we plan to conduct a more detailed study to identify location-based chronic physical risks, particularly water stress and drought.	Reduction in production capacity  Increase in operational costs as well as water related costs	In 2023, we completed our water footprint assessment in accordance with the ISO 14046 standard. We aim to reduce our water footprint by implementing process improvements. At our biomass facilities, we collect all wastewater and reuse it in processes such as ash wetting, wet ash conveyors, and site cleaning. Additionally, we have installed a reverse osmosis system to reduce chemical consumption and blowdown volumes, thereby improving water use efficiency. In the upcoming period, we aim to enhance efficiency efforts within water management and reduce our dependence on water resources.

### Climate Related Transition Risks

RISK TYPE	RISK FACTOR	DESCRIPTION OF THE RISK	IMPACT	HOW DO WE MANAGE THE RISK?
Policy and Legal Risks	Changes in national and international regulations and legislation related to waste management and renewable energy	Changes in waste management and energy regulations in Turkey can significantly impact Biotrend's operations and strategic direction. For example, new regulations may require stricter environmental assessments, potentially increasing operational costs and causing delays in project development. Additionally, changes in renewable energy incentives or updates to carbon credits could affect the financial feasibility of current and future projects. Expected regulatory changes may force Biotrend to revise its operational strategies, invest in new technologies, or adapt existing processes to comply and maintain operational efficiency.	Increase in compliance costs	To address the anticipated rise in compliance costs and adapt to changing regulations, we are implementing a comprehensive environmental compliance program. This initiative, aligned with the strategic partnership established with the European Bank for Reconstruction and Development (EBRD) in August 2021, involves aligning all operations with the Equator Principles. We have developed tailored action plans and compliance roadmaps for each facility in collaboration with independent experts and internal teams.  We are also investing in advanced technologies for real-time environmental monitoring and automation of compliance processes as part of our 2050 net-zero target. To exceed legal requirements, we are taking steps to enhance our ESG performance, reviewing operational protocols as needed, and conducting regular audits. Furthermore, we are exploring potential opportunities to diversify our energy portfolio.
Technology Risks	Transition to low-carbon technology and advanced recycling requirements	To achieve its net-zero emissions target, Biotrend needs to invest in technologies that minimize carbon emissions and enhance energy efficiency. Delays in this transition or the failure of new technologies to deliver expected performance could hinder Biotrend's environmental goals and result in operational efficiency losses. For example, the planned advanced recycling facility and the UpCycle Process technology, developed in partnership with Honeywell, play a crucial role in the company's circular economy and sustainable plastic production goals. Failing to adapt to such technologies could weaken Biotrend's competitive strength and innovative position in the sector.	Increase in investment costs  Efficiency losses  Reduction in competitive advantage	To manage technology risks, we are investing in R&D and innovation processes. Specifically, we are developing an innovative solution in collaboration with industry leader Honeywell for the advanced recycling facility that will convert plastic waste into recycled polymer raw materials. This facility, planned to be operational by 2027, will produce pyrolysis oil from waste. Biotrend is also implementing systems across all facilities to enhance energy efficiency and developing strategic projects with innovative technologies to reduce carbon emissions.
Reputation Risk	Delays in achieving sustainability targets and misalignment with societal expectations	Failure to achieve our 2050 net-zero target or disruptions in progress towards this goal could undermine stakeholder trust. Our business model, based on waste-to-energy production, integrated waste management, carbon credit sales, and circular economy projects, positions us as a contributor to the green transformation in our country. Therefore, insufficient progress in combating climate change or shortcomings in transparent reporting could lead to a decline in the company's reputation.	Loss of investors and customers, reduction in market share, decrease in brand value	To manage reputation risk, we follow a transparent roadmap for our sustainability performance. Through CDP reporting, we disclose climate risks and opportunities to stakeholders and regularly monitor progress in this area. With the annual sustainability reports we started publishing this year, we aim to share our performance transparently with all stakeholders and drive continuous improvement. We are also part of global initiatives and have been a signatory of the UN Global Compact since 2021.

OPPORTUNITY TYPE	OPPORTUNITY FACTOR	DESCRIPTION OF THE OPPORTUNITY	IMPACT	OUR STRATEGIES TO REALIZE THE OPPORTUNITY
Products and Services	Increase in sales of existing products and services	Since 2021, Biotrend has been participating in carbon credit projects at our facilities in Harmandalı, Balıkesir, and Uşak. In 2022, we expanded our efforts for carbon credits to cover all facilities. These projects are certified under internationally recognized standards such as VERRA, GCC, and ICR, ensuring the reliability and marketability of the carbon credits produced. Biotrend's carbon credits are generated through integrated waste management and waste-to-energy production activities. The environmental benefits of these operations, such as reducing greenhouse gas emissions, are independently verified by third-party organizations.	Increased revenue driven by higher demand for products and services	We plan to expand carbon credit production capabilities across all facilities, ensuring high-quality carbon credits that are attractive in voluntary markets under VERRA, GCC, and ICR standards. Additionally, we aim to explore new market opportunities and optimize our operations to maximize the volume of credits produced, increasing revenue potential.
Capital Flow	Access to new financing options	In 2023, we issued a Sustainable Lease Certificate worth 100 million TRY, securing resources to finance sustainability projects. Issuing the sustainable lease certificate ensured Biotrend had the necessary capital during a period when access to finance was challenging. While the costs of this financing instrument were similar to traditional financing options, the lease certificate enabled us to continue our investments during a time when many companies faced difficulties accessing financial resources. The successful use of these funds led to tangible environmental and social benefits, such as producing enough green energy to meet the annual energy needs of 3,800 households.	Access to capital during periods of limited financing availability	We plan to continue issuing similar green financing instruments by leveraging their environmental benefits and reliability. While continuing to implement sustainability projects, these funds will reduce dependence on traditional financing, improve cash flow, increase profitability, and expand the company's renewable energy and circular economy portfolio. At Biotrend, our strategy focuses on maintaining high environmental standards, expanding sustainability projects, and enhancing our eligibility for green financing instruments
Market	Expansion into new markets for renewable energy	We see significant potential in expanding into new markets for renewable energy, focusing on waste-to-energy (biogas and biomass), solar energy, and electricity storage. Our expertise in converting waste into renewable energy aligns closely with global demand for climate solutions. This opportunity strengthens our position in emerging renewable energy markets and supports the transition to a low-carbon economy.	Increased revenue through expanded production capacity and market access	To capitalize on these opportunities, we aim to expand our waste-to-energy operations and invest in new technologies such as solar energy and electricity storage. By broadening our renewable energy portfolio, we target increased production capacity and diversification of revenue streams. We foresee strategic partnerships, such as with Honeywell for plastic recycling, as key to supporting our sustainable growth.
Resource efficiency	Resource optimization in operational processes	This opportunity arises from applying advanced technologies to optimize Biotrend's waste-to-energy conversion processes.  Adopting cutting-edge equipment and integrating continuous process improvement strategies can significantly enhance production efficiency. This would reduce operational costs while simultaneously increasing energy production, allowing us to generate more revenue from existing operations.	Increased revenue due to higher production capacity and reduced average costs	To seize this opportunity, we plan to invest in the latest technologies to optimize waste-to-energy conversion processes. This includes updating biogas facilities with the newest fermenters and implementing advanced monitoring systems to ensure peak performance. We regularly review and improve our operations to enhance efficiency. Through these steps, we aim to achieve significant cost savings and boost energy production, thereby increasing overall profitability.

## Annex 3: Environmental Performance Indicators

2023
919,065.8
0
14,414.9
10,480.5
943,961.2
1,096,297.4

SCOPE 3 EMISSIONS BY CATEGORIES (ton CO <sub>2</sub> e)	2023
Category 1: Purchased goods and services	3,018.1
Category 3: Fuel and energy related emissions	6,237.2
Category 5: Waste	60
Category 6: Business travel	332.4
Category 7: Employee commuting	832.9
TOTAL	10,480.5

ENERGY CONSUMPTION (MWh)	2023
Biomass <sup>(12)</sup>	629,161
Purchased electricity	32,836
TOTAL	661,997
Internal consumption <sup>(13)</sup>	52,392

(12) The amount of biomass energy consumed includes the total energy consumption required to meet the energy used and sold by Biotrend in its operations.

(13) Internal consumption refers to the amount of energy produced and used by Biotrend to sustain its operations, included within the biomass energy consumed.

TOTAL ENERGY SOLD (MWh)	2023
Electricity <sup>(14)</sup>	575,090
TOTAL	575,090

NET ELECTRICITY PRODUCTION BY FACILITY					
NAME OF SPV	FACILITY NAME	FUEL TYPE	NET ELECTRICIT	Y PRODUCTIO	ON (GWH)
			2021	2022	2023
Doğu Star	Orduzu Tesisi (Li- censed)	Biogas	2.41	2.37	5.79
Doğu Star	Orduzu Tesisi (Non-li- censed)	Landfill gas	11.34	9.40	7.14
Nov Enerji	Sivas Facility	Landfill gas	18.29	13.44	13.75
Novtek Enerji	İnegöl-1 Facility	Landfill gas	18.47	17.21	17.72
Novtek Enerji	İskenderun Facility	Landfill gas	31.25	29.79	25.26
İzmir Novtek	Harmandalı Facility	Landfill gas	199.99	200.53	163.44
İlda (Landfill)	Balıkesir Tesisi	Landfill gas	56.18	42.43	59.85
Uşak Yenilenebilir	Uşak Tesisi	Landfill gas - Biogas	13.21	20.30	17.98
Doğu Star	İnegöl-2 Tesisi	Landfill gas - Biogas	5.81	27.51	32.90
İzmir Doğu Star	Bergama Tesisi	Landfill gas - Biogas	21.21	40.63	46.62
Biyomek	Çine Biyokütle	Refuse-Derived Fuel (RDF)	20.53	98.31	88.85
Doğu Star	Malatya-2	Landfill gas	5.50	12.39	9.26
MD Biyokütle	Aksaray	Landfill gas	0.13	5.16	8.77
Mersin	Ezine Biyokütle	Refuse-Derived Fuel (RDF)			65.92
Serenti	Giresun	Landfill gas	6.77	10.87	11.84
TOTAL			411.10	530.34	575.09

<sup>(14)</sup> The total net electricity sold is entirely generated from biomass energy.

MATER FOOTBRINE (1.3)	0007
WATER FOOTPRINT (m³)	2023
Blue Water Footprint	1,380,130.9
Green Water Footprint	2,150,500.6
Grey Water Footprint	2,821,160.9
TOTAL	6,351,792.4

WATER WITHDRAWAL (m³)	2023
Thirdparty and groundwater	405,629
Freshwater	0
TOTAL	405,629
Purchased drinking water	974,502

LEACHATE WATER (m³)	2023
Leachate water	273,750

RECYCLED WASTE (ton)	2022	2023
Recycled / reused non-hazardous waste	212.2	305.8
Recycled / reused hazardous waste	159.5	151.7
TOTAL RECYCLED WASTE	371.7	457.5
RECYCLING RATIO	100%	100%

ENVIRONMENTAL FINES (TL)	2023
Total environmental fines	1,234,232

## **Annex 4: Social Performance Indicators**

### **Employee Demographics**

EMPLOYEES BY GENDER AND	20	21	202	2022		2023	
CATEGORY	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	
Number of employees	45	416	64	508	166	621	
Total	4	461		572		787	
White-collar employees	33	125	51	131	56	138	
Total white-collar employees	1:	57	182		194		
Blue-collar employees	12	292	13	377	110	483	
Total blue-collar employees	30	304		390		593	

EMPLOYEES BY AGE	2021		2022		2023	
	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE
Below 30 years old	10	118	15	158	33	199
30-50 years old	29	241	45	281	104	340
Above 50 years old	6	57	4	69	29	82

EMPLOYEES BY CONTRACT TYPE	2021		2022		2023	
	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE
Indefinite-term employment contract	45	416	64	508	166	621
Definite-term employment contract	0	0	0	0	0	0
Employees covered by collective bargaining agreement	0	0	0	0	0	0

	2021		2022		2023	
EMPLOYEES WITH DISABILITIES	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE
Employees with Disabilities by Gender	0	1	0	2	1	7

### Manager Demographics

MANAGERS BY AGE	2021		2022		2023	
	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE
Below 30 years old	0	1	2	14	0	1
30-50 years old	3	23	4	26	4	39
Above 50 years old	3	8	3	8	4	7

MANAGERS BY SENIORITY	2021		2022		2023	
	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE
Board	2	7	3	6	3	6
C-level	0	2	0	2	0	4
Director	2	5	1	3	3	8
Manager	2	18	2	25	2	29

#### Recruitment

RECRUITMENT BY GENDER AND AGE	20	2021		2022		2023	
	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	
Below 30 years old	10	194	18	149	63	326	
30-50 years old	34	335	25	165	209	274	
Above 50 years old	6	81	2	26	54	62	

We Transform Waste into Value for a Livable World

EMPLOYEES WHO LEFT	20	2021		2022		2023	
	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	
Below 30 years old	1	75	10	94	45	263	
30-50 years old	8	100	17	129	145	256	
Above 50 years old	0	25	0	25	33	75	
Employees who left voluntarily	6	136	17	142	98	345	

EMPLOYEE TURNOVER RATIOS	202	2021		2022		2023	
	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	
Turnover by gender	20%	48%	42%	49%	134%	96%	
Average turnover	45	45%		48%		104%	
Voluntary turnover by gender	13%	33%	27%	28%	59%	56%	
Average voluntary turnover	319	%	28	3%	56	%	

#### Parental Leave

	20	2021 20		22	2023	
PARENTAL LEAVE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE
Employees who benefited from parental leave	0	3	0	14	1	18
Employees who returned to work after parental leave	0	0	0	0	1	0

### **Employee Volunteering**

EMPLOYEE VOLUNTEERING	2021	2022	2023
Total hours spent by employees on volunteering activities	-	200	200
Number of employees participating in volunteering activities	-	1	1
Total number of volunteering projects	-	3	3

### **Employee Training and Development**

TRAINING	2021	2022	2023
Total training hours (person*hour)	0	8,726	28,813
Average training hours per employee	0	15	37
Total cost of training (TL)	0	9,027	356,260

EMPLOYEE INVESTMENTS AND EXPENDITURE	2021	2022	2023
Total expenditures related to employees	51,445,333	111,021,247	307,204,432

### Occupational Health and Safety (OHS)

OHS TRAINING	2021	2022	2023
Total OHS training hours (person*hour) provided for employees	0	10,334	29,973.5
Total OHS training hours (person*hour) provided for subcontractors	0	7,776	7,120

OHS PERFORMANCE	2022	2023
Number of accidents	64	122
Accident Frequency Rate (AFR)	44.8	62.1
Fatal Accident Rate	0	0
Occupational Disease Rate (ODR)	0	0
Number of Lost Working Days	476	608
Lost Days Rate (LDR)	333.4	309.5

Annexes We Transform Waste into Value for a Livable World

## Annex 5: ISO 14064-1 Carbon **Footprint Verification Report**



#### ΕΥΡΩΠΑΪΚΗ ΕΤΑΙΡΕΙΑ ΕΛΕΓΧΩΝ ΚΑΙ ΠΙΣΤΟΠΟΙΗΣΕΩΝ Α.Ε.

**EUROPEAN INSPECTION AND CERTIFICATION COMPANY S.A.** 89 CHLOIS & LYKOVRISEOS, 144 52 METAMORFOSI, ATHENS, GREECE TEL:: +30 210 6252495, 6252495

FAX: +30 210 6203018. WEB SITE: www.eurocert.gr

#### **GHG EMISSIONS VERIFICATION REPORT**

REFERENCE STANDARD(S): EN ISO 14064-1:201

	COMPANY'S IN	IFORMATIO	N			
NAME	BİOTREND ÇEVRE VE ENERJi YATIRIMLARI A.Ş					
Address (No / Street / City / P.C.)	/ Street / City / 34810.					
e-mail	Kurumsal.iletisim@biotrendenerji.com.tr	Kurumsal.iletisim@biotrendenerji.com.tr Website biotrendenerji.com.tr				
Tel.	+90 216 680 00 00	Fax	+90	0 216 680 00 00		
Company's representative	Ahmet H. Zembil	1		2017 LP 2017 CONTESTED		
				EA: 39,24,25, 01		
Scope	Industry(Collection and Separation of Sale of Packaging Waste and Waste D Filling of Worthless Waste in Landfills Leachate, Obtaining Electrical Energy Gas. Greenhouse Cultivation activities 1-Waste Processing and Disposal 2-Electricity Generation and Electrical Transactions	erived Fuel, s, Treatmen from Landf .)	tof	NACE: 38.1,38.3,38.11,38.2,38.21,38.22,38.32 ,35.11,01.1		

		AUDIT INFOR	MATION		
Case No	Audit Information (use «x»)				
	Initial Verification	x	Annual Emissions Report		Î
00.22.0119.01	Subsequent Verification		CFP Study Repor	t	
	Reference period:	2023	Materiality / Assurance level:		<ul><li></li></ul>
	Sites visited / Address		Date	Total o	n-site audit man-days
Yeniyoruk Mahallesi Yeniyoruk Cad. No: 76 İnegöl/Bursa (Integrated Solid Waste Facility- LFG Facility) Harmandalı Gazi Mustafa Kemal Atatürk Mahallesi 9600 Sk. No: 44 -/- Çiğli/İzmir (Integrated Solid Waste Facility) Gökyaka Mahallesi 2 Cad. A Apt. No: 33 A Çine/Aydın (Biomass Burning-Biomass Fuel Preparation)		22.08.2024		2	

## Annex 6: ISO 14046-1 Water **Footprint Verification Report**



#### SU AYAKİZİ DOĞRULAMA RAPORU

Rapor No	SAİ-2023-787
Temel Yıl	2023
Doğrulama Dönemi	01.01.2023-31.12.2023
Düzenlenme Tarihi	26.08.2024

#### SU AYAK İZİ BEYAN ACIKLAMASI

	OO ATAIT IEI BETAIT AGITEAINAOI			
Kuruluş Adı:	BİOTREND ÇEVRE VE ENERJİ YATIRIMLARI A.Ş.			
Kuruluş Adresi:	Ekinciler Caddesi Ertürk Sokak 3 Kavacık Beykoz/İSTANBUL			
Envanter Rapor Bilgisi:	BİOTREND ENERJİ 2023", "01/08/2024" tarihli Rev.00 Su Ayakizi Envanter Raporu			
Doğrulama Amacı:	01.01.2022-31.12.2022 dönemine ait Su ayak izi Envanterinin EN ISO 14046:2014 Çevre yönetimi- Su ayak izi-Prensipler, gerekler ve kılavuz ve WFN Su Ayak İzi Değerlendirme Kılavuzuna" uygun şekilde hazırlandığını ve beyan edilen verilerinin doğruluğunu "Makul Güven Seviyesinde" doğrulamaktır.			
Envanter Kapsamı:		Su Ayak İzi Envanteri; Kurumsal Kapıdan Kapıya Doğrudan Su Çekiş miktarları, Toplanan Yağmur Suyu miktarı, Su Deşarj miktarları, Analiz sonuçları, Analiz Limit Değerleri, Kirletilen Su Miktarı		
Doğrulama Tekniği:	Temel Su Akışı, Kaynağına göre Su çekiş miktarları, Toplanan Yağmur Suyu miktarı, Alıcı ortama göre Su Deşarj miktarları, Analiz sonuçları, Analiz Limit Değerleri, Kirletilen Su Miktarı hesabına göre saha ziyaretleri ve yeniden hesaplamalar gerçekleştirilerek, yapılan değerlendirmeler sonucunda doğrulanmıştır.			
Standart ve Mevzuatlar:	EN ISO 14046:2014 Çevre yönetimi-Su ayak izi-Prensipler, gerekler ve kılavuz ve WFN Su Ayak İzi Değerlendirme Kılavuzu, Analiz Sonuçları Türkiye Cumhuriyeti Su Kirliliği Kontrolü Yönetmeliği, Türkiye Cumhuriyeti İnsani Tüketim Amaçlı Sular Hakkında Yönetmelik			
Kuruluş Sınırları:	BİOTREND ÇEVRE VE ENERJİ YATIRIMLARI A.Ş'nin; Doğrulama Raporu 9.2.'de tanımlanan lokasyonlarında şebekeden kullanılan doğrudan su tüketiminin ve yağmur suyu toplama şehir şebeke sisteminde yer alan kanalizasyon sistemine deşarjı			
Temel Yıl:	2023			
Doğrulama Dönemi:	2023 (01.01.2023-31.12.2023)			
Güven Seviyesi:	Makul Güven Seviyesi			
	Kapsam	Toplam (m3/yıl)		
Doğrulanan Veriler :	Doğrudan Toplam Kirli Su Ayak İzi	2.821.160,85		
bograduan fornor.	Doğrudan Toplam Çekilmiş Su Ayak İzi	1.380.130,96		
	Doğrudan Toplam Toplanan Su Ayak İzi	2.150.500,59		
	WF Toplam Su Ayakizi m3/yıl 6.351.792,40			

AURA ULUSLARARASI BELGELENDİRME EĞİTİM DENETİM VE MUAYENE HİZ. LTD. ŞTİ. Yukarıda Bilgileri verilen Kuruluşun belirtilen doğrulama dönemine ait Su Ayak İzi Envanteri' nin EN ISO 14046:2014 Çevre yönetimi-Su ayak izi-Prensipler, gerekler ve kılavuz ve WFN Su Ayak İzi Değerlendirme Kılavuzuna uygun şekilde hazırlandığını ve beyan edilen Doğrudan Su Ayak İzi Hesaplamalarının doğruluğunu Makul Güven Seviyesinde doğrulamıştır.

Rapor No: SAİ-2023-787

Doğrulama Dönemi: 01.01.2023-31.12.2023

Düzenlenme Tarihi: 26.08.2024

**AURA ADINA RAPORU TASTÍK EDEN** Genel Müdür Tugay TANRIVERDİ

## **Annex 7: GRI Content Index**

STATEMENT OF USE	Biotrend Çevre ve Enerji Yatırımları A.Ş. has reported the information cited in this GRI content index for the period 01.01.2023-31.12.2023 with reference to the GRI Standards.
GRI 1 USED	GRI 1: Foundation 2021

GRI STANDARD	DISCLOSURE	LOCATION/ PAGE NO, SOURCE AND/OR DIRECT ANSWERS
GENERAL DISCLOSU	RES	
	2-1 Organizational details	9, 16-19
	2-2 Entities included in the organization's sustainability reporting	9, 28, 29
	2-3 Reporting period, frequency and contact point	9
	2-4 Restatements of information	
	2-5 External assurance	9, 120, 121
	2-6 Activities, value chain and other business relationships	20-27
	2-7 Employees	84, 85, 115-117
	2-8 Workers who are not employees	115, 119
	2-9 Governance structure and composition	42, 43, 52, 53
GRI 2: General Disclosures	2-10 Nomination and selection of the highest gover- nance body	52, 53
2021	2-11 Chair of the highest governance body	52, 53
	2-12 Role of the highest governance body in over- seeing the management of impacts	42, 43
	2-13 Delegation of responsibility for managing impacts	42, 43
	2-14 Role of the highest governance body in sustainability reporting	42, 43
	2-15 Conflicts of interest	Annual Report 2023, page 135 https://www.biotrendenerji.com.tr/Files/yatirimci_ iliskileri/2023%20Yıllık%20Faaliyet%20Raporu.pdf
	2-16 Communication of critical concerns	42, 43, 52, 53
	2-17 Collective knowledge of the highest gover- nance body	52, 53
	2-18 Evaluation of the performance of the highest governance body	52, 53
	2-19 Remuneration policies	Remuneration Policy, https://www.biotrendenerji. com.tr/Files/Raporlar/Ücretlendirme-Politikası- İngilizce-Tercüme.pdf

GRI STANDARD	DISCLOSURE	LOCATION/ PAGE NO, SOURCE AND/OR DIRECT ANSWERS
GENERAL DISCLOSUR	RES	
GRI 2: General Disclosures 2021	2-20 Process to determine remuneration	Remuneration Policy, https://www.biotrendenerji. com.tr/Files/Raporlar/Ücretlendirme-Politikası- İngilizce-Tercüme.pdf
	2-21 Annual total compensation ratio	
	2-22 Statement on sustainable development strategy	10-13, 38, 39, 44-47
	2-23 Policy commitments	55, https://www.biotrendenerji.com.tr/policies
	2-24 Embedding policy commitments	55, https://www.biotrendenerji.com.tr/policies
	2-25 Processes to remediate negative impacts	54
	2-26 Mechanisms for seeking advice and raising concerns	54
	2-27 Compliance with laws and regulations	54
	2-28 Membership associations	104, 105
	2-29 Approach to stakeholder engagement	44, 45, 49
	2-30 Collective bargaining agreements	115

GRI STANDARD	DISCLOSURE	LOCATION/ PAGE NO, SOURCE AND/OR DIRECT ANSWERS
MATERIAL TOPICS		
GRI 3: Material Topics 2021	3-1 Process to determine material topics	44, 45
	3-2 List of material topics	46, 47
	3-3 Management of material topics	47

GRI STANDARD	DISCLOSURE	LOCATION/ PAGE NO, SOURCE AND/OR DIRECT ANSWERS	
ECONOMIC PERFORMANCE			
GRI 3: Material Topics 2021	3-3 Management of material topics	30, 31	
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	30, 31	

GRI STANDARD	DISCLOSURE	LOCATION/ PAGE NO, SOURCE AND/OR DIRECT ANSWERS
ENERGY		
GRI 3: Material Topics 2021	3-3 Management of material topics	74, 75
	302-1 Energy consumption within the organization	112, 113
GRI 302: Energy 2016	302-3 Energy intensity	112, 113
	302-4 Reduction of energy consumption	74, 75
GRI STANDARD	DISCLOSURE	LOCATION/ PAGE NO, SOURCE AND/OR DIRECT ANSWERS
WATER AND EFFLUENTS		
GRI 3: Material Topics 2021	3-3 Management of material topics	76, 77
	303-1 Interactions with water as a shared resource	76, 77
GRI 303: Water and	303-2 Management of water discharge-related impacts	76, 77
Effluents 2018	303-3 Water withdrawal	114
	303–4 Water discharge	114
GRI STANDARD	DISCLOSURE	LOCATION/ PAGE NO, SOURCE AND/OR DIRECT ANSWERS
EMISSIONS		
GRI 3: Material Topics 2021	3-3 Management of material topics	70-73
	305-1 Direct (Scope 1) GHG emissions	112
	305-2 Indirect (Scope 2) GHG emissions	112
GRI 305: Emissions 2016	305-3 Other indirect (Scope 3) GHG emissions	112
	305-5 Reduction of GHG emissions	71
GRI STANDARD	DISCLOSURE	LOCATION/ PAGE NO, SOURCE AND/OR DIRECT ANSWERS
EMPLOYMENT		
GRI 3: Material Topics 2021	3-3 Management of material topics	84-94
GRI 3: Material Topics 2021 GRI 401: Employment 2016	3-3 Management of material topics 401-1 New employee hires and employee turnover	92, 117

GRI STANDARD	DISCLOSURE	LOCATION/ PAGE NO, SOURCE AND/OR DIRECT ANSWERS
WASTE		
GRI 3: Material Topics 2021	3-3 Management of material topics	78, 79
GRI 306: Waste 2020	306-1 Waste generation and significant waste- related impacts	78, 79
	306-2 Management of significant waste-related impacts	78, 79
	306-3 Waste generated	78, 79
	306-4 Waste diverted from disposal	78, 79, 114
	306-5 Waste directed to disposal	78, 79, 114

GRI STANDARD	DISCLOSURE	LOCATION/ PAGE NO, SOURCE AND/OR DIRECT ANSWERS
OCCUPATIONAL HEALTH	I AND SAFETY	
GRI 3: Material Topics 2021	3-3 Management of material topics	96, 97
	403-1 Occupational health and safety management system	96, 97
	403-2 Hazard identification, risk assessment, and incident investigation	96, 97
	403-3 Occupational health services	96, 97
	403-4 Worker participation, consultation, and communication on occupational health and safety	96, 97
GRI 403: Occupational	403-5 Worker training on occupational health and safety	96, 97
Health and Safety 2018	403-6 Promotion of worker health	96, 97
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	96, 97
	403-8 Workers covered by an occupational health and safety management system	96, 97
	403-9 Work-related injuries	97, 119
	403-10 Work-related ill health	97, 119

#### Annexes > Annex 7: GRI Content Index

126

GRI STANDARD	DISCLOSURE	LOCATION/ PAGE NO, SOURCE AND/OR DIRECT ANSWERS
TRAINING AND EDUATI	ON	
GRI 3: Material Topics 2021	3-3 Management of material topics	88-91
	404-1 Average hours of training per year per employee	90, 118
GRI 404: Training and Education	404-2 Programs for upgrading employee skills and transition assistance programs	91
	404-3 Percentage of employees receiving regular performance and career development reviews	89

GRI STANDARD	DISCLOSURE	LOCATION/ PAGE NO, SOURCE AND/OR DIRECT ANSWERS
DIVERSITY AND EQUAL	OPPORTUNITY	
GRI 3: Material Topics 2021	3-3 Management of material topics	86
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	84-86

#### Report Consultant

#### ZOA SUSTAINABILITY CONSULTING

zoaconsulting.co / info@zoaconsulting.co

Report Design

MOREPORT

moreport.co / info@moreport.co





Biotrend Enerji ve Çevre Yatırımları A.Ş. Ekinciler Caddesi Ertürk Sokak 3 Kavacık Beykoz 34810 İstanbul, Türkiye

+90 216 680 00 00

surdurule bilir lik@biotrendenerji.com.tr

www.biotrendenerji.com.tr