Welcome to your CDP Climate Change Questionnaire 2023

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Migros is the leading supermarket chain of the Turkish food retail sector, which was founded in 1954. Migros has an omnichannel structure in order to get closer to the customers, operating supermarkets, premium supermarkets under Migros (M, MM, MMM, 5M and Migros Jet) and Macrocenter brands, foodservice wholesale, and also online & mobile retailing in Türkiye. Migros Sanal Market (our e-commerce channel) is Türkiye's first, largest and most widely used e-commerce website for food. The nature of the retail sector that focuses on "the people" and being the locomotive of local development directs our target for sustainable growth. We offer our customers a shopping experience that makes a difference with our innovative practices, service quality, competitive prices that contribute to the family budget, and our friendly service approach. We carry out awareness-raising activities for public health as well as our red meat products that we personally control from farm to table and good agricultural practices in plant and animal production where we transfer our expertise in fresh products. We aim to provide our employees with a healthy and safe work environment that supports their personal and professional development. By providing employment in cities we are located, contributing to our producers and giving guarantees to our farmers, we bring vitality to the local economy.

The 367 new stores that Migros opened in 2022 expanded its home-market footprint, bringing the total number in the chain to 2,908. Internationally Migros only operates one shopping mall in Kazakhstan and we have no retail operations. You can find detailed information in our 2022 Integrated Annual Report. We increased the number of households to 100% in 2021. With indirect employment, close to 60 thousand people are employed under the umbrella of Migros. In 2022 we have published our first Integrated Annual Report. Also, in 2022 Migros become a signatory of UN Global Compact. With our Migros Better Future Plan, we aim to protect the rights of future generations by protecting today's resources by taking the view that every step taken for a more habitable world is actually taken on behalf of humanity. Within our Migros Better Future Plan, issues of combating climate change, transition to a low carbon economy and our applications and goals regarding sustainability are all committed to maintain within the framework of international norms, national legal requirements, and UN Sustainable Development Goals (SDG's). As an executive member, the principles of the Consumer Goods Forum (CGF) which is an umbrella organization for retailers and FMCG manufacturers with the

focus on sustainability management (issues such as food waste, plastic waste, deforestation etc.), also leads our commitments and targets. Accordingly, we set our environmental targets to reduce our carbon emissions in line with particularly the Paris Agreement, global initiatives and national targets covered by our business strategy. The sustainability issues that we have addressed at the top management level are particularly efforts to combat climate change and carbon management. In this direction, we determine our short, medium- and long-term actions, and implement them in line with our Company's strategy.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date

January 1, 2022

End date

December 31, 2022

Indicate if you are providing emissions data for past reporting years

Yes

Select the number of past reporting years you will be providing Scope 1 emissions data for

1 year

Select the number of past reporting years you will be providing Scope 2 emissions data for

Not providing past emissions data for Scope 2

Select the number of past reporting years you will be providing Scope 3 emissions data for

1 year

C0.3

(C0.3) Select the countries/areas in which you operate.

Turkey

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

TRY

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	ISIN TREMGTI00012
Yes, a SEDOL code	SEDOL1 B50PPK4 TR

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual or committee	Responsibilities for climate-related issues
Chief Executive Officer (CEO)	Our Board of Directors (BoD) is responsible for determining our strategic approach to sustainability including climate and water-related issues such as sustainable growth, responsible sourcing, climate change, waste and water management. Our CEO, as a member of the BoD and head of execution, has the highest responsibility about water and climate related issues in Migros. CEO is responsible for the execution and implementation of the climate and water-related strategies determined by the BoD, and fulfils this responsibility together with the Senior Management team. Additionally, our Sustainability Committee (SC) was appointed by the CEO to carry

	out the management, implementation, monitoring and measurement of our climate and water related efforts. In the SC, all the main functions of our company are represented, and a discussion environment is offered that offers equal participation and voice to all departments. In another word, the sustainability management approach is handled at the board level by the CEO and managed on the operational level by the SC. Through the Committee, in line with our Environmental Policy and Migros Better Future Plan, we determine our short, medium and long-term actions and set qualitative and quantitative development targets. Departments and working groups working on climate change and environmental management report monthly to their C-Suite Officers who report highlighted issues to the CEO. The Committee consolidates data from the related persons and provides quarterly detailed reporting to the CEO who reports these issues to the BoD also on a quarterly basis. Some examples of climate-related decisions made by our CEO in 2022 are as follows: - Becoming a signatory to UN Global Compact. - Installation of solar panels in our Adana Distribution Center. - Approval of a solar PV investment in three of our distribution centers - Approval of submission of our target to Science Based Targets Initiative for validation.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding annual budgets Overseeing major capital expenditures Overseeing acquisitions, mergers, and divestitures Overseeing and guiding employee incentives	Our Board of Directors (BoD) is responsible for determining the overall strategic approach to sustainability including water and climate-related issues such as sustainable growth, responsible sourcing, climate change, waste and water management. We always try to implement climate-related issues in our governance mechanisms so that our BoD have access to broader information when they are working on the company strategy. In 2022, we have included issues related to our climate transition plan in our governance mechanisms. With this inclusion our purpose is to make sure that the development and

	Reviewing and guiding strategy Overseeing and guiding the development of a transition plan Monitoring the implementation of a transition plan Overseeing the setting of corporate targets Monitoring progress towards corporate targets Overseeing and guiding public policy engagement Overseeing value chain engagement Reviewing and guiding the risk management process	implementation of our climate transition plan is monitored at the highest level. In 2022, 5 BoD meetings were held, and in some of these meetings the following climate related issues are scheduled agenda items: - Sustainability strategy including climate-related issues - Climate-related targets - Development and implementation of our climate-transition plan - Climate-related risks and opportunities - Inclusion of climate-related performance indicators into employee incentives Our CEO, as a member of the BoD is the head of execution and he is responsible for briefing the board on climate-related issues. The implementation of the water and climate-related strategies are also the CEO's responsibility and he fulfills this responsibility together with the senior management team.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues
Row 1	Yes	The competence of the Board Members on climate-related issues is assessed by reviewing their climate related previous experiences, responsibilities, representations, national/ international publications etc. Currently, we have 3 Board Members who are competent on both climate and water-related issues.

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Position or committee

Other C-Suite Officer, please specify

Our Corporate Communications Group Director and Head of Sustainability Committee report directly to our CEO. This title is accepted as a C-Level position in Migros as it reports directly to the CEO.

Climate-related responsibilities of this position

Developing a climate transition plan
Integrating climate-related issues into the strategy
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Managing value chain engagement on climate-related issues
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

Quarterly

Please explain

The Corporate Communications Group Director and Head of Sustainability Committee (CCD) report directly to our CEO. This title is accepted as a C-Level position in Migros as it reports directly to the CEO.

Our Corporate Communications Group Director (CCD) has been appointed by the CEO as the Head of the Sustainability Committee (SC) and she has the highest responsibility for climate-related issues right after our CEO. This is a supra-departmental position in Migros. The Head of SC reports directly to our CEO who is also a member of our BoD. Together with the Sustainability Committee, our Corporate Communications Group Director is responsible for the development of the climate transition plan, setting and monitoring of climate-related targets and assessment and management of climate-related risks and opportunities.
Being the highest-level position in corporate communications, our CCD is also responsible for integrating climate-related issues into our strategy and making sure that our sustainability strategies are in line with our corporate strategy.

Position or committee

Sustainability committee

Climate-related responsibilities of this position

Providing climate-related employee incentives
Developing a climate transition plan
Implementing a climate transition plan
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Managing value chain engagement on climate-related issues
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

Corporate Sustainability/CSR reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

Quarterly

Please explain

The Sustainability Committee (SC) was established through the participation of senior managers representing the main functions of the company and is chaired by the Head of SC.

Our SC carries out the management, implementation, monitoring and measurement of our sustainability and climate-related efforts with the appointment of our Chief Executive Officer on behalf of our Board of Directors.

The SC reports through the Board quarterly through the Corporate Communications Group Director and Head of Sustainability Committee (CCD) which is equivalent to CSO in Migros.

In our Sustainability Committee, all the main functions of our company are represented, and a discussion environment is offered that offers equal participation and voice to all departments. The SC has representatives from all of our business divisions including “quality and environmental management”, “energy management and construction”, “marketing”, “supply chain and logistic”, “internal audit”, “risk management” and “corporate communication”. There is a total of 120 members in our Sustainability Committee, and all departments are represented at the director level.
The SC assesses environmental, operational, socio-economic risks and opportunities that may affect the existence and activities of our company, monitors and analyzes sustainability and climate-related issues, identifies KPIs to be used in tracking performance and carries out projects to achieve set performance targets.

Through the Committee, in line with our Environmental Policy and Migros Better Future Plan, we determine our short, medium and long-term actions and set qualitative and

quantitative development targets. At least one of the annual goals of all the main functions of our company is required to be in the field of sustainability and its activities in this field directly affect the annual performance premiums. Our SC annually audits the adequacy and effectiveness of our 'Environmental' and 'Responsible Procurement' policies by receiving information from all department managers. These corporate policies are expected to be known and owned by all our employees. All department managers, who form our SC, demand and follow their teams to implement these policies. In addition, the developments and results related to these studies are reported to our CEO, Senior Management and to the BoD quarterly.

There are also sub-working groups affiliated with the SC focusing on particular topics such as water management, energy efficiency, food waste, plastic waste, improving the packaging of private label products.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	At least one of the annual targets of all the primary functions of our company is in the field of sustainability, and the activities made in this field directly affect the annual performance premium (bonus). Department managers who make up our committee carry out the request and follow-up processes regarding our corporate policies, which we expect to be followed by all our employees. We also use the Migros Rewarding System to appreciate the performance of our employees in creativity, added value and teamwork. In this context, we provide initiatives for the attainment of climate-related targets to our staff. We will explain these initiatives in detail below.

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive

Other C-Suite Officer

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Board approval of climate transition plan
Progress towards a climate-related target
Achievement of a climate-related target
Company performance against a climate-related sustainability index (e.g., DJSI, CDP Climate Change score etc.)

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

The Corporate Communications Group Director and Head of Sustainability Committee (CCD) report directly to our CEO. This title is accepted as a C-Level position in Migros as it reports directly to the CEO. Our Corporate Communications Group Director (CCD) has been appointed by the CEO as the Head of the Sustainability Committee (SC) and she has the highest responsibility for climate-related issues right after our CEO. This is a supra departmental position in Migros.

The timeframe of the performance indicators varies, i.e. if the indicator is linked to a climate-related target, then the achievement of the target is long-term (i.e. until 2030), however progress towards a target is monitored annually.

10% of the KPIs of our CCD comes from sustainability related indicators. The successful achievement of KPIs result in a bonus as % of salary.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

This incentive contributes to our climate commitments because it is directly related to our climate transition plan and our GHG emission reduction targets.

Entitled to incentive

Other C-Suite Officer

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Implementation of an emissions reduction initiative
Reduction in absolute emissions

Energy efficiency improvement
Increased share of renewable energy in total energy consumption
Reduction in total energy consumption

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

Chief Expansion, Property and Construction Officer (CPO) has an emission and energy reduction target that affects his balanced score card performance by 10-20% which directly affects the amount of yearly cash bonus that is going to be paid to him by the company. CPO also has an emission reduction project target to increase the number of stores that use natural refrigerants.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

These incentives are included in both short-term and long-term incentive plans of our CPO and they contribute to the achievement of our 42% GHG emission reduction target by 2030. To ensure the achievement of our climate commitments, we have made a projection until 2030 and developed a roadmap that determines the actions to be taken, and the implementation of these actions are linked to the incentive plan of our CPO.

Entitled to incentive

Other C-Suite Officer

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Progress towards a climate-related target
Implementation of an emissions reduction initiative
Reduction in absolute emissions
Increased engagement with suppliers on climate-related issues
Increased supplier compliance with a climate-related requirement
Increased value chain visibility (traceability, mapping, transparency)

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

Quality and Environmental Management Directorate (QEMD) is responsible for monitoring, calculation, reporting and verification of our GHG emissions QEMD reports all GHG management related data to our Chief Supply Chain & Logistics Officer (CSCO). Our supplier network and carbon hub where we collect Scope 3 related data is

also reported to our CSCO by QEMD and Sustainability Management Group Directorate.

Our CSCO has a target to increase efficiency in supply chain operations and also a target for route optimization in supply chain. These targets are implemented in his short- and long-term incentive plans and they contribute to reduction of our Scope 3 GHG emissions.

These targets have 10-20% impact on the balance scorecard of the (CSCO) which directly affects the amount of yearly cash bonus that is going to be paid to him by the company.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

This incentive contributes to the implementation of our climate commitments by contributing to the reduction of our Scope 3 GHG emissions.

Entitled to incentive

Other, please specify

Maintenance and Energy Management Director

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Implementation of an emissions reduction initiative
Reduction in absolute emissions
Energy efficiency improvement
Increased share of renewable energy in total energy consumption
Reduction in total energy consumption

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

Maintenance and Energy Management Director has an emission and energy reduction target that effects his balanced score card performance by 10-20% which directly affects the amount of yearly cash bonus that is going to be paid to him by the company. Maintenance and Energy Management Director also has an emission reduction project target to increase the number of stores that use natural refrigerants.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

These incentives are linked to both short and long-term incentive plans of the Maintenance and Energy Management Director, which also contributes to the achievement of our climate targets.

Entitled to incentive

Procurement manager

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Increased engagement with suppliers on climate-related issues
Increased supplier compliance with a climate-related requirement
Increased value chain visibility (traceability, mapping, transparency)

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

For every category (fruits-vegetables, meat, dairy products etc.) we have marketing directors who are responsible for sustainable sourcing of the goods that are sold at our stores. The marketing directors are the highest level responsible for procurement and they are directly below C-Level in the Migros executive structure.

All of our marketing directors have targets linked to sustainability-related KPIs like sustainable agriculture, management of plastics, supporting local production, etc. These KPIs make up 10-15% of their overall performance score. When they achieve their targets, they receive a bonus as a % of their salary.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

This incentive contributes to the implementation of our organization's climate commitments by reducing our Scope 3 GHG emissions.

Entitled to incentive

All employees

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Energy efficiency improvement
Reduction in total energy consumption

Incentive plan(s) this incentive is linked to

Not part of an existing incentive plan

Further details of incentive(s)

All departments at Migros are expected to have at least one sustainability related target that supports the company's main targets. With this approach we are aiming to include all employees in our sustainability journey.

Our Good Idea, Good Project platform aims to assess the new and creative ideas of all our employees through the Idea Hunters from different departments and to put into practice those that are found appropriate, and to make the projects compete with each other. Ideas are evaluated in 10 categories such as efficiency, sustainability and technology, etc.

A total of 1,541 ideas were submitted in 2022. Among those ideas communicated since 2020, a total of 35 projects were put into effect. The employees whose ideas are selected for implementation are given a monetary reward.

