

# Welcome to your CDP Climate Change Questionnaire 2023

## C0. Introduction

### C0.1

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

With more than 180 years of history, Türk Telekom (TT) is the first integrated telecommunications operator in Türkiye. Türk Telekom Group (TTG) Companies provide services in 81 cities of Türkiye with 39433 employees alongside the vision of introducing new technologies across the country and accelerating Türkiye's transformation into an information society. TT unified its mobile, internet, phone and TV products and services under the single Türk Telekom brand as of Jan 2016. The Company is listed in Borsa Istanbul (BIST) since 2008 and has been the only telecom company listed on the BIST Corporate Governance Index since 2009. TT also takes part in the BIST Sustainability Index since 2014. TT which provides PSTN and wholesale broadband services, directly owns 100% of mobile operator TT Mobil, retail internet services, IPTV, satellite TV, Web TV, Mobile TV, Smart TV services provider TTNET, convergence technologies company Argela, IT solution provider İnnova, online education software company SEBİT, call centre company AssisTT, project development and corporate venture capital company TT Ventures, Electric Supply and Sales Company TTES, provider of combined facilities support activities TT Destek. with, wholesale data and capacity service provider TT International and TT International Holding BV, and financial technology company TTG Finansal, and indirectly owns Consumer Finance Company TT Finansman, payment, and e-money services company TT Ödeme. TT continued investing in Türkiye's digitalisation unabatedly with its fixed infrastructure investments as the leading infrastructure provider of Türkiye. TT, one and only internet service provider that can deliver fibre internet services to Türkiye's 81 provinces, aims to increase the country's average internet usage speed and to enable households to connect to the internet at highest possible speeds. The fibre network extended to 403K km by the end of 2022 from 256K km in 2017. Number of homepass increased to 31.4 mn as of 2022 and almost doubled compared to 5 years ago. Total number of fibre subscribers grew to 11.8 mn, making up 78% of the total base (2017: 28%). In 2005, Concession Agreement was signed between the Company and the Information and Communication Technologies Authority (ICTA), which covers the provision of all kinds of fixed line telecommunication services, establishment of necessary facilities and the use of such facilities by other licensed operators and the marketing and supply of fixed line telecommunication services between 2001 and 2026. On Jan 3rd, 2023, TT has submitted its application for the extension of the concession agreement to ICTA. TT held 78,1% share in

Türkiye's wholesale fixed internet market and 57% in retail fixed internet market as of the end of 2022. TT began offering mobile communications services in 1986, when it was awarded an NMT450 license. TT held 28,2% market share in Türkiye's mobile market as of the end of 2022. Avea signed a concession agreement with the ICTA on 30 Apr 2009, pursuant to which it was granted a 3G license and the right to establish, develop and operate IMT-2000/UMTS infrastructure and networks. The term of the license is 20 years from its signature date. On 26 Aug 2015, an auction for 4.5G (IMT Services and Infrastructures Authorization) was held by the ICTA. Additionally, the ICTA granted TT Mobil 4.5G License on 27 Oct 2015. The license is effective until 2029. TT's Tivibu maintained its number two position in Türkiye's pay TV market with 32,7% market share as of the end of 2022. The global member of TTG, TT International, is a wholesale data and capacity service provider company. Headquarters of the company are located in Budapest, Hungary. The company's field of operation covers Central and Eastern Europe, the Middle East, the Caucasus, Central and South Asia, Latin America and the Far East regions in addition to Türkiye. TT continues its efforts to make its business processes more compatible with sustainability principles. In addition to transparently sharing its exemplary practices in the fields of environment, social and governance with its stakeholders, TT cares for its progress in national and international sustainability indices. TT is part of the national and international sustainability organizations and indices: FTSE4GOOD, S&P, BIST, MSCI, Sustainalytics, UNGC and also a member of the GSMA. In line with TTG's strategic investment plans and sustainability agenda, the Company plans to accelerate Solar Power Plant (SPP) investments soon, in order to reduce carbon footprint, contribute to climate risk management, and create financial value. TT carries out all environmental activities within the framework of national legislation and international standards. With this approach, all service areas are managed and certified in accordance with ISO14001, 45001. In addition, the Company completed audit and certification processes for ISAE3402, ISO20000, 50001, 27701, 27017, 27018, PCI DSS, CSA Star.

## 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

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**Start date**

January 1, 2022

**End date**

December 31, 2022

**Indicate if you are providing emissions data for past reporting years**

No

## 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	TRETTLK00013

# 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
Board-level committee	The Sustainability Committee ("Committee") has been established to; carry out Environmental, Social, and Governance (ESG) studies, to create the necessary policies, targets and implementation plans, to execute, monitor and audit the policies, and to carry out the necessary studies within the scope of the Sustainability Principles Compliance Outline published by the Capital Markets Board of Turkey. The Committee; - reports to the Board of Directors.

	<ul style="list-style-type: none"> <li>- is incorporated and authorized by the Board of Directors</li> <li>- is chaired by the CEO (also a member of the BoD) and consists of 10 members.</li> <li>- meets as frequently as required by the tasks assigned to it, with a minimum of two (2) meetings per year</li> </ul> <p>As Türk Telekom, our emission target will be committed to the SBTi (The SBTi promotes corporate climate action and encourages organizations from all sectors to demonstrate leadership by setting science-based emissions reduction targets.) until the end of 2023. We aim to be a net-zero company in the future. Below topics will be the 2023 agenda items and work in progress for the Sustainability Committee:</p> <ul style="list-style-type: none"> <li>- Working on a net-zero roadmap</li> <li>- Setting medium and long- term environment related targets</li> <li>- Aligning the carbon reduction targets with SBTi.</li> <li>- Framing a well-worked out roadmap that is viable both operationally and financially.</li> <li>- Improve sustainability reporting for more transparency and better compliance with international standards/frameworks.</li> </ul>
<p>Director on board</p>	<p>Türk Telekom's CEO is also a member of the Board of Directors and chairs the Sustainability Committee, which is responsible for sustainability and environmental related targets and initiatives.</p> <p>Sustainability committee, which was previously formed with the approval of the CEO, has been reformed with the approval and support of the Board of Directors in 2023. TT's Sustainability Policy has been adopted by the Board of Directors simultaneously. The committee is chaired by the CEO and consists of 10 executive members.</p>
<p>Chief Executive Officer (CEO)</p>	<p>Türk Telekom's sustainability strategy is determined and implemented under the leadership of the CEO. Climate change and environment is identified as one of the five focus areas stated in Turk Telekom's Sustainability Policy. The CEO of the Company, also a member of the BoD, is the top executive responsible for all actions to be taken on environmental, social and governance issues. Turk Telekom has systems and resources in place to monitor, measure and report performance in climate-related issues. We make every effort to continuously increase the effectiveness of our systems and processes in this area. By setting forth its board-approved Sustainability Policy and adding oversight on the Sustainability Committee to BoD's responsibility, Turk Telekom has taken an important step forward in its commitment to progress in sustainability and climate-related issues. We target fully integrating our sustainability approach to our business culture through commitment and active engagement at all levels. Turk Telekom deploys new technologies and adopts best practices where possible to progress on its environmental agenda.</p>

## 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 Reviewing innovation/R&D priorities Overseeing and guiding employee incentives Reviewing and guiding strategy Overseeing and guiding the development of a transition plan Monitoring the implementation of a transition plan Overseeing and guiding scenario analysis Overseeing the setting of corporate targets Monitoring progress towards corporate targets Overseeing and guiding public policy engagement Overseeing value chain engagement	<p>Türk Telekom urges participation and ownership of the senior management in achieving sustainability targets. Economic, environmental, and social factors are being embedded into decision-making processes along with corporate governance principles in order to manage the risks associated with these factors and the overall sustainability agenda effectively. The Sustainability Committee, formed as a part of this approach by the Board of Directors (BoD), determines the long-term sustainability vision and strategies. It reviews sustainability activities and evaluates them within the scope of sustainability goals and policy. The Committee incorporated and authorized by the BoD is headed by the CEO. The Investor Relations and Sustainability Directorate is responsible for the coordination of the Committee and for implementation of the Company's sustainability policy and strategy, progress towards its goals and the implementation of executive decisions and the recommendations of the BoD. All resources and support necessary for the Committee to undertake the assigned tasks are provided by the BoD.</p> <p>The Committee is responsible for;</p> <ul style="list-style-type: none"> <li>• Identifying the priority issues on sustainability, the sustainability strategy, sustainability targets, roadmaps and policies.</li> <li>• Presenting sustainability issues for the approval of the BoD.</li> <li>• Working to ensure in compliance with the principles in the Sustainability Principles Compliance Outline announced by the CMB.</li> <li>• Improving, developing, executing, monitoring, auditing sustainability goals, policies, practices, working principles, and management systems by regularly reviewing, and submitting such studies for approval of BoD at least once a year and in any case in accordance with the maximum periods determined for the disclosure of annual reports to the public.</li> </ul>

	<p>Reviewing and guiding the risk management process</p>	<ul style="list-style-type: none"> <li>• Carrying out studies and development projects in order to integrate sustainability into the Company structure.</li> <li>• Monitoring the current processes, practices and projects related to sustainability, following the necessary audits, setting targets for performance measurement and ensuring that the data and information provided by the relevant units are reported to the BoD.</li> <li>• Following current developments in sustainability and making recommendations for the development of current strategies, policies and practices.</li> <li>• Coordinating the communication to ensure that the sustainability strategy, policy and practices are adopted by all stakeholders of the Company, the organization of necessary trainings on related issues, and the coordination of stakeholder participation in matters deemed necessary.</li> </ul> <p>Note: Climate change and environment is identified as one of the five focus areas stated in Turk Telekom's Sustainability Policy. Climate-related risks and opportunities and the management of these are priority agenda for the Sustainability Committee. The Committee aims to set medium term emission targets in 2023 and start working on the application process to the SBTi asap.</p>
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## 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	<p>Three board members are from engineering discipline. Therefore, with this background, they have a good understanding of energy efficiency, climate related issues, risks and opportunities.</p> <p>In addition, energy efficiency and renewable energy is an area that Turk Telekom is particularly focused on. We have competent engineers in related departments in this field. BoD member's competency is improved by detailed information presented and reports prepared about</p>

		the work being undertaken on energy efficiency and carbon reduction related projects.
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## C1.2

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

### **Position or committee**

Chief Executive Officer (CEO)

### **Climate-related responsibilities of this position**

Managing climate-related acquisitions, mergers, and divestitures  
Providing climate-related employee incentives  
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  
Managing climate-related risks and opportunities

### **Coverage of responsibilities**

### **Reporting line**

Reports to the board directly

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

Quarterly

### **Please explain**

The CEO emphasizes that the telecommunication sector is a key facilitator of sustainable development targeting social, economic and environmental aspects all at the same time. The committee determines the short, medium and long-term sustainability vision and strategies, and evaluates sustainability activities and sustainability targets. The Sustainability Committee is formed and authorized by the Board of Directors. The CEO is also a member of the Board of Directors and chairs the Committee. Some of the climate-related projects that CEO leads and monitors;

1. Renewable Energy and SPP investments
2. Smart City Technologies: While expanding the concept of smart city technologies, Türk Telekom contributes to the effective use of the country's resources by achieving savings in electricity, fuel consumption and irrigation in municipalities with the smart solutions it has produced.
3. Smart Agriculture: In 2022, Türk Telekom developed the artificial intelligence supported smart agriculture software, the new member of the new generation city family,



with local solution partners and included it in the new generation city ecosystem. Smart agriculture software plays an important role in reducing the risks and impacts of climate change and agricultural external dependency, increasing production efficiency and digitizing agriculture. Production with Smart Agriculture directly or indirectly contributes to many goals, including Ending Hunger, Sustainable Cities and Communities, and Climate Action from the United Nations Sustainable Development Goals.

4. Software solutions for the digital transformation journey of municipalities

5. Smart Energy Management Platform: Thanks to the Smart Energy Management Platform implemented in 2022, Türk Telekom is able to track the results of its efficiency and optimization projects in a faster and more effective manner. In the first phase of the platform, TT aims to save more than 10 million kWh of energy annually and to save 100 thousand liters of generator fuel per year.

6. Zero Waste: The obligations are fulfilled as per the regulations on the management of waste electrical and electronic equipment. Türk Telekom carries out studies in cooperation with the Information Industry Association (TÜBİSAD) for the recycling of electronic waste generated as a result of the services it provides. Between 2017 and 2022, over 33 tons of electronic waste were collected and recycled in this context. In addition, by the end of 2022, with the recycling of 9,425 tons of scrap cable, 6,880 tons of pure copper and approximately 4,241 tons of by-products were circled back to economy.

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### **Position or committee**

Chief Financial Officer (CFO)

### **Climate-related responsibilities of this position**

Managing annual budgets for climate mitigation activities

Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)

### **Coverage of responsibilities**

### **Reporting line**

CEO reporting line

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

More frequently than quarterly

### **Please explain**

Our Company's CFO is also vice chairman of Sustainability Committee. With the change in the Company's organisational structure, the Sustainability function was transferred to the Investor Relations Directorate and the name of the department was changed as Investor Relations and Sustainability Directorate in 2022. Investor Relations and Sustainability Director directly reports to the CFO.



CFO is responsible from managing the budget for climate related risks and opportunities of the company. He is also monitoring all sustainability-related issues of the company, actively participating in management of the climate transition plan, conducting climate-related scenario analysis, and monitoring progress against climate-related corporate targets.

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### **Position or committee**

Sustainability committee

### **Climate-related responsibilities of this position**

Managing annual budgets for climate mitigation activities  
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)  
Managing climate-related acquisitions, mergers, and divestitures  
Providing climate-related employee incentives  
Developing a climate transition plan  
Implementing a climate transition plan  
Integrating climate-related issues into the strategy  
Conducting climate-related scenario analysis  
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**

Reports to the board directly

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

Quarterly

### **Please explain**

Sustainability committee, which was previously formed with the approval of the CEO, has been reformed with the approval and support of the Board of Directors in 2023. TT's Sustainability Policy has been adopted by the Board of Directors simultaneously. The committee is chaired by the CEO and consists of 10 executive members.

- It determines the material sustainability issues, develops the sustainability strategy, short-, medium-, and long-term goals, roadmaps, and policies, and presents them to the Board of Directors for approval.
- It works to ensure compliance with the Sustainability Principles Regulation

Framework's guiding principles. Prepares the sustainability reports required by the Capital Markets Board and submits them to the Board of Directors for public release.

- By routinely reviewing sustainability goals, policies, practices, working principles, and management systems, they improve, develop, execute, monitor, audit, and work at least once a year and within the maximum periods determined for the public disclosure of annual reports. It is submitted for approval.
- It conducts studies and develops projects to incorporate sustainability into the organization's structure.
- It monitors the current processes, practices, and projects related to sustainability, oversees the necessary audits, establishes goals for performance measurement, and ensures that the Board of Directors receives the data and information provided by the relevant units.
- Recommends strategies, policies, and practices for the development of current strategies and policies.
- It ensures the communication of the company's sustainability strategy, policy, and practices to stakeholders and the coordination of stakeholder participation in matters deemed necessary.
- The Committee meets as frequently as required by the tasks assigned to it, with a minimum of two (2) meetings per year.

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### **Position or committee**

Environment/ Sustainability manager

### **Climate-related responsibilities of this position**

Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)

Managing climate-related acquisitions, mergers, and divestitures

Developing a climate transition plan

Implementing a climate transition plan

Integrating climate-related issues into the strategy

Conducting climate-related scenario analysis

Setting climate-related corporate targets

Monitoring progress against climate-related corporate targets

Managing public policy engagement that may impact the climate

Assessing climate-related risks and opportunities

Managing climate-related risks and opportunities

### **Coverage of responsibilities**

### **Reporting line**

Finance - CFO reporting line

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

More frequently than quarterly

**Please explain**

With the change in the Company's organisational structure, the Sustainability function was transferred to the Investor Relations Directorate and the name of the department was changed as Investor Relations and Sustainability Directorate in 2022. Corporate Governance Compliance and Sustainability Group Manager is positioned under the unit directly responsible for monitoring all sustainability-related issues of the company, developing a climate transition plan, conducting climate-related scenario analysis, and monitoring progress against climate-related corporate targets. There is a dedicated expert working only on sustainability issues, thus, more effective work is targeted.

The Investor Relations and Sustainability Directorate which provides coordination for the Sustainability Committee, ensures the determination, development, monitoring, and implementation of the sustainability strategy. Aiming to facilitate integration of Sustainability Principles to all business making processes of TT, facilitate inter-departmental coordination where shared responsibility is required, monitor progress on Committee's Sustainability related goals (including climate related targets) and prepare and communication of all Sustainability related reporting, the department reports directly to the CFO.

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**Position or committee**

Environmental, Health, and Safety manager

**Climate-related responsibilities of this position**

Managing value chain engagement on climate-related issues  
Assessing climate-related risks and opportunities

**Coverage of responsibilities**

**Reporting line**

Other, please specify  
Support Services and Procurement Management Assistant General Manager

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

More frequently than quarterly

**Please explain**

This department is responsible for carrying out environmental and occupational health and safety standards. Principal responsibilities include waste management, certification and follow-up of ISO 14001 and ISO 50001 Management System processes, and preparation of environmental and energy training content for internal use.

**Position or committee**

Energy manager

**Climate-related responsibilities of this position**

Conducting climate-related scenario analysis  
Assessing climate-related risks and opportunities

**Coverage of responsibilities**

**Reporting line**

Other, please specify  
Technology Assistant General Manager

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

More frequently than quarterly

**Please explain**

Within Türk Telekom, develops and implements energy efficiency projects. The energy manager has the objective to develop and follow up projects to reduce and diversify (towards renewables) the company's electricity consumption. This function monitors the energy consumption of equipment in the fixed and mobile infrastructure throughout the country and carries out improvement projects. Throughout the reporting year, Fixed Cooling Efficiency Projects, Fixed Transformation and Optimization Projects, the SPP (Solar Power Plant) Project, Mobile Optimization Projects, Mobile Transformation and Modernization Projects, and the TTessa (Smart Energy Management Platform) Project were developed.

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**Position or committee**

Risk manager

**Climate-related responsibilities of this position**

Assessing climate-related risks and opportunities  
Managing climate-related risks and opportunities

**Coverage of responsibilities**

**Reporting line**

Risk - CRO reporting line

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

Quarterly

**Please explain**

Türk Telekom's Risk Management Presidency is a systematized, organization-wide division that develops and implements strategies to identify and mitigate all risks that our company is facing or may face. Sustainability and climate related issues have long been identified as both strategic and operational risks. That said, Turk Telekom views sustainability as both a risk management and a value creation tool. Risks related to climate change and the environment are continuously identified and monitored.

## 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	<p>The Achievements and Incentives mechanism applies to all related department heads and related staff who are assigned these responsibilities. Accordingly, individuals' target and performance scorecards do take these responsibilities into account. Ultimate ownership of the implementation of Sustainability initiatives at Turk Telekom lies with the CEO, also the head of the Sustainability Committee. Therefore, there is also a climate risk/opportunities related target in the CEO's performance scorecard.</p> <p>The main targets are to reduce carbon emissions to help climate action, optimise the Company's energy cost and minimise the impact of volatility in energy prices for our Company. Finally, we work with many municipalities across Turkey in implementation of smart cities. Responsible employees receive a performance bonus proportionate to their contributions to a department's assigned objective. If a target is not met, the performance rating of the assigned employee drops.</p>

## 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**

Chief Executive Officer (CEO)

**Type of incentive**

Monetary reward

**Incentive(s)**

Bonus - % of salary

**Performance indicator(s)**

Reduction in absolute emissions

**Incentive plan(s) this incentive is linked to**

Short-Term Incentive Plan

**Further details of incentive(s)**

At Türk Telekom, performance results are determined according to the realization of the targets set at the beginning of the year. After the performance result is revealed, these results go through the calibration phase. The performance system applied at Türk Telekom is related to the Company careers of the Employees, but these values can be used as a reference in various rewarding systems. The calibrated performance results are used in the "Special Award" process, which is decided to be implemented every year at the employer's initiative, in order to motivate Türk Telekom Employees for the new period and increase their company loyalty. A special reward coefficient matrix is created based on certain title groups and performance results. After the special reward amounts of the employees are determined according to the coefficients in the matrix, these amounts are reviewed and calibrated by the Senior Management. Payments are made annually on calibrated special award amounts.

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

CEO is the ultimate owner of the implementation of Sustainability initiatives in Turk Telekom. He is also the Chairman of the Sustainability Committee which reports to the BoD. Our HR department has got well established processes and quantifiable metrics in place in performance measurement. Therefore, Turk Telekom's achievements in climate risk management area are part of CEO's performance and incentive evaluation.

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**Entitled to incentive**

Chief Financial Officer (CFO)

**Type of incentive**

Monetary reward

**Incentive(s)**

Bonus - % of salary

**Performance indicator(s)**

Reduction in absolute emissions

**Incentive plan(s) this incentive is linked to**

Short-Term Incentive Plan

**Further details of incentive(s)**

At Türk Telekom, performance results are determined according to the realization of the targets set at the beginning of the year. After the performance result is revealed, these results go through the calibration phase. The performance system applied at Türk

Telekom is related to the Company careers of the Employees, but these values can be used as a reference in various rewarding systems. The calibrated performance results are used in the “Special Award” process, which is decided to be implemented every year at the employer's initiative, in order to motivate Türk Telekom Employees for the new period and increase their company loyalty. A special reward coefficient matrix is created based on certain title groups and performance results. After the special reward amounts of the employees are determined according to the coefficients in the matrix, these amounts are reviewed and calibrated by the Senior Management. Payments are made annually on calibrated special award amounts.

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

The CFO is the vice chair of the Sustainability Committee. The Investor Relations and Sustainability department reports to the CFO. As the decision maker of the Investor Relations and Sustainability department, he is responsible for the budget and management of sustainability activities within the company. Therefore, Turk Telekom's achievements in climate risk management area are part of CFO's performance and incentive evaluation.

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**Entitled to incentive**

Environment/Sustainability manager

**Type of incentive**

Monetary reward

**Incentive(s)**

Bonus - % of salary

**Performance indicator(s)**

Progress towards a climate-related target  
Achievement of a climate-related target  
Implementation of an emissions reduction initiative  
Reduction in absolute emissions

**Incentive plan(s) this incentive is linked to**

Short-Term Incentive Plan

**Further details of incentive(s)**

At Türk Telekom, performance results are determined according to the realization of the targets set at the beginning of the year. After the performance result is revealed, these results go through the calibration phase. The performance system applied at Türk Telekom is related to the Company careers of the Employees, but these values can be used as a reference in various rewarding systems. The calibrated performance results are used in the “Special Award” process, which is decided to be implemented every year at the employer's initiative, in order to motivate Türk Telekom Employees for the new period and increase their company loyalty. A special reward coefficient matrix is created



based on certain title groups and performance results. After the special reward amounts of the employees are determined according to the coefficients in the matrix, these amounts are reviewed and calibrated by the Senior Management. Payments are made annually on calibrated special award amounts.

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

The Sustainability Committee is coordinated by the Investor Relations and Sustainability Directorate. This department is in charge of the CDP and GRI-Sustainability Reports, as well as the SBTi and TCFD studies. In addition, the Investor Relations and Sustainability Directorate is in charge of organizing workshops on related issues and reporting to the relevant departments.

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**Entitled to incentive**

Environmental, health, and safety manager

**Type of incentive**

Monetary reward

**Incentive(s)**

Bonus - % of salary

**Performance indicator(s)**

Reduction in absolute emissions

**Incentive plan(s) this incentive is linked to**

Short-Term Incentive Plan

**Further details of incentive(s)**

At Türk Telekom, performance results are determined according to the realization of the targets set at the beginning of the year. After the performance result is revealed, these results go through the calibration phase. The performance system applied at Türk Telekom is related to the Company careers of the Employees, but these values can be used as a reference in various rewarding systems. The calibrated performance results are used in the "Special Award" process, which is decided to be implemented every year at the employer's initiative, in order to motivate Türk Telekom Employees for the new period and increase their company loyalty. A special reward coefficient matrix is created based on certain title groups and performance results. After the special reward amounts of the employees are determined according to the coefficients in the matrix, these amounts are reviewed and calibrated by the Senior Management. Payments are made annually on calibrated special award amounts.

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

Our occupational health and safety department is responsible for implementing international and local environmental and occupational health and safety regulations. In this context, the relevant standards' requirements are followed and implemented.

Additionally, the occupational health and safety department is in charge of waste management also. In each of Turkey's 81 cities, the waste collection and recycling processes are monitored.

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**Entitled to incentive**

Energy manager

**Type of incentive**

Monetary reward

**Incentive(s)**

Bonus - % of salary

**Performance indicator(s)**

Reduction in absolute emissions

Energy efficiency improvement

Increased share of low-carbon energy in total energy consumption

Increased share of renewable energy in total energy consumption

Reduction in total energy consumption

Increased investment in low-carbon R&D

**Incentive plan(s) this incentive is linked to**

Short-Term Incentive Plan

**Further details of incentive(s)**

At Türk Telekom, performance results are determined according to the realization of the targets set at the beginning of the year. After the performance result is revealed, these results go through the calibration phase. The performance system applied at Türk Telekom is related to the Company careers of the Employees, but these values can be used as a reference in various rewarding systems. The calibrated performance results are used in the "Special Award" process, which is decided to be implemented every year at the employer's initiative, in order to motivate Türk Telekom Employees for the new period and increase their company loyalty. A special reward coefficient matrix is created based on certain title groups and performance results. After the special reward amounts of the employees are determined according to the coefficients in the matrix, these amounts are reviewed and calibrated by the Senior Management. Payments are made annually on calibrated special award amounts.

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

The energy unit monitors energy consumption and develops energy efficiency and diversification (towards renewables) projects. Smart power management project that Turk Telekom has developed and implemented internally is one and most popular of these projects. Solar energy investments and renewable energy certificate projects are also developed by this team.

## 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	Climate related operational risks (such as extreme weather condition risks) and opportunities are defined as short-term.
Medium-term	1	3	Risks and opportunities in climate-related business processes and energy efficiency projects are defined as medium-term.
Long-term	3	30	Climate related targets such as medium-term target or net zero target are defined as long-term.

#### C2.1b

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

At Türk Telekom, we position risk management as a systematic process embedded in our strategies and applied throughout the organization. In this regard, we have established the general basis and principles of the framework to be used in accordance with the ISO31000 Enterprise Risk Management System. We consider the sustainability risk defined within this framework not only as a process through which we manage negative impacts, but also as an area where we can create value by effectively managing opportunities. We adopt a sustainability approach which is based on disclosing the long-term values we create to our stakeholders in line with the principles of accountability and transparency. In addition, risks are reviewed annually. Accurately analysing the changing global risk environment and swiftly and effectively responding to stakeholder expectations clustered around the Sustainable Development Goals are key elements for our future success, we believe. This shows us the necessity of adopting sustainable development as a business model.

The Early Identification and Management of Risks Committee was established with the Board Resolution dated 14 August 2013. The Early Identification and Management of Risks Committee convenes every two months. The Early Identification and Management of Risks Committee was established with the following aims:

- To identify potential risks that could jeopardise the existence, growth and development of Türk Telekom

- To establish the Corporate Risk Management System (CRMS) in order to implement necessary measures and actions designed to eliminate identified risks, to ensure business continuity and resilience, and to implement development processes where necessary
- To conduct activities related to risk management and monitoring via risk management tools
- To ensure that the findings received from the CRMS form an important component of the decision-making mechanism, and to present reports to the Board of Directors (BoD) on these issues.

Risk management and Internal Control is a natural part of the activities carried out by all Türk Telekom employees. The Corporate Risk Management approach is aimed at serving as an integral part of decision-making mechanisms by integrating the approach into business activities and processes at all levels. The Board of Directors is the ultimate authority responsibility for the effectiveness of Corporate Risk Management. The Board of Directors conducts this responsibility through supervision of the Early Identification and Management of Risks Committee. All organisational levels of the Group, particularly the senior management and risk holders, contribute to and support the Corporate Risk Management and Internal Control processes. Within the scope of the Risk Management and Internal Control, TT aims to internalise a risk and control culture across the Group and ensure that all activities are carried out with the contribution of all stakeholders to whom risks are associated.

Evaluation of the effects of risks is carried out by the risk owner by running necessary research, utilising risk management tools and taking opinions of the relevant stakeholders. All root causes identified during the risk identification phase are examined in detail and possible outcomes are considered on the basis of each root cause. Related scenario analyses are carried out. Risks are expressed in a numerical scale of Impact and Probability analysis (1-5). **(Critical >250M TRY, Major / High 50-250M TRY, Medium 5-50M TRY, Minor / Low 1-5M TRY, Pretty Low <1M TRY).**

TT carries out all work required to manage potential risks effectively under a holistic approach. The risks that the Company is exposed to are identified by the business and technology teams and the root causes and potential consequences of the identified risks are determined. With the Bow-Tie Analysis used in this process, the end-to-end risk profile is determined, including checkpoints, from root causes to their effects on targets. The status of risks is measured and monitored according to the possibility of materialisation of these risks and the effects they would create if they occurred. While conducting a risk analysis, the possibility of a risk affecting more than one area is taken into account. When making decisions to manage risks, risk owners conduct cost-benefit analysis and take stakeholder expectations into account. Four main options are considered in this context are; Accept the Risk, Reduce the Risk, Transfer the Risk, Avoid the Risk.

## 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**

Climate-related materiality assessments are initiated and carried out by the Sustainability Committee. The Committee presents its views and recommendations to Türk Telekom's Board of Directors. The Company's climate-related risks and opportunities are managed by related departments in coordination of the Investor Relations and Sustainability Director, a team tasked with ensuring management of sustainability (include climate change) risks and opportunities in a holistic approach across the organisation.

At Türk Telekom, we define risk appetite as the amount and type of risk we want to take while carrying out our activities. The responsibility for determining and owning the risk appetite rests with the Board of Directors. However, the development of risk appetite often takes place under the joint responsibility of senior management and the Board of Directors. This work usually includes the development of risk appetite with appetite levels recommended by senior management, which is then reviewed and approved by the Board.

Head of Enterprise Risk and Business Continuity Presidency determines the criteria used to evaluate/measure the effects of risks and the probability of these risks to materialise by consulting with the relevant business units and running scenario analysis with them. The determined criteria are reviewed every year and revised if necessary. While determining the criteria, the defined risk appetite levels and legal or sectoral regulations and standards are all taken into account. It is acknowledged that the impact of a risk may be in more than one area and therefore, separate evaluations are run for each impact area where necessary.

Areas of evaluation:

- Financial
- Market Position & Customer
- Company Reputation
- Operational

- Legal and Regulatory.

Evaluation of the effects of risks is carried out by the risk owner by taking the opinions of the relevant stakeholders and running sensitivity analysis in cooperation with related departments. All root causes identified during the risk identification phase are examined in detail and possible outcomes are considered on the basis of each root cause.

Risks are expressed in a numerical scale of Impact and Probability analysis (1-5). (Critical >250M TRY, Major / High 50-250M TRY, Medium 5-50M TRY, Minor / Low 1-5M TRY, Pretty Low <1M TRY).

The criteria of the above scaling are detailed in internal documents. It is acknowledged that the impact of a risk may be in more than one area and therefore, separate evaluations are run for each impact area where necessary.

The impact level of the risk is categorised based on the highest impact value implied by this analysis.

The main risks that TT is exposed to are monitored under 4 main headlines: Financial, Strategic, Operational and Sustainability Risks.

TT may be exposed to financial risks such as liquidity risk, foreign exchange exposure, interest rate risk and counterparty risk.

TT conducts proactive risk management activities in line with the Company's strategic priorities, to enhance company's revenues and meet customer expectations. Information and Communication Technologies sector offers solutions to prevent global sustainability risks. Therefore, TT's strong presence in this segment paves the way for capturing opportunities in the market by providing solutions for risks faced by our of our customers. It would be fair to say, most of these solutions concentrate on climate related risks and digitalisation. Operational Risks: Operational risk is generally defined as the risk of loss arising from inadequate or failed internal processes, employees and systems, or external incidents. TT carries out intensive work to protect itself and its subscribers against business interruptions and security breaches by overseeing the implementation of correct practices, standards and policies, and taking important steps, including obtaining certificates such as ISO 22301,27001, PCI-DSS. Sustainability risks include climate crisis and supply chain risks. The Global Risks Report published annually by the World Economic Forum is carefully considered by TT when determining the sustainability risks.

#### Customer Related Risks

1. Information Security and Cyber Risk
2. Data Management Risk
3. Digital Growth and Diversification Risk
4. Innovation Risk
5. Reputation Risk
6. Network Transformation Risk - Transformation and Development of Infrastructure and Network Technologies
7. Supply Chain Risk
8. Sustainability Risk

## 9. Organizational Agility Risk

### Climate Change and Environment Related Risks

1. Reputation Risk
2. Sustainability Risk
3. OHS Risk
4. The Risk of Drought and Water Crisis
5. Recycling
6. Waste
7. Energy Requirement/Density

### Risks Related to Contribution to Society

1. Innovation Risk
2. Reputation Risk
3. Inability to be Positioned as a Beneficial Company to Society Risk

Regulatory and financial impacts, such as the short-, medium-, and long-term impacts of the EU ETS, carbon pricing in the operations' geographies, and adaptation needs based on the physical impacts of climate change are closely monitored. Türk Telekom follows the Climate and Energy Legislation, which is aimed to be updated within the scope of the European Green Deal and is carried out by sector associations affiliated to the European Union.

Currently, TT prioritises two main areas of climate related opportunities and aims to diversify its options in the medium term.

1) We aim to reduce our energy costs and our dependency on market risks on energy costs. Also, we intend to reduce our emissions through deployment of energy-friendly technologies and equipment in our networks or diversification of our consumption towards renewable sources. Currently we work on sizeable Solar Power Plant - SPP investment projects. We will be allocating an important capex budget to this initiative in the next few years.

2) With the digital solutions we produce internally, we contribute to environment directly (through our own use) or indirectly (selling our products and services to our customers including many corporates, public institutions, municipalities, etc). We are an important player in this segment and we continue to invest in this business to grow our opportunities ahead.

## C2.2a

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

	Relevance & inclusion	Please explain
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<p>Current regulation</p>	<p>Relevant, always included</p>	<p>Corporate Risk Management monitors and applies changes to comply with updates on current regulations, benchmarks and regulative changes which are deemed best practices. In addition, we are following the current regulation in terms of GHG emission standards and scope, GHG inventories, and so on. Recently we are not subjected to severe changes due to the current regulation. The company has not received any financial penalties and it has not been involved in a situation that will cause a social reaction.</p> <p>Emerging environmental and climate-related regulations may have an impact on multiple aspects of Türk Telekom's business, such as our facility operations, product design, and product stewardship. The Sustainability committee, Legal and Regulation Assistant General Manager, and Investor Relations and Sustainability Directorate, continuously evaluate and monitor this process. For instance, the Investor Relations and Sustainability team closely monitors potential EU legislation regarding energy efficiency and circular economy.</p> <p>As Türk Telekom, we evaluated IPCC RCP4.5 and RCP8.5 temperature scenarios. Since we are a telecom company operating in 81 provinces of Turkey both in fixed and mobile telecom services, we will be affected by the risk of temperature rise. This will directly affect the company's cooling costs. In this context, we invest in renewable energy sources. We will also present our SBTi commitment by the end of 2023.</p>
<p>Emerging regulation</p>	<p>Relevant, always included</p>	<p>Emerging climate change regulations and their associated risks can have a direct impact on our costs and business practices across all of our business lines. Corporate Risk Management and Legal and Compliance teams are heavily involved in these efforts but related departments are also expected to fulfil their responsibilities to meet or implement the related regulations, benchmarks and standards.</p> <p>Considering the possibility of emerging tariffs and/or quota regulations by the government, our company works on carbon reduction scenarios to mitigate our risks and seize opportunities at this front. After Paris Agreement and SDGs were introduced, the international stakeholders have started to take climate risks into consideration accordingly.</p> <p>The Paris Agreement is basically based on the United Nations Framework Convention on Climate Change and aims to regulate the post-2020 climate change regime, which is the expiration date of the Kyoto Protocol. The Paris Agreement aims to strengthen global socioeconomic resilience against the threat of climate change in the post-2020 period. The long-term goal of the Paris Agreement is to keep the global temperature rise as low as 1,5°C compared to the pre-industrial era. This target requires a gradual reduction in the use of fossil fuels (oil, coal) and a shift towards renewable energy. Türkiye has</p>

		<p>become a party to the Paris Climate Agreement and has set a net zero emission target of 2053.</p> <p>TT Sustainability Committee has reached important resolutions in its recent meeting; accordingly, TT will take Paris Agreement and Türkiye's commitment on emission reductions as its main guidance in setting its own medium term and long term emission targets within 2023.</p> <p>TT also closely monitors regulatory financial impacts, such as the short-, medium-, and long-term impacts of the EU ETS, carbon pricing in the operations' geographies, and adaptation needs based on the physical impacts of climate change. Türk Telekom follows the Climate and Energy Legislation, which is aimed to be updated within the scope of the European Green Deal and is carried out by sector associations affiliated to the European Union.</p>
Technology	Relevant, always included	<p>We are constantly developing innovative solutions to mitigate the effects of the climate crisis. Adapting our operations to rapidly evolving technology and customer needs is a top priority for our Company. Failure to provide products that respond to technological changes at the same pace may result in a loss of market share.</p> <p>Customers want more options, greater flexibility, and faster responses. While the new business models adopted will make operations easier, it will be possible to maximize speed, agility, efficiency, and profitability, allowing for an improved customer experience. By utilizing innovative strategies, products, processes, and experiences, a digital business can generate positive experiences and revenue. The problem extends beyond a technological infrastructure update and has a significant impact on environment friendly business models.</p> <p>With artificial intelligence technologies, TT, Türkiye's digital transformation leader, is pioneering next-generation city transformation. Energy savings were achieved in all areas of smart living, from traffic to public safety, from irrigation to lighting, with the solutions implemented in 14 cities through the Next Generation Urbanism Initiative. While TT ensures the efficient use of public resources by utilizing data from the IoT platform, it also promotes a sustainable urban lifestyle.</p> <p>TT has also implemented the 'Next Generation Bicycle Project' in collaboration with Aksaray Municipality. Thanks to the Smart Energy Management Platform, which it launched in 2022, Thanks to the Smart Energy Management Platform implemented in 2022, Türk Telekom is able to track the results of its efficiency and optimization projects in a faster and more effective manner. In the first phase of the platform, TT</p>

		<p>aims to save more than 10 million kWh of energy annually and to save 100 thousand liters of generator fuel per year.</p> <p>TT has also recently prioritized increasing the proportion of electricity generated by renewable energy sources. As part of this initiative, TT is running plans to invest in SPP's and has obtained a license to operate electric charging station projects. TT plans to grow its number of charging stations due to consumer preference and fleet management.</p>
Legal	Relevant, always included	<p>Legal risks associated with climate change are prioritized, particularly in the areas of regulations, penalties, and inspections. Failure to comply with current environmental laws (including upcoming climate change regulations) may result in financial penalties. TT considers these risks with utmost care. Also, compliance to newly developed products and solutions is assured prior to their use by TT.</p> <p>TT takes a diligent approach to Legal risks. Hence, the Company has a large and more importantly rather experienced legal and regulatory team that can follow the regulations and global practices. In our company, the Legal and Regulations units are combined under a single Assistant General Manager who directly reports to CEO. This gives us an advantage in efficiency and better management of risks as well as in utilising possible synergies. The risk management framework at Türk Telekom evaluates all risk types. Until now, Türk Telekom has not faced any environmental penalties. Moreover, the likelihood of climate-related lawsuits against Türk Telekom is currently regarded as low.</p>
Market	Relevant, always included	<p>Raw material, supply and service-related risks are indirectly monitored under the risk inventory as risks that could be caused by climate change. Customer expectations and demands are handled with environmentally friendly methods. Climate-related risks can be considered as market risks in case of an increase in demand for low-carbon products. Similarly, disruption in our services from climate-related risks may result in failure to meet customer demand and connectivity services.</p> <p>We operate energy devices by monitoring 100% of our fixed grid with the artificial intelligence-supported Intelligent Energy Management System (TTessa), network, generator, battery, and so on. A 25% increase in network downtime will result in a 5,805,971 TRY increase in generator fuel costs. We are developing similar low-carbon products and services, increasing our investments in renewable energy, and closely monitoring customer behaviour.</p>

Reputation	Relevant, always included	<p>Stakeholders, including our customers, are placing a greater emphasis on corporate action on climate change. This is well evidenced by our own customer research studies. Increasing sensitivity around climate issues is also widely observed in consumers' purchasing decisions. We even observe the reflection of these sensitivities in types of inquiries we receive from our customers and other stakeholders. We observe that both individual and business clients prefer environmentally friendly solutions and select services that move in this direction. Potential business partnerships require similar criteria and proof of effective management of climate related issues by TT. . Besides, we observe that investor and policymaker engagement in this subject has also been increasing rapidly. We expect such awareness and requirements to grow in the coming years and at TT we take this transformation both as a trigger for broader and more diligent risk management and source of new opportunities for our business. In this regard, we concentrate on offering more eco-friendly products and services, allocating sufficient budget to support R&amp;D activities necessary to meet emerging demand, transforming our operations to mitigate our negative impact on the environment and prioritizing savings that support a low-carbon economy .</p> <p>TT is aware that failing to meet carbon emission targets or other climate-related stakeholder expectations, may lead to risk of losing our reputation, customers, and investors. Under reputation risk, the underlying causes that may contribute to this risk are examined. As a result of this risk, decreased trust in the company's reputation and brand may result in negative outcomes such as customer retention, negative media coverage and campaigns, and income loss.</p>
Acute physical	Relevant, always included	<p>Due to Türkiye's large geography, the magnitude of climate change varies between regions. Because of the varying temperatures, our company may be exposed to acute physical risks. Scenario analysis was conducted using the RCP4.5 and RCP8.5 temperature scenarios from the IPCC. Hot weather may result in increased operational expenses, because our cooling systems are a significant source of energy consumption. Natural disasters such as floods and earthquakes are evaluated within the scope of business continuity risks. Acute physical risks are evaluated by business continuity teams using business impact analyses and scenario planning. Within this framework, threats that may cause business interruption (by natural disasters such as flood, sudden increase/decrease in temperature, forest fire, and storm) are analysed annually in each of Türk Telekom's 11 geographically and administratively split regional directorates. After conducting risk analyses and assessments, each region's countermeasures against the aforementioned risks are identified</p>

		<p>separately. These actions may have a significant impact on the institutional structure and processes, as well as the infrastructure. (For example, fiber optic applications in flood-prone areas or the design of system rooms in high-temperature areas). In the "lessons learnt" meetings, disasters and their effects are analysed, and corrective measures are implemented. Due to the impossibility of completely eliminating these risks, disaster and emergency plans for residual risks are developed by taking regional risks into account. Central and local staff proactively monitors potential natural disasters and threats, and preventative measures are taken or advised by them.</p>
Chronic physical	Relevant, always included	<p>Although more effort is spent on acute physical risks for periodic planning, the company uses all technological availability to reduce the effects of chronic physical risks. For example, running subcontractor audits. Chronic changes in the environment can have a significant impact on our supply chain and costs. Chronic physical risks form the backbone of our risk assessment. Assessing chronic physical risks is part of our Corporate Risk Management activities.</p> <p>In this context, the following measures are taken to increase the outside temperature due to global warming.</p> <p>1- As a precaution for temperature rise, we choose the outside temperature design value in cooling devices at higher values compared to standard products.</p> <p>2- We provide portable washing devices for effects such as dirty precipitation caused by dust transport.</p> <p>3- We design our infrastructure redundancy according to the scenario where there is no water, by enlarging the backup water storage areas in our adiabatic systems for the water crisis. We operate our infrastructure by following the data instantly.</p>

## 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.**

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Identifier

Risk 1

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

Chronic physical

Changing temperature (air, freshwater, marine water)

**Primary potential financial impact**

Increased direct costs

**Company-specific description**

Weather has the potential to interrupt, or reduce the quality of, ICT services, through a wide range of direct and indirect impacts, including international impacts on supply chains. Extreme weather leading or heatwaves is a particular concern. Changing climate is expected to increase both frequency and severity of extreme weather incidents. Rising need for more data centers, communication networks and user devices is indicative of higher energy use in ICT services over the next decade. The increase in temperature caused by the climate crisis will have a direct impact on our company's operational and financial strategies. An increase of 1 degree in the average outdoor temperature compared to the seasonal norms will cause our cooling units to work significantly more. Consequently, depending on the temperature increase, cooling costs will increase.

The increase in electricity demand with the increase in temperature will also affect the security of electricity supply. The increase in energy costs due to supply problems in energy resources due to environmental effects will increase our energy expenses. Energy supply security is crucial to achieving sustainable development objectives. As the world faces increasing environmental challenges and strives to mitigate climate change, it becomes increasingly important to ensure a secure and resilient energy supply. Renewable energy sources such as solar, wind, and hydropower play a crucial role in mitigating climate change and reducing greenhouse gas emissions. By providing a secure energy source, including efficient energy storage and grid management systems, outages can be mitigated, allowing for a greater penetration of renewable energy and a more sustainable approach to energy management. In addition, we operate energy devices. %10 increase in energy unit prices and an increase of 1 degree in the average outdoor temperature compared to seasonal norms would increase our energy costs by around 252,906,646 TRY.

**Time horizon**

Short-term

**Likelihood**

Likely

**Magnitude of impact**

Medium-high

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

252,906,646

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

We estimate that a temperature increase of 1 degree will result in an increase of approximately 3% (5.6GWh) in total electricity consumption. In addition, the financial impact of 5.6GWh electricity consumption is estimated as 11,495,879 TRY. The share of this amount in the total OPEX for 2022 is calculated as 0.5%. On the other hand, the increase in energy unit costs due to supply problems in energy resources will increase our energy expenses. The share of electricity expense in total OPEX is around 8%. 10% increase in electricity unit prices may cause an additional cost of 241,513,627 TRY. With this increase, its share in total OPEX may reach the level of 9%. In order to manage and mitigate these risks, we carry out energy management projects.

**Cost of response to risk**

91,485,357

**Description of response and explanation of cost calculation**

Solutions that are resistant to high temperatures and can be used without air conditioning have been prioritized in our infrastructure transformations. High-temperature HT batteries and Lithium Battery solutions are preferred. SPP-supported solutions were used to reduce the impact of network outages at base stations. High-temperature products are purchased by utilizing environmentally friendly gases in cooling devices.

The following measures have been taken in order to manage the risks of power cuts that may occur in the energy supply in our fixed grid.

- 1- Generators have been installed in 100% of our important centers for mains interruption.
- 2- There is enough fuel for a minimum of 48 hours in all centers with generators.
- 3- All our centers have a minimum of 8 hours of battery backup time.
- 4- Solar Power Plant with a total installed power of 4MW has been installed in more than 1700 centers.
- 5- By monitoring 100% of our fixed grid with the artificial intelligence supported Intelligent Energy Management System (TTessa), network, generator, battery, etc.

In addition, 81 GWh of energy was saved with Energy Efficiency projects in 2022. These



projects for energy efficiency include cooling efficiency, optimization, mobile conversion, and modernization.

The following measures are taken to prevent the effects of temperature changes.

- 1- As a precaution for temperature rise, we choose the outside temperature design value in cooling devices at higher values compared to standard products.
- 2- We provided portable washing devices for effects such as dirty precipitation caused by dust transport.
- 3- We designed our infrastructure redundancy according to the scenario where there is no water by enlarging the backup water storage areas in our adiabatic systems for the water crisis, air conditioner failure etc. We operate our infrastructure by following the data instantly.

The cost of response to risk incurred in 2022 of our Solar Power Plant project, energy efficiency projects, and energy-focused R&D projects is 91,485,357 TRY.

## Comment

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### Identifier

Risk 2

### Where in the value chain does the risk driver occur?

Direct operations

### Risk type & Primary climate-related risk driver

Acute physical  
Flood (coastal, fluvial, pluvial, groundwater)

### Primary potential financial impact

Decreased revenues due to reduced production capacity

### Company-specific description

Türkiye is frequently exposed to natural disasters due to its geographical location. Due to the combination of landforms, climatic features, geological structure and other environmental factors, the country can be affected by natural disasters such as floods. Floods and overflows are frequently seen in Türkiye, especially in the summer months due to heavy rainfall. Floods cause serious damage to agricultural lands, residences and infrastructure. Floods that cause loss of life and property and mostly seen in Marmara, Aegean and Mediterranean Regions, except for the Black Sea. The geological features of these regions are also an important factor in the occurrence of these disasters. Wind and storm are also effective in floods caused by heavy rains rather than prolonged precipitation. Areas with high slopes in the Marmara and Aegean are also at risk of flooding. Heavy rains and wind from the Balkans are also affecting. Due to geography, the magnitude of climate change varies between regions. Because of the

varying temperatures, our company may be exposed to acute physical risks. Hot weather may result in increased operational expenses, because our cooling systems are a significant source of energy consumption. Natural disasters such as floods and earthquakes are evaluated within the scope of business continuity risks. Acute physical risks are evaluated by business continuity teams using business impact analyses and scenario planning. Within this framework, threats that may cause business interruption (natural disasters, sudden increase/decrease in temperature, forest fire, and storm) are analysed annually in each of TT's 11 geographically and administratively split regional directorates. After conducting risk analyses and assessments, each region's countermeasures against the aforementioned risks are identified separately. These actions may have a significant impact on the institutional structure and processes, as well as the infrastructure. (Fiber optic applications in flood-prone areas or the design of system rooms in high-temp areas). In the "lessons learnt" meetings, disasters and their effects are analysed, and corrective measures are implemented. Due to the impossibility of completely eliminating these risks, disaster and emergency plans for residual risks are developed by taking regional risks into account. Central and local staff proactively monitors potential natural disasters and threats, and preventative measures are taken or advised by them.

**Time horizon**

Long-term

**Likelihood**

Likely

**Magnitude of impact**

Medium-high

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

41,378,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

Service Interruption: Our fixed and mobile networks can be damaged as a result of events such as floods, storms and fires caused by climate change. When we examine the average annual cost of these incidents over the last 10 years, we arrive at a figure of USD 2,500,000. Accordingly we estimate the financial impact as 41,378,000 TRY (USD 2,500,000 \* 16.5512 TRY/USD).

**Cost of response to risk**

### Description of response and explanation of cost calculation

Service Interruption: Our fixed and mobile networks can be damaged as a result of events such as floods, floods, storms and fires caused by climate change. Every year, situations that may cause damage to our infrastructure and equipment against various disaster risks are covered by insurance. Within the comprehensive insurance policy, the provision for damage that may occur due to certain natural events cannot be separated.

### 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.**

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### Identifier

Opp1

### Where in the value chain does the opportunity occur?

Direct operations

### Opportunity type

Products and services

### Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

### Primary potential financial impact

Increased revenues resulting from increased demand for products and services

### Company-specific description

Türk Telekom offers smart city technologies that support the construction of sustainable, efficient, and high-quality cities under the headings of transportation, security, energy, health, environment and life. TT's smart city solution enables instant monitoring of all smart components as well as decision making through data analysis Customers' integrated system collects, organizes and manages the big data.

Türk Telekom offers smart city technologies that support the construction of sustainable, efficient, and high-quality cities. The company is leading Türkiye's largest smart city projects with solutions compatible with the new generation urbanism approach. The range of solutions offered by new generation city technologies under the headings of transportation, security, energy, health, environment, and life was expanded in 2021.

The smart solutions implemented by Türk Telekom in 14 cities in the fields of next generation transportation, energy, environment, health and safety under the name of the Next Generation City Platform contribute to construction of sustainable and safe cities offering a better quality of life. With the smart solutions implemented by the company, 40% of the electricity and 30% of the irrigation resources have been saved in the municipalities so far.

**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)**

118,104,242

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

Türk Telekom continued to expand its solution partner ecosystem for local governments in 2022. Revenue from smart solution products in reporting year is 118,104,242.

**Cost to realize opportunity**

52,244,242

**Strategy to realize opportunity and explanation of cost calculation**

Türk Telekom, the leader of digital transformation in Türkiye, is pioneering the next generation urban transformation with artificial intelligence technologies. Developing tailor-made turnkey and end to end solutions to meet the needs of local governments, Türk Telekom strengthens the communication between municipalities and their citizens, while supporting municipalities in increasing efficiency and reducing costs through its software solutions. The company developed Türkiye's first integrated next generation city Project and in 2023, will continue to supports its customers in carbon reduction and develop a smart city network.

While offering smart city products and services, equipment, employee and software expenses constitute the majority of the expenses within the project. 52,244,242 TRY is the cost of this project realized in reporting year.

## Comment

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### Identifier

Opp2

### Where in the value chain does the opportunity occur?

Direct operations

### Opportunity type

Energy source

### Primary climate-related opportunity driver

Use of lower-emission sources of energy

### Primary potential financial impact

Increased revenues through access to new and emerging markets

### Company-specific description

Energy use and energy cost management is important for telecom operators. Türk Telekom is one of the rare operators that reduce the volume of electricity consumption while growing its business. So far, we have managed to realise this through energy efficiency projects.

We went one step further in managing energy consumption and accelerated our plans for renewable energy investments.

In line with our strategic investment plans and sustainability agenda, we plan to accelerate our Solar Power Plant (SPP) investments in the near future, in order to reduce our carbon footprint, contribute to climate risk management, and create financial value.

There are two major steps; the first one is renting available land and the second one is getting permission from the regulatory authority. In early 2023, as part of this agenda, we secured permission from regulatory authority for a total installation capacity of 405.8 MWe which corresponds to nearly 65% our current total electricity consumption. We also secured land for 29 years. The next steps are financing of the project and kicking off the physical investments that are currently in planning phase. This will be a multi-year investment plan.

### Time horizon

Long-term

### Likelihood

Virtually certain

### 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)**

1,156,000,000

**Potential financial impact figure – maximum (currency)**

1,734,000,000

**Explanation of financial impact figure**

According to the market researches, the estimated installation cost of 1MWe SPP investment is within the range of USD 850K - 1 mn. When we calculate the installation cost of the total capacity acquired by Türk Telekom over the average USD/TRY dollar exchange rate of 2022, it corresponds to an investment amount of between TRY 5.7- 6.7 bn (assumed average 6.2bn TRY cost to realize opportunity). If the SPP investments had been completed in 2022, the Company would have been able to save between 4% and 6% of the consolidated total OPEX.

**Cost to realize opportunity**

6,212,741,188

**Strategy to realize opportunity and explanation of cost calculation**

Continuing its investments and optimisation efforts in energy efficiency by systematically reducing its carbon emissions, Türk Telekom installed another 1.5 MW solar energy system last year (in addition to existing 2.5 MW installed capacity).

In line with our strategic investment plans and sustainability agenda, we plan to accelerate our Solar Power Plant (SPP) investments in the near future, in order to reduce our carbon footprint, contribute to climate risk management, and create financial value. 2023, as part of this agenda, we secured permission from regulatory authority for a total installation capacity of 405.8 MWe which corresponds to nearly 65% our current total electricity consumption.

According to the market researches, the estimated installation cost of 1MWe SPP investment is within the range of USD 850K - 1 mn. When we calculate the installation cost of the total capacity acquired by Türk Telekom over the average USD/TRY dollar exchange rate of 2022, it corresponds to an investment amount of between TRY 5.7- 6.7 bn (assumed average 6.2bn TRY cost to realize opportunity).

**Comment**

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**Identifier**

Opp3

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Products and services

**Primary climate-related opportunity driver**

Development and/or expansion of low emission goods and services

**Primary potential financial impact**

Increased revenues resulting from increased demand for products and services

**Company-specific description**

Türk Telekom monitors all energy and cooling infrastructure instantly with the Smart Energy Management Platform, which it launched in 2022, and saves on cooling electricity consumption and generator fuels with artificial intelligence supported algorithms. The project carried out jointly with Türk Telekom and a domestic software company; A secure, fast and user-friendly platform was designed and implemented. With this project, in addition to the energy and cooling devices in the infrastructure, IOT products such as fuel level sensor, hall infrastructure monitoring device and grounding measurement device were designed and started to be used in its infrastructure.

**Time horizon**

Short-term

**Likelihood**

Likely

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

22,688,092

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

With Smart Energy Management Platform implemented in 2022, Türk Telekom is able to track the results of its efficiency and optimization projects in a faster and more effective manner. In the first phase of the platform, TT aims to save more than 10 million kWh of energy annually and to save 100 thousand liters of generator fuel per year. The potential financial impact amount is calculated based on the unit electricity and unit fuel cost realized in 2022.

**Cost to realize opportunity**

6,894,703

**Strategy to realize opportunity and explanation of cost calculation**

By monitoring 100% of our fixed grid with the artificial intelligence supported Intelligent Energy Management System (TTessa), network, generator, battery, etc. In 2022, we invested 6,894,703TRY for the Smart Energy Management Platform Project.

**Comment**

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**Identifier**

Opp4

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Energy source

**Primary climate-related opportunity driver**

Use of lower-emission sources of energy

**Primary potential financial impact**

Increased revenues through access to new and emerging markets

**Company-specific description**

Within the scope of investment and optimization studies for energy efficiency by systematically reducing carbon emissions, a 1.5 MW solar energy system was installed in addition to 2.5 MW in 2022. By increasing the total installed power of renewable energy systems to 4 MW, approximately 3.335 tons of carbon emissions per year will be prevented.

**Time horizon**

Long-term

**Likelihood**

Virtually certain

**Magnitude of impact**

High

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

5,608,615

**Potential financial impact figure – minimum (currency)**



### Potential financial impact figure – maximum (currency)

#### Explanation of financial impact figure

Potential financial impact figure is calculated by multiplying saved kilowatt hours by the national electricity price.

#### Cost to realize opportunity

23,058,870

#### Strategy to realize opportunity and explanation of cost calculation

Continuing its investments and optimisation efforts in energy efficiency by systematically reducing its carbon emissions, Türk Telekom installed another 1.5 MW solar energy system last year (in addition to existing 2.5 MW installed capacity). By doing so, on top of preventing 1,250 tons of carbon emissions, the company has also achieved its goal of increasing its solar power generation capacity by 60% in 2022, earlier than originally planned by 2023. The value of our additional SPP investment in 2022 is TRY 23,058,870.

#### 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

Our climate transition plan is voted on at Annual General Meetings (AGMs)

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

<https://www.ttyatirimciiliskileri.com.tr/media/w0ehgokc/2022-annual-report.pdf>

## 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, 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
Physical climate scenarios RCP 4.5	Company-wide		We are following IPCC methodologies for climate scenarios and take TCFD requirements as our assessment and future reporting guideline. In this context, we analysed the outcomes of the RCP 4.5 and RCP 8.5 scenarios and their potential effects on our company. Academic studies by the Turkish State Meteorological Service reveal that RCP 4.5 and RCP 8.5 would result in an average temperature increase between 1 and 2 degrees Celsius for the period 2016–2040 and 1.5 to 4 degrees Celsius for the period 2071-2099. The 2040, 2070, and 2099 temperature and precipitation projections were developed relative to the 1971-2000 base period. Due to our country's diverse geographical features, regional, watershed, and provincial changes in average temperature and precipitation vary. The Tigris-Euphrates River system and the Mediterranean are at risk.
Physical climate scenarios RCP 8.5	Company-wide		We are following IPCC methodologies for climate scenarios and take TCFD requirements as our assessment and future reporting guideline. In this context, we analysed the outcomes of the RCP 4.5 and RCP 8.5 scenarios and their potential effects on our company. Academic studies by the Turkish State Meteorological Service reveal that RCP 4.5 and RCP 8.5 would result in an average temperature increase between 1 and 2 degrees Celsius for the period 2016–2040 and 1.5 to 4 degrees Celsius for the period 2071-2099. The 2040, 2070, and 2099 temperature and precipitation projections were developed relative to the 1971-2000 base period. Due to our country's diverse geographical features, regional, watershed, and

			provincial changes in average temperature and precipitation vary. The Tigris-Euphrates River system and the Mediterranean are at risk.
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## 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

When considering climate scenarios for the telecommunications industry, several focal questions can help guide the analysis and planning process. These questions address the potential impacts of climate change on the industry and its infrastructure, as well as the industry's role in mitigating climate change and adapting to its effects.

- How will climate change affect the telecommunications infrastructure, such as network equipment, data centers, and transmission systems?
- Which geographic regions are most vulnerable to climate-related hazards, such as extreme weather events, sea-level rise, or wildfires?
- What are the potential risks to communication networks and services due to climate change, and how can they be mitigated?
- How will climate change policies and regulations impact the industry's energy use and emissions?
- What strategies can the telecommunications sector adopt to reduce its carbon footprint, increase energy efficiency, and transition to renewable energy sources?
- How can the telecommunications infrastructure be made more resilient to climate-related hazards?
- What backup systems and redundancy measures are needed to ensure uninterrupted communication during extreme weather events or other climate-related disruptions?
- What opportunities exist for the telecommunications industry to leverage green technologies, such as energy-efficient network equipment, smart grids, or sustainable data centers?
- How can the industry foster innovation and research to develop new technologies that support both climate action and telecommunications needs?
- How can the telecommunications sector help corporate and other institutional customers in their climate goals and strategies through innovation, ICT solutions, etc.?
- How can the telecommunications sector engage with policymakers, regulators, and other stakeholders to align climate goals and strategies?
- What partnerships and collaborations can be established with other industries, such as renewable energy providers or transportation companies, to achieve synergistic climate outcomes?
- How can the industry engage and educate customers about the climate impacts of their communication habits and promote sustainable practices?

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

The Task Force on Climate-related Financial Disclosures (TCFD) provides a framework for organizations to assess and disclose climate-related risks and opportunities. It is important to address the risks of the telecommunications sector within the framework of TCFD and the significance of climate-related risks and the need for disclosure in the telecommunications sector have been gaining attention. We are following IPCC methodologies for climate scenarios and take TCFD requirements as our assessment and future reporting guideline. Taking TCFD as our assessment and future reporting guideline, we have identified that physical risks will have an impact on Türk Telekom, and we are continuing our efforts and investments in addressing and mitigating physical climate risks. Design values for external temperatures in cooling devices are selected at higher levels compared to standard products, considering the temperature rise. Portable washing devices are being provided to mitigate the effects of factors such as precipitation affected by dust transport. In adiabatic systems, water crisis-related risks are minimized by expanding backup water storage areas and improving infrastructure, thereby reducing the risks associated with scenarios where access to water is not available. We are developing our action plans to reduce our energy risks (supply, market volatility etc) in order to ensure business continuity, reduce costs and allocate resources to R&D activities. We reduce our energy expenses with projects such as Smart Energy Management System, Fixed Cooling Efficiency Projects, Fixed Transformation and Optimization Projects, Mobile Optimization Projects, Mobile Transformation and Modernization Projects. In 2022, we received authorization for an SPP installation capacity of 405.8 MWe, which would amount to approximately 65% of our energy consumption if fully installed. While our related teams prepare for the start of the project and its financing (requires a multi-year investment plan) we continue our research for further investments to reduce our consumption and other opportunities to diversify our consumption towards in Renewable Energy resources.

### 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	Türk Telekom has an ICT solutions provider subsidiary; Innova. This subsidiary is one of the largest in its sector. Innova serves to the private sector, in the fields of telecommunications, finance, banking, insurance, retail, energy, automotive, production and service. In public sector, it provides services in many areas such as health,

		<p>education, transportation, security and infrastructure.</p> <p>Through its subsidiary, Türk Telekom offers low-carbon product and service solutions in various industries it serves and works to reduce greenhouse gas emissions. Greenhouse gas management and combating climate change are included in the company's overall strategy and are one of its most pressing concerns.</p> <p>With data analytics, artificial intelligence, and digital solutions, we offer products and services that add value to both customers and the industry through our subsidiaries. These subsidiaries' areas of expertise include Smart City and Smart Store Solutions, Robotic Process Automation, and Fintech Products and Solutions.</p>
Supply chain and/or value chain	Yes	<p>ICT is a rapidly growing industry that enables many low-carbon solutions. We are working to identify our customers' needs and provide cutting-edge services that enable carbon reductions throughout the value chain (for example, telepresence, cloud computing, increased broadband access, and improved network capabilities). We have a variety of low-carbon customer-facing solutions, such as e-billing and renewable modem devices.</p> <p>Furthermore, by converting old technology materials such as copper ADSL cables into cutting-edge fiber cables, we ensure that the precious metals contained in the old products are returned to the circular economy.</p> <p>There is always a budget set aside to support the development of such products and services, and we are constantly innovating towards low-carbon alternatives.</p> <p>We also ensure that our customers' carbon footprints are reduced by using data centers that get all of their electricity from renewable sources.</p>
Investment in R&D	Yes	<p>Türk Telekom directly or through its subsidiaries invests heavily in R&amp;D and other innovative ideas to facilitate a low-carbon or even decarbonized future and markets. We continue to innovate and prototype new solutions that can make a difference throughout our value chain by learning from the positive environmental impact of our products and services. Turk Telekom is keen to develop more solutions on climate related issues to enhance its revenues and to help combat environmental risks indirectly; hence, sets aside a budget for these activities.</p> <p>Through investments in renewable energy, Türk Telekom aims reduce the negative impact of its operation on the environment. Also,</p>

		<p>energy losses are avoided, and emissions are reduced through digitalization projects such as smart cities.</p> <p>IT and project expenditures, which include investments such as smart energy management systems powered by artificial intelligence and considered within the scope of climate-related opportunities, have been steadily increasing in comparison to previous years. (See the annual report of Türk Telekom <a href="https://www.ttyatirimciliskileri.com.tr/media/w0ehgokc/2022-annual-report.pdf">https://www.ttyatirimciliskileri.com.tr/media/w0ehgokc/2022-annual-report.pdf</a>.)</p>
Operations	Yes	<p>The governance model enables the issue to be managed at the highest level (sustainability committee in which senior executives are members directly reports to the Board), which demonstrates the high awareness around the significance of the issue. There is a great deal of recognition for reducing emissions, as well as innovative ideas for reducing emissions in various sectors. Turk Telekom added climate related targets to CEO and CFO performance scorecards and linked their incentives to these targets in 2023. The Company plans to extend this relationship to more executives' scorecards in 2024. The Company has a published Sustainability Policy. Climate Change is an integral part of this Policy, which frames the governance and the overall management of the issue. According to that, climate change-related issues are managed in the relevant departments and units and are regularly reported to the sustainability committee.</p>

### 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	Capital allocation Access to capital	In consideration of climate risks, Türk Telekom invests in renewable energy resources through related projects. In addition, Turk Telekom provides the necessary conditions for its green investments and receives support from green fund sources. Türk Telekom plans to fully integrate the universal principles of sustainability into its business model, strategies and corporate decisions with its sustainability approach. Our Company implements many projects and initiatives including energy efficiency projects designed in this direction in close cooperation with its stakeholders. For instance, in order to finance our Company's capital

		<p>expenditures within sustainability scope we received green loan from EBRD.</p> <p>Energy is very important for telecoms operators. Türk Telekom is one of the rare operators that reduce the volume of electricity consumption while growing its business. So far, we have managed to realise this through energy efficiency projects.</p> <p>We went one step further in managing energy consumption and accelerated our plans for renewable energy investments.</p> <p>In line with our strategic investment plans and sustainability agenda, we plan to accelerate our Solar Power Plant (SPP) investments in the near future, in order to reduce our carbon footprint, contribute to climate risk management, and create financial value.</p> <p>There are two major steps; the firstone is renting available land and the second one is getting permission from the regulatory authority. In early 2023, as part of this agenda, we secured permission from regulatory authority for a total installationcapacity of 405.8 MWe which corresponds to nearly 65% our current total electricity consumption. We also secured land for 29 years. The next steps are financing of the project and kicking off the physical investments that are currently in planning phase. This will be a multi-year investment plan.</p>
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### 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**

Revenue/Turnover

**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)

23,058,870

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

0.05

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

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

100

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

Continuing our investments and optimisation efforts in energy efficiency by systematically reducing our carbon emissions, Türk Telekom installed another 1.5 MW solar energy system in 2022. In this context, the amount of investment made in 2022 has been calculated and shared. Investments will accelerate in the coming years with an installed power capacity of 405.8 MWE.

According to the market researches, the estimated installation cost of 1MWe SPP investment is within the range of USD 850K - 1 mn. When we calculate the installation cost of the total capacity acquired by Türk Telekom over the average USD/TRY dollar exchange rate of 2022, it corresponds to an investment amount of between TRY 5.7- 6.7 bn (assumed average 6.2bn TRY cost to realize opportunity).

## 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.

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#### Target reference number

Abs 1

#### Is this a science-based target?

No, but we anticipate setting one in the next two years



**Target ambition**

**Year target was set**

2020

**Target coverage**

Company-wide

**Scope(s)**

Scope 1

Scope 2

**Scope 2 accounting method**

Location-based

**Scope 3 category(ies)**

**Base year**

2020

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

131,691.1

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

601,634.9

**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 CO<sub>2</sub>e)**

733,326

**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 CO<sub>2</sub>e)**

**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 CO<sub>2</sub>e)**

**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 CO<sub>2</sub>e)**

**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 CO<sub>2</sub>e)**

**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 CO<sub>2</sub>e)**

**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 CO<sub>2</sub>e)**

**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 CO<sub>2</sub>e)**

**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**

2023

**Targeted reduction from base year (%)**

35

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

476,661.9

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

129,978.67

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

426,875.42

**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)**

556,854.09

**Does this target cover any land-related emissions?**

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

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

68.7559771702

**Target status in reporting year**

Underway

**Please explain target coverage and identify any exclusions**

The target remained the same for Scope 1 and 2.

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

In the base year of 2020, Scope 1 emissions were 131,691.1 tons CO2e and Scope 2 emissions were 601,634.9 tons CO2e. In 2022, total emissions were 556,854.09 tons CO2e and the target is underway with a 24% reduction. Türk Telekom is planning to reduce electricity usage with efficiency projects, increase its capacity to generate energy from solar energy, purchase more of its electricity from lower emission sources and offset carbon emissions with renewable energy certificates.

**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?**

No other climate-related targets

## 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 *)
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Under investigation	0	0
To be implemented*	1	3,533.2
Implementation commenced*	0	0
Implemented*	6	44,988.2
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  
Heating, Ventilation and Air Conditioning (HVAC)

### Estimated annual CO2e savings (metric tonnes CO2e)

7,633.09

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

Scope 2 (location-based)

### Voluntary/Mandatory

Voluntary

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

32,311,450

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

61,531,784

### Payback period

1-3 years

### Estimated lifetime of the initiative

16-20 years

### Comment

Fixed Cooling Efficiency Projects: Türk Telekom expanded its energy-saving free cooling solutions in fixed locations, thus achieving energy savings of up to 80% per center in air conditioning energy consumption. In addition, in 2022, it replaced the old generation air conditioners used in the fixed network with new generation eco-friendly efficient devices. After the transformation and optimization projects, the cooling efficiency of the system halls was increased by optimizing the air conditioning capacities and increasing the backup and set value. CO2 savings are calculated by saved kwh times 0.484 national electricity grid emission factor.



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**Initiative category & Initiative type**

Energy efficiency in production processes  
Process optimization

**Estimated annual CO2e savings (metric tonnes CO2e)**

18,978.94

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

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

80,339,320

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

0

**Payback period**

No payback

**Estimated lifetime of the initiative**

16-20 years

**Comment**

Fixed Transformation and Optimization Projects: Due to technological advancements, the commissioning of new generation systems, and communication device optimizations (UPS conversion, network card optimization, system room optimization, room merging, building relocation, outdoor cabinet optimization, etc.), Türk Telekom has significantly reduced its energy costs. Savings in CO2 are calculated by multiplying saved kilowatt hours by the national electricity grid emission factor of 0.484 tons CO2e/MWh.

---

**Initiative category & Initiative type**

Low-carbon energy generation  
Solar PV

**Estimated annual CO2e savings (metric tonnes CO2e)**

1,324.95

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

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

5,608,615

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

23,058,870

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

16-20 years

**Comment**

SPP: Türk Telekom invested in a solar energy system of 1.5 MW in 2022. CO2 savings are calculated by saved kwh times 0.484 national electricity grid emission factor. Savings in CO2 are calculated by multiplying saved kilowatt hours by the national electricity grid emission factor of 0.484 tons CO2e/MWh. By this investment, Turk Telekom's solar power capacity has reached to 4 MW.

---

**Initiative category & Initiative type**

Energy efficiency in production processes  
Process optimization

**Estimated annual CO2e savings (metric tonnes CO2e)**

10,110.76

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

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

42,799,624

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

0

**Payback period**

<1 year

**Estimated lifetime of the initiative**

16-20 years

**Comment**

Mobile Optimization Projects: In order to reduce the amount of energy used by mobile base stations, the company has begun to implement new software features that reduce power consumption at base stations in all regions during low traffic hours. Since this project including the development of the software was end to end completed by Turk

Telekom's internal IT and engineering sources, it did not require additional investment budget.

---

**Initiative category & Initiative type**

Energy efficiency in production processes  
Process optimization

**Estimated annual CO2e savings (metric tonnes CO2e)**

2,100.45

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

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

8,891,387

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

0

**Payback period**

No payback

**Estimated lifetime of the initiative**

16-20 years

**Comment**

Mobile Transformation and Modernization Projects: As part of the equipment modernization work in mobile base stations, the old generation equipment in the network continued to be renewed with new generation equipment. CO2 savings are calculated by saved kwh times 0.484 national electricity grid emission factor. Savings in CO2 are calculated by multiplying saved kilowatt hours by the national electricity grid emission factor of 0.484 tons CO2e/MWh.

---

**Initiative category & Initiative type**

Energy efficiency in production processes  
Process optimization

**Estimated annual CO2e savings (metric tonnes CO2e)**

4,840

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

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

22,688,092

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

6,894,000

**Payback period**

<1 year

**Estimated lifetime of the initiative**

16-20 years

**Comment**

TTessa - Smart Energy Management Platform Project: Türk Telekom monitors all energy and cooling infrastructure instantaneously with the Smart Energy Management Platform, which was launched in 2022, and saves on cooling electricity consumption and generator fuels with AI-supported algorithms. A secure, fast, and user-friendly platform was designed and implemented in conjunction with Türk Telekom and a domestic software company. In addition to the energy and cooling devices in the infrastructure, IoT products such as a fuel level sensor, a hall infrastructure monitoring device, and a grounding measuring device were designed and implemented in the infrastructure as part of this project. Savings in CO2 are calculated by multiplying saved kilowatt hours by the national electricity grid emission factor of 0.484 tons CO2e/MWh.

### C4.3c

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

Method	Comment
Dedicated budget for other emissions reduction activities	<p>Every year, when the yearly budget is determined, the amount allocated for saving and efficiency projects, which in turn cause emissions reduction, is also determined. Hence, every year there is a certain allocation for emission reduction activities.</p> <p>6-year term 100 million loan agreement has been signed with EBRD (total cost LIBOR + 2.85%) to finance our investments in sustainability (such as energy efficiency).</p>

### 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

No taxonomy used to classify product(s) or service(s) as low carbon

### Type of product(s) or service(s)

Other

Other, please specify

Next Generation Smart Cities

### Description of product(s) or service(s)

The smart solutions implemented by Türk Telekom (TT) in 14 cities in the fields of new generation transportation, energy, environment, health and security under the name of the New Generation City Platform contribute to the construction of sustainable and safe cities with a high quality of life. With the smart solutions implemented by the company, 40% of the electricity and 30% of the irrigation resources have been saved in the municipalities so far. For e.g., in Elazığ, the waiting time in traffic decreased by 33% in 2021, while the drivers saved a total of 4,982 lt in fuel consumption per day. With the Dynamic Junction Control System application implemented in Mersin, fuel savings equivalent to approximately 11,694 lt per day were achieved in 2021, and approximately 19.5 tons of carbon dioxide emissions per day were saved.

In 2022, TT developed artificial intelligence supported smart agriculture software, the new member of the next generation city family, with local solution partners and added it to the next generation city ecosystem. Smart agriculture software plays a key role in the journey of reducing the risks and impacts of climate change and foreign dependency in agriculture, increasing production efficiency and digitising agriculture. Moreover, smart agriculture software, which is a component of the next generation city project, provides solutions with the aim of increasing efficiency and production in agriculture.

### 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 CO<sub>2</sub>e 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**

0.3

## 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 boundary	The categories under scope 3 have been expanded. In 2022, 3.1 Purchased Goods and Services and 3.3 Fuel and energy-related activities 3.4 Upstream transportation and distribution have been included.
-------	---------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## 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	Compared to the calculations and reporting of GHGs emissions made in previous years, we have changed the year 2020 as the base year because we made the most comprehensive reporting in 2020, the base year of our emission reduction targets is 2020, and we plan to set Science-Based targets in the coming period.	No

## 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)**

131,691.1

**Comment**

Fuel oil, lignite coal, diesel, natural gas, refrigerant gases and fire extinguishing gases are calculated within scope 1 emissions this year. Coal is used for heating purposes in power plant buildings located in regions where there is no natural gas infrastructure. We are an institution that provides infrastructure services in 81 provinces, towns and villages of the country and has service buildings in order to provide fixed and mobile telecommunication service throughout the country. If natural gas infrastructure is provided by the relevant municipalities, it is a priority for us to immediately abandon the use of coal.

### Scope 2 (location-based)

**Base year start**

January 1, 2020

**Base year end**

December 31, 2020

**Base year emissions (metric tons CO2e)**

601,634.9

**Comment**

Scope 2 emissions include our electricity consumption, and a large part of Scope 2 electricity consumption is electricity consumed to run fixed and mobile networks.

**Scope 2 (market-based)**

---

**Base year start**

January 1, 2020

**Base year end**

December 31, 2020

**Base year emissions (metric tons CO2e)**

0

**Comment**

Scope 2 emissions include our electricity consumption.

**Scope 3 category 1: Purchased goods and services**

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

Relevant data are available but not reported. We continue to work to report this category in the coming years.

**Scope 3 category 2: Capital goods**

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**



**Comment**

Relevant data are available but not reported. We continue to work to report this category in the coming years.

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

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

Relevant data are available but not reported. We continue to work to report this category in the coming years.

**Scope 3 category 4: Upstream transportation and distribution**

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

Relevant data are available but not reported. We continue to work to report this category in the coming years.

**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)**

328.9

**Comment**

This category includes our waste.

### Scope 3 category 6: Business travel

---

**Base year start**

January 1, 2020

**Base year end**

December 31, 2020

**Base year emissions (metric tons CO2e)**

1,720.5

**Comment**

This category includes domestic and international flights of our employees.

### Scope 3 category 7: Employee commuting

---

**Base year start**

January 1, 2020

**Base year end**

December 31, 2020

**Base year emissions (metric tons CO2e)**

3,379.5

**Comment**

This category includes the service vehicles used by our employees commuting. We gathered data from the relevant suppliers and calculated the emissions according to the distances, vehicle size and engine emission type.

### Scope 3 category 8: Upstream leased assets

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

Emissions from upstream leased assets are included in Scope 1 and Scope 2.

### 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)**

652.6

**Comment**

This downstream transportation and distribution calculations are performed for our cargo operations.

**Scope 3 category 10: Processing of sold products**

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

We do not sell any products that require processing.

**Scope 3 category 11: Use of sold products**

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

Relevant data are available but not reported. We continue to work to report this category in the coming years.

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

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

Relevant data are available but not reported. We continue to work to report this category in the coming years. We have some targets and projects regarding the collection of e-waste and yet they are not considered as part of the emission calculations.

### **Scope 3 category 13: Downstream leased assets**

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

Relevant data are available but not reported. We continue to work to report this category in the coming years.

### **Scope 3 category 14: Franchises**

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

Relevant data are available but not reported. We continue to work to report this category in the coming years. We have a very wide franchises network as we serve approximately 50 million subscribers all over Turkey. Therefore, collecting data from all franchises is a challenging process.

### **Scope 3 category 15: Investments**

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

Relevant data are available but not reported. We continue to work to report this category in the coming years.

### **Scope 3: Other (upstream)**

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

We have no other (upstream) emission category.

**Scope 3: Other (downstream)**

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

We have no other (downstream) emission category.

## 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

Other, please specify

UNFCCC Turkey 2022 National Inventory Report

## C6. Emissions data

### C6.1

**(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO<sub>2</sub>e?**

**Reporting year**

---

**Gross global Scope 1 emissions (metric tons CO<sub>2</sub>e)**

129,978.67

**Comment**

Fuel oil, lignite coal, diesel, natural gas, refrigerant gases and fire extinguishing gases are calculated within scope 1 emissions this year. Coal is used for heating purposes in power plant buildings located in regions where there is no natural gas infrastructure. We are an institution that provides infrastructure services in 81 provinces, towns and villages of the country and has service buildings in order to provide fixed and mobile telecommunication service throughout the country. If natural gas infrastructure is provided by the relevant municipalities, it is a priority for us to immediately abandon the use of coal.

## 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**

Check this link to access I-REC certifications by using 2 0 8 6 0 6 7 4 verification key numbers

<https://api.evident.app/public/certificates/en/IQmnebd/IkGsxTUX63GdOqzIWdJv2sUr6pnpqR9t/Fif43zuenO2aldNf3555njm>.

Check this link to access I-REC certifications by using 1 9 6 8 2 6 5 1 verification key numbers.

<https://api.evident.app/public/certificates/en/VtLY7sr9yvJ0Jrj%2FDXAH42QcacXVrUir0f%2B0zrTgzgWBHCEktQrIDxe%2Fy5ouM89U>

Location based indicates electricity consumption and market based indicates purchased renewable energy certificates.

## C6.3

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

**Reporting year**

**Scope 2, location-based**

570,539.2

**Scope 2, market-based (if applicable)**

426,875.42

### Comment

Scope 2 emissions include electricity consumption emissions. Check this link to access I-REC certifications by using 2 0 8 6 0 6 7 4 verification key numbers  
<https://api.evident.app/public/certificates/en/IQmnebd/IkGsxTUX63GdOqzIWdJv2sUr6pnpqR9t/Fif43zuenO2aldNf3555njm>.  
Check this link to access I-REC certifications by using 1 9 6 8 2 6 5 1 verification key numbers.  
<https://api.evident.app/public/certificates/en/VtLY7sr9yvJ0Jrj%2FDXAH42QcacXVrUir0f%2B0zrTgzgWBHCEktQrIDxe%2Fy5ouM89U>  
Most of Scope 2 emissions are generated by the electricity consumption to run the fixed and mobile networks and mobile base stations. Note that Turk Telekom is a growing telecom operator. Number of total subscribers increased from 51.8 million in 2021 to 52.8 million. In the meantime, we would like to point out that fixed voice subscribers are decreasing in direct proportion to the change in technology. And we know that the fixed voice subscribers' energy consumption is lower than the broadband and TV subscribers.

## 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?**

No

## 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 CO<sub>2</sub>e)

168.51

#### Emissions calculation methodology

Average data method

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

100

#### Please explain

We calculated this category for the first time. We have calculated the paper and toner purchased in this year; we will calculate all the items we have purchased in the coming years. The emission value was calculated by multiplying the purchased paper and toner weights by the corresponding DEFRA emission factors.

## Capital goods

---

### Evaluation status

Relevant, not yet calculated

### Please explain

Relevant data are available but not reported. We continue to work to report this category in the coming years.

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

---

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO<sub>2</sub>e)

12,253.57

### 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

We calculated this category for the first time. The emission value was determined by multiplying the consumption data for fuel oil, lignite coal, diesel, natural gas, and operationally controlled transport vehicles by the appropriate DEFRA emission factor.

## Upstream transportation and distribution

---

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO<sub>2</sub>e)

4,032.12

### Emissions calculation methodology

Distance-based method

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

100

### Please explain

We calculated this category for the first time. Unlike last year, cargo emissions are calculated in the upstream transportation and distribution category this year because all cargo activity data fees were covered by Türk Telekom this year. The emission value was calculated by multiplying the distance (not included in the operational boundary) of



transportation and distribution by the appropriate DEFRA emission factor. This category includes transportation and distribution services purchased by Türk Telekom from third parties during the reporting period. These emissions were caused by third-party transportation and distribution between Türk Telekom facilities. In contrast to last year, when it was calculated as downstream transportation and distribution, this year it was calculated as upstream transportation and distribution. Because all shipping charges are paid by Türk Telekom.

## Waste generated in operations

---

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

601.89

### Emissions calculation methodology

Waste-type-specific method

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

100

### Please explain

The emission value was calculated by multiplying the waste data of our operations by the corresponding DEFRA emission factor.

## Business travel

---

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

4,151.54

### Emissions calculation methodology

Distance-based method

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

100

### Please explain

The emission value was calculated by multiplying the business air travel distance and passenger data by the appropriate DEFRA emission factor. Domestic, short-haul, and long-haul air travels were calculated separately by applying the relevant metrics. With the end of the covid epidemic, business travel and flights have increased.

## Employee commuting

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

5,407.87

**Emissions calculation methodology**

Distance-based method

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

100

**Please explain**

The emission value was calculated by multiplying the distance data of employee services with the appropriate DEFRA emission factor. With the end of the covid epidemic, the use of the service has increased as the remote employees started to come to the office.

---

**Upstream leased assets**

**Evaluation status**

Relevant, not yet calculated

**Please explain**

Emissions from upstream leased assets are included in Scope 1 and Scope 2.

---

**Downstream transportation and distribution**

**Evaluation status**

Not relevant, explanation provided

**Please explain**

We have no downstream transportation and distribution emissions. We pay the costs of all transportation processes itself.

---

**Processing of sold products**

**Evaluation status**

Not relevant, explanation provided

**Please explain**

The products we sold do not require any processing.

---

**Use of sold products**

**Evaluation status**

Relevant, not yet calculated

**Please explain**

Relevant data are available but not reported. We continue to work to report this category in the coming years.

### End of life treatment of sold products

---

#### Evaluation status

Relevant, not yet calculated

#### Please explain

Relevant data are available but not reported. We continue to work to report this category in the coming years. There are some targets and projects regarding the collection of e-waste and yet they are not considered as part of the emission calculations.

### Downstream leased assets

---

#### Evaluation status

Relevant, not yet calculated

#### Please explain

Relevant data are available but not reported. We continue to work to report this category in the coming years.

### Franchises

---

#### Evaluation status

Relevant, not yet calculated

#### Please explain

Relevant data are available but not reported. We continue to work to report this category in the coming years. We run widespread operations as we serve almost 52 million subscribers across Türkiye. Therefore, collecting data from all franchises is a challenging process.

### Investments

---

#### Evaluation status

Not relevant, explanation provided

#### Please explain

Relevant data are available but not reported. We continue to work to report this category in the coming years.

### Other (upstream)

---

#### Evaluation status

Not relevant, explanation provided

#### Please explain

We have no other (upstream) emission category.

### Other (downstream)

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

We have no other (downstream) emission category.

## C6.7

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

No

## C6.10

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

---

**Intensity figure**

0.00001309

**Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO<sub>2</sub>e)**

556,854.09

**Metric denominator**

unit total revenue

**Metric denominator: Unit total**

42,556,610,313

**Scope 2 figure used**

Market-based

**% change from previous year**

40.77

**Direction of change**

Decreased

**Reason(s) for change**

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

**Please explain**

Our emission intensity decreased by 40.77% due to an increase in revenue, emission reduction activities and purchased renewable energy certificates (I-REC). Last year's revenue value was revised as 29,868,752.808 TRY, so last year's emission intensity value was revised as 0.00002455. The change in emission intensity compared to last year is 40.77%. Our consolidated revenue increased 42.5% compared to previous year.

## 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	66,402.1	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	137.51	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	3,573.24	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	59,865.82	IPCC Fifth Assessment Report (AR5 – 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	129,978.67

### 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)
Heating	12,622.37
Emergency generator	3,816.66
Fuel consumption by company vehicles	53,673.82
Fugitive emissions - Refrigerant gasses	36,439.32
Fugitive emissions - Fire extinguishers	23,426.5

## 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	570,539.2	426,875.42

## 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)
Purchased electricity	570,539.2	426,875.42

## 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	143,663.78	Decreased	21.79	This year, Türk Telekom acquired 296,826 MWh of I-REC renewable energy certificates. Therefore, CO2 emissions were reduced by 143,663.78 tons (296,826 MWh x 0.484 tonCO2/MWh = 143,663.78 tonCO2). The company had reduced its CO2 emissions by 27,414.14 tons in 2021 through purchasing of an I-REC renewable energy certificate for 60,000.00 MWh (60,000 MWh x 0.4569 tonCO2/MWh = 27,414.14 tonCO2). Compared to 2021 (143,663.78 tonCO2 - 27,414.14 tonCO2) 116,249.64 tons more CO2 emission reduction has been achieved through purchases of I-REC renewable energy certificates. Compared to 2021 scope 1 and 2 emissions, the reduction is 21.79% (143,663.78 /659.284.4 x 100). Check this link to access I-REC certifications by using 2 0 8 6 0 6 7 4 verification key numbers <a href="https://api.evident.app/public/certificates/en/IQmnebd/lkGsXTUX63GdOqzIWdJv2sUr6pnpqR9t/Fif43zuenO2aldNf3555njm">https://api.evident.app/public/certificates/en/IQmnebd/lkGsXTUX63GdOqzIWdJv2sUr6pnpqR9t/Fif43zuenO2aldNf3555njm</a> . Check this link to access I-REC certifications by using 1 9 6 8 2 6 5 1 verification key numbers. <a href="https://api.evident.app/public/certificates/en/VtLY7sr9yvJ0Jrj%2FDXAH42QcacXVrUir0f%2B0zrTgzgWBHCEktQrIDxe%2Fy5ouM89U">https://api.evident.app/public/certificates/en/VtLY7sr9yvJ0Jrj%2FDXAH42QcacXVrUir0f%2B0zrTgzgWBHCEktQrIDxe%2Fy5ouM89U</a>
Other emissions reduction activities	44,988.2	Decreased	6.8	In 2022 we saved 44,988.2 tons of CO2 by our energy efficiency projects such as Smart energy management platform projects, Mobile transformation and modernization projects, Fixed cooling efficiency project. In proportion to our total Scope 1 and 2 emissions in 2021 (659,284.4 tonsCO2e), the CO2 savings we achieved by energy efficiency investments was 6.82%. We arrived at 6.82% through (44,988.2 tonsCO2 / 659,284.4 tonsCO2 ) *100=6.82% Scope 1 emissions increased in 2022 together with post Covid-19 normalisation. Particularly the emissions by vehicles and heating in offices have increased meaningfully due to this impact we think,

				although we cannot quantify how much of the increase was caused by this reason.
Divestment	0	No change	0	Türk Telekom has not made any divestment in the reporting year.
Acquisitions	0	No change	0	Türk Telekom has not made any acquisitions in the reporting year.
Mergers	0	No change	0	Türk Telekom has not made any mergers in the reporting year.
Change in output	0	No change	0	Türk Telekom has not any output change in the reporting year.
Change in methodology	31,942.67	Increased	4.8	As per the Turkish Electricity Production and Electricity Consumption Point Emission Factors Information Form published by the Turkish Ministry of Energy this year, Türk Telekom used the emission factor of 0.484 tonsCO <sub>2</sub> /MWh. In 2021, it used the value of 0.4569 tons of CO <sub>2</sub> /MWh obtained from TEİAŞ (Turkish Electricity Transmission Co.) data. Due to the change in the emission factor, the emission value has increased by 31,942.67 tonsCO <sub>2</sub> this year ((1,178,800 MWh x 0.484 tonsCO <sub>2</sub> /MWh) - (1,178,800 MWh x 0.4569 tonsCO <sub>2</sub> /MWh) = 31,942.67 tonsCO <sub>2</sub> ). Compared to the previous year, there was a 4.8 percent increase ((31,942.67 tonsCO <sub>2</sub> /659,284.4 tonsCO <sub>2</sub> )x100 = 4.8%).
Change in boundary	0	No change	0	Türk Telekom has not any boundary change in the reporting year.
Change in physical operating conditions	0	No change	0	Türk Telekom has not any physical operating conditions change in the reporting year.
Unidentified	0	No change	0	Türk Telekom has not any unidentified change in the reporting year.
Other	0	No change	0	Türk Telekom has not any other change in the reporting year.



## 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	233,279.27	233,279.27
Consumption of purchased or acquired electricity		296,826	881,974	1,178,800
Consumption of self-generated non-fuel renewable energy		5,931		5,931
Total energy consumption		302,757	1,115,253.27	1,418,010.27

## 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	No
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

#### Comment

We have no sustainable biomass consumption.

## Other biomass

---

### Heating value

Unable to confirm heating value

### Total fuel MWh consumed by the organization

0

### Comment

We have no other biomass consumption.

## Other renewable fuels (e.g. renewable hydrogen)

---

### Heating value

Unable to confirm heating value

### Total fuel MWh consumed by the organization

0

### Comment

We have no other renewable fuels consumption.

## Coal

---

### Heating value

LHV

### Total fuel MWh consumed by the organization

770.17

### Comment

Coal is utilized for heating purposes only in offices that do not have access to natural gas infrastructure. If natural gas infrastructure is provided by the relevant municipalities, it is a priority for us to immediately abandon the use of coal.

## Oil

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### Heating value

LHV

### Total fuel MWh consumed by the organization

165,321.19

### Comment

Total consumption of diesel and gasoline for heating of buildings and vehicles.

## Gas

---

### Heating value

LHV

**Total fuel MWh consumed by the organization**

67,187.91

**Comment**

Total consumption of natural gas for heating purposes in buildings.

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

**Heating value**

Unable to confirm heating value

**Total fuel MWