

# **TÜRKTRAKTÖR**

## **TSRS-COMPLIANT**

### **SUSTAINABILITY**

#### **REPORT 2024**

## LIMITED ASSURANCE REPORT OF THE INDEPENDENT AUDITOR ON THE INFORMATION PRESENTED UNDER THE TURKISH SUSTAINABILITY REPORTING STANDARDS OF TÜRK TRAKTÖR VE ZİRAAT MAKİNELERİ ANONİM ŞİRKETİ

### To the General Assembly of Türk Traktör ve Ziraat Makineleri Anonim Şirketi.

We have been assigned to perform limited assurance engagement on the information (“Sustainability Information”) presented in accordance with the Türkiye Sustainability Reporting Standards 1 “General Requirements for Disclosure of Sustainability-related Financial Information” and Türkiye Sustainability Reporting Standards 2 “Climate-Related Disclosures” of Türk Traktör ve Ziraat Makineleri Anonim Şirketi (“the Company”) for the year ended December 31, 2024.

Our assurance engagement does not include the information related to prior periods and other information associated with Sustainability Information (including any images, audio files, website links or embedded videos).

### Limited Assurance Conclusion

Based on the procedures performed and the evidence obtained, as summarized under the section “Summary of the Work we Performed as the Basis for our Assurance Conclusion”, nothing has come to our attention that causes us to believe that Company’s Sustainability Information for the year ending December 31, 2024, has not been prepared in accordance with the Türkiye Sustainability Reporting Standards (“TSRS”), as published by the Public Oversight Accounting and Auditing Standards Authority of Türkiye (“POA”) in the Official Gazette dated December 29, 2023 and numbered 32414(M). We do not provide any assurance conclusion regarding the information related to prior periods and any other information associated with the Sustainability Information (including any images, audio files, website links or embedded videos).

### Inherent Limitations in the Preparation of Sustainability Information

The Sustainability Information is subject to inherent uncertainties due to lack of scientific and economic information. The inadequacy of scientific data leads to uncertainties in the calculation of greenhouse gas emissions. Additionally, due to the lack of data regarding the likelihood, frequency, and impacts of potential physical and transition climate risks, the Sustainability Information is subject to uncertainties related to climate-related scenarios.

### Responsibilities of Management and Those Charged with Governance Regarding Sustainability Information

The Company’s Management is responsible for:

- Preparing the Sustainability Information in accordance with the principles of Türkiye Sustainability Reporting Standards;
- Designing, implementing and maintaining internal control over information relevant to the preparation of the Sustainability Information that is free from material misstatement, whether due to fraud or error;
- Additionally, the Company Management is responsible for selecting and implementing appropriate sustainability reporting methodologies as well as making reasonable assumptions and suitable estimates.

Those Charged with Governance is responsible for overseeing the Company’s sustainability reporting process

### Responsibilities of the Independent Auditor Regarding the Limited Assurance of Sustainability Information

We are responsible for the following:

- Planning and performing the engagement to obtain limited assurance about whether the Sustainability Information is free from material misstatement, whether due to fraud or error;
- Forming an independent conclusion, based on the procedures we have performed and the evidence we have obtained; and
- Reporting our conclusion to the Company Management.

Since we are responsible for providing an independent conclusion on the Sustainability Information prepared by management, we are not permitted to be involved in the preparation process of the Sustainability Information in order to ensure that our independence is not compromised.

### Professional Standards Applied

We performed a limited assurance engagement in accordance with the Standard on Assurance Engagements 3000 “Assurance Engagements other than Audits or Reviews of Historical Financial Information” and in respect of greenhouse gas emissions included in the Sustainability Information, in accordance with Standard on Assurance Engagements “3410 Assurance Engagements on Greenhouse Gas Statements”, issued by POA.

### Independence and Quality Control

We have complied with the independence and other ethical requirements of the Code of Ethics for Independent Auditors, issued by the POA, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. Our firm applies Standard on Quality Management 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements. Our work was carried out by an independent and multidisciplinary team including assurance practitioners, sustainability and risk management specialists. We have used the work of our expert team to assess the reliability of the information and assumptions related to the Company’s climate and sustainability-related risks and opportunities. We remain solely responsible for our assurance conclusion.

### Summary of the Work we Performed as the Basis for our Assurance Conclusion

We are required to plan and perform our work to address the areas where we have identified that a material misstatement of the Sustainability Information is likely to arise. The procedures we performed were based on our professional judgment. In carrying out our limited assurance engagement on the Sustainability Information,

- Face-to-face and online interviews were conducted with the Company’s key senior personnel to understand the processes in place for obtaining the Sustainability Information for the reporting period.
- The Company’s internal documentation was used to review and assess the sustainability related information.
- The disclosure and presentation of sustainability-related information have been evaluated.
- Through inquiries, we obtained an understanding of Company’s control environment and information systems relevant to the preparation of the Sustainability Information. However, we did not evaluate the design of particular control activities, we did not obtain evidence about their implementation or we did not test their operating effectiveness.
- The appropriateness and consistency of the Company’s estimation development methods were evaluated. However our procedures did not include testing the data on which the estimates are based or separately developing our own estimates against which to evaluate Company’s estimates.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement.

Güney Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik Anonim Şirketi  
A member firm of Ernst & Young Global Limited



Didem Tuşel Özdoğan, SMMM  
Partner

28 July 2025  
İstanbul, Türkiye

# About the Report

This report is prepared in accordance with the Türkiye Sustainability Reporting Standards (TSRS), which entered into force on January 1, 2024, following the publication in the Official Gazette, and covers the activities of Türk Traktör ve Ziraat Makineleri A.Ş. (TürkTraktör) for the period between January 1 and December 31, 2024. The TSRS were developed by the Public Oversight, Accounting and Auditing Standards Authority (KGK), based on the international standards set by the International Sustainability Standards Board (ISSB). Under the transitional exemption, this report provides information solely in accordance with TSRS 2 – Climate-Related Disclosures Standard, including climate-related risks and opportunities, strategy, governance, risk management, metrics, and targets. The report also takes into account TSRS 1 – General Requirements for Disclosure of Sustainability-related Financial Information. The report was approved by the Board of Directors on July 28, 2025.

The scope of this report covers the activities included in TürkTraktör's financial statements for the period between January 1 and December 31, 2024. This includes activities controlled and consolidated in the financial statements by TürkTraktör. The organizational boundary used for sustainability- and climate-related financial disclosures is consistent with the scope of consolidation in the financial statements.

The report also takes into account TSRS Industry Based Guidance Volume 50 – Industrial Machinery and Goods. In line with this sector guideline, disclosure topics and metrics aligned with TürkTraktör's operations were evaluated, and those deemed appropriate were incorporated into the report.

The information presented in this report has been compiled based on environmental and operational data from TürkTraktör's internal data systems, greenhouse gas emission calculations, strategy documents, risk analyses, management statements, and financial reports. In addition, scientific sources, national and international scenario sets, and open data repositories were also used as supporting information sources. The accuracy and consistency of the data were ensured through internal control mechanisms and advisory support processes.

Wherever possible, the data and assumptions used in preparing this report are consistent with the data and assumptions used in the preparation of the relevant financial statements, in accordance with the Turkish Accounting / Financial Reporting Standards.

The climate-related disclosures presented in this report are linked to the financial statements of Türk Traktör ve Ziraat Makineleri A.Ş. and are, to the extent possible, consistent with the data and assumptions used in the preparation of the financial statements. The information presented in this report pertains to the 12-month period from January 1 to December 31, 2024, and is aligned with the same reporting period. These disclosures should be evaluated together with the financial statements prepared for TürkTraktör. The relevant financial information is available [here](#).

The presentation currency for the financial information in this report is the Turkish Lira (TL). This presentation currency is consistent with that used in TürkTraktör's financial statements.

## Transition Period Reliefs

In this report, TürkTraktör has made use of certain transitional exemptions as defined under Articles E3, E4, E5, and E6 of TSRS 1 and Articles C3, C4, and C5 of TSRS 2. The transitional exemptions applied by the company are outlined below:

- In the first reporting period, information has been provided solely on climate-related risks and opportunities, and other dimensions of sustainability topics have been excluded from the scope.
- No comparative information from previous years has been provided.
- The climate-related financial disclosures have been prepared and published after the release of TürkTraktör's financial statements.

## Independent Assurance

This report has been subjected to independent assurance in line with the principles of reliability and transparency. The reporting within the scope of TSRS has been subject to limited assurance in accordance with Assurance Engagement Standard 3000, "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information", as published by the Public Oversight Authority (KGK), and, with respect to the greenhouse gas emissions disclosed under sustainability information, in accordance with Assurance Engagement Standard 3410, "Assurance Engagements on Greenhouse Gas Statements".

# Governance

TürkTraktör places climate change and environmental issues at the core of its long-term corporate success and sustainable growth strategy. The company approaches the effective management of environmental and climate-related risks and opportunities not merely as a compliance requirement, but as a domain for creating strategic competitive advantage. Accordingly, all climate-related processes are conducted under the direct oversight of the Board of Directors, which is the company's highest governance body, and a systematic governance model, performance monitoring, and a culture of continuous improvement are adopted across all levels of the organization.

## **Board of Directors**

The TürkTraktör Board of Directors is the highest authority directly responsible for managing the company's climate-related risks and opportunities. The short-, medium-, and long-term climate and sustainability targets identified under the "Future Impact" sustainability strategy are approved and monitored by the Board of Directors. The climate-related issues are regularly discussed in Board meetings, and the Board is formally briefed at least three times a year.

The Company Leader (CEO), who also serves as a member of the Board, plays an active role in the management of climate and environmental issues. The criteria for achieving sustainability targets are included as part of the annual performance evaluation. The Company Leader also reports directly to the Board and regularly provides updates on all sustainability-related processes.

Various mechanisms are implemented to ensure competency on environmental and climate issues within the Board of Directors and across the company. Among the members of the TürkTraktör Board and the Sustainability Committee (composed of top management) are individuals who actively participate in national and international platforms on climate and sustainability, and who closely follow global developments in the field. Some Board members have completed certification programs on sustainability and climate change at leading universities. The Board's expertise is regularly enhanced with the support of both internal and external advisors. The Company Leader, who also serves as a member of the Board of Directors, holds the Best Practice Farming for Sustainable 2050 certification from the University of Western Australia. Additionally, among the members of the Board are individuals who represent Türkiye in the CEO Action Group established under the Green Deal initiative of the World Economic Forum, and who have served as speakers and representatives at various international summits such as the Davos Summit and the United Nations Climate Change Conference (COP). Through this approach, the company strengthens its governance structure in line with its strategic objectives and ensures the effective management of climate-related risks. Furthermore, in line with the TürkTraktör Board of Directors Diversity Policy, diversity is considered in the formation of the Board's membership structure.

You can access the Board Diversity Policy [here](#).

## **Sustainability Committee**

The Sustainability Committee is responsible for determining, implementing, and monitoring the company's sustainability strategy, targets, and actions. The Committee is chaired by the Company Leader (CEO). The Committee members are Commercial Business Leader, Financial Affairs Business Leader, Purchasing and Supply Chain Business Leader, Product Life Cycle Business Leader, Human, Culture and Sustainability Business Leader, Construction Equipment Business Leader, Ankara Factory Business Leader, Erenler Factory Business Leader, Marketing and Business Development Business Leader, After-Sales Business Leader, and Central Quality Management Group Leader.

The Committee meets regularly and reports to the Board of Directors. The areas of responsibility of the Committee include: identifying and evaluating climate and environmental risks and opportunities; setting corporate environmental and climate targets and tracking performance indicators related to these targets; developing and implementing climate transition plans; defining strategies to reduce greenhouse gas emissions; integrating climate and sustainability elements into the company's long-term business strategies; updating corporate strategies in line with national and international sustainability trends, regulations, and expectations; regularly reporting significant climate-related events and developments to the Board of Directors; providing recommendations on development to working teams; and coordinating adaptation and mitigation strategies for critical climate risks.

## **Working Teams**

Four main sustainability working teams operate under the direct supervision of the Sustainability Committee:

- Environment and Energy Team
- Product Life Cycle Team
- Responsible Supply Chain Team
- Diversity, Equity, and Inclusion (DEI) Team

Each team is led by a part-time Product Owner (PO), in addition to their primary role within the company. The teams hold monthly alignment meetings with the Sustainability Center of Excellence Lead. The Center of Excellence Lead reports the progress and findings from these meetings to the Sustainability Committee, which in turn presents this information to the Board of Directors.

The primary mission of the teams is to design, implement, and drive continuous improvement in projects that contribute to the goals defined within TürkTraktör's Future Impact strategic framework. Each team monitors progress in a data-driven manner through annual performance targets and key indicators and identifies improvement actions accordingly.

# Governance

## **Sustainability Center of Excellence**

At the operational level, sustainability efforts are carried out under the coordination of the Sustainability Center of Excellence Lead (CoE Lead), who reports to the People, Culture, and Sustainability Business Leader.

The CoE Lead is responsible for coordinating the entire sustainability governance structure at TürkTraktör, and ensures the flow of information and alignment between the Sustainability Committee, the Board of Directors, and the sustainability working teams.

The primary mission of the CoE Lead is to design, implement, and continuously improve projects and initiatives, together with the teams, that support the achievement of the company's sustainability goals, contributing to the Future Impact strategic framework. While leading this process, the CoE Lead is also responsible for both national and international sustainability reporting. The teams work in a data-driven manner in line with annual targets, regularly monitoring progress and taking necessary improvement actions. The CoE Lead reports the outcomes of these efforts to the Sustainability Committee and ensures strategic alignment.

In addition, to ensure cross-functional coordination, monthly alignment meetings are held with representatives from teams responsible for Occupational Health and Safety, New Business Development and Technology Platform, Precision Farming, Risk Management and Management Systems, Intrapreneurship and Innovation, and Compliance and Competition.

This structure enables TürkTraktör to implement a comprehensive, dynamic, and integrated management model for key sustainability focus areas such as climate change adaptation, emissions reduction, circularity, human-centeredness, and supply chain sustainability.

## **Evaluation of Climate-Related Issues in Decision-Making Processes**

At TürkTraktör, climate-related risks and opportunities are directly evaluated by top management in alignment with the company's overall strategy, product and service portfolio, large-scale investments, and long-term growth targets. Recent initiatives such as R&D projects on electric tractors, green finance credit obtained from the European Bank for Reconstruction and Development (EBRD), investments in energy efficiency within production processes, and solar power plant (SPP) projects have all been shaped in line with climate-related management priorities.

In this context, when assessing large-scale strategic investments, the top management considers sustainability and climate-related trade-offs. For example, in the case of SPP projects, short-term trade-offs such as capital investments and increased costs are evaluated alongside long-term benefits such as reduced carbon footprint and lower energy costs, with final decisions made accordingly.

## **Performance and Remuneration**

At TürkTraktör, climate performance are positioned among the company's strategic priorities and integrated into the performance measurement and

remuneration system through a holistic approach. Climate- and environment-focused targets have been made an integral part of individual performance evaluations at the top management level.

Moreover, sustainability-related criteria have been embedded into the performance and remuneration processes of all relevant senior executives, including the Company Leader (CEO). Executives in key roles, such as the People, Culture and Sustainability Business Leader; Ankara Factory Leader; Erenler Factory Leader; Procurement and Supply Chain Leader; and Product Life Cycle Leader, are evaluated based on these targets. Concrete climate and environmental goals, such as the reduction of Scope 1 and Scope 2 emissions, implementation of solar energy projects, reduction of energy and water consumption, execution of Life Cycle Assessments, and sustainability assessments of critical suppliers, have been integrated into the OKR (Objective and Key Results) framework.

For 2024, one-quarter of the Company Leader (CEO)'s annual performance objectives consist of sustainability-related OKRs. In 2024, the Company Leader's performance scorecard, 15% of all performance indicators are climate-focused. Considering that sustainability and climate-related targets are integrated into the performance measurement and remuneration system through a holistic approach, the specific percentage of these targets within the total remuneration of senior executives is not reported separately. Efforts in this area will continue in the coming periods.

This system demonstrates that climate and environmental performance is not merely a matter of social responsibility, but an essential component of TürkTraktör's long-term success strategy. TürkTraktör manages climate and environmental risks within a transparent, accountable, and results-oriented management system at both strategic and operational levels.

## **Integration into Business Processes**

At TürkTraktör, the roles and authorizations related to the Board of Directors and the climate-focused governance structure are supported through company policies and procedures enacted by a resolution of the Board of Directors. In addition, TürkTraktör has integrated climate change and environmental issues into its corporate policies, procedures, and operational processes through its Integrated Management System (IMS). At TürkTraktör, in addition to ISO 9001, ISO 14001, and ISO 45001 certifications covered under the Integrated Management System (IMS), the processes for identifying, monitoring, and continuously improving climate-related risks and environmental impacts are systematically carried out in alignment with international standards such as ISO 50001 and ISO 14064-1. Within this system, environmental and climate-related risks are not addressed solely through stand-alone projects but are integrated into TürkTraktör's core processes, including quality management, occupational health and safety, energy efficiency, and environmental management. Moreover, TürkTraktör continues to enhance the internalization of climate risk management processes at the policy and procedural levels.



# Strategy

### CLIMATE RISKS AND OPPORTUNITIES

TürkTraktör evaluates the physical and transition risks posed by climate change, as well as the opportunities it presents, in a comprehensive manner. Analyses conducted within the framework of the company’s corporate risk management approach assess the impact of climate-related uncertainties on strategy, taking into account short-, medium-, and long-term effects. Among the physical risks identified, water stress stands out in particular. Under transition risks, increased raw material costs associated with the introduction of an Emissions Trading System (ETS) have been defined as a potential risk factor.

At the same time, climate-related opportunities are also systematically addressed and prioritized based on their value-creation potential. In this context, the strengthening of renewable energy production capacity is considered strategic opportunity for TürkTraktör in terms of enhancing operational resilience, managing costs, and achieving sustainability targets. No risk is foreseen for a material adjustment to the carrying amounts of assets and liabilities reported in the financial statements for the current or subsequent reporting periods.

Term	Connection to strategic decision-making processes
SHORT TERM: 0-3 YEARS	TürkTraktör’s short-term planning includes initiatives related to operational efficiency, energy savings, transition to renewable energy, and regulatory compliance. This period aligns with the company’s annual budget and medium-term planning cycles. Given the nature of climate-related risks, which may not be fully captured by traditional risk management frameworks, the short-term definition has been slightly extended.
MEDIUM TERM: 3-10 YEARS	TürkTraktör’s medium-term planning spans 3 to 10 years and focuses on managing risks and opportunities that require longer preparation periods. This period includes activities such as sustainable product development and commercialization, optimization of the supply chain based on sustainability criteria, and preparation for new regulatory frameworks. The medium-term horizon goes beyond traditional financial planning cycles and considers the gradually evolving impacts of climate-related issues over time.
LONG TERM: 10 YEARS AND LONGER	TürkTraktör’s long-term strategic planning covers a period of more than 10 years. This period addresses systemic changes such as the development and commercialization of sustainable products, decarbonization of logistics processes, and building resilience against the growing impact of climate change on agricultural practices. With its long-term planning approach, TürkTraktör maintains both its financial stability and leadership in sustainable production, ensuring its competitiveness in evolving market conditions.

### Climate-Related Risks

RISK INFORMATION	<p><b>Chronic physical risk</b></p> <p><b>Water stress risk</b></p> <p><b>Term:</b> Medium and Long</p> <p><b>Impact:</b> Low</p> <p><b>Likelihood:</b> High</p> <p><b>Value chain step with concentrated risk:</b> Direct operations (Erenler and Ankara Factories)</p>
RISK DEFINITION	<p>The level of water dependency in TürkTraktör’s production processes varies across facilities. In particular, the paint shop operations at the Erenler Factory use water intensively and consider it a critical resource, whereas the production processes at the Ankara Factory are less dependent on water compared to those at the Erenler Factory. According to the WRI Aqueduct Water Risk Atlas assessment, the Ankara Factory is located in an “Extremely High” water stress zone under both baseline and future scenarios. In contrast, the Erenler Factory is in a “Low” risk zone under the baseline scenario and a “Low to Medium” risk zone under future projections. The combination of water dependency and water risk scores has led to this risk being prioritized.</p>
IMPACT OF THE RISK ON OPERATIONS AND THE VALUE CHAIN	<p>Increased water stress creates a risk of operational disruptions in TürkTraktör’s production processes, especially in water-intensive areas such as paint shop operations and component manufacturing. Rising water procurement costs may also exert upward pressure on the overall cost structure of production processes.</p> <p>The impact of water stress may not be limited to plant operations alone, but could also extend across TürkTraktör’s broader value chain. Operational disruptions at water-dependent subcontractors and suppliers, particularly those in industries such as paint, casting, and metal plating, may lead to delays in supply times and increased input costs. Water-related cost increases could be passed on by suppliers in the form of higher product prices, which may indirectly increase TürkTraktör’s production costs. However, water dependency and water stress risks across the value chain have not yet been analyzed in detail. These will be incorporated into future assessments as the scope of climate risk analyses is expanded.</p>
IMPACT OF THE RISK ON FINANCIAL POSITION, FINANCIAL PERFORMANCE, AND CASH FLOW	<p>Rising water stress, increasing water prices, and possible water outages during periods of extreme stress may result in short-term disruptions to TürkTraktör’s operations. For the current reporting period, no significant impact of this risk has been identified on the company’s financial position, financial performance, or cash flow.</p> <p>In the short to medium term, operational costs may increase due to rising water prices. In the medium term, an increase in water stress and potential water shortages may lead to disruptions, particularly in the paint shop operations at the Erenler Factory, where water is used intensively. In the long term, potential issues in water supply may create a need for infrastructure investments and pose a risk of partial restrictions on production capacity. Additionally, rising water prices may lead to increased operational costs over the long term.</p> <p>Through its ongoing efforts at both production facilities, TürkTraktör is well-prepared for potential water shortages and is mitigating the financial position, financial performance, and cash flow risks that may arise from difficulties in water supply. Quantitative impact calculations assessing how water stress-driven water price increases may affect operational costs have not yet been completed due to measurement uncertainties. However, work is ongoing to model the quantitative impacts of future price increases under different scenarios.</p>

# Strategy

MITIGATING ACTIONS

TürkTraktör has developed a long-term water management strategy to address the risk of water stress. In 2024, a total of 51,811 m³ of wastewater was reused through the reverse osmosis systems installed at the Ankara and Erenler factories, resulting in significant water savings. The purified water obtained through this process was treated further in integrated water facilities and repurposed in various forms to meet the needs of production processes. The use of existing water storage tanks and recycled water through reverse osmosis in processes at both the Erenler and Ankara Factories helps the company mitigate risks associated with potential water outages. As part of water management efforts, taking into account the trade-offs related to water stress risks, investments in water storage infrastructure were made in previous years. Even in the event of serious water shortages, the water storage tanks currently in place can meet the needs of the Erenler Factory for approximately 5–6 days, and the Ankara Factory for approximately 8–10 days.

IMPACT OF THE RISK ON STRATEGY AND DECISION-MAKING PROCESSES

Water management is addressed as a priority within TürkTraktör's Future Impact sustainability strategy. Targets related to water recovery and efficiency are integrated into annual investment planning processes and are aligned with the company's operational sustainability targets. TürkTraktör aims to meet 100% of the water used in its production and operations with reclaimed water by 2030. Moreover, by 2030, the company targets a 40% reduction in water consumption per product, using 2019 as the baseline year. Progress toward this target is monitored regularly.

New investments, such as a rainwater harvesting project, are being planned to reduce the impact of water stress and control water-related costs. Water consumption performance is monitored regularly at the factory level and on a per-product basis. These metrics are considered in both risk management and strategic planning processes. Within this scope, water stress risk plays a significant role in the management of TürkTraktör's production capacity, cost structure, and long-term resilience strategies.

Investment decisions are made considering financial capacity, market expectations, long-term corporate strategy, investment and financing policies, and the company's cash position. Decisions related to water risks are also evaluated within this framework.

METRICS USED TO MEASURE THE RISK

- Annual water consumption by factory (m³)
- Water consumption per product (m³/product)
- Recovered water ratio (%)

RISK INFORMATION

**Market risk**

**Risk of increased prices of carbon-intensive raw materials due to the planned Emissions Trading System (ETS) in Türkiye**

**Term:** Short

**Impact:** Low

**Likelihood:** High

**Value chain step with concentrated risk:** Direct operations and supply chain (especially suppliers operating in carbon-intensive sectors)

RISK DEFINITION

As part of Türkiye's efforts to combat climate change, a national Emissions Trading System (ETS) is planned to be established in 2025-2026, initiating carbon pricing. Although TürkTraktör currently has no direct obligations related to emission sources, the use of carbon-intensive raw materials, particularly iron and steel, in its production processes could lead to an increase in indirect carbon costs. Additionally, the introduction of carbon pricing within the electricity generation sector under the ETS may result in increased electricity costs. However, TürkTraktör aims to meet its entire electricity demand with renewable energy generated through its ongoing solar power plant (SPP) investments by the end of 2026.

IMPACT OF THE RISK ON OPERATIONS AND THE VALUE CHAIN

Under the ETS planned to be established in Türkiye, indirect cost increases in carbon-intensive sectors such as electricity and iron-steel may lead to supplier-driven increases in TürkTraktör's production costs. This may heighten pressure on energy costs in energy-intensive production processes, particularly in component manufacturing lines and paint shop operations, potentially driving up the cost of production per unit. However, since TürkTraktör aims to meet its total electricity demand through self-generated renewable energy sources by the end of 2026, the potential increase in electricity costs is not expected to create a significant risk to the company.

In TürkTraktör's value chain, particularly among steel and other carbon-intensive material suppliers, direct cost increases are expected as a result of their inclusion in the ETS. The reflection of these cost increases on procurement prices may indirectly impact production costs, potentially leading to higher final product prices. Moreover, considering that supplier-related emissions account for a notable 8% of TürkTraktör's total greenhouse gas emissions as of 2024, it may become necessary in the medium term to collaborate with low-carbon suppliers, prioritize the procurement of low-carbon materials, and develop carbon reduction projects jointly with suppliers.

IMPACT OF THE RISK ON FINANCIAL POSITION, FINANCIAL PERFORMANCE, AND CASH FLOW

During the establishment of the ETS in Türkiye, TürkTraktör will closely monitor regulatory changes and carry out preparations within the company. While the direct cost impact is expected to be limited, there remains the potential for an increase in electricity costs. Furthermore, TürkTraktör will speed up the process of collecting and monitoring carbon emissions data from suppliers.

As carbon pricing emerges in ETS-covered sectors, indirect cost increases will become more apparent. Potential increases in electricity prices and additional costs for carbon-intensive raw materials are likely to raise production costs and affect product pricing.

TürkTraktör has identified that it may face cost escalation risks under the ETS, planned to be implemented in the short term in Türkiye. However, calculating the quantitative effects of raw material price increases is currently hindered by obstacles such as limited access to accurate data and high measurement uncertainty. Uncertainties around carbon pricing under the ETS, the exact quantities of raw materials such as iron-steel and aluminum included in TürkTraktör's direct procurement, and the degree to which suppliers will pass on cost increases into prices, make it difficult at this stage to quantify the financial impact of the risk. As these uncertainties diminish in the future, TürkTraktör will be better positioned to conduct quantitative impact analyses of this risk. Since such cost increases are expected to apply across the sector, TürkTraktör anticipates that a portion of the cost may be reflected in product prices without significantly affecting competitiveness, and pressure on profitability will remain limited.

# Strategy

## MITIGATING ACTIONS

TürkTraktör has implemented various measures to mitigate the impacts of the ETS-related risk. To reduce indirect carbon emissions from electricity, expected to fall under the ETS scope, solar power plant (SPP) projects have been launched. In addition to the Roof Solar Power Plant (SPP) projects launched at the Erenler Factory in 2023 and the Ankara Factory in 2024, the SPP established in Sivas became operational in February 2025. These SPPs now supply part of the company's energy needs directly from renewable sources. At the Ankara Factory, 100% of electricity demand has been met through renewable sources since 2025. By the end of 2026, the company aims to meet its entire electricity consumption with self-generated renewable energy. As of the end of 2024, TürkTraktör's installed renewable energy capacity is 7.9 MWe, and the total renewable energy generated in 2024 was 6,258 MWh. TürkTraktör invested TL 124 million in SPP projects in 2024.

In addition, carbon management within the supply chain is being strengthened, and supplier evaluation processes were initiated in 2024. Further collaboration with suppliers is planned in the upcoming period.

## IMPACT OF THE RISK ON STRATEGY AND DECISION-MAKING PROCESSES

To manage the operational and strategic implications of policy changes such as the ETS, TürkTraktör integrates these considerations into its risk management and sustainability processes.

Targets to reduce electricity costs and the carbon footprint are aligned with the energy management and resource efficiency focus areas of the company's sustainability strategy.

In the supply chain, the company aims to collaborate with low-carbon suppliers, prioritize the procurement of low-carbon materials, and jointly develop carbon reduction projects with suppliers.

Additionally, Life Cycle Assessment (LCA) studies initiated in 2024 aim to systematically measure the environmental impact of products and to support the development of low-carbon material strategies.

Investment decisions are made considering financial capacity, market expectations, long-term corporate strategy, investment and financing policies, and the company's cash position. Decisions related to managing ETS-related risks are also evaluated within this framework.

## METRICS USED TO MEASURE THE RISK

- Scope 2 emissions (tons CO<sub>2</sub>e)
- Share of renewable energy in total electricity consumption (%)
- Number of products subject to Life Cycle Assessment

## Climate-Related Opportunities

OPPORTUNITY INFORMATION	<b>Renewable Energy Generation and Use</b>
	<b>Term:</b> Short
	<b>Impact:</b> Low
	<b>Likelihood:</b> High
OPPORTUNITY DEFINITION	<b>Value chain step with concentrated opportunity:</b> Direct operations (Erenler and Ankara factories)
IMPACT OF THE OPPORTUNITY ON OPERATIONS AND THE VALUE CHAIN	The transition to renewable energy represents both an opportunity for TürkTraktör, supporting long-term control of energy costs, and a strategic area of action, directly contributing to climate goals by reducing operational emissions. Through solar power plant (SPP) investments and green energy purchases, the company is progressing toward its goal of eliminating Scope 2 emissions. Energy transition is seen not only as a lever for operational efficiency, but also as a driver of reputation and brand strength.
IMPACT OF THE OPPORTUNITY ON FINANCIAL POSITION, FINANCIAL PERFORMANCE, AND CASH FLOW	By using renewable energy, TürkTraktör maintains more predictable and lower energy costs, while also directly contributing to its sustainability targets by reducing its carbon footprint. As of 2024, 100% of the electricity consumed is sourced from renewable energy through purchased I-REC certificates. By the end of 2026, the company aims to meet this consumption entirely through its own SPP investments.
IMPACT OF THE OPPORTUNITY ON STRATEGY AND DECISION-MAKING PROCESSES	TürkTraktör's shift to sourcing electricity from renewable energy will allow for greater predictability in energy costs in the short term and reduce exposure to market price volatility. Sourcing 100% of purchased electricity from renewable sources will directly contribute to reducing the company's operational carbon footprint. Through its renewable energy investments, TürkTraktör is working to meet its electricity needs through self-production, thereby lowering its operational costs.
	The ongoing SPP investments, aimed at covering 100% of electricity consumption with company-generated renewable energy by the end of 2026, are expected to generate significant cost advantages in the medium term, while also enhancing the company's energy supply security. This initiative will enable TürkTraktör to eliminate its Scope 2 emissions in line with its carbon-neutrality targets and positively influence investor confidence and the company's ability to access sustainable finance. Moreover, increasing energy independence will strengthen TürkTraktör's long-term competitive advantage. The sale of excess energy to the grid could also provide additional revenue. Both financing from the EBRD and internal equity are being used to implement the SPP investments.
	In addition to the rooftop SPP projects commissioned in Erenler and Ankara in 2023 and 2024 respectively, the commissioning of the Sivas SPP in February 2025 aims to ensure that a significant portion of electricity consumption is met from renewable energy sources.
	Renewable energy investments are included in TürkTraktör's annual investment plans as one of the foundational pillars of the company's climate transition strategy, and are monitored through performance indicators aligned with sustainability targets. SPP projects are regarded not only as emission reduction tools but also as strategically prioritized investments that ensure energy security and enhance operational resilience.

## METRICS USED TO MEASURE THE OPPORTUNITY

- Annual SPP generation capacity (MWh)
- Annual energy cost savings (TL)



# Strategy

### CLIMATE RESILIENCE AND SCENARIO ANALYSES

TürkTraktör leverages scenario analyses to better manage climate-related risks and opportunities and to assess the resilience of its business model and strategy against different climate scenarios. The first workshop, held in 2023, brought together units from different disciplines, including sustainability, environment, product, R&D, and risk management, to evaluate TürkTraktör’s key physical and transition risks and opportunities, resulting in a company-wide scenario analysis. A second workshop was organized in 2025 with participation from relevant teams to re-evaluate transition risks and opportunities.

#### Transition Scenario Analyses

The scenario analyses were conducted across medium- and long-term horizons, specifically targeting the years 2030 and 2050. The year 2030 is recognized as a milestone for global climate targets, while 2050 is positioned as the focal point for countries’ net-zero emission goals. Accordingly, the analysis process was structured to evaluate TürkTraktör’s strategic resilience at these two critical junctures. The analysis included the Ankara and Erenler Factories, supplier relationships across the value chain, and the product portfolio. The scenarios were developed using quantitative assumptions and inputs from international sources. In line with scenarios from the International Energy Agency (IEA), parameters such as global and regional economic growth rates, carbon pricing levels, fuel prices, projected capital expenditures for low-carbon technologies, sector-based emission intensities, and the share of fossil fuels in end-user consumption were incorporated into the analysis. Moreover, the scenarios from the UN Food and Agriculture Organization (FAO)

included assumptions related to the development of the agriculture sector, such as productivity, efficiency, land use, and the carbon footprint of agriculture. These inputs were evaluated comparatively, and the potential impacts on TürkTraktör’s operations, as well as the company’s level of resilience, were interpreted using a qualitative analysis approach. In the coming periods, TürkTraktör plans to further develop its scenario analysis methodology and focus on generating quantitative outputs.

As part of the transition scenario analyses, two primary scenarios were evaluated: an optimistic scenario aligned with the 1.5°C target, and a pessimistic scenario based on current trends. The optimistic scenario was constructed by aligning the IEA Net Zero Emissions by 2050 (NZE) scenario with the FAO Towards Sustainability Scenario (TSS). The pessimistic scenario combined the IEA Stated Policies Scenario (STEPS) and the FAO Business-as-Usual (BAU) scenario, modeling a future in which current policies persist and global temperature rise reaches around 3°C. This approach allowed TürkTraktör to comprehensively assess the regulatory, technological, and cost pressures that may emerge during a low-carbon transition, as well as the limited risk-limited opportunity landscape that may arise under a continuation of current policies.

Comparison of Assumptions in Climate Scenarios Used		
Topic	NZE + TSS Scenario (1.5°C)	STEPS + BAU Scenario (~3°C)
GLOBAL TEMPERATURE INCREASE	Temperature rise is limited to 1.5°C.	Reaches around 3°C.
POLICY APPROACH	Carbon prices rise rapidly, new environmental regulations are implemented.	Current policies continue, with limited introduction of new regulations.
TECHNOLOGICAL DEVELOPMENT	Electric and alternative-fuel tractors become widespread.	Electrification remains limited, and diesel engines continue to dominate.
ENERGY USE AND SOURCES	Electricity consumption rises, and share of renewables increases.	Natural gas remains dominant, and renewable energy investments progress slowly.
CARBON PRICING	High-cost pressure for Scope 1 emissions.	Carbon prices remain low or are applied only in select regions.
CUSTOMER DEMAND	Demand for low-emission and sustainable products increases.	Demand in this area remains limited.
FINANCING CONDITIONS	Access to green finance becomes easier.	Incentives for sustainable investments remain weak.
PHYSICAL RISK OUTLOOK	Frequency of extreme weather events decreases, and pressure on water resources is reduced.	Water stress and extreme weather events increase.
ECONOMIC IMPACTS	Long-term growth is supported through transition investments.	Short-term costs remain low, but long-term risks rise.

# Strategy

Carbon Pricing Assumptions Used in Scenario Analyses					
USD per ton of CO <sub>2</sub> (2023)	Country / Region	2030	2035	2040	2050
STEPS SCENARIO	European Union	140	145	149	158
NZE SCENARIO	Emerging economies with net-zero commitments	90	125	160	200

**Outcomes of Transition Scenarios and Climate Resilience**

Under the NZE + TSS scenario, it is expected that technological transformation and demand for alternative-fuel products grow rapidly, carbon prices reach higher levels, and significant cost increases occur for carbon-intensive raw materials. Consequently, TürkTraktör’s direct operations may be substantially impacted by carbon pricing mechanisms. Under this scenario, alternative fuels such as hydrogen are being considered to replace natural gas, but such a transition is expected to require significant investment. Nonetheless, TürkTraktör is already pursuing energy efficiency projects and solar power plant (SPP) investments to reduce Scope 1 and 2 emissions, securing access to sustainable finance, and expanding its low-emission product portfolio. The company, which carries out domestic R&D for electric tractors, introduced its first electric tractor to farmers in 2024. If domestic market demand emerges, TürkTraktör has the capacity to adapt its production processes to this new product group in the short term. The company’s ability to

quickly transform its existing assets and production processes, even under aggressive net-zero scenarios that demand rapid action, demonstrates its capacity to adapt its production processes and business strategy to climate change. Ongoing monitoring of policies and regulations, continued R&D efforts, and the potential activation of incentives position this scenario as both an adaptation and opportunity space for TürkTraktör.

The results of the transition scenario analysis also confirm the strategic alignment of TürkTraktör’s investments to date. Through its R&D investments in electric tractors aimed at expanding its low-carbon product portfolio, the company has the technical and operational capacity to adapt to the rapid transformation environment projected under the 1.5°C-aligned transition scenario. This affirms the resilience of TürkTraktör’s current business strategy, particularly in the context of R&D and product development, against net-zero emission scenarios through 2050. Being the first and only company in Türkiye to develop an electric tractor prototype

highlights TürkTraktör’s high level of technological readiness and its potential to respond quickly to market demands. Moreover, the company’s leadership position in Türkiye’s tractor market strengthens its ability to influence and guide the sector during the transition. TürkTraktör’s early and full compliance with Stage V emission regulations, ahead of other companies in the sector, and its proactive transformation of production infrastructure further demonstrate its adaptability to new regulatory environments. These investments have been evaluated as key factors enhancing the company’s resilience against the carbon prices and product standards regulations projected in the scenario analysis.

In the STEPS + BAU scenario, however, a slower transition process is anticipated, where carbon prices remain low and technological adaptation is more limited. While this provides TürkTraktör with more time to transform its product portfolio and invest in low-emission technologies, it also brings the risk of failing to fully capitalize on opportunities due to reduced access to green finance, limited demand for alternative-fuel tractors, and weaker product regulations under lower transition pressure.

**Physical Scenario Analyses**

Scenario analyses regarding physical risks were addressed during the workshop held in 2023. In this study, chronic and acute physical risks were assessed based on five facilities located in five different locations where TürkTraktör operates. Water stress was analyzed using the World Resources Institute’s WRI Aqueduct Water Risk Atlas under the IPCC RCP 2.6 (optimistic) and RCP 7.0 (business as usual) scenarios. Acute risks such

as flooding and extreme heat were evaluated using the ThinkHazard! platform and considered alongside the company’s existing risk matrix. The analysis revealed that these physical risks are largely long-term in nature and have a low level of impact. However, water stress stands out as a high-likelihood threat and is particularly taken into account in long-term operational planning. Currently, physical scenario analyses have been conducted within a more limited scope, but it is planned to further develop and update these analyses in the future as the company’s competencies and experience in this area increase.

Based on the outputs of the scenario analyses, TürkTraktör’s strategic resilience against climate change is systematically assessed, and these outputs are integrated into risk management, R&D investments, and product strategy as inputs. In addition, a planning process has been initiated to update these analyses annually and to incorporate them more broadly into decision-support processes.

**Key Areas of Uncertainty, Assumptions and Judgements**

Although the findings obtained from the scenario analyses are based on assumptions from global sources, various areas of uncertainty and judgements have been taken into account in interpreting their potential impacts on TürkTraktör’s operations:

– **Carbon Pricing Uncertainties:** The scope of the Emissions Trading System (ETS) in Türkiye is initially limited to certain sectors, and the potential inclusion of industrial companies such as TürkTraktör remains uncertain. Moreover, if TürkTraktör is included in the system in the future, several factors such as

<sup>1</sup> WRI Aqueduct Water Risk Atlas  
<sup>2</sup> ThinkHazard!

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applicable carbon price levels, allocation methods (free/auctioned), the transition process, and sector-specific dynamics represent major sources of uncertainty. Therefore, while the carbon prices indicated in IEA scenarios are used as a reference in the analyses, uncertainties remain regarding the extent to which these prices will be applicable in the context of Türkiye.

– **Supply Chain Uncertainties:** For Scope 3 emissions, a significant portion is associated with raw material and component procurement processes. It is difficult to project how the prices of carbon-intensive inputs (e.g., iron and steel) will evolve and how supply security risks may change in the future. Particularly, the cost, availability, and technical feasibility of low-carbon alternative materials have been carefully considered in the scenario assumptions, and related uncertainties have been addressed through qualitative analysis.

– **Technological Uncertainties:** The applicability, maturity, and cost of transition technologies such as electric tractors, alternative fuels, and precision farming systems can vary significantly depending on sectoral developments. Scenario-based assumptions have been used to assess the extent to which these technologies will be commercialized in the short to medium term.

– **Product Lifetime and Performance Uncertainties:** In the post-sales phase, the energy efficiency, emissions performance, and durability of products may vary depending on user behavior and operational conditions. Accordingly, the long-term field performance and market adoption of innovative products developed by TürkTraktör, such as electric

tractors, have been evaluated based on scenario-driven assumptions.

– **Financial Uncertainties:** While access to green financing may appear more feasible under low-carbon transition scenarios, uncertainties remain with regard to interest rates, collateral requirements, and the long-term availability of such funding mechanisms.

## TÜRKTRAKTÖR'S CLIMATE STRATEGY

Climate change is one of the key external factors affecting TürkTraktör through both physical and transition risks. TürkTraktör addresses this issue under its Future Impact sustainability strategy, launched in 2022. Within this strategy, climate change is positioned as one of the priority themes under the focus area of “Impact Responsibly in Operations and Products.” In this context, the company adopts a holistic approach that incorporates climate action targets not only into its own operations but also throughout the value chain and in product development strategies.

Reducing greenhouse gas emissions, lowering the environmental impact of products, and designing agricultural technologies to support climate adaptation are the main pillars of this strategy. The strategy is also aligned with the climate-related risk and opportunity analyses conducted by TürkTraktör and is integrated into short-, medium-, and long-term planning cycles and decision-making processes. Furthermore, the strategy is supported by the company's sustainability targets, including reducing greenhouse gas emissions, meeting electricity demand through self-produced renewable energy, improving resource efficiency, and conducting assessments and audits across the supply chain.

## Ongoing and Planned Direct and Indirect Mitigation Actions

Reducing emissions from production activities is among TürkTraktör's critical priorities within its climate strategy. In line with rising regulatory pressure, energy costs, emerging market mechanisms for carbon pricing, and the 2050 carbon neutrality target, the company pursues a systematic strategy to reduce carbon emissions in its production operations. This strategy consists of multiple layers, including energy efficiency, transition to renewable energy, technological modernization, and performance monitoring mechanisms.

To reduce emissions from energy-intensive production activities, an energy management system aligned with ISO 50001 is implemented across Ankara, Erenler, Akyurt, and İzmir locations, and energy performance is monitored through regular internal and external audits. Data are tracked with analytical models, and energy loss reduction efforts are supported by improvement projects carried out in areas identified.

In 2024, seven energy efficiency projects implemented at the Ankara and Erenler Factories achieved actual savings of 1,454 MWh and a reduction of 546 tons of CO<sub>2</sub>e emissions. These projects are estimated to have a total annual savings potential of 1,988 MWh. At the Erenler Factory, the integration of inverters into paint shop surface treatment pumps and the heat pump system is helping to limit natural gas consumption. At the Ankara Factory, waste heat is used in washing benches to reduce electricity consumption.

As of 2024, 100% of the electricity purchased by the company is sourced from renewable resources certified through I-REC certificates. Scope 2 emissions

account for 56% of the company's total Scope 1 and 2 emissions as of 2024. This highlights the critical role of renewable energy projects aimed at reducing Scope 2 emissions in achieving the company's target of reducing gross Scope 1 and 2 emissions by 42% by 2030, compared to the 2021 baseline year – a target approved by the Board of Directors and publicly announced in 2023.

To this end, the company plans to meet all its electricity needs from self-produced renewable energy sources by the end of 2026. As part of this effort, the solar power plant (SPP) commissioned at the Erenler Factory now meets 49% of the factory's electricity consumption through in-house generation. The rooftop SPP installed at the Ankara Factory, together with the solar power plant commissioned in Sivas in February 2025, now enables the Ankara Factory to meet 100% of its electricity consumption from renewable sources.

## Climate Focus in Product and R&D Strategy

In 2024, 91% of total greenhouse gas emissions calculated stemmed from the use phase of the products, which represents the most emission-intensive stage in their life cycle. This rate reveals that the majority of the company's carbon footprint originates from tractors in use in the field, which makes reshaping the product strategy with a climate-focused approach a strategic necessity. Accordingly, the product strategy is being restructured to focus on reducing environmental impacts. In 2024, cradle-to-grave Life Cycle Assessment (LCA) studies were completed for four tractor models using Simapro 9.6.0.1 software and the IPCC methodology. The LCA results confirmed these findings, showing that 67% of total emissions from the analyzed products occurred

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during the use phase, followed by 20% from the supply chain (raw materials and production processes), and 10% from the maintenance phase.

In TürkTraktör's product strategy, transformation projects directly impacting the use phase have been prioritized, based on this scientifically established carbon footprint profile showing that 67% of product emissions originate from this stage. As part of this approach, following four years of dedicated R&D, TürkTraktör introduced its electric tractor, the New Holland T3 Electric Power, at the Konya Agriculture Fair, developed entirely by Turkish engineers. Compared to its diesel counterparts, the tractor is positioned as a zero-emission alternative and also mitigates operational cost risks stemming from fluctuations in fuel prices. In 2024, TL 57 million was invested in R&D for the development of the electric tractor, which was launched in March 2024. Also introduced in 2024, the New Holland R3S agricultural robot and autonomous spraying machine enable reduced agricultural inputs through targeted applications, minimize the use of chemicals, and enhance water efficiency. These products not only provide environmental benefits but also support a more climate-resilient agricultural production model. Through this technology-driven transformation, TürkTraktör aims to become a pioneer in sustainable agriculture in both local and global markets.

The company also aims to allocate 70% of its total R&D and innovation expenditures between 2023–2027 to sustainability-focused investments. In this context, approximately 80% of TürkTraktör's 2024 R&D investments were directed toward sustainability-focused R&D. These investments include work on Stage V engine development and integration,

agricultural robots, electric tractors, and smart farming products.

As of 2025, TürkTraktör has entered the withdrawal phase of its commitment under the Science Based Targets initiative (SBTi), as it continues to work on setting targets for Scope 3 emissions. When assessed through factors such as market demand, regulatory pressure, and technological feasibility, no concrete legislation and/or mandatory requirements for alternative fuel or zero-emission tractors and construction equipment have yet been introduced in the EU and/or Turkish markets. This is similarly the case across the sector, where best practices and product strategies remain limited. Therefore, TürkTraktör continues its product development and target-setting efforts.

In this context, efforts to define reduction targets for TürkTraktör's Scope 3 emissions are ongoing. Given the high share of the use phase in total GHG emissions, these targets need to be shaped by technical feasibility, market dynamics, and regulatory developments. Accordingly, the company's comprehensive climate transition plan has not yet been finalized. At present, the climate strategy is limited to operational strategies to reduce Scope 1 and 2 emissions, while the strategic roadmap for transforming Scope 3 emissions is at the analysis and target-setting phase. Once the plan is finalized, the company aims to share its long-term transition planning with the public, integrated into its investment and product development strategies.

## **Sustainability-Oriented Technological Agriculture Practices**

Technological transformation plays a fundamental role in advancing sustainable agriculture. In this regard, TürkTraktör promotes the widespread adoption of digital and precision farming technologies to support farmers in achieving climate-resilient, efficient, and resource-friendly production.

The Tarlam Cepte (Mobile Field) mobile application provides users with real-time information such as meteorological early warnings, weather forecasts, agricultural subsidies, and wholesale and market prices. The application also offers indexes generated from satellite data, including plant health, nitrogen levels, water stress, and irrigation recommendations, enabling users to optimize water and fertilizer use. As of 2024, the application has reached approximately 170,000 users, contributing to climate-sensitive decision-making in agricultural production.

Under digitalization and precision farming practices, the locally developed fleet and vehicle tracking system TTConnect enables the analysis of data collected from tractors while satellite-assisted auto-steering systems help minimize operator errors and prevent unnecessary use of water and chemicals. The TTGuide domestic smart guidance system enables day and night operations and helps reduce overlaps and skips during fieldwork, thereby contributing to savings in chemical inputs, while the Raven Automatic Flow and Rate Control System ensures precise application of agricultural chemicals, preventing excessive chemicals that may harm the soil.

Additionally, through TürkTraktör Drone services, large-scale precision spraying operations are carried out, reducing fuel and pesticide consumption while saving labor and time. Within the scope of Industry 4.0 applications, machine and equipment communication, image-processing-supported plant health detection, early warning systems, and AI-assisted yield prediction systems enable data-driven and environmentally conscious agricultural operations.

The implementation of these technologies not only helps reduce environmental impacts but also contributes to the creation of a resilient infrastructure that ensures the continuity of agricultural production in the face of climate risks.

## **Collaboration in the Supply Chain**

In TürkTraktör's climate strategy, the supply chain is positioned as a supporting element as well as a strategic leverage point for emissions reduction and environmental impact management. Considering that a significant portion of Scope 3 emissions originates from the supply chain, efforts in this area play a critical role in achieving the company's climate targets.

To address Scope 3 emissions from the supply chain, the Supplier Assessment and Development Program under the Koç Holding Sustainability in Supply Chain initiative was launched in 2024 (covering 30 critical suppliers in 2024). The program was conducted in partnership with an independent audit and consulting firm to evaluate suppliers based on GHG data, energy use, environmental certifications, and ethical standards. Accordingly, by the end of 2025, the goal is to complete audits for suppliers that account for 80% of the domestic direct material procurement volume.

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The data collected through supplier assessments supports strategic decision-making to reduce supply risks, minimize environmental impacts, and ensure compliance with environmental standards. Additionally, supplier contracts include commitments to ISO 14001 compliance, and environmentally friendly suppliers are supported under Green Procurement policies.

## **Financial Planning and Resource Allocation**

Investment planning and resource allocation processes at TürkTraktör are structured to support the achievement of the company's emission reduction and energy transition targets, as set out in its climate strategy. In this context, the long-term loan agreement signed with the EBRD in 2023 – amounting to a total of EUR 70 million – has been considered a key financing source for investments in low-emission engine production and the expansion of renewable energy capacity.

The EBRD financing covers modernization investments for the production of EU Stage V compliant engines, as well as solar power plant (SPP) projects installed on factory rooftops. Under the utilization plan for the 2023–2025 period, EUR 15 million was utilized in 2023, EUR 30 million in 2024, and the remaining EUR 25 million in 2025. In 2024, approximately TL 1.1 billion of loan financing was secured, providing a financing cost advantage of around TL 13-14 million compared to the average market interest rates during the allocation period.

This financing facility provides flexibility in TürkTraktör's capital cost management and enables the acceleration of investments aligned with its climate strategy. Through investments in the production of EU Stage V compliant engines, the share of low-emission solutions in the company's product portfolio is being increased, while the solar power plant projects enhance the share of renewable energy in meeting TürkTraktör's electricity demand.

In addition, the internally funded budgets allocated for energy efficiency projects and other investments carried out under the climate strategy reflect the company's commitment to integrating climate risks and opportunities into its financial planning. In this process, factors such as the introduction of an emissions trading system, carbon pricing, and regulatory developments in export markets are also taken into consideration, with resource allocation decisions shaped in line with the requirements of the climate strategy.

Through this structured approach, TürkTraktör strengthens its position as a company with a sustainable investment profile in the eyes of financial markets and enhances its ability to access similar financing opportunities in the future.

# Risk Management

TürkTraktör adopts an integrated approach to managing all financial and non-financial risks as a strategic requirement for ensuring long-term success and sustainability. Environmental, social, and governance (ESG) risks, including climate-related transition and physical risks, are systematically identified, assessed, and managed within the company's corporate risk management system.

## **Risk Management Committee**

At TürkTraktör, risk management is carried out under the supervision of the Risk Management Committee, which reports to the Board of Directors. The Committee is chaired by an independent board member and consists of non-executive board members. At the operational level, the Risk Management and Management Systems Team, which operates under the Central Quality Management Business Unit, is responsible for coordinating all risk management processes.

The Risk Management Committee provides recommendations to the Board of Directors on the identification and assessment of strategic, financial, operational, and compliance risks; the calculation of their impacts and likelihoods; the effectiveness of internal control systems; and the consideration of risks in decision-making processes.

## **Risk Identification, Assessment and Management**

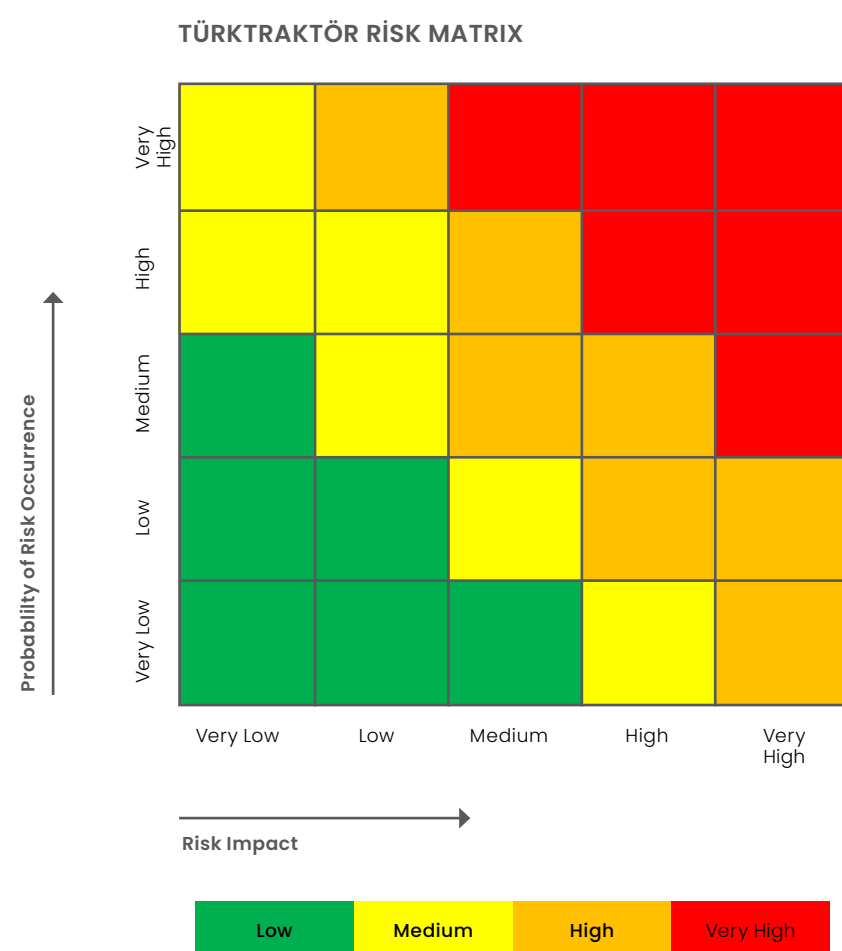
TürkTraktör systematically evaluates its risks using a 5x5 impact and likelihood matrix. Impact assessment is carried out on a five-level scale, ranging from very low to very high, based on how significantly the risk could affect the company's operational and strategic objectives. Likelihood assessment is similarly conducted on a five-level scale, based on how frequently the risk may occur. Risks evaluated by impact and likelihood are classified into four categories according to their risk scores: extreme, high, medium, or low. These categories

help define the criticality of risks, and high-risk items are prioritized by top management and the Risk Management Committee.

In the corporate risk management process, impact assessments of risks are conducted by separately considering their potential consequences in the areas of finance, corporate reputation, people, environment, business continuity, and legal compliance. Within this framework, the following factors are taken into account: the impact of risks on the company's net profit for the period, potential adverse effects on stakeholder relations and media exposure, occupational health and safety incidents that could result in fatalities or permanent injuries, accidents causing environmental pollution at production facilities, long-term disruptions in production or the supply chain, and legal sanctions that could lead to the suspension of operating permits. The magnitude of impact is determined based on thresholds such as production stoppages lasting less than one day or more than twenty days on the operational side, while on the financial side, risks are classified based on thresholds linked to the company's net profit for the period. All these criteria are applied using a 5x5 impact-probability matrix, supported by both quantitative and qualitative assessments. For measurable financial impacts – in alignment with TürkTraktör's corporate risk management matrix – risks with the potential to affect more than 1% of the company's net profit for the period are classified as high-priority risks. The combined use of quantitative and qualitative evaluations demonstrates the company's holistic approach to risk management. When determining probabilities, the frequency of occurrence and the likelihood of realization within a one-year period are assessed and rated accordingly. The same matrix and assessment processes are also applied to the prioritization and monitoring of opportunities.



# Risk Management



Risk identification and assessment processes are reviewed annually, while operational, strategic, financial, and compliance risks are reported to the Risk Management Committee three times a year. Risk management activities are carried out in accordance with ISO 31000 Risk Management Standard and the COSO Enterprise Risk Management Framework.

TürkTraktör strategically and operationally integrates sustainability- and climate-related risks and opportunities into its overall risk management processes. To this end, teams such as the Sustainability Center of Excellence, the Environment and Energy Team, the Product Life Cycle Team, and Risk Management participate in the processes of identifying and assessing such risks and opportunities.

Each team contributes to the corporate risk management process by identifying and evaluating risks and opportunities relevant to their own areas. Climate-related opportunities are addressed under a separate category within TürkTraktör's corporate risk management structure. In this context, risks as well as potential opportunities arising from the climate transition process are systematically evaluated. In meetings held with the participation of relevant departments, key risks and major areas of opportunity for TürkTraktör have been identified, and the potential impacts of these opportunities on operations have been evaluated. The matrix and assessment methodology used in the corporate risk management process was also applied to opportunities, and similar threshold values and indicators were used to determine their significance. For each opportunity, the level of impact, likelihood of occurrence, and strategic relevance were individually discussed. These assessments have served as the basis for determining the actions to be taken regarding opportunities and their alignment with the company's strategy.

The Risk Management Team evaluates and integrates climate-related risks, alongside financial and operational risks, into the reports presented to the Risk Management Committee. Until 2024, climate change risks were reported under a consolidated heading; however, in the upcoming periods, these risks are planned to be detailed and reported separately as physical risks, transition risks, and opportunities. Thus, TürkTraktör aims to ensure more effective monitoring of climate risks in alignment with the strategic goals of the Board of Directors and top management, and to reflect them more clearly in decision-making processes.

Databases such as WRI Aqueduct, scenario analyses like IEA NZE and STEPS, and internal data are used in managing climate-related risks and opportunities. These efforts are supported by external consultancy and stakeholder consultations. Evaluations are carried out both qualitatively and quantitatively, covering strategic, operational, and supply chain stages.

## Integration of Risks into Business Processes

TürkTraktör has strategically and systematically integrated risk management into all its business processes. Before launching any new business process, risks are analyzed through assessment steps, and throughout the process, they are periodically monitored using predetermined risk indicators. Based on the risk levels identified in the assessment, action plans are created, and their implementation is monitored. Risk management is not limited to operational activities but is also integrated into decision-making mechanisms such as strategic objectives, investment decisions, and project management. Risk reviews and improvement activities are supported by internal audit functions and independent audits, ensuring the effectiveness and continuous improvement of the system. Climate-related risks are also evaluated within this framework and are integrated into the corporate risk management process. In this context, transition and physical risks are considered during the design of business processes and in operational and strategic decision-making mechanisms, and are monitored by relevant departments to develop mitigation plans.

# Metrics and Targets

At TürkTraktör, we manage our greenhouse gas (GHG) emissions transparently and regularly monitor our performance as part of our commitment to combating climate change. Our GHG emissions are calculated, reported, and verified in accordance with the ISO 14064-1 standard and the Greenhouse Gas Protocol (GHG Protocol), using the operational control approach. TürkTraktör does not have any subsidiaries or investments that must be included in the emission calculations under the TSRS.

### CLIMATE-RELATED METRICS

TürkTraktör regularly measures and reports its greenhouse gas (GHG) emissions on an annual basis in line with international standards and methodologies.

#### Approach, Inputs and Assumptions Related to Greenhouse Gas Emissions

The measurement of TürkTraktör’s greenhouse gas emissions is carried out in line with the ISO 14064-1:2018 standard and the Greenhouse Gas Protocol: Corporate Accounting and Reporting Standard (2004), based on the operational control approach. The measurement methodology is based on the IPCC TIER-1 approach, using emission factors from the IPCC Sixth Assessment Report (2021) and the UK DEFRA 2024 dataset. Additionally, sector-specific databases such as the USEEIO Model v1.1 by the U.S. EPA are used in certain cases.

Different activity data sources are used for Scope 1, 2, and 3 emissions under this methodology. For example, for direct emissions, TürkTraktör takes into account actual consumption data such as fuel use and stationary/mobile equipment operation, for indirect emissions, electricity consumption and transport

distance data, and for Scope 3 emissions, supply chain, logistics, and product usage. All activity data and emission factors are monitored and recorded according to procedures defined in TürkTraktör’s Integrated Management System.

The data sources and emission factors used in the GHG inventory are reviewed and updated during each reporting period. There were no changes in the methodology used for the 2024 reporting period. The inputs and assumptions used in the measurement methodology are based on standard and up-to-date sources, such as lower heating values of fuels, average consumption coefficients, and sector-based emission factors.

#### Greenhouse Gas Emissions Data

As of 2024, the total greenhouse gas emissions amounted to 10,200,081 tCO<sub>2</sub>e. This total includes Scope 1, Scope 2 (location-based), and Scope 3 emissions.

For 2024, TürkTraktör’s Scope 2 emissions were calculated separately based on location and market approaches. Location-based Scope 2 emissions, calculated based on the amount of grid electricity consumed, were determined to be 13,907 tons of CO<sub>2</sub>e. However, all of the electricity consumption at the Ankara Factory (25,935 MWh) and Erenler Factory (5,786 MWh) was supplied from I-REC certified renewable energy sources. Therefore, the greenhouse gas emissions associated with electricity consumption at these facilities were zeroed out in market-based calculations. This contractual instrument (I-REC) brings TürkTraktör’s 2024 market-based Scope 2 emissions down to 273 tCO<sub>2</sub>e. There were no renewable energy certificates obtained in 2024 for the Akyurt Depot and Izmir Regional Office.

Greenhouse Gas Emissions (tCO <sub>2</sub> e)	2024
SCOPE 1	10,884
SCOPE 2 (LOCATION-BASED)	13,907
SCOPE 2 (MARKET-BASED)	273
SCOPE 3	10,175,290
TOTAL	10,200,081

In reporting Scope 3 emissions, all categories defined under the Greenhouse Gas Protocol have been assessed. However, only those categories deemed to have a material environmental and financial impact on the company’s activities have been included in the calculation. Scope 3 data by category is provided below:

Category-based Scope 3 Emissions (tCO <sub>2</sub> e)	2024
CATEGORY 1 - PURCHASED GOODS AND SERVICES	815,255
CATEGORY 2 - CAPITAL GOODS	23,658.1
CATEGORY 3 - FUEL- AND ENERGY-RELATED ACTIVITIES	3,654.1
CATEGORY 4 - UPSTREAM TRANSPORTATION AND DISTRIBUTION	17,560.9
CATEGORY 5 - WASTE GENERATED IN OPERATIONS	144.7
CATEGORY 6 - BUSINESS TRAVELS	703.2
CATEGORY 7 - EMPLOYEE COMMUTING	2,498.9
CATEGORY 8* - UPSTREAM LEASED ASSETS	*
CATEGORY 9 - DOWNSTREAM TRANSPORTATION AND DISTRIBUTION	20,691.1
CATEGORY 10 - PROCESSING OF SOLD PRODUCTS	37.4
CATEGORY 11 - USE OF SOLD PRODUCTS	9,289,930
CATEGORY 12 - END OF LIFE TREATMENT OF SOLD PRODUCTS	1,157.6
CATEGORY 13* - DOWNSTREAM LEASED ASSETS	*
CATEGORY 14** - FRANCHISING	**
CATEGORY 15*** - INVESTMENTS	***

\*Under Category 8 (Upstream Leased Assets) and Category 13 (Downstream Leased Assets), the financial significance of the leased assets was negligible in terms of emission impact; therefore, they were excluded from the emission calculations.

\*\*Under Category 14 (Franchising), no activities are carried out by TürkTraktör; hence, emissions related to this category were not included in the calculation.

\*\* Under Category 15 (Investments), potential emissions arising from TürkTraktör’s 6.6% stake in the Agrovisio venture (Agrovisio Tarım Bilişim Sanayi ve Ticaret Ltd) were not included in the 2024 calculation, as their share in the company’s total Scope 3 emissions was assessed as immaterial and below the significance threshold in the materiality assessment conducted for the reporting period.

# Metrics and Targets

**Vulnerability to Physical Risks**

TürkTraktör’s main production facilities are located in Ankara and Erenler. According to WRI Aqueduct data, the Ankara Factory is situated in an area with “extremely high” water stress, while the Erenler Factory is located in a “low” water stress region. Within this context, the proportion of TürkTraktör’s facilities exposed to high water stress is 50%. However, identifying vulnerability requires evaluating not just exposure to risk but also the mitigation measures in place and the organization’s adaptive capacity. As TürkTraktör also operates in the Sakarya Basin, which is subject to high water stress, a comprehensive water management strategy is implemented. Water storage systems at the Ankara and Erenler factories provide resilience against extended water cuts (8–10 days). In water-intensive processes, such as the paint lines at the Erenler Factory, water efficiency improvement projects have strengthened adaptive capacity. Through these efforts, the company’s resilience to water-related risks has increased. It is assessed that TürkTraktör does not have vulnerable assets in relation to the significant water stress risk identified as a risk.

**Vulnerability to Transition Risks**

TürkTraktör’s climate-related transition risks mainly stem from its products and raw material sourcing. Based on current assessments, raw material cost increases driven by the Türkiye ETS (Emissions Trading System) are expected to raise TürkTraktör’s operational costs in the short and medium term. However, due to measurement uncertainty in identifying the proportion of raw materials that may be affected, TürkTraktör’s vulnerability to this transition risk cannot yet be clearly determined.

**Climate-Related Opportunities and the Ratio of Aligned Activities**

In 2024, all electricity purchased for TürkTraktör’s Ankara and Erenler factories was sourced entirely from renewable energy under Renewable Energy Certificates (I-REC). In addition, for the year 2024, the share of investments allocated to TürkTraktör’s sustainability-focused R&D projects reached approximately 80%. This figure primarily reflects investments in projects aimed at reducing carbon emissions, such as the development of electric tractors, tractors compliant with Stage V emission standards and autonomous agricultural machinery, and the use of recycled materials.

While the exact percentage of assets and activities aligned with climate-related opportunities cannot yet be calculated, it is expected to increase in the coming period. TürkTraktör is committed to closely monitoring climate-related opportunities and continuously enhancing this ratio through new investments.

Furthermore, the EUR 70 million loan agreement signed with the European Bank for Reconstruction and Development (EBRD) in July 2023 also supports TürkTraktör’s sustainability transformation. This loan strengthens the company’s overall financial structure and offers significant financial flexibility for energy efficiency and carbon reduction projects. The loan usage in 2024 is tracked under the short- and long-term financial liabilities in the financial statements.

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Metrics	2024 Data	Code
TOTAL ENERGY CONSUMED (GJ)	213,133	RT-IG-130a.1
PERCENTAGE OF GRID ELECTRICITY (%)	54%	RT-IG-130a.1
PERCENTAGE OF RENEWABLE ENERGY (%)	62%	RT-IG-130a.1
FOR OFF-ROAD EQUIPMENT: SALES-WEIGHTED FUEL EFFICIENCY (LITERS/HOUR)	13.8	RT-IG-410a.2
FOR OTHER OFF-ROAD DIESEL ENGINES: SALES-WEIGHTED NITROGEN OXIDES (NOX) EMISSIONS (KJ/G)*	-	RT-IG-410a.4
FOR OTHER OFF-ROAD DIESEL ENGINES: SALES-WEIGHTED PARTICULATE MATTER (PM) EMISSIONS (KJ/G)*	-	RT-IG-410a.4

\*Nitrogen oxides (NOx) and particulate matter (PM) emissions are below the threshold values specified in the applicable mandatory regulations. However, as emissions are measured only at the engine family level in accordance with regulatory requirements, and no product-specific measurements are available for each unit sold, it is not possible to calculate sales-weighted NOx and PM values.

Operational Metrics	2024 Data	Code
NUMBER OF TRACTORS PRODUCED	43,611	RT-IG-000.A
NUMBER OF CONSTRUCTION EQUIPMENT PRODUCED	417	RT-IG-000.A
NUMBER OF EMPLOYEES	2,571	RT-IG-000.B

<sup>3</sup> Since TürkTraktör’s product portfolio does not include medium- and heavy-duty vehicles, stationary generators, marine diesel engines, locomotive diesel engines, or on-road medium- and heavy-duty engines, only the applicable metrics within Volume 50: Industrial Machinery and Products have been reported.

# Metrics and Targets

### CLIMATE-RELATED TARGETS

Within the scope of the Carbon Transition Program carried out by Koç Holding, one of its main shareholders, TürkTraktör has set its climate-related targets in line with the goal of becoming carbon neutral by 2050. These targets were approved by the Board of Directors and are regularly monitored. The Sustainability Center of Excellence is responsible for tracking progress toward the targets and reporting to top management and the Board of Directors on a regular basis.

TürkTraktör aims to achieve net-zero Scope 1 and Scope 2 emissions by 2050 and has set the relevant interim targets and milestones. To this end, the company has announced its targets for the years 2026, 2030, and 2040, which include absolute GHG emissions, renewable energy generation, energy efficiency, and decarbonization of logistics operations. TürkTraktör’s emission reduction and carbon neutrality targets cover all greenhouse gases.

These climate-related targets are aligned with the 1.5 °C global temperature increase goal of the Paris Agreement and Türkiye’s 2053 net-zero emissions target. They are also in line with Koç Holding’s group-wide 2050 carbon-neutral commitment.

Additionally, the goal of reducing Scope 1 and Scope 2 GHG emissions by 42% by 2030 compared to the 2021 baseline year has been set in alignment with the Science Based Targets initiative (SBTi) guidelines. Since the target-setting process for Scope 3 emissions is still underway, the SBTi validation process has not

yet been completed. As of 2025, TürkTraktör’s current SBT status has been updated as “commitment withdrawal.” As discussed in the Strategy section of the report, due to limited market demand and the slow pace of change in policies and regulations, TürkTraktör has not yet finalized its Scope 3 reduction targets. The target-setting process is still ongoing.

TürkTraktör monitors its performance annually with respect to its climate-related targets and analyzes the progress made. The data for 2024 indicates significant progress toward meeting the targets. Scope 1 and 2 emissions have decreased by 25% compared to the 2021 base year. This performance reflects alignment with the company’s 2030 target of a 42% reduction.

TürkTraktör’s water performance is also tracked under its Future Impact strategy, particularly within the focus area of Impact Responsibly in Operations and Products. In line with the company’s target to reduce water consumption per product by 2030 compared to the 2019 base year, the 2024 performance was recorded as 2.4, reflecting a 45% reduction from the base year. Accordingly, TürkTraktör has already met this target and aims to maintain it in the coming period.

In its projects aimed at reaching its targets, TürkTraktör makes decisions by taking into account financial return rates, GHG reduction quantities, and financial savings. Although an internal carbon pricing mechanism has not yet been implemented, shadow pricing and similar tools are planned to be evaluated in the future.

Target	Metrics	Aim	Scope	Base Year / Period	Gross / Net	2024 Performance
CARBON NEUTRALITY BY 2050	Scope 1 and 2 emissions (tons CO <sub>2</sub> e)	Absolute reduction	All operations (Scope 1 and 2)	-	Gross	24,791
42% REDUCTION OF SCOPE 1 AND 2 EMISSIONS BY 2030	Scope 1 and 2 emissions (tons CO <sub>2</sub> e)	Absolute reduction	All operations (Scope 1 and 2)	Base Year: 2021	Gross	24,791 (25% decrease compared to base year)
100% RENEWABLE ELECTRICITY GENERATION BY 2026	Amount of renewable energy generated (MWh)	Reduction and adaptation	All operations	Monitoring since 2022	-	6,258
30% REDUCTION IN ELECTRICITY CONSUMPTION PER PRODUCT BY 2030	Electricity consumption per product (MWh / equivalent product)	Intensity	All operations	Base Year: 2019	-	0.8 (34% decrease compared to base year)
CARBON NEUTRALITY OF LOGISTICS OPERATIONS BY 2040	Emissions from logistics operations (tons CO <sub>2</sub> e, Scope 3 Category 4 and Category 9)	Absolute reduction	Upstream and downstream logistics processes	-	Gross	38,252
40% REDUCTION IN WATER CONSUMPTION PER PRODUCT BY 2030	Water consumption per product (m³ / equivalent product)	Intensity	All operations	Base Year: 2019	-	2.4 (45% decrease compared to base year)

To meet its net GHG emission targets, TürkTraktör primarily focuses on direct emission reductions. Accordingly, the company continues to implement and improve energy efficiency projects, renewable energy investments, and low-carbon product development activities across its operational processes. As of the 2024 reporting period, TürkTraktör has not used any carbon credits, nor has it planned to use any in reaching future targets. The company’s emission reduction approach is based primarily on reducing GHG emissions through direct mitigation projects carried out under its own operational control.

**Events After the Reporting Period**  
In February 2025, a 13 MWe solar power plant was commissioned in Sivas, targeting an annual production of 22,537 MWh. This development is covered in the relevant sections of the report, explaining its projected impact on TürkTraktör.

**REPORTING CONSULTANT**

ZOA Sustainability Consulting  
[www.zoaconsulting.co](http://www.zoaconsulting.co)

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