Migros also has an application called QuizGame for its employees. The application aims to train employees on company initiatives and strategic decisions made by the company with entertainment. Questions about sustainability and climate change are also included in QuizGame which repeats many times during the year. Employees who complete the Quizgame successfully are rewarded with cash prizes, discounts and gift cards.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

This incentive contributes to the implementation of our climate target as it increases awareness among our employees while also increasing the willingness of our employees to contribute to our sustainability efforts.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	1	Short-term is identified as 0-1 years in Migros. We also set our short-term targets on an annual basis.
Medium-term	1	5	Medium-term is identified as 1-5 years in Migros. We also develop our medium-term strategies on a 5-year basis
Long-term	5		Any time horizon over 5 years is considered as long-term in Migros.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Impacts at the corporate level may become substantive depending on the proportion of business units or facilities affected, the size of the impact(s), the results of the impact, and our business' dependency on those business units or facilities (e.g. key distribution center) etc.

The impact level of risk is determined using the risk assessment criteria identified by our risk management department. In order to determine the impact of a risk we use both financial and non-financial criteria. For climate change and water-related risks we use a different impact scale, because although these risks are assessed within the company-wide risk assessment systems, it is not easy to accurately identify the impacts as there are many variables when it comes to climate science.

We identify a climate-related risk to have a substantive impact when:
1. Financial:
a. The risk has an impact of more than 1% of our EBITDA. Our EBITDA is 6,286,423,000TRY for the reporting year, so the substantive impact threshold for financial impact is identified as 62,864,230 TRY
b. The risk has an impact of more than 0.05 % of our revenue. Our revenue is 74,501,977,000 TRY for the reporting year, so the substantive impact threshold for financial impact is identified as 37,250,988 TRY

2. Strategic Market Position (Market-Share):
a. Risk results in a 1% loss in market share
If the risk impact is above any of the given figures, then it is directly classified as substantive regardless of the probability score. Because especially in climate-related risks, the probability of occurrence can not be identified as a probability to occur in a year. Both transitional and physical climate risks and opportunities have to be assessed in longer periods of time.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

With the Migros internal control system, risks related to the operational, functional and financial performance of our processes and units are defined, examined independently and the results are presented to the management of our company. The risk assessments are performed bi-annually covering all value-chain stages and short-medium and long-time horizons.

As an example, climate-related transitional risks are assessed within short-medium and long-term time horizons, whereas physical climate-related risks are usually assessed within medium to long-term time horizons.

Our company's Risk Management are activities based on a holistic perspective.

The Company Risk Management process entails the following:
• Defining risk criteria,
• Creation of risk assessment (impact and likelihood) scales,
• Preparation of consolidated risk inventory,
• Development of necessary action plans for mitigating and/or eliminating the risks in question,
• Description of the targeted risk management framework, and
• Integration of established aspects within the Company Risk Management system.

Identification of risks:
Our CFO and the Early Detection of Risks Committee steer the actions of The Risk Management Group Directorate. The aim of The Risk Management Group Directorate is to first detect the risks that may have an impact on the development and continuity of our operations, then taking the necessary measures, and implementing actions against the identified risks.
The Risk Management Group Directorate is responsible for managing company-wide

risks and is supported by the Sustainability Committee for the management of specific sustainability risks. The Committee monitors and analyses all sustainability issues including climate change-related risks and opportunities which may influence Migros' assets, operational and commercial practices. Sustainability risks, arising from the failure of adapting to climate change (transitional & physical), are among the primary risks evaluated by The Risk Management Group Directorate.

Assessment of the risks:
To assess the risks, we are using risk scoring criteria and rating the risk topics from 1 to 4 according to two criteria.
The first criterion is the impact of the risk, which is evaluated under three topics:
• Financial: Impact of the risk on EBITDA and revenue
• People (OHS, HR, Employee Satisfaction): Number of injuries, employee satisfaction surveys
o Reputational impacts
o Impacts on stakeholders (Suppliers, Employees, Customers, Partners),
o Strategic impacts (Market place, market share) and
• Compliance (Legal): Legal fines, investigations and reviews
The significance of the risk is determined by the impact scale, and as mentioned in section 2.1b of this report, if the impact is above the given thresholds regardless of the probability, the risk is assessed as substantive. Risks with lower impacts are further assessed according to their "probability of occurrence", which is scored as follows:
1. Negligible risk
2. Having a medium possibility with a possible chance of occurrence.
3. Risk has a high chance of occurrence
4. Almost certain to occur
After a risk is scored both on impact and probability scales (A scale of 4 for each), the scores are multiplied to find the overall risk score. The final risk scores between 12-16 (max) are rated as severe risk, 9-8 is rated important, 3-6 is rated as Medium and 1-2 is rated as negligible risk.
Both physical and transitional impacts of climate change are assessed as risks using this procedure. To determine the risks and opportunities associated with climate change, a team of our departments, which are affiliated with the Sustainability Committee, performs assessments.

Risk Response:
Risks that overlap with the issues covered by global initiatives such as TCFD (Task Force for Climate-Related Financial Disclosures) are reported to our Senior Management in order to develop solutions by following the possible and current financial results. While climate risks are integrated into multi-disciplinary company-wide risk identification, assessment, and management processes through The Risk Management Group Directorate as explained above, Migros Sustainability Committee is the prime functioning unit for the assessment of specific climate risks.
In order to manage risks related to operational, functional and financial performance, which are important for our company, these risks are defined in detail in the Migros Internal Control System, and they are independently examined to ensure accurate

information transfer and the results of the examination are presented to the management of our Company.
Within the scope of sensitivity analysis and risk tests for risk management, we make scenario analysis about the main risk issues, test risk levels and identify the response strategies by taking the necessary measures in this context.
In all our business processes, risk restriction is applied with the principle of diversification of the supply chain by working with more than one supplier and service provider on any type of product/service. Risk transfer is managed through processes such as insurance and different service purchases.
Also, we manage all environmental activities and risks (especially acute and chronic physical climate-related risks) through our certified ISO 14001 Environmental Management System which covers our activities in all our business units in Türkiye. In this context, all our environmental activities and risks are managed by environmental impact assessment procedures. We follow the ISO 14064 principles to monitor and measure our corporate greenhouse gas inventory and monitor our GHG impacts closely. Electricity consumption, fuel and natural gas consumption, refrigerant leaks and leaks in fire extinguishers are monitored very closely and are included in the risk assessment process according to the results obtained.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Risks related to current regulations are always evaluated as transition risks in our risk assessments as we would not be able to operate if we are not in line with the local regulations. Being a primary topic in our risk assessments, regulatory risk assessments also include current climate-related regulation, which is closely monitored by our Risk Management Group Directorate and Sustainability Committee. According to the Energy Efficiency Law in Türkiye, all qualifying new and current buildings must meet minimum design requirements for energy efficiency, as of December 2020. These requirements are identified and structured with Energy Performance Certificate (EKB); therefore, it is obligatory to obtain an EKB for all the buildings owned or rented by Migros. If we do not comply with this regulation, we have the risk of facing sanctions that will have a financial impact on us. Also, as a part of the “Zero Waste Project” of the Ministry of Environment, Urbanization and Climate Change, there is a “Zero Waste” regulation that requires setting up Waste Management System

		and obtaining a certificate for chain markets and for some distribution centers. The Project focuses on reducing waste and recycling methodologies, indirectly, it aims to reduce GHG emissions. We aim to obtain Zero Waste Certificate in all our facilities. We are in close contact with the Ministry and play an active role in the establishment of the system, sectoral compliance and informing consumers. According to the regulation published by the Ministry of Environment, Urbanization and Climate Change, shopping bags became chargeable as of January 1, 2019. During this transition period, we carried out intensive awareness activities and campaigns to inform our customers and direct them to environmentally friendly multi-use bags. The use of plastic bags in 2022 was 55% less than in 2018 when there were paid sales. In 2022, we sold 2,257,495 environmentally friendly multi-use bags.
Emerging regulation	Relevant, always included	For the sake of the continuity of our operations, all emerging regulation is under the radar of our Risk Management Group Directorate. All regulatory risks are of primary importance to Migros as we wouldn't be able to operate if we are in violation of any regulatory obligations. In order to better assess and manage climate-related emerging regulatory risks, our Risk Management Group Directorate is supported by the Sustainability Committee. At the end of 2020, a draft Climate Change Regulation was published under the World Bank Lead Partnership for Market Readiness Program. Although this regulation is still not presented to the Grand National Assembly of Türkiye, it gives us a basic concept of the regulations that we will face in the near future. The regulation gives the signals of an emerging Emission Trading System (ETS) and/or potential Carbon Taxation mechanism in Türkiye, which we have already factored into our risk assessments. The F-gas regulation was implemented on January 1, 2015, in the EU. The regulation put in place an HFC phase-down from 2015 to 2030 by means of a quota system and sectorial bans on high GWP refrigerants. The effects of the EU Regulation will also be seen in Türkiye. The use of refrigerants with low GWP is likely to become widespread. Conventional HFC supply is expected to decrease gradually and this gas prices are expected to increase also. We predict that non-natural gas and high GWP refrigerants will be banned by 2030. Refrigerant gases account for 96.04% of scope 1 emissions in Migros. This is implicating a strong investment need for

		Migros in order to align its site with the emerging regulation. In 2022, we have increased our renewable energy consumption by 74,100 MWh, reaching 134,413 MWh. For the reporting year, 21.42 % of our electricity consumption comes from renewable sources.
Technology	Relevant, always included	Technology has a major impact on our risk and opportunity assessments, therefore technological developments are always included in our risk assessments. Climate-related risks related to technology are always evaluated as a transition risk in our risk assessment. We use technology to decrease negative impact of climate change and help achieve our sustainability goals through using better and higher efficiency equipment (i.e. natural cooling efforts are described below). In our retail operations, we focus on the use of natural refrigerants, more efficient and next-generation systems in cooling systems. For our cooling cabinets, we have tried a way to circulate cold water and use natural refrigerants to cool the circulating water since 2016. Instead of hydrofluorocarbon (HFC) in the cooling systems in our distribution centers and stores, we are implementing our innovative practices for the use of natural refrigerants or environmentally friendly systems that can work in harmony with the climate of our country. However, these systems' installation costs and electric consumption are higher than the HFC-based refrigerants. We currently have this system in 54 stores and facilities, and we will use this system in every new store starting from 2022. The ongoing replacement of existing refrigeration systems in stores with Migros-patented ones that use cold water instead of gas as a refrigerant is helping to reduce greenhouse gas emissions. To reduce electricity consumption, refrigeration, air-conditioning, and lighting systems are centrally controlled and existing systems are being replaced with newer and more efficient ones. 21.42% of the electricity that Migros used in 2022 was from renewable sources.
Legal	Relevant, always included	Climate-related risks related to legal changes are always evaluated as a transition risk in our risk assessment. We are aware that any sanctions, lawsuits or penalties related to environmental issues may harm our image and create a reputational risk which can affect our sales negatively. In this context, we have put in place audits and risk assessments on environmental issues and compliance with laws and regulations related to climate change to mitigate this risk. So, there were no climate-related litigation claims in 2022. Additionally, as a part of our ISO 14001 certification, independent auditors conducted 1 unit audits in total; we

		conducted internal audits at 2,908 stores and 58 other types of facilities (i.e. distribution centers, warehouses, meat processing facilities, etc.). Also, before deciding to work with supplier companies, business partners and agencies, we conduct a thorough review and investigation of financial, legal and ethical risks and opportunities associated with companies. 517 GC Ethical Conformity supplier audits were conducted in the areas of environment, ethics, and occupational health & safety, 84.09 % of our suppliers have successfully passed GC Ethical Conformity audits. Also, the opening of new stores and their audits are made within the framework of legal regulations. For this reason, all changes and decisions that occur will affect our business materially or commercially.
Market	Relevant, always included	Being a retail company, we are always face to face with our customers and the changes in our customers' preferences and demands, are very important to us and always evaluated as a transition risk in our risk assessment. This risk type is always included in our risk assessments and the Sustainability Committee assists our Risk Management Department for the identification, assessment and management of climate-related market risks. In 2022, a survey on Sustainability Trends was conducted with 405 Migros customers to understand their perspectives on the concept of sustainability and their daily practices in this regard. As a result of the study, 78% of the participants stated that a brand's environmental/recyclable options are effective in which brand they prefer to purchase. In parallel, 43% of customers stated that they tended more towards sustainable products compared to last year. In line with this work, we shape our services within the scope of our customers' demands and expectations. As an example, 6% of our products by number are classified as sustainable/eco products. In 2021 the share of sustainable products in our revenue was 3.92%, this value has increased to 7% for the reporting year. This increase alone shows how the customers' preferences are changing and how this can be an opportunity for Migros. This opportunity is assessed in more detail in Opp1 under section 2.4a of this report. Also, unexpected natural events triggered by climate change (storm, flood, frost etc.) has a negative impact on the production and harvest of agricultural products. This leads directly to high-trend changes in product prices and may negatively impacts sales. In 2022, the weather conditions affected especially drupes (peaches, nectarine, apricots, plumes) and strawberries. In some regions, the

		tonnage rates increased as a result of climate change, while some of them decreased as a result of bad weather events such as hail. The average tonnage losses of the above-mentioned products are 28,1%. With the effect of extreme weather events, the average purchase cost of these products increased to 113%.
Reputation	Relevant, always included	Being the market leader in the food retail sector, our reputation is of utmost importance to us, therefore climate-related reputational risks are always included in our risk assessments. We are aware that the sensitivity to climate-related issues has increased on both our customers' and investors' sides. It seems that there is a higher level of trust in companies that prioritize work on climate-related activities. A small negative impact on the environment, spreading with a tweet or news, can lead to irreversible loss of reputation and thus loss of customers for a company. To mitigate this type of risk, apart from complying with legal requirements and regulations, we take pioneering steps in many environmental issues on a voluntary basis and carry out projects with non-governmental organizations. 2022, we reduced the rate of plastic bag usage per transaction by 21 % within the plastic bag-free shopping movement, we collected 36.9 tons of waste vegetable oil and 3.8 tons of waste batteries, we recycled 19,833 tons of packaging waste, we sent 133 tons of electrical and electronic equipment for recycling and we sold 2,257,495 environmentally friendly multi-use bags.
Acute physical	Relevant, always included	We have 2,908 stores all over Türkiye and are being dispersed into every city in Türkiye, possible physical impacts of climate change are very closely monitored by our Risk Management Group Directorate with the help of our Sustainability Committee. Several weather events like floods, heavy rainfall, hail or droughts, may affect not only our direct operations but also the operations of our suppliers, and create a chain reaction that emerges other types of risks. These events can cause damage to our stores and distribution centers that make our stores or distribution centers unable to serve or may cause problems related to the health and safety of our employees and customers in these affected stores. Floods are more common, especially in regions that have more rainfall. If there is an increase in climate-related events such as floods and snow, there will be financial loss and short-term deficit in our stores as sales operations will stop when the stores are closed. In this context, we take some precautions to mitigate specific climate or water-related risks. In 2022, by using the WRI Aqueduct water risk atlas

		tool, we assessed the water stress risk level for each of our facilities by identifying the cities they are located at. We categorized the cities where all our facilities are located as having High to Extremely High Flood Risk Levels between 40-80% and more than 80% respectively and we have completed our calculation by proportioning the number of facilities. We included precipitation changes in our risk assessment for the next 5 and 10 years, as the storms in 2021 caused significant losses. In 2022, a total of 240 of our stores and 3 distribution centers were affected by floods, and storms caused by climate change and suffered material damage. In this context, we anticipate that the damage caused by snow, storms and floods will increase and as a result, the loss that may occur in our stores alone is projected to be between 6.2 to 99.8 million TRY in 2032. The details of this risk can be seen under section C2.3a of this report. We ensure our stores as a precaution against possible floods and other natural disasters. Using the WRI Aqueduct Water Risk Atlas tool we identified that 2,519 facilities of Migros located in water stress areas and 864 of our facilities located in flood risky areas. These events also create risks related to our suppliers.
Chronic physical	Relevant, always included	Being operational all over Türkiye, both acute and chronic physical impacts of climate change are always included in our risk assessments. Changing precipitation patterns and types, water scarcity and heat stress are among the chronic physical risks Migros is facing in the long term. As 77% of our products are of agricultural origin, the chronic impacts of climate change have always been under our radar. Especially for our agricultural value chain, in 2021, we started working on regenerative agriculture practices and reducing carbon emissions of agricultural products. In 2022, we have rolled out our first Rainforest Alliance-certified private label product, M Life raw hazelnuts, as part of our goal of expanding our line of sustainable product offerings by 2025. Migros deals with issues pertaining to combating climate change, transitioning to a low-carbon economy, and to sustainability within the overall framework of international norms, national legal obligations, SDG, and Consumer Goods Forum principles. Having improved its daily carbon emissions/m2 sales area performance by 38% in the course of six years between 2015 and 2021, in 2021 the company has set itself a new absolute emission reduction target to reduce Scope 1 and Scope 2 emissions by 42% from a 2020 base year until 2030. This target is in line with the SBTi 1.5°C ambition.The ongoing replacement of existing refrigeration systems in stores with Migros-patented ones that use cold water instead of gas as a refrigerant is helping us reduce our GHG emissions to reach our ambitious targets.

		To reduce electricity consumption, refrigeration, air-conditioning, and lighting systems are centrally controlled and existing systems are being replaced with newer and more efficient ones. 21.42% of the electricity that Migros used in 2022 was from renewable sources. We have built automation systems to help recognize, monitor and manage the trending in-store temperature changes. We installed an automation system that centrally controls our cooling, air conditioning and lighting systems to monitor our energy consumption. We carry out efficiency activities in order to save our energy consumption arising from distribution and logistics, and to reduce our greenhouse gas emissions arising from logistics. Number of stores with cooling automation is 2,651, with air conditioning automation is 1,957 and with lighting automation is 1,823. In 2022, with our energy efficiency projects we have saved 13,081 MWh of electricity.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Upstream

Risk type & Primary climate-related risk driver

Acute physical

Heavy precipitation (rain, hail, snow/ice)

Primary potential financial impact

Decreased revenues due to reduced production capacity

Company-specific description

One of the important risks that may arise during the procurement process is the disruption in harvest and the supply of agricultural products due to severe weather events such as rain, hail, snow, ice or drought related to climate change, in the locations where agricultural products are grown.

This leads directly to high-trend changes on product prices and negatively impacts sales

because of the availability of products.

We use the WRI Aqueduct Food and Country Rating Tools to avoid any problems related to drought and water stress in the production and supply of agricultural products, which constitute 77% of the sales in our stores. In order to avoid a problem in the procurement process of the products that affect our revenues most in agricultural products, we follow the acute physical risks in cities where these products are grown, and the risk of heavy precipitation, drought and seasonal variability on a product basis.

In 2022, the weather conditions affected especially drupes (peaches, nectarine, apricots, plumes) and strawberries.

In some regions, the yield decreased as a result of climate change, while some of them decreased as a result of heavy precipitation events such as hail. The average yield losses of above-mentioned products were 28.1% in 2022. This reflected as a decrease in our revenues from these agricultural products due to their reduced production.

In 2022, we had about 27% loss of sales tonnage for some fruits and vegetables which resulted in a revenue loss of TRY 37.6 million.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

37,600,000

Potential financial impact figure – maximum (currency)

219,000,000

Explanation of financial impact figure

Approach used to calculate the impact figure:
For the minimum financial impact, the realized impact of the extreme weather events is calculated.
We have analyzed 10 fruits and 10 vegetables, of which our sales are the highest.
For the maximum financial impact, the results of our climate-related scenario analysis are used. According to our analysis there is a very strong possibility that the frequency and severity of extreme weather events will increase, therefore the impact of the events

in 2022 may be doubled in the not-so-distant future. For example, as a result of the late arrival of summer temperatures in 2023 it is expected that there will be seasonal shifts in September and October, and all fruits and vegetables may be highly affected by this situation.

Figures used in calculation:
Average yield loss: 28.1%
Loss of sales tonnage in 2022 for the specified fruits: 27%
In 2022, our revenue loss in 10 vegetables and 10 fruits, was calculated as TRY 37.6 million (min. financial impact figure)

Assumptions:
For the maximum impact, we have assumed we are on the path to the worst-case scenario (RCP 8.5)
According to the Climate Change Projections for Turkey Report, in Turkey within the framework of IPCC's RCP 4.5 and 8.5 scenarios Euphrates -Tigris basin will be impacted the most.
There will also be a significant decrease in precipitation in the Western Mediterranean region where we source some of our products.
For the same 10 fruits and 10 vegetables, the loss of revenue for the year 2030 is calculated as 219,000,000 (max. financial impact figure).

Cost of response to risk

1,200,000

Description of response and explanation of cost calculation

SITUATION:
Agricultural products are extremely vulnerable to climate conditions. There is a risk of increase in extreme weather events, which directly impact agriculture. In 2022 we have lost 27% of sales tonnage of the products that were impacted by extreme weather events.

TASK:
Monitor climate-conditions and impacts on our suppliers in order to manage an upcoming loss of agricultural products.

ACTIONS:
We have local teams that manage the potential climate-related loss of agricultural products in the regions where we source our products from. These local experts are highly experienced in agriculture processes and are able to foresee the amount of loss we may expect when such an extreme weather event happens.
Thanks to our local experts we are able to take an early position and try to diversify the suppliers.
We also use the WRI Aqueduct Food to assess water risks for suppliers, which relies on two different climate-related scenarios for projecting future changes to water supply, seasonal variability, demand, etc. Thanks to this tool, we get information on what water risks and food security risks are, especially regarding agricultural products. In this

process, we work with an external consultant to specify other potential procurement locations for products that we experience a revenue loss.

TIMELINE:
Since this is an action that is performed continuously and will continue in the future, the timeline for this action can be defined as ONGOING.
The cost of response is calculated as 1.2 Million TRY, and includes the salaries of Migros experts only for the time period when they work to overcome the impacts of climate-related events.

RESULTS:
Through working with the teams that have the right expertise, the supply chain and the purchasing regions are planned diligently so that the negative consequences of the climate-related risks are minimized.

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical
Heavy precipitation (rain, hail, snow/ice)

Primary potential financial impact

Decreased revenues due to reduced production capacity

Company-specific description

Heavy precipitation events driven by climate change have serious impacts on our business. Depending on the location of the event, there may be several risks on our business:
1. Damage to our property and/or goods that are in stock in our distribution centers
2. Forced temporary shut-down of operations-facilities & stores
3. Health and safety risks for our customers and employees

In 2022 we had disruption to sales in 240 stores due to heavy precipitation related weather events, which resulted in shut-down of stores from a few hours up to four days. As a result of heavy precipitation events, we have experienced loss of revenue in these 240 stores. In 2021 this figure was much lower where we had disruption in sales in only 13 stores.
Keeping in mind that precipitation regimes will change as a result of climate change, we are expecting to experience more severe weather events much more frequently than

ever before experienced. This increase in number of stores impacted, is an indication that the physical effects of climate change may become much more serious in the future.

Time horizon

Long-term

Likelihood

Virtually certain

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

6,203,021

Potential financial impact figure – maximum (currency)

99,813,664

Explanation of financial impact figure

Approach used to calculate the figure:
The financial impact of this risk depends on the magnitude, frequency and location of the events, however, the initial impact is the disruption of sales in damaged stores.
In the first quarter of 2022, there was a heavy snow event, and this event alone had a major impact on our operations.
In 2022 we had disruption to sales in 240 stores due to heavy precipitation related weather events, which resulted in the shut-down of stores from a few hours up to four days.
While calculating the financial impact of the events in 2022, we used the average hourly revenue of each store and multiplied it by the number of hours that the store was forced to shut down due to weather events.
For 2022, the financial impact is calculated as a loss of sales equal to 12,981,823 TRY. However, it wouldn’t be a viable assumption that we would have a similar impact every year.
According to the study "Climate Change Projections for Turkey: Three Models and Two Scenarios" precipitation amounts are expected to become more irregular with the impacts of climate change. In both RCP 4.5 and RCP 8.5 Scenarios, an increase in precipitation is expected in winter in the first period (2016-2040).
With the increasing intensity of climate change, it is expected that the severity of these events will also increase.
The impacts are calculated for the year 2032.

Assumptions:

For the min. impact it is assumed that there is no heavy snow event (like the one in 2022).
For the max. impact it is assumed that there is a heavy snow event similar to the one in 2022.
It is assumed that we have the same levels of operation, i.e. growth rate is not included in the calculations for simplification purposes.
Both calculations are basically financial projections of the financial impacts of the events in 2022.
Different inflation rates are applied for each year.

Results:
The min. financial impact is calculated as 6,203,021 TRY for the year 2032. This is an annual impact figure.
The max. impact is calculated as 99,813,664 TRY for the year 2032. This also is an annual impact figure.

There is also a risk of damage to property, however as our properties are covered by insurance against weather events this impact is not included in our calculations.
The final impact is the health and safety risks for our employees and customers, however as human life is priceless, the impacts cannot be expressed in financial terms.

Cost of response to risk

8,533,000

Description of response and explanation of cost calculation

SITUATION:
In 2022 we had a loss of sales in 240 stores due to heavy precipitation events. Heavy weather events also damaged our property.

TASK:
To reduce the impacts of heavy weather events on our stores and other key facilities.

ACTIONS &COSTS:
1- We develop flood emergency plans in all of our stores to protect our customers and employees.
2- Emergency drills: In 2022 we have performed 10,800 drills that cover emergency scenarios like earthquakes, fires, floods, heavy winds & storms. A total of 37,656 Migros employees have participated in these drills.
The cost of actions 1 and 2 are taken as zero because their costs are absorbed into our business-as-usual activities.
3- Use of risk transfer instruments: The amount of insurance is updated annually according to the size of the individual incidents. Annual Risk premiums/ insurance costs for natural disasters including severe weather events (such as heavy rainfall, flooding, drought etc.) and other accidents/incidents (such as fire, robbery etc.), as well as our efforts to strengthen our distribution centers, added up to TRY 34.13 million in the reporting period.
The given cost is the insurance cost for all of our operations and the premiums for

extreme weather events cannot be reported separately.
As the cost of response for weather-related events like heavy rainfall, snow, flooding, etc. we proceeded with the assumption that it would correspond to 25% of total insurance costs. Which equals to 8,533,000 TRY.
This amount is also expected to increase with the increasing number of events in the future.

TIMELINE:
A total of 10,800 emergency drills performed in 2022Drills are performed at least once a year within the scope of “Emergency and Disaster Management”.
Insurance policy is an ongoing measure which is renewed annually.

RESULTS:
As a result of these actions, Migros employees are more prepared to these kinds of heavy weather events.
With the help of the insurance policies, we are able to transfer some of the financial impact of these risks. In 2022 there were 60 events of property damage due to extreme weather events. Our loss from these events would be 8.5 million TRY if there was no active insurance policy.
We will be increasing the number and frequency of our investigations and strengthening efforts in other stores and warehouses going forward in relation to adaptation efforts.

Comment

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation
Mandates on and regulation of existing products and services

Primary potential financial impact

Increased capital expenditures

Company-specific description

The F-gas regulation was implemented on January 1, 2015, in the EU. The regulation put in place an HFC phase-down from 2015 to 2030 by means of a quota system and sectorial bans on high GWP refrigerants.

It is expected that a similar regulation may be implemented by the Turkish authorities in line with Türkiye’s Net-Zero 2053 target. The use of refrigerants with low GWP is likely

to become widespread. Conventional HFC supply is expected to decrease gradually and the prices for these gases are also expected to increase.

We predict that non-natural gas and high GWP refrigerants will be banned by 2030.

Refrigerant gases account for 96.04% of scope 1 emissions in Migros.

If Turkish authorities implement a similar regulation, we would need to invest heavily in order to change all of our cooling cabinets with HFC-Free versions.

Time horizon

Long-term

Likelihood

More likely than not

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

140,000,000

Potential financial impact figure – maximum (currency)

607,600,000

Explanation of financial impact figure

Figures used in the calculation:
Average price for 1 kg of refrigerant: 636.36 TRY (including labor costs)
Amount of refrigerants to be replaced: 220,000 kg

The financial impact is calculated with the following assumptions:
1- Refrigerant gas prices vary according to the type of store, distribution center, type of gas, unit type etc. Therefore, an average unit price is estimated using the data from 2022 purchases for simplification purposes.
2- As a result of this regulation, if we have to change all the gases in our cooling cabinets with low GWP versions we would need to replace 220 tons of refrigerant gases: the cost of this investment is calculated as 140 million TRY.
3- As a result of this regulation, if we need to replace all of the cooling cabinets with new versions that are accepted by the regulation: the cost of this investment is calculated as 607.6 million TRY. This value includes changing all the cooling cabinets and evaporators.

Cost of response to risk

40,000,000

Description of response and explanation of cost calculation

SITUATION:
In the reporting year 96.04% of our Scope 1 emissions come from refrigerant gases and 96.74% of these gases are classified as HFCs. If the Turkish Government implements a regulation that is similar to the EU F-Gas regulation, we may face serious sanctions or costs related to the replacement of these refrigeration units.

TASK:
Phase-out of high GWP refrigerants that may be included in the scope of the F-gas regulation.

ACTION:
We use technology to reduce the negative impacts of climate change and help achieve our sustainability goals through using better and higher efficiency equipment .
In 2015, we started our first studies for the use of a natural refrigerant system and tried cooling with glycol instead of HFC-R404a gas. Next, we tried cooling the refrigerator cabinets by circulating cold water and used a natural coolant, glycol propane, to cool the water we use. We got the patent for this cooling system, which has a Utility Model Certificate. Currently, we have 51 stores and 3 distribution centers where our water-based cooling system is used, and we continue to work to expand the use of this new system in other locations. We use ammonia as a natural refrigerant instead of F-gases in our cooling systems at our MİGET meat processing facility.
This project helps us reduce our vulnerability to this risk while also reducing our GHG emissions.
The cost of the response to this risk is taken as the investment in water cooling systems since 2015: 40 million TRY

TIMELINE & RESULTS:
The actions listed above is also a part of our climate transition plan. The timeline for implementation is as follows:
a. Until the end of 2022: In the locations where we have water cooling systems, we have already saved 4,000 kg of fugitive gases which equals to 15,922 tons of CO2e with respect to the regular systems.
b. 2023: Every new store will have water-based cooling cabinets. Implementation of water-based cooling systems in some of the old warehouses and stores, as a result 20,000 tCO2e will be reduced.
c. Starting from 2024: 135 stores water-cooling system transformation and/or low GWP impact gas exchange. As a result, 14,000 tCO2e will be reduced every year.
d. Starting from 2025: 200 stores refrigerant gas exchange with low GWP impact per year. As a result, 3,000 tCO2e will be reduced every year.

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Shift in consumer preferences

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Whether shopping for bread or books, t-shirts or TVs, gardening tools, or shampoo, or simply buying a cup of coffee, the consumers are the driving force of climate action. Each year consumers are more aware of the impacts of climate change, and they want to understand the climate impacts of the products they buy and they opt for purchases that have less impact on climate which also help them live lower carbon lives.

In 2022, a survey on Sustainability Trends was conducted with 405 Migros customers to understand their perspectives on the concept of sustainability and their daily practices in this regard. As a result of the study, 78% of the participants stated that a brand's environmental/recyclable options are effective in which brand they prefer to purchase. In parallel, 43% of customers stated that they tended more towards sustainable products compared to last year.

In line with this work, we shape our services within the scope of our customers' demands and expectations.

These shifts in customer expectations are opening up opportunities for retailers to differentiate their offers and attract new customers, with climate concerns particularly marked amongst younger citizens.

The increase in the sales trends of sustainable products in our product range since the last year supports this change of perception and preferences.

As an example, 6% of our products by number are classified as sustainable/eco products. In 2021 the share of sustainable products in our revenue was 3.92%, this value has increased to 7% for the reporting year.

This change in consumer preferences presents us with an opportunity to be a part of a rapidly growing market, while reducing our environmental footprint. By continuing to revise our product line in line with these changing consumer preferences and adding more sustainable agriculture products with “Good Agricultural Practices”, sustainable Private Label products and energy-efficient products to our product range, we can increase our revenues resulting from increased demand for these sustainable products and services.

Time horizon

Long-term

Likelihood

Very likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

5,215,138,390

Potential financial impact figure – maximum (currency)

7,450,197,700

Explanation of financial impact figure

We determine our sustainable product range in the following areas:

- Sustainable agriculture products with “Good Agricultural Practices (GAP)”,
- Sustainable Private Label products
- Less plastic used and recyclable products
- Organic products
- Vegan products
- Energy efficient electronic products
- Products with certified palm/soy/cacao content

Our sales numbers show us the growing demand for these types of products.

The magnitude of the impact depends on the share of financial impact in our revenue due to this opportunity.
In 2022 share of sustainable products including the agricultural products in our revenue was 7% (5.22 billion TRY) which is identified as the minimum potential financial impact for this opportunity.
As this is already a realized impact, the maximum financial impact is calculated by taking into consideration our mid-term and long-term strategies to increase the share of these products in our portfolio.

According to our strategies, we predict the share of these products in our revenue will go up to 10% by 2030. Therefore the max. financial impact is calculated as 10% of our current revenue (Billion TRY which is an underestimation as our revenues are expected to increase as well). Impacts of inflation and growth is not included in this calculation and the calculation is made using our 2022 revenue.

Cost to realize opportunity

10,700,000

Strategy to realize opportunity and explanation of cost calculation

SITUATION:
Due to changing consumer demands if we are able to highlight the sustainable products in our portfolio we can increase the share of these products in our revenue. In 2021 the share of sustainable products in our revenue was 3.92%.

TASK:
We consider this consumer trend as an opportunity and if we are able to seize this opportunity, we can increase the share of sustainable products in our revenue. Therefore, our task is to increase the share of sustainable products in our revenue to a value that is above 10% by 2030.

ACTIONS-TIMELINE & COSTS:
There are several actions we implement to seize this opportunity.
2022:
• 7.5% of our budget for R&D projects (10.7 Million TRY) invested in sustainability related projects focusing on meeting our customers' demand for sustainable products
• Through our Better Future Plan we reflect our sustainability vision in many different areas and create shared value for our stakeholders to uphold our reputation. These actions are already included in the marketing budget, so no extra cost is reported.
• We used 25% r-Pet (recycled pet) in the packaging of our 6 private label products in total. By using 18.10 tons of r-pet 74% energy savings were achieved. There are no extra costs for r-pet application.
• In order to make our efforts more visible, we have a project to tag sustainable products. As a first step of this project, sustainable attributes and certificates were identified for the sustainable products.-No extra cost
2023:
• Through our B2B system, suppliers that have products with the specified attributes and certificates are requested to identify their products in our system

2024:
• By the end of 2024, we plan to tag 80% of the sustainable products and highlight these products on our stores and online channels.
Total cost of the realized actions in 2022 is 10.7 million TRY.

RESULTS:
With the implementation of the above-mentioned actions, the share of sustainable products in our revenue increased from 3.92% to 7% in 2022.

Comment

Identifier
Opp2

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Resource efficiency

Primary climate-related opportunity driver
Use of more efficient production and distribution processes

Primary potential financial impact
Reduced indirect (operating) costs

Company-specific description
As Migros, we constantly strive to make our stores, production and distribution processes more efficient. Our efficiency efforts help us reduce the impact of climate-related risks that we are facing and they also present an opportunity to reduce our indirect operating costs.

In all of our newly opened and renovated stores, we aim for the highest operational efficiency and combat climate change through systems with varied current control and high automation for air conditioning and industrial cooling systems. With these efforts we are able to reduce our energy consumption which in turn reduces our GHG emissions helping us to stay on track for achieving our ambitious targets.

Some examples of the projects carried out in 2022:
1. We carried out lighting, air conditioning and cooling automation works in 1,098 stores saving. 1,004 MWh of energy.
2. The transformation of glass door cooling cabinets in 1 store saving 26 MWh of Electricity.
3. Conversion of the old lighting systems into new generation lighting systems in 115 stores, saving 10,179 MWh of energy.
4. Replacement of old and expired air conditioners in 227 stores, saving 1,528 MWh of

energy.
5. Turning off the lights on the floors during lunch breaks, saving 30 MWh.
6. Setting up water-based refrigeration systems in 29 stores. The provided refrigerant gas saving is 790 kg.
7. Group change in 14 stores saving 1,646 kg of refrigerants.
8. Solar Panel installation in our Adana distribution center, saving 314 MWh of electricity.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

73,578,230

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Thanks to our energy-saving practices which are mentioned under the company-specific description, our direct operations became more energy efficient.
With these investments in 2022 we saved:
• 13,081 MWh energy,
• 2,436 kg of refrigerant gases
• 15,309 tons of Scope 1 and Scope 2 GHG emissions
• 73.5 Million TRY

The details of the cost savings are as follows:
1. We carried out lighting, air conditioning and cooling automation works in 1,098 stores saving 5.67 Million TRY
2. The transformation of glass door cooling cabinets in 1 store saving 144,357 TRY.
3. Conversion of the old lighting systems into new generation lighting systems in 115 stores, saving 57.51 Million TRY
4. Replacement of old and expired air conditioners in 227 stores, saving 8.64 Million TRY.
5. Turning off the lights on the floors during lunch breaks, saving 171,873 TRY
6. Setting up water-based refrigeration systems in 29 stores. The provided refrigerant gas saving is 790 kg.-No monetary savings

7. Group change in 14 stores saving 362,000 TRY
8. Solar Panel installation in our Adana distribution center, saving 1.08 Million TRY.

The total financial impact for 2022 is 73,578, 230 TRY.

Cost to realize opportunity

164,370,000

Strategy to realize opportunity and explanation of cost calculation

SITUATION:
By saving energy, we have the opportunity to spend less for our energy and operational costs.

TASK:
In Turkey the energy prices are rising with the increasing inflation rates. By investing in renewable energy and energy efficiency projects we can reduce our energy costs. This will also increase our resilience to changing energy market conditions.

ACTIONS, COSTS and TIMELINES:
In 2022 several energy saving projects were implemented detailed costs of which are given in below:
1. Lighting, HVAC automation works in 1,098 stores: 22.70 Million TRY
2. Transformation of glass door cooling cabinets in 1 store-no additional cost
3. Conversion of the old lighting systems into new generation lighting systems in 115 stores: 60 Million TRY
4. Replacement of old and expired air conditioners in 227 stores: 51.8 Million TRY
5. Turning off the lights on the floors during lunch breaks-no extra cost
6. Setting up water-based refrigeration systems in 29 stores: 11.7 Million TRY
7. Group change in 14 stores: 2.67 Million TRY
8. Solar Panel installation in our Adana distribution center: 15.5 Million TRY
Total cost of efficiency projects for the reporting year is 164.37 Million TRY.
Also as part of our transition plan:
Until 2025 we have planned to install 200 MW of solar panels which will reduce 320,000 MWh of electricity per annum reducing 140,800 tCO2/year.
After 2025 cooler cabinets will be replaced in 200 stores/year saving 3,000 tCO2e/year.
Every year we will set up 135 water-based refrigeration systems saving 14,000 tCO2e/year.

RESULTS:
With the implemented efficiency projects, we have saved a total of 13,081 MWh of electricity and 2,436 kg of refrigerant gases, resulting in reduction of 15,309 tCO2e Scope1 and 2 GHG emissions.
With the planned investments we will be saving 157,800 tCO2e emissions per annum after 2025.

Comment

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a climate transition plan that aligns with a 1.5°C world?

Row 1

Climate transition plan

Yes, we have a climate transition plan which aligns with a 1.5°C world

Publicly available climate transition plan

Yes

Mechanism by which feedback is collected from shareholders on your climate transition plan

We have a different feedback mechanism in place

Description of feedback mechanism

Our sustainability progress is included in investor presentations published quarterly on our corporate website. These results are published in the KAP (Public Disclosure Platform) announcement. A press release is also published.

These disclosures include elements of our low-carbon transition plan and investors who wish to give feedback on our transition plan, are welcome to do so and they are able to reach us via e-mail.
In addition, investor presentations are held in meetings in the form of webinars. Investors who wish are welcome to give feedback during the webinars as well.
We are carrying out our work in coordination with investor relations after we switch to the integrated annual report format in 2022. The Sustainability Management Group Manager attends the annual general assembly meetings to answer questions and gets feedback from investors.

Emails of all management staff are also available on our website.

Sustainability-related inquiries, suggestions and feedback can also be shared directly with the Sustainability Management team via the sustainability e-mail address which is located in the contact section of our sustainability page.

Frequency of feedback collection

More frequently than annually

Attach any relevant documents which detail your climate transition plan (optional)

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy
Row 1	Yes, qualitative and quantitative

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios IEA NZE 2050	Company-wide		We have selected IEA NZE 2050 which assumes that advanced economies will reach net zero in advance of 2050 and sets out an emissions trajectory consistent with a 50% chance of limiting the global temperature rise to 1.5°C without a temperature overshoot. This is a qualitative scenario. According to IPCC's current reports, if the current global emissions level is maintained, the carbon budget will be consumed in the early 2030s, and the 1.5°C limit in average global temperature will be exceeded in the 2030s. After COP 26, many nations declared their revised NDCs complying with NetZero Target, Türkiye is on the way to determining a medium- and long-term roadmap in line with the Net-Zero target in 2053. After Türkiye's ratifying the Paris Agreement, and contribution to COP 26, the studies on policy makers' part were accelerated, starting with the new assignment to the Ministry of Environment, Urbanization and Climate Change. In our scenario analysis, we evaluated the transition risks as; carbon emission policies, agriculture protection policies, changes in consumer behavior, renewable energy- agricultural commodities subsidies, changes in renewable products' prices, the progress of next-generation technology, changes in reputation among investors, and energy-saving technologies, changes in fuel costs as an energy source. The time horizon covered for this analysis is long-term

			as our long-term definition is >5 years. All Migros activities have been included in the analysis: supply chain of all agricultural products, all packed food, storing, logistics. Since 77% of Migros' overall sales consist from agricultural products, We have made a qualitative scenario analysis for our agricultural division. Results: • Determining alternative raw material and energy saving methods through Life Cycle Assessment on PL products • Price and market monitoring to purchase renewable energy (PPAs) • Performing a feasibility assessment for renewable energy systems to assess if there are new opportunities with lower ROI. (currently the ROI is 6 years) • Explore the opportunity to generate a new revenue stream, by creating a low-carbon emission refrigerant system as part of their agricultural division • Explore the opportunity to accelerate their decarbonization, in order to get access to more favorable financing and inward investment. • Focus on policy makers for financial support mechanisms • Lobbying for financial support mechanisms and production of new low-GWP refrigerants
Physical climate scenarios RCP 8.5	Company-wide		To better understand and analyze the physical impacts of climate change we chose a worst-case - IPCC RCP 8.5. This is a quantitative scenario. This scenario refers to the worst case by a combination of factors, e.g. high population growth and a lot of coal use or high economic growth and strong reliance on fossil fuels. This pessimistic scenario helped us assess the impacts of climate change especially on our value-chain operations. We also use WRI Aqueduct Food Tool for our scenario analysis related to food production. This tool helped us to enable proactive management of water-related risks to food security in our agricultural products supply chain, to make supplier diversification or drive our supply over possible risks that we may face during the harvesting of agricultural products that are critical for us. Migros focuses on the acute and chronic

			physical risks gathering several indicators categorized in increased severity of the extreme weather events like floods and wildfires, change in precipitation patterns, water scarcity, and rising mean temperatures. We applied this scenario also on the long-term in line with our long-term definition of over 5 years. Since 77% of Migros' overall sales consist of agricultural products, we have implemented this quantitative analysis for our agricultural division. Migros activities are exposed to climate-related hazards, such as extreme weather events and changes in climate patterns (upstream / sourcing of agricultural commodities and food products). After this pilot study, we extended the scope across our whole company and value chain. Results: The outcomes of the RCP 8,5 scenario analysis informed Migros's management to make the following strategic decisions: • To support sustainable agriculture and production and protect agriculture-oriented biodiversity. • Making operational improvements, projects and collaborations to reduce food waste throughout our value chain. • Measuring, reducing, recycling our waste to support economy. • To improve the life-cycle of our private-label products.

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

1. What are the physical risks that our operations are most exposed to?
2. What are the transition risks that our businesses are most exposed to?
3. How will consumer demand change and what will this mean for our revenue streams?
4. What are the potential policies that will most materiality affect our business and operations?

5. How do the possible emerging regulations have the potential to impact our operations.

Results of the climate-related scenario analysis with respect to the focal questions

1. Our physical risks are mainly classified as acute and chronic physical risks gathering several indicators categorized in increased severity of the extreme weather events like floods and forest fires, changes in precipitation patterns, water scarcity, rising mean temperature, changes in agricultural yields, or water availability.
As a result of the quantitative scenario analysis, it is projected that the damage caused by extreme weather events will increase and the loss that may occur only in our stores is projected to be approximately 10.9 million TL in 5 years and 34.9 million TL in 10 years.
How these results have informed a decision:
We expanded the coverage of insurance policies in our stores to include all the damage from extreme weather events.

2. The transition risks are carbon emission policies, agriculture protection policies, changes in consumer behavior, renewable energy- agricultural commodities subsidies, changes in renewable products' prices, the progress of next-generation technology, changes in reputation among investors, and energy-saving technologies, changes in fuel costs as an energy source.

3. Migros makes consumer and trend research every month by taking part in the relevant coalitions of the Consumer Goods Forum (CGF). According to the researches and survey results, it is found that consumers demand more healthier and more sustainable products.

4. After Türkiye has ratified the Paris Agreement, the agenda of making medium and long-term commitments within the framework of the obligation to update the NDCs was formed. These major developments will lead to the prioritization of many legal regulations regarding climate change issues in Türkiye and their entry into force. The fact that the agricultural sector is among the priority areas within the scope of the EU Green Deal shows that the legal regulations in this area will also be accelerated.

5. Although Migros will probably not be a part of an upcoming ETS regulation, this regulation may have an indirect impact on us, as energy producers will be included. After the initial implementation of an ETS in Türkiye, energy prices are expected to increase as more than 60% of the Turkish grid is fed by fossil fuel-powered plants. Another impact may be a ban on HFC's as projected in Europe, in case of which we may have to invest heavily to change the existing equipment.
The results of the focal questions 2-3-4-5 have encouraged us to invest more in projects that will help us reduce our GHG emissions.
In 2022 we have invested a total of 454.67 Million TL including maintenance and repairs, on GHG emission reduction projects (i.e. solar panels, water-based cooling systems, automation, new generation system transformations) and environmental

management activities (i.e. measurement, verification, waste and water management, consultancy).

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	In terms of our products and services, the risks and opportunities associated with climate change influenced our strategy in two different ways. First, according to the research titled “Climate Change Perception and Energy Preferences in Türkiye”, the awareness of climate change and its impacts is rising 83% of respondents mentioned that they are worried or really worried about climate change. This shows a significant increase as this ratio was 66% in the previous year’s research. We figure that this increase in awareness escalates the interest in sustainable products in the perception of our clients' preferences. Also in the summer of 2022, a survey on Sustainability Trends was conducted with 405 Migros customers to understand their perspectives on the concept of sustainability and their daily practices in this regard. As a result of the study, 78% of the participants stated that a brand's environmental/recyclable options are effective in their brand preferences. In parallel, 43% of customers stated that they tended more towards sustainable products compared to last year. In line with this work, we shape our services within the scope of our customers' demands and expectations. 6% of the products currently sold by Migros are environmentally friendly products and these products constitute 7% of our turnover. The products we consider as green products are as follows: Fruits/Vegetables, Chicken, Eggs, and Milk which are labeled with Good Agricultural Practices, and Organic Products, Environmental Detergents, Vegan Products, multi-use bags

		and energy-efficient electronic products. The second impact of climate-related risks on our products and services is the physical impacts of climate change that may damage our stores or distribution centers resulting in a disruption in our operations which may impact our daily revenue related to how many days these stores and distribution centers stay closed. Of course, the financial impact of this risk depends on the magnitude, frequency and location of the events.
Supply chain and/or value chain	Yes	In terms of our supply and/or value chain, the risks and opportunities associated with climate change affect our strategy in two different ways. First, we attach great importance to supplier selection and monitor our suppliers' practices within the framework of our responsible sourcing approach and offer them assistance and guidance to improve their performance, including their water use, risks & management. Before deciding to work with supplier companies, business partners and agencies, we conduct a thorough review and investigation of financial, legal and ethical risks and opportunities associated with companies. Companies that become suppliers are subject to GC Ethical and Social Conformity, Environment, Health and Safety based ethical/social/environmental audits in accordance with audit periods and their impact on people and the environment are audited. In 2022, 517 external audits were conducted on 440 of our (total suppliers 2,031), which make up 22% of our suppliers by number. The suppliers which make up 80% of our turnover are referred to as critical suppliers. In 2022 80% of our critical suppliers (250 suppliers) were audited on-site and online by an accredited external audit company. Through this rationale, we believe that we cover a significant part of our suppliers, which have a massive impact on our business. Secondly, while we are currently assessing water risks related to our stakeholders, we expect that suppliers will be included in our risk assessment in the future covering all aspects of our value chain since 77% of Migros' sales consist of agricultural products and our agricultural products suppliers play a vital

		role for the quality of services of Migros. We use the WRI Aqueduct Food Tool to avoid any problems related to drought and water in the production and supply of agricultural products. In order to avoid a problem in the procurement process of the products that affect our revenues most in agricultural products, we follow the drought risk in cities where these products are grown, and the risk of drought and seasonal variability on a product basis. Therefore, we take necessary actions and perform additional analysis for the riskiest products and suppliers towards mitigating this risk and consider its impact as medium-high.
Investment in R&D	Yes	Within the scope of our Migros Better Future Plan, we aim to reduce our carbon footprint in order to combat climate change and implement innovative practices that increase our efficiency. One of our strategies that was influenced by the climate-related risks is using cooling gases with lower global warming potentials among refrigerants (especially natural refrigerants). Since 2016, we have been working on a project where we use cold water to cool the cooling cabinets, where the circulating water is cooled using a natural refrigerant. We have patented this innovative system which has a useful invention certificate. We currently have this system in 51 stores and 3 distribution centers. It was decided to implement this innovative system in all new stores starting from 2022.
Operations	Yes	In terms of operations, the risks and opportunities associated with climate change impact our strategy in two different ways. The physical impacts of climate change may result in damage to our stores and distribution centers disrupting our operations. The financial impact of this risk depends on the magnitude, frequency and location of the events. We carry out efficiency studies to save our energy consumption from distribution and logistics. Every year, we measure routes traveled between our distribution centers and stores, make route optimizations and open our new distribution centers according to the results of these analyzes. Within the framework of our central distribution strategy, we carry 85% of our products to shops with fully loaded trucks. We reduce truck traffic by up to 30 times by directing the products to be sold in our stores to their distribution centers. Also, we use multi-use and collapsible crates in our

		distribution centers and in our fruit, vegetable and red meat shipments. Thanks to our cooperation with “Palex”, the pallets collected from our distribution centers saved 71 tons of CO2e. Also, we saved 759 tons of CO2e as a result of our work with “Chep”, and 8,363 tons of CO2e as a result of our cooperation with IFCO. With our İzmir Fish Distribution Center, which was commissioned in 2022, end-to-end management with 0-4 °C air conditioning was provided in our supply chain operations by switching to a central distribution system in the Aegean Region in a way that enables distribution from the sea and fish farms directly to the stores. Our distribution system also consists of shipments of Our E-Commerce Channel, besides the shipments of our distribution centers. We have 15 electric vehicles available within the Our E-Commerce Channel vehicle fleet in order to reduce our impact on the environment. Also, we increased the number of electric bicycles, which was 23 in 2017, to 38 in 2019, 41 in 2020,49 in 2021, and 52 in 2022.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Capital expenditures Capital allocation Acquisitions and divestments Access to capital Assets Liabilities	Revenues: As we mentioned before, damages due to physical impacts of climate change which result in disruption of our operations may impact our daily revenue related to how many days these stores and distribution centers stay closed. In 2022, 247 of our stores are affected by several weather events related to climate changes such as floods and heavy rainfalls. Also, since the sales of agricultural products constitute a large part (77%) of our turnover, the procurement processes of these products are extremely critical for us. One of the important risks that may arise during the procurement process is the disruption in harvest and the supply of agricultural products due to several weather events such as drought or flooding related to climate change, in the locations where agricultural products are grown. This leads directly to high-trend changes in product prices

		and negatively impacts sales. In order to prevent the shortage of products and balance the prices, we supply all vegetable and fruit products from more than one region, and we work on different supply scenarios according to our analysis in WRI Food Tool. Overall, we categorize the magnitude of impact for this category as medium-low. Lastly, our sustainable/eco-friendly products and sustainable farming for fruits and vegetables (e.g. GAP) range help us to attract customers' attention. The research on climate change in Türkiye shows us awareness of the impact of climate change is rising in Türkiye and customers prefer more and more sustainable/eco-friendly products. Our sales numbers also confirm this situation. The revenues of fruits and vegetables with GAP (Good Agricultural Practices) have increased by 208% since 2019. So, we have a great opportunity for increasing our revenue through developing our sustainable product range. These have a high magnitude of impact on our financial planning process Direct Costs: Thanks to our energy efficiency R&D programs for minimizing our carbon footprint within our store and distribution centers are through eco-friendly cooling systems, LED lighting upgrades and lids installations in our refrigeration units. We put in place our innovative practices for making use of natural coolants or eco-friendly systems, which can function in harmony with the climate of our country, for the refrigeration systems of our distribution centers and stores, instead of hydrofluorocarbon (HFC). As of 2022, the water cooling system patented by Migros is used in 51 stores and 3 distribution centers. We also prefer systems with varied current control and high automation efficiency for air conditioning and industrial cooling systems in all our newly opened and renovated stores in order to reduce our energy consumption and the emission caused thereby. In 2022, in 1,098 stores the automation system for lighting, cooling and air conditioning TRY 5,674,000 saved. We have also converted the old lighting systems into new-generation lighting systems in 115 stores and saved 10,179 MWh. With the replacement of old and expired air conditioners, we have saved 1,528 MWh in 2022. Finally, the energy saving achieved by turning off the lights on the floors during lunch breaks is 30 MWh. By those changes, a total of 13,081 MWh energy was saved, 15,309 tCO2e emissions and TRY 73,574,210 was saved on a yearly basis. These implementations especially executed efficiency measures and low-carbon installations may increase the value of our owned sites.

		The most important aspect of our assets are our stores. The more efficient our processes and systems are, the more sustainable we become as a company. We have been investing in automation and natural cooling; we're improving and updating our existing systems with new-generation technology. The more we invest in these physical tools and technology that make us more efficient in our operations, we become a more valuable company. Capital Expenditures & Capital Allocation: Capital expenditures and capital allocation is one of the major financial planning elements that are influenced by climate-related risks. In order to finance our climate-transition plan, we focus on capital expenditures, and working on an allocation plan to help us reach our 2050 net zero goal. In 2022 we have invested a total of 454.67 Million TL including maintenance and repairs, on GHG emission reduction projects (i.e. solar panels, water-based cooling systems, automation, new generation system transformations) and environmental management activities (i.e. measurement, verification, waste and water management, consultancy).

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition
Row 1	Yes, we identify alignment with our climate transition plan

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's climate transition.

Financial Metric

CAPEX

Type of alignment being reported for this financial metric

Alignment with our climate transition plan

Taxonomy under which information is being reported

Objective under which alignment is being reported

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)

173,800,000

Percentage share of selected financial metric aligned in the reporting year (%)

8.4

Percentage share of selected financial metric planned to align in 2025 (%)

8.4

Percentage share of selected financial metric planned to align in 2030 (%)

8.4

Describe the methodology used to identify spending/revenue that is aligned

There are several actions in our climate transition plan that require capital investments. The CAPEX % in the reporting year is calculated using the amount of investments realized within the scope of our climate transition plan.

For the 2025 and 2030 figures, we have planned the same %, however taking into consideration our growth strategies, although the % amount seems to be the same as the CAPEX is expected to increase so will the amount of funds reserved for realization of our climate-transition plan.

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Is this a science-based target?

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next two years

Target ambition

1.5°C aligned

Year target was set

2021

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Market-based

Scope 3 category(ies)

Base year

2020

Base year Scope 1 emissions covered by target (metric tons CO2e)

268,001

Base year Scope 2 emissions covered by target (metric tons CO2e)

236,014

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e)

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

504,015

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2030

Targeted reduction from base year (%)

42

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

292,328.7

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

243,587

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

216,972

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

460,559

Does this target cover any land-related emissions?

Yes, it covers land-related emissions only (e.g. FLAG SBT)

% of target achieved relative to base year [auto-calculated]

20.5284895621

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

This target is our near-term target which was set in 2021 and we are also planning to submit this target to the SBTi for review. The target covers all of our Scope 1 and Scope 2 GHG emissions. There are no exclusions. As the target also covers enteric fermentation in our breeding farm, it covers FLAG emissions according to Table 5 of FLAG Science Based Target Setting Guidance, enteric CH4 emissions are classified under Land Management (non-LUC emissions).

Plan for achieving target, and progress made to the end of the reporting year

We have a dedicated budget for energy efficiency projects.
We are working on innovative solutions like our water-based cooling system to reduce the GHG emissions from refrigerant leaks which make up more than 51% of our Scope 1 & Scope 2 GHG emissions.
According to our climate-transition plan, we will change 200 cooling cabinets per year saving 3,000 tCO2e per annum starting from 2025.
We are also planning to implement 135 water-based cooling systems reducing 14,000 tons of CO2e/year.
We are also planning to install 200 MW of solar panels until 2025 which will reduce 140,800 tCO2e per annum.

List the emissions reduction initiatives which contributed most to achieving this target

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Target reference number

Abs 2

Is this a science-based target?

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next two years

Target ambition

1.5°C aligned

Year target was set

2021

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Market-based

Scope 3 category(ies)

Base year

2020

Base year Scope 1 emissions covered by target (metric tons CO2e)

268,001

Base year Scope 2 emissions covered by target (metric tons CO2e)

236,014

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e)

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

504,015

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2050

Targeted reduction from base year (%)

95

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

25,200.75

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

243,587

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

216,972

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

460,559

Does this target cover any land-related emissions?

Yes, it covers land-related emissions only (e.g. FLAG SBT)

% of target achieved relative to base year [auto-calculated]

9.0757532801

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

This target is was set in 2021 as a long term target in line with SBTi. This target is also planned to be submitted to SBTi for validation. The target covers all of our Scope 1 and Scope 2 GHG emissions. There are no exclusions. As the target also covers enteric fermentation in our breeding farm, it covers FLAG emissions according to Table 5 of FLAG Science Based Target Setting Guidance, enteric CH4 emissions are classified under Land Management (non-LUC emissions).

Plan for achieving target, and progress made to the end of the reporting year

We have a dedicated budget for energy efficiency projects.
We are working on innovative solutions like our water-based cooling system to reduce the GHG emissions from refrigerant leaks which make up more than 51% of our Scope 1 & Scope 2 GHG emissions.
According to our climate-transition plan we will change 200 cooling cabinets per year saving 3,000 tCO2e per annum starting from 2025.
We are also planning to implement 135 water-based cooling systems reducing 14,000 tons of CO2e/year.
We are also planning to install 200 MW of solar panels until 2025 which will reduce 140,800 tCO2e per annum.

List the emissions reduction initiatives which contributed most to achieving this target

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Net-zero target(s)

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number

NZ1

Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Abs1

Abs2

Target year for achieving net zero

2050

Is this a science-based target?

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next two years

Please explain target coverage and identify any exclusions

This target covers all of our direct operations. There are no exclusions.

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?

Unsure

Planned milestones and/or near-term investments for neutralization at target year

Planned actions to mitigate emissions beyond your value chain (optional)

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	3	3,141.65
Implementation commenced*	0	0
Implemented*	9	74,914.2
Not to be implemented	0	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Energy efficiency in buildings
Building Energy Management Systems (BEMS)

Estimated annual CO2e savings (metric tonnes CO2e)

454

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)
Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

5,845,873

Investment required (unit currency – as specified in C0.4)

22,696,000

Payback period

4-10 years

Estimated lifetime of the initiative

11-15 years

Comment

In 2022 we have implemented 2 projects related to building energy management systems. The first one is the automation of lighting and HVAC in our buildings the other project is shutting down unused lights in our headquarters during lunch breaks. The two projects resulted in energy savings of 1,034,00 kWh in 2022.

Investment required and annual monetary saving figures are given as a total for these two projects.
The estimated lifetime and payback period are given as an average for these two projects.

Initiative category & Initiative type

Energy efficiency in buildings
Heating, Ventilation and Air Conditioning (HVAC)

Estimated annual CO2e savings (metric tonnes CO2e)

672

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)
Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

8,635,000

Investment required (unit currency – as specified in C0.4)

51,800,000

Payback period

4-10 years

Estimated lifetime of the initiative

6-10 years

Comment

We have replaced old A/C units with efficient ones, saving 1,528 MWh of electricity and 672 tCO2e.

Initiative category & Initiative type

Fugitive emissions reductions
Refrigerant leakage reduction

Estimated annual CO2e savings (metric tonnes CO2e)

6,456

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

362,000

Investment required (unit currency – as specified in C0.4)

14,375,000

Payback period

4-10 years

Estimated lifetime of the initiative

6-10 years

Comment

We have made a group change in 14 stores resulting in reduction of fugitive refrigeration gases.

Initiative category & Initiative type

Fugitive emissions reductions
Refrigerant leakage reduction

Estimated annual CO2e savings (metric tonnes CO2e)

3,099

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

237,000

Investment required (unit currency – as specified in C0.4)

11,700,000

Payback period

>25 years

Estimated lifetime of the initiative

11-15 years

Comment

In 2022 we set-up water-based refrigeration systems in 29 stores.

Initiative category & Initiative type

Energy efficiency in buildings
Lighting

Estimated annual CO2e savings (metric tonnes CO2e)

4,479

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)
Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

57,508,000

Investment required (unit currency – as specified in C0.4)

60,000,000

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

We have also converted the old lighting systems into a led systems in 115 stores saving 10,179 MWh of electricity.

Initiative category & Initiative type

Energy efficiency in buildings
Maintenance program

Estimated annual CO2e savings (metric tonnes CO2e)

11

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)
Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

144,000

Investment required (unit currency – as specified in C0.4)

0

Payback period

No payback

Estimated lifetime of the initiative

11-15 years

Comment

Replacement of the doors in glass cabinets helped us save 26 MWh of electricity in 2022.

Initiative category & Initiative type

Low-carbon energy generation
Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)
739.2

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (location-based)
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
1,078,980

Investment required (unit currency – as specified in C0.4)
15,504,000

Payback period
11-15 years

Estimated lifetime of the initiative
21-30 years

Comment
We have installed Solar Panels in our Adana Distribution Center. The given CO2 emission reductions are annual estimated figures.

Initiative category & Initiative type
Low-carbon energy consumption
Solid biofuels

Estimated annual CO2e savings (metric tonnes CO2e)
59,004

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
0

Investment required (unit currency – as specified in C0.4)
965,520

Payback period

No payback

Estimated lifetime of the initiative

<1 year

Comment

In 2022 we purchased I-REC certificate from SEPAS, one of our electricity suppliers, in size of 134,100 MWh electricity which is equivalent to 21.37% of our total electricity consumption. The I-REC purchase is from Mutlular Enerji Biomass Power plant.
As this investment does not result in monetary savings, therefore, the payback period is selected as No payback.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Employee engagement	With the appointment of our CEO on behalf of our Board of Directors, our Sustainability Committee conducts the management, implementation, follow-up and measurement of our activities in the field of sustainability. In this committee, where all the main functions of our company are represented, there is a discussion environment offering equal participation and the right to speak to all departments. We also provide e-learnings about sustainability and climate change to our employees to raise their awareness and empower them to be engaged in our company's strategy. Migros' corporate communications magazine "Turuncu", which is published every 3 months, includes a Sustainability page in order to make sure our employees can follow the developments in the field.
Internal incentives/recognition programs	As mentioned in C1.3a, an application called Quizgame has been developed for the employees of Migros in order to ensure comprehension of the development and strategy of the company. Quizgame application is repeated many times in a year and questions relevant to sustainability and climate change are included in the Quizgame. Employees who become successful in the Quizgame are awarded prizes, discounts, and gift cards. Also, at least one of the other targets set by Migros for its employees is in the field of sustainability. Annual performance bonuses of the employees are directly affected depending on the work carried out.
Financial optimization calculations	In order to optimize cost efficiency and reduce carbon emissions as much as possible in energy-efficiency projects, the payback period and investment amounts are monitored closely.
Dedicated budget for other emissions reduction activities	We have a dedicated budget for projects that reduce GHG emissions. We are working on transforming the cooler systems with water cooler systems.

	We also have an annual budget for renewable energy purchases.
Dedicated budget for energy efficiency	We have a dedicated budget for energy efficiency projects and this budget is revised every year. In 2022 we have implemented 7 Efficiency projects and also installed a solar PV plant in our Adana DC, reducing 15,309 tons of CO2e.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

Low-Carbon Investment (LCI) Registry Taxonomy

Type of product(s) or service(s)

Other

Other, please specify

Our sustainable products range

Description of product(s) or service(s)

There are many products in our sustainable products range, which are assessed to be low-carbon using the LCI registry taxonomy. These products are : LEDs, energy-efficient electronic products, less plastic used and recyclable products, products with certified palm/soy/cacao content, organic products, sustainable agriculture products with “Good Agricultural Practices (GAP)”.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

No

Methodology used to calculate avoided emissions

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Functional unit used

Reference product/service or baseline scenario used

Life cycle stage(s) covered for the reference product/service or baseline scenario

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

Explain your calculation of avoided emissions, including any assumptions

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

7

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

No

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)

Row 1	Yes, a change in methodology	We have revised the base year as 2020 to be in line with our targets. We have also deducted emissions related to enteric fermentation from our 2020 Scope 1 emissions. Also in 2022, for scope 3 Categories 3, 9 and 11 we have expanded our calculation scope to be in line with GHG Protocol Value Chain (Scope 3) Standard. This change was triggered by a corrective action request issued during the verification of our 2022-Scope 3 inventory. In order to be able to reflect this change, we have also revised our calculations for our base-year 2021. We have also revised our Scope 3 Base Year as 2020 so that the base year is consistent within all Scopes.

C5.1c

(C5.1c) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in C5.1a and/or C5.1b?

	Base year recalculation	Scope(s) recalculated	Base year emissions recalculation policy, including significance threshold	Past years' recalculation
Row 1	Yes	Scope 1 Scope 2, location-based Scope 2, market-based Scope 3	If there is a significant change in boundary, methodology, or any structural changes in the organization, the base year GHG emissions are recalculated if the subject change is assessed to have an impact of over 5% on the GHG emissions from the relevant scope(s). We updated the base year for our Scope 1 and Scope 2 (Market Based &Location Based) emissions to match the base year of our targets. We have also subtracted biogenic emissions from our 2020 Scope 1 emissions. We have also updated our base year for Scope 3 GHG emissions as we were able to compile data for 2020, so that the base year for all of our GHG inventory scopes is the same. Previously our base year for Scope 3 was reported as 2021.	Yes

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start
January 1, 2020

Base year end
December 31, 2020

Base year emissions (metric tons CO2e)
267,236

Comment
We have updated our base year as 2020 in order to match the base year of our targets. Emissions from enteric fermentation are excluded.

Scope 2 (location-based)

Base year start
January 1, 2020

Base year end
December 31, 2020

Base year emissions (metric tons CO2e)
254,658

Comment
We have updated our base year as 2020 in order to match the base year of our targets.

Scope 2 (market-based)

Base year start
January 1, 2020

Base year end
December 31, 2020

Base year emissions (metric tons CO2e)
236,014

Comment
We have updated our base year as 2020 in order to match the base year of our targets. Migros purchases electricity from the Turkish electricity grid. As it is not possible to find supplier-specific or residual emission factors for the Turkish grid, the market-based emissions are calculated using the location-based emission factor as a proxy.

Scope 3 category 1: Purchased goods and services

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

10,747,770.33

Comment

Our base-year is revised as 2020 for all Scope 3 categories.

Scope 3 category 2: Capital goods

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

0

Comment

The emissions related to this category are assessed to be lower than our materiality threshold according to the materiality analysis performed by Quantis Scope 3 evaluator tool.

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

338,562

Comment

Our base-year is revised as 2020 for all Scope 3 categories.

Scope 3 category 4: Upstream transportation and distribution

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

82,398

Comment

Our base-year is revised as 2020 for all Scope 3 categories.

Scope 3 category 5: Waste generated in operations

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

51,199

Comment

Our base-year is revised as 2020 for all Scope 3 categories.

Scope 3 category 6: Business travel

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

258

Comment

Our base-year is revised as 2020 for all Scope 3 categories.

Scope 3 category 7: Employee commuting

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

2,314

Comment

Our base-year is revised as 2020 for all Scope 3 categories.

Scope 3 category 8: Upstream leased assets

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

0

Comment

We have many stores which are not owned by us, however, as we are compiling our GHG inventory using the operational control approach, the GHG emissions from these stores are reported under our Scope 1 and Scope 2 GHG emissions. Therefore, the GHG emissions from upstream leased assets are not relevant for Migros.

Scope 3 category 9: Downstream transportation and distribution

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

165,497

Comment

Our base-year is revised as 2020 for all Scope 3 categories.

Scope 3 category 10: Processing of sold products

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

0

Comment

We do not sell any intermediate products that require further processing. Therefore, this category is not relevant for Migros.

Scope 3 category 11: Use of sold products

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

3,921,111

Comment

Our base-year is revised as 2020 for all Scope 3 categories.

Scope 3 category 12: End of life treatment of sold products

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

263,494

Comment

Our base-year is revised as 2020 for all Scope 3 categories.

Scope 3 category 13: Downstream leased assets

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

9,438

Comment

Our base-year is revised as 2020 for all Scope 3 categories.

Scope 3 category 14: Franchises

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

0

Comment

Migros does not have any franchises.

Scope 3 category 15: Investments

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

0

Comment

Migros does not have any investments that should be reported under this category. All of the affiliates of Migros are included in our Scope 1, Scope 2 & Scope 3 calculations. We do not have any equity shares in any other company.

Scope 3: Other (upstream)

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

0

Comment

No other upstream scope 3 emissions.

Scope 3: Other (downstream)

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

0

Comment

No other downstream Scope 3 emissions.

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

Defra Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance, 2019
IPCC Guidelines for National Greenhouse Gas Inventories, 2006
ISO 14064-1
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
The Greenhouse Gas Protocol: Scope 2 Guidance
The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Standard

C6. Emissions data

C6.1

(C6.1) What were your organization’s gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

241,390

Start date

January 1, 2022

End date

December 31, 2022

Comment

We have no offset purchases so our gross emissions are equal to our net emissions. 100% of our Scope 1 GHG emissions are verified by an independent 3rd Party. As per CDP's recommendations emissions from fermentation are excluded from our Scope 1 Emissions and reported under C6.7.
Our verified Scope 1 emissions in the verification report is 243,587 tCO2e which includes the emissions from enteric fermentation which is in line with ISO 14064-1 standard.

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)

231,995

Start date

January 1, 2021

End date

December 31, 2021

Comment

In our 2021 CDP Report the Scope 1 GHG emissions reported (234,659 tCO2e) included emissions that result from enteric fermentation in our breeding farm (2,664 tCO2e). These emissions were also reported under C6.7 which means the emissions were reported twice.
This year we didn't include these emissions in Scope 1 reporting under C6.1 as per CDP guidance, therefore 2021 Scope 1 emissions are also revised.

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

Migros purchases electricity from the main grid. We also purchase energy attribute certificates (i-RECs) as proof of the use of renewable electricity. As the Turkish grid does not have any published emission factors for residual mix, the location-based EF is used as a proxy for the calculation of market-based emissions.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based

275,976

Scope 2, market-based (if applicable)

216,972

Start date

January 1, 2022

End date

December 31, 2022

Comment

Migros purchases electricity from the main grid. We also purchase energy attribute certificates (i-RECs) as proof of the use of renewable electricity. As the Turkish grid does not have any published emission factors for residual mix, the location-based EF is used as a proxy for the calculation of market-based emissions.

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1, Scope 2, or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source of excluded emissions

Capital Goods purchases made in 2022

Scope(s) or Scope 3 category(ies)

Scope 3: Capital goods

Relevance of Scope 1 emissions from this source

Relevance of location-based Scope 2 emissions from this source

Relevance of market-based Scope 2 emissions from this source

Relevance of Scope 3 emissions from this source

Emissions are not relevant

Date of completion of acquisition or merger

Estimated percentage of total Scope 1+2 emissions this excluded source represents

Estimated percentage of total Scope 3 emissions this excluded source represents

0.3

Explain why this source is excluded

During the reporting year, although we have opened some new stores, the data of capital goods that were purchased for these new stores were collected, and according to our materiality analysis performed using Quantis Scope 3 evaluator tool, the impact of the capital goods on our GHG emissions is assessed to be 0.26% (rounded up to 0.3 %) which is way below our materiality threshold of 5%.
Therefore, the emissions from capital goods are not included in our GHG emissions inventory for the reporting year.

Explain how you estimated the percentage of emissions this excluded source represents

We have used the Scope 3 evaluator tool and estimated the GHG emissions of our Scope 3 Category 2 GHG emissions as 35,724 tons which makes 0.26% of our total Scope 3 GHG emissions.

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

9,622,350

Emissions calculation methodology

Average data method
Average product method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

As we are a retail company, the purchased goods are also the goods that we sell in our stores. To calculate the GHG emissions we use the sales data of all the products that are bought and sold in the reporting year. The total sales numbers are used either in kg or in number of units for each product. We grouped the products according to their functions (i.e. Detergents, Beverages, Meat, etc.) and then we multiplied the amount of goods sold by relevant emission factors taken from the DEFRA Conversion Factors 2022 Database, "material use" sheet.

Capital goods

Evaluation status

Not relevant, explanation provided

Please explain

During the reporting year, although we have opened some new stores, the data of capital goods that were purchased for these new stores were collected, and according to our materiality analysis performed using Quantis Scope 3 evaluator tool, the impact of the capital goods on our GHG emissions is assessed to be 0.26% which is way below our materiality threshold of 5%.
Therefore, the emissions from capital goods are not included in our GHG emissions inventory for the reporting year. The exclusion is reported under C6.4a of this report.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

115,542

Emissions calculation methodology

Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

The emissions related to this category are below our materiality threshold of 5%, however as we have the data readily present the GHG emissions are calculated.
Well to tank emissions for the fuels and electricity consumed. The activity data compiled for Scope 1 and Scope 2 emission calculations are used. Activity data is taken from invoices so 100% of the emissions are calculated using supplier data. Emission factors are taken from DEFRA Conversion Factors-2022. 'WTT-Fuels' and 'WTT – UK and overseas elec' sheets.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

98,884

Emissions calculation methodology

Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

The emissions related to this category are below our materiality threshold of 5%, however as we have the data readily present the GHG emissions are calculated.
GHG emissions arise during the transportation and distribution of purchased goods for resale.
100% of the activity data were collected from value chain partners and cross-checked by internal records as liters of diesel oil consumed in transportation operations.
Emission factors are taken from DEFRA Conversion Factors-2022.

Waste generated in operations

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

34,004

Emissions calculation methodology

Waste-type-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

The emissions related to this category are below our materiality threshold of 5%, however as we have the data readily present the GHG emissions are calculated. Waste type and treatment totals are provided by Migros' waste management team. Conversion factors are taken from the DEFRA conversion factors 2022 database and applied as appropriate. Food waste amounts are tracked in the company through our database which monitors the food waste continuously. The amounts of other waste types are tracked according to their disposal method.

Business travel

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

643

Emissions calculation methodology

Supplier-specific method
Spend-based method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Although GHG Emissions from this category are well-below our materiality threshold, as we have the activity data, the GHG emissions are calculated.

Only employees’ air travels are included in the calculation. Data is tracked through an external travel service and internal accounting services. Purchase receipts and travel expense reports track TRY spent on travel. External travel service company reports all departure and arrival information of each flight transaction of Migros employees in 2022. According to the flight information of each transaction the total emission is calculated by multiplying the activity data with relevant conversion factors from DEFRA Conversion factors 2022.

Employee commuting

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

1,649

Emissions calculation methodology

Average data method
Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Although GHG Emissions from this category are well-below our materiality threshold, as we have the activity data, the GHG emissions are calculated.

Fuel used by employee shuttles is extrapolated by gathering the distance travelled by employee shuttles in 2022 from the subcontractor company and multiplying the distance (km) by the vehicle's average fuel consumption per km (lt / km). The GHG emissions are calculated using relevant emission factors from DEFRA Conversion Factors 2022 database.
Employees using their car or public transport are not included.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

We have many stores which are not owned by us, however, as we are compiling our GHG inventory using the operational control approach, the GHG emissions from these stores are reported under our Scope 1 and Scope 2 GHG emissions. Therefore, the GHG emissions from upstream leased assets are not relevant for Migros.

Downstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

232,347

Emissions calculation methodology

Average data method
Fuel-based method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

4.88

Please explain

This category includes the GHG emissions resulting from home deliveries to customers and the GHG emissions of customers traveling to and from our stores.

Customer services are also included in our calculations.

For home deliveries: the emissions are calculated using the amount of diesel oil used in the delivery vehicles. The diesel oil consumed by the delivery vans is multiplied by the diesel oil emission factor taken from the DEFRA conversion factors 2022 database.

Carbon emissions of Migros Sanal Market and Tazedirekt (our e-commerce channels) vehicles are calculated.

For the customers transportation we worked on a scenario of how the customers come to our stores. The scenario includes public transport as well as customers commuting with their own vehicles. We used the commuting data from the customer satisfaction survey performed by Nielsen to form a scenario for the average distances that the customers may be traveling from. For the fuel types, we used the Turkish Statistical Institute data on the percentages of fuels used in the vehicles. We used this scenario to calculate GHG emissions from downstream transportation and distribution. Emission factors are taken from DEFRA conversion factors 2022 database.

Around 4.88% of the reported emissions are calculated using data obtained from value chain partners or suppliers.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

We do not sell any intermediate products that require further processing. Therefore, this category is not relevant for Migros.

Use of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

3,156,879

Emissions calculation methodology

Average product method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

The calculation methodology was revised to include cooking the dishes in the food category and the use of domestic appliances.

The calculations were made using a scenario.

Products in the category of electrical and electronic household appliances are included in the calculation. Calculations were made taking into account the useful lifetime assumptions for household appliances.

In the food category, a ratio of 30% to 70% was determined for dishes cooked in the oven and on the stove respectively and greenhouse gas emissions resulting from cooking were included in the calculation.

The lifetime GHG emissions of the household appliances and LED bulbs were calculated using the estimated kWh consumption figures and multiplying the consumption figures with the Turkish grid EF.

End of life treatment of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

275,250

Emissions calculation methodology

Waste-type-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

According to the United Nations (UN) Environment Program Food Waste Index Report, 1/3 of the food produced in the world every year is wasted and 61% of food wastage occurs at the household level, 26% is in food services and 13% takes place at the retail stage. Taking this report into account the calculations are made assuming 61% of all of the food products that we sell end up in landfills.

The calculations are made by multiplying the amount of goods sold by the relevant landfill emission factors taken from the DEFRA Conversion Factors 2022 Database, “Waste disposal” sheet.

Downstream leased assets

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

7,815

Emissions calculation methodology

Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Although GHG Emissions from this category are well-below our materiality threshold, as we have the activity data, the GHG emissions are calculated.

DEFRA GHG Conversion Factors 2022 is used for calculation.
• Natural gas amount used by sub-contracted firms in stores is extrapolated by dividing the invoice amount to the unit natural gas price of the region where the store operates as we do not have metered information.
• Electricity used by sub-contracted firms in stores is directly calculated via monthly readings from electric meters by our store managers.
Natural gas usage and electricity usage of the sub-contractor running the bakery section in our stores have been included in our calculations. As all the natural gas and electricity data is taken from invoices, 100% of emissions are calculated using data obtained from our suppliers.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

This category is not relevant for Migros. Migros does not operate franchises.

Investments

Evaluation status

Not relevant, explanation provided

Please explain

Migros does not have any investments that should be reported under this category. All of the affiliates of Migros are included in our Scope 1, Scope 2 & Scope 3 calculations. We do not have any equity shares in any other company.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Please explain

This category is not relevant for Migros. No additional upstream sources.

Other (downstream)

Evaluation status

Not relevant, explanation provided

Please explain

This category is not relevant for Migros. No additional downstream sources.

C6.5a

(C6.5a) Disclose or restate your Scope 3 emissions data for previous years.

Past year 1

Start date

January 1, 2021

End date

December 31, 2021

Scope 3: Purchased goods and services (metric tons CO2e)

8,978,282

Scope 3: Capital goods (metric tons CO2e)

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

132,030

Scope 3: Upstream transportation and distribution (metric tons CO2e)

89,658

Scope 3: Waste generated in operations (metric tons CO2e)

35,527

Scope 3: Business travel (metric tons CO2e)

228

Scope 3: Employee commuting (metric tons CO2e)

1,653

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream transportation and distribution (metric tons CO2e)

186,406

Scope 3: Processing of sold products (metric tons CO2e)

Scope 3: Use of sold products (metric tons CO2e)

2,959,583

Scope 3: End of life treatment of sold products (metric tons CO2e)

214,343

Scope 3: Downstream leased assets (metric tons CO2e)

9,214

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment

Categories Revised:
C3, C9 & C11-Calculation scope expanded in 2022, hence 2021 calculations were revised
C5-Minor mistake found in calculations, hence 2021 values are revised

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

Yes

C6.7a

(C6.7a) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment
Row 1	2,197	The GHG emissions from the animals in our breeding farm.

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.0000062

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

458,362

Metric denominator

unit total revenue

Metric denominator: Unit total

74,501,977,000

Scope 2 figure used

Market-based

% change from previous year

53.34

Direction of change

Decreased

Reason(s) for change

Change in renewable energy consumption
Other emissions reduction activities
Change in revenue

Please explain

Our revenue has increased by 105.4% when compared to the previous reporting period.

Our GHG emissions have decreased by 4.17%* thanks to the increase in renewable energy we use and the energy efficiency projects we have implemented.

In 2021 we have purchased 60.000 MWh of energy attribute certificates in the form of i-Recs from a renewable geothermal power plant. In 2022 we have increased our renewable energy use by purchasing energy attribute certificates for 134,100 MWh of our consumption and we have also build solar panels on our Adana Distribution Center generating 313 MWh of renewable energy.

We have also implemented energy efficiency and emission reduction projects in 2022 reducing 15,171 tons of CO2e from both Scope 1 and Scope 2 GHG emissions.

Our verified Scope 1 emissions in the verification report is 243,587 tCO2e which includes the emissions from enteric fermentation which is in line with ISO 14064-1 standard, for this calculation we didn't include the biogenic emissions and the Scope 1 GHG emissions used in this calculation is 241,390 tCO2e.

As a result, the emissions intensity per revenue has decreased by 53.34%.

* The 4.17% decrease in GHG emissions is calculated excluding biogenic emissions. When biogenic emissions are included, the change in emissions is calculated as 4.24% decrease. Our Target Abs1 includes biogenic emissions.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	7,375.1	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	10.49	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	63.83	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	226,334	IPCC Fourth Assessment Report (AR4 - 100 year)
Other, please specify R22	7,606.53	IPCC Fourth Assessment Report (AR4 - 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/area/region.

Country/area/region	Scope 1 emissions (metric tons CO2e)
Turkey	241,390

1	

1GHG emissions from enteric fermentation (biogenic emissions from our breeding farm) is not included in this value. Our verified Scope 1 emissions in the verification report is 243,587 tCO2e which includes the emissions from enteric fermentation which is in line with ISO 14064-1 standard.

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By activity

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
Mobile Combustion (Company Vehicle Fuels)	3,579.43
Fugitive emissions (refrigerants)	233,941.03
Generators	1,606.28
Fire Extinguishers	2.06
Stationary Combustion	2,261.2

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/area/region.

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Turkey	275,976	216,972

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By activity

C7.6c

(C7.6c) Break down your total gross global Scope 2 emissions by business activity.

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Electricity consumption	275,976	216,972

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

No

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	31,176	Decreased	6.52	In 2021 we have purchased 60,000 MWh of renewable electricity and achieved a GHG emission reduction of 27,966 tCO2e from our Market-Based Scope 2 emissions. In 2022 we have increased the renewable energy purchase amount to 134,100 MWh we have also produced 313 MWh of renewable energy from rooftop solar panels in our Adana Distribution Center. The total share of renewable energy in our electricity consumption has reached 21.43%. The consumption of a total of 134,433 MWh renewable energy resulted in 59,142 tCO2e emission reduction from our market-based emissions. The additional amount of emission reductions are calculated as:

				59,142-27,966 = 31,176 tCO2e Our Scope 1+Scope 2 emissions for 2021 was 478,286 tCO2e (excluding biogenic emissions). The emissions value, % is calculated as follows: 31,176 / 478,286 = 6.52%
Other emissions reduction activities	15,171	Decreased	3.17	In 2022 we have implemented 7 energy efficiency and emission reduction projects in projects reducing 15,171 tons of CO2e. Our Scope 1+Scope 2 emissions for 2021 was 478,286 tCO2e (excluding biogenic emissions). The emissions value, % is calculated as follows: 15,171/478,286 = 3.17%
Divestment	0	No change	0	We have not made any divestment in the reporting year.
Acquisitions	0	No change	0	We have not made any acquisitions in the reporting year.
Mergers	0	No change	0	We have not made any mergers in the reporting year.
Change in output	26,423	Increased	5.52	The total change in GHG emissions from 2021 (478,286) to 2022 (458,362) is equal to a decrease of 19,924 tCO2e. 31,176 tCO2e of this decrease is due to change in renewable energy consumption. 15,171 tCO2e of this decrease is due to efficiency projects performed in the reporting year. Remaining value is calculated as: (31,176+15,171) – 19,924 = 26,423 In the form of an increase in GHG emissions. This is an expected increase because the number of stores have increased considerably in 2022 with respect to 2021.

				The emissions value, % is calculated as follows: 26,423 / 478,286 =5.52%
Change in methodology	0	No change	0	We did not change our methodology for scope 1 and Scope 2 GHG emissions calculations.
Change in boundary	0	No change	0	There is no change in boundary for Scope 1 and Scope 2 GHG emissions in the reporting year.
Change in physical operating conditions	0	No change	0	We did not have any changes in physical operating conditions.
Unidentified	0		0	We did not have any unidentified changes in our emissions.
Other	0	No change	0	We did not have any category to account for changes in our emissions.

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 5% but less than or equal to 10%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes

Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	0	31,209	31,209
Consumption of purchased or acquired electricity		134,100	493,119	627,219
Consumption of self-generated non-fuel renewable energy		313		313
Total energy consumption		134,413	524,328	658,741

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No

Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

We don't use sustainable biomass in our operations.

Other biomass

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

We don't use other type of biomass in any of our operations.

Other renewable fuels (e.g. renewable hydrogen)

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

We do not use any other renewable fuels in our operations.

Coal

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

We do not use coal in our operations.

Oil

Heating value

LHV

Total fuel MWh consumed by the organization

19,010

MWh fuel consumed for self-generation of electricity

6,050

MWh fuel consumed for self-generation of heat

12,960

Comment

We use diesel oil and fuel oil in generators for the generation of electricity. We also use diesel oil and gasoline for company vehicles. The oil used in company vehicles is reported under MWh consumed for self-generation of heat.

Gas

Heating value

LHV

Total fuel MWh consumed by the organization

12,199

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

12,199

Comment

Natural gas is only used for heating in our operations.

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

We don’t use any other non-renewable fuel in our facilities.

Total fuel

Heating value

LHV

Total fuel MWh consumed by the organization

31,209

MWh fuel consumed for self-generation of electricity

6,050

MWh fuel consumed for self-generation of heat

25,159

Comment

The given figure includes all our stationary and mobile fuel consumption in MWh for the reporting year.

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	6,363	6,363	313	313
Heat	12,199	12,199	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in C6.3.

Country/area of low-carbon energy consumption

Turkey

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Sustainable biomass

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

134,100

Tracking instrument used

I-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute

Turkey

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2016

Comment

We have purchased 134,100 MWh of renewable electricity which is accounted for with zero GHG emissions in our market-based scope 2 calculations.

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area

Turkey

Consumption of purchased electricity (MWh)

627,219

Consumption of self-generated electricity (MWh)

6,363

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

12,199

Total non-fuel energy consumption (MWh) [Auto-calculated]

645,781

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place

Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Migros_14064 VOS FINAL_for 2022_Rev1-Final.pdf
Assessment Report 14064_MİGROS_2022-Final.pdf

Page/ section reference

BSI-Verification Opinion Statement (VOS), Page 2
BSI-Migros Ticaret A.S. Assessment Report, Page 15
The verified Scope 1 GHG emissions are 243,587 tCO2e which include Anthropogenic biogenic emissions.
Anthropogenic biogenic emissions are verified as 2,197 tCO2e. Our Scope 1 emissions are reported as 241,390 tCO2e (243,587-2,197) as per GHG guidance for question C6.1

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Migros_14064 VOS FINAL_for 2022_Rev1-Final.pdf

Assessment Report 14064_MİGROS_2022-Final.pdf

Page/ section reference

BSI-Verification Opinion Statement, Page 2, Indirect GHG emissions from imported energy, Location-based

BSI-Migros Ticaret A.S. Assessment Report, Page 17

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

Scope 2 approach

Scope 2 market-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Migros_14064 VOS FINAL_for 2022_Rev1-Final.pdf

Assessment Report 14064_MİGROS_2022-Final.pdf

Page/ section reference

BSI-Verification Opinion Statement, Page 2, Indirect GHG emissions from imported energy, Market-based

BSI-Migros Ticaret A.S. Assessment Report, Page 15

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

Scope 3: Purchased goods and services
Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
Scope 3: Upstream transportation and distribution
Scope 3: Waste generated in operations
Scope 3: Business travel
Scope 3: Employee commuting
Scope 3: Downstream transportation and distribution
Scope 3: Use of sold products
Scope 3: End-of-life treatment of sold products
Scope 3: Downstream leased assets

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Assessment Report 14064_MİGROS_2022-Final.pdf

Page/section reference

BSI-Migros Ticaret A.S. Assessment Report, Page 15 and Page 16.

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C7. Emissions breakdown	Year on year change in emissions (Scope 1 and 2)	ISO 14064-3	% Change in our Scope 1 and Scope 2 GHG emissions are verified during annual ISO 14064-1 audits. Please see Assessment Report page 16. 1
C6. Emissions data	Other, please specify Anthropogenic biogenic GHG emissions	ISO 14064-3	Anthropogenic biogenic emissions are verified during annual ISO 14064-1 audits. Please see Verification Opinion Statement Page 2. 2
C8. Energy	Energy consumption	ISO 14064-3	Our total electricity consumption is verified during annual ISO 14064-1 audits. Please see Assessment Report page 9. 1
C8. Energy	Renewable energy products	ISO 14064-3	Our renewable energy consumption and generation figures are verified during annual ISO 14064-1 audits. Please see last 2 paragraphs of the Assessment Report page 7. 1

[1]Assessment Report 14064_MİGROS_2022-Final.pdf

[2]Migros_14064 VOS FINAL_for 2022_Rev1-Final.pdf

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

No, and we do not anticipate being regulated in the next three years

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Type of internal carbon price

Shadow price

How the price is determined

Alignment with the price of a carbon tax

Objective(s) for implementing this internal carbon price

Change internal behavior
Drive energy efficiency
Drive low-carbon investment
Identify and seize low-carbon opportunities
Navigate GHG regulations

Scope(s) covered

Scope 1
Scope 2

Pricing approach used – spatial variance

Uniform

Pricing approach used – temporal variance

Static

Indicate how you expect the price to change over time

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)

166.04

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)

166.04

Business decision-making processes this internal carbon price is applied to

Capital expenditure
Operations
Risk management
Opportunity management

Mandatory enforcement of this internal carbon price within these business decision-making processes

No

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan

Migros is not directly included within the scope of MRV Regulation in Türkiye, however, it is foreseen that the ETS will be implemented in the energy industry as a pilot, so we can expect an increase in our electricity prices as more than 60% of the Turkish grid is fed by electricity generated by using non-renewable fossil fuels.
For this reason, we reduce our carbon emissions by making various renewable energy investments and we are already taking measures to reduce a possible additional financial burden. Our transition plan also includes a plan of what we will do each year in terms of emission reductions. With the application of this carbon price on the decision-making process for our capital expenditures, we've increased our investments to decrease our CO2 emissions across the business.
In 2022 through our energy-saving initiatives, we achieved 15,309 tCO2e savings.
The internal carbon price is also applied to our decision-making process for our operations, as a result, we increased the share of renewable energy in our operations by purchasing renewable energy attribute certificates, for 134,100 MWh of electricity which is equivalent to 21.42% of our total electricity consumption.

Internal carbon pricing (ICP) is allowing energy management and planning teams to calculate the cost of the CO2 impacts on our operations. Accordingly, we take into account the cost of a carbon tax or an ETS when planning budgets and building business cases for gas and electricity reduction initiatives across the business. In terms of company-specific examples, we carried out energy efficiency projects by considering ICP, in the areas of refrigeration, cooling technology, automation and IT
According to our climate transition plan:
• 200 stores refrigerant gas exchange with low GWP impact per year, after 2025 – 3,000

tCO2/year
• 135 stores water-cooling system transformation and/or low GWP impact gas exchange per year 14,000 tCO2/year
• As of 2022, we started our renewable energy investments. It is planned to install 200 MW solar panel until 2025.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers
Yes, our customers/clients

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Run an engagement campaign to educate suppliers about climate change

% of suppliers by number

14.82

% total procurement spend (direct and indirect)

80

% of supplier-related Scope 3 emissions as reported in C6.5

94

Rationale for the coverage of your engagement

More than 94% of our Scope 3 GHG emissions come from 2 main Scope 3 categories:
1. Scope 3 Category 1: Purchased goods and services make up more than 70% of our Scope 3 GHG emissions
2. Scope 3 Category 11: Use of sold products make up around 24% of our Scope 3 emissions.
This emissions profile is the reason why we decided to focus on this selected group of suppliers.
In 2022, as a part of our net zero journey we launched the Sustainable Business Partners Network (SBPN). All of our suppliers that are responsible for producing the products that make up more than 94% of our Scope 3 emissions are included in this network.
These suppliers also make up 80% of our total procurement spend (and total revenue).

Our Migros Private Label producers are also included in this system.
With this platform, we are aiming to keep track of the GHG emissions, water consumption, waste generation and similar environmental data of our suppliers. We also track the GHG emission reduction targets of our suppliers and support them in their efforts to set targets of their own.
In 2022 with the launch of this platform, in order to get reliable data from our suppliers we have started running an engagement campaign to educate our suppliers on climate change and how to calculate and report their GHG emissions and how to reduce their impact on climate change.

Impact of engagement, including measures of success

The aim of this engagement activity was to increase the know-how of our suppliers on how to collect data and calculate their GHG emissions as well as making sure that their calculation methodologies are in line with our methodologies.

Our measure of success for this engagement activity is the number of suppliers that have submitted and had their data verified through our platform divided by total number of suppliers invited to join this platform.

Our target is to reach 100% verified submissions by the end of 2026.
Description of the impact of climate-related engagement strategy:
In the reporting year, 42.52% of our suppliers have submitted their verified data through this platform. This result was way above our expectations for the first year, we believe the reason for this success was the trainings we have provided, 20 % of these suppliers were the ones that have participated in our GHG emission calculations training.
We will keep on supporting our suppliers through education campaigns.

Comment

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Collaboration & innovation
Run a campaign to encourage innovation to reduce climate change impacts

% of customers by number

80

% of customer - related Scope 3 emissions as reported in C6.5

2.03

Please explain the rationale for selecting this group of customers and scope of engagement

With our Migros Better Future Plan, we aim to protect the rights of future generations by protecting today's resources towards a more habitable world. As an active company within the retail sector, we get into contact with the customers through our stores, therefore our customers are included within our key stakeholders.

Within this scope, we focus on collaborating with our customers to reduce the GHG emissions from end-of-life treatment of sold products (Scope 3 Category 12). These emissions make up 2.03% of our total Scope 3 GHG emissions. Our main focus area is packaging waste and other recyclable waste in our value chain.

In order to reduce our impacts and our customer's impacts on climate change we have been running an extensive client waste take-back and recycling program for many years. The system allows for the separate collection and recycling of organic waste, used batteries, cooking oils, glass, paper, plastics and aluminum cans. Recycling diverts these waste streams from landfill, thus reducing the respective GHG emissions and avoiding the excessive use of virgin materials.

80% of our stores have recyclable waste collection points readily available for our customers' use. Therefore the % of customers by number is selected as 80% as an estimate based on the number of stores that have recyclable waste collection points.

We also collect waste oil from our customers and through our e-commerce channel (Migros Sanal Market) and deliver them to our licensed company authorized by the Ministry of Environment, Urbanization and Climate Change

In the locations where we have recyclable waste collection points, we share information about the importance of recycling and waste management with all of our customers. We have also started a new interactive social media campaign in the end of 2021. We have shared stories informing our customers on topics like waste management, food waste, climate change, plastic, water saving and sustainable agriculture. We have also asked for opinions/suggestions from our customers about these subjects on social media. After receiving suggestions, we have shared the suggestions of our customers from our account.

Impact of engagement, including measures of success

The measure of success for this engagement activity is identified as % of the increase in tons of packaging waste collected and sent to recycling with respect to the previous year. If there is more than 5% increase we assess the impact of the engagement activity as successful.
Impact of the engagement strategy:
In 2021 we have collected and recycled 13,774 tons of packaging waste. In 2022 we have increased the weight of packaging waste collected and recycled to 19,833 tons. Therefore a 44% increase was achieved and the engagement activity is assessed to be successful.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

Yes, climate-related requirements are included in our supplier contracts

C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization's purchasing process and the compliance mechanisms in place.

Climate-related requirement

Complying with regulatory requirements

Description of this climate related requirement

All of our suppliers are required to comply with all regulatory requirements. This requirement is also included in their supplier contracts.
In the annual GC conformity audits the suppliers are requested to prove their compliance with the environment and climate-related regulations.

% suppliers by procurement spend that have to comply with this climate-related requirement

100

% suppliers by procurement spend in compliance with this climate-related requirement

84.09

Mechanisms for monitoring compliance with this climate-related requirement

On-site third-party verification
Supplier scorecard or rating

Response to supplier non-compliance with this climate-related requirement

Retain and engage

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

Yes

Attach commitment or position statement(s)

Migros Integrated report 2022 pages 27-28 and 96
SBTi Commitment Letter

Migros Integrated Annual Report-2022.pdf

SBT Commitment Letter_Migros Ticaret.pdf

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

Our Environmental Policy and Commitments are shared with our employees via e-mail and circulars and with the public via our corporate website.

Our guidebook for our employees, named “Orange Book”, explains all our corporate policies and Migros Code of Ethics with transparency and in detail. This guide is shared with all of our employees via e-mail when they start their new job, and the guide is also available on the internet.

Our online training, where we present our policy contents and strategies, is offered to our employees in order to ensure that our corporate policies are understood and adopted by all of our employees. While our current employees are expected to have completed this training, it is ensured that our newly recruited employees receive the training in the first month of employment. Our employees who cannot pass the exam as a result of the training must take the training again.

Also only a select number of executives are authorized for official engagement with policy makers and they have extensive knowledge about our policies, strategies and commitments.

If an employee of Migros is detected to be involved in an engagement activity that directly violates our climate change strategy, the detected inconsistency is reported to our Industrial Relations department for further evaluation. The employee may be referred to the disciplinary committee in line with the evidence. After the evaluation by the disciplinary committee, s/he may receive a penalty in the form of a warning, an aggravated warning or his/her employment contract may be terminated.

C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or engages with, which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association

Consumer Goods Forum (CGF)

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

Consumer Goods Forum is committed to taking action in recognition of the serious risks that climate change poses for businesses, supply chains and consumers.

The Consumer Goods Forum (CGF), which has 400 members consisting of retailers, manufacturers and service providers from 70 countries worldwide, provides guidance to the fast-moving consumer goods and retail sector in the world in respect of social and environmental sustainability, health, product safety and end-to-end value chain. Özgür Tort, our Chief Executive Officer, who has been holding office on the Board of Directors of CGF since 2013, continues to serve as the Head of CGF Retail since 2019. Thus, Migros plays an active role in the determination of the global targets of the CGF in respect of sustainability.

CGF, which has maintained its activities in accordance with various initiatives, working groups, proposed solutions and commitments previously under the topics of environmental sustainability, social sustainability, health, product safety and end-to-end value chain, updated its management and implementation approach in 2019. Accordingly, the coalitions for Food Waste, Plastic Waste, Collaborations for Healthier Lives, Global Food Safety Initiative (GFSI), Sustainable Supply Chain Initiative (SSCI), Human Rights – Working to End Forced Labor, End-to-End Value Chain, and Forest Positive (supporting forestation) have been established upon the participation of the retailers and manufacturers that wish to work actively in the relevant fields. As based on such coalition structuring, each company became involved in the topics, in which it is actually interested and in which it wishes to make a difference, depending on its own material topics. It is expected that the commitments as determined in such a manner would be more realistic, and also that the practices would be faster and generate

effective results.

We lead our industry in respect of the accomplishment of the improvement objectives of the CGF in Türkiye by participating in the coalitions of the CGF for Food Waste, Collaborations for Healthier Lives, and End-to-End Value Chain. We provide contributions to the progress reports, which are based on the commitments and objectives and issued separately for all focal topics by the CGF, by means of our sustainability performance.

Migros has no opposition to CGF's position on climate change we are publicly promoting their position.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

204,603

Describe the aim of your organization's funding

Membership fees paid to CGF in the reporting year.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

TÜSİAD (Turkish Industry and Business Association), GPD (Food Retailer Association), TOBB (The Union of Chambers and Commodity Exchanged of Türkiye) Retail Council

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

We work with trade associations like TUSIAD, GPD, TOBB Retail Council to influence the development of national climate-related regulations.

Especially TUSIAD works intensively on climate change-related issues and publishes reports on climate-related regulations that may impact Turkish businesses. GPD and TOBB Retail Council work on climate-related issues on a case-by-case basis.

As Migros, we take part in TUSIAD's climate change and environmental management working groups. In these working groups, we evaluate the global climate-related regulations and the possibilities of their implementation in Türkiye are examined. The possible sectoral impacts of these regulations are discussed in detail. Our position is completely in line with TÜSİAD and we publicly promote their position.

GPD and TOBB Retail Council also work on climate-related issues however they don't have directly assigned working groups like TÜSİAD. Legislators involve these organizations in the process when there is a draft regulation that concerns them. If such a regulation proposal comes from the legislators, the same process is carried out as in TÜSİAD.

We are also in line with these organizations position on climate change.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

96,750

Describe the aim of your organization's funding

The value given is the total membership fees paid to TUSIAD, GPD and TOBB.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports

Status

Complete

Attach the document

Migros Integrated Annual Report-2022.pdf

Page/Section reference

Migros 2022 Integrated Annual Report – pg 93
All sustainability-related information pages 92 – 121 (A Better Future for Our Planet)
Targets & performance Pages 314 – 315

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

In our 2022 Integrated Annual Report, we share our sustainability performance transparently. In particular, all our efforts in this area can be found between pages 92 – 121, which is the “A Better Future for Our Planet” Chapter. Our targets and performances directly geared towards combatting climate change are reported on pages 93 – 97,101,314,315

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization’s role within each framework, initiative and/or commitment
Row 1	Business Ambition for 1.5C Race to Zero Campaign UN Global Compact	Race to Zero Campaign Through our commitment to SBTi, we have joined the Race to Zero Campaign on 21st of July 2022. Business Ambition for 1.5C Through our commitment to SBTi, we have joined the Business Ambition for 1.5C Campaign on 21st of July 2022. UN Global Compact We participated in the SDG Innovation for Young Professionals program organized by the UN Global Compact. We contributed to the development of our innovation culture by reconsidering business strategies in line with the Sustainable Development Goals. We participated in the program as 3 people from the sustainability management, environmental management and education departments. We participated in various workshops and seminars for 6 months and developed a project to present to the senior management.

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity
Row 1	Yes, both board-level oversight and executive management-level responsibility	Biodiversity is a topic which has both board-level oversight through our CEO and management-level responsibility through the Sustainability Committee in Migros. We know that preventing the loss of ecosystems and biodiversity against the increasing negative impacts of climate change and ensuring the sustainability of natural resources will contribute to economic and social development, and we continue our work with this awareness. In the operations, we carry out, the protection of biological wealth in the regions within our sphere of influence is among the issues we give importance to. We pay attention to the sustainability of natural life in all of our activities and as an output of this; Our operations do not directly harm biodiversity. As an industry leader, we want to achieve more and work to minimize our indirect impacts. We support sustainable agricultural practices within the scope of our activities that we carry out in harmony with natural life.

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments
Row 1	Yes, we have made public commitments only	Commitment to respect legally designated protected areas Commitment to avoidance of negative impacts on threatened and protected species

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment

No, but we plan to within the next two years

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

No, but we plan to within the next two years

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity-sensitive areas in the reporting year?

No

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water protection Land/water management Education & awareness

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	Yes, we use indicators	Response indicators

C15.7

(C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments Biodiversity strategy	Migros 2022 Integrated Annual Report Page 107-111 1

[1]Migros Integrated Annual Report-2022.pdf

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

Our I-REC certificate is attached.
Sepas_Migros_60000_2201.pdf

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	CEO	Chief Executive Officer (CEO)

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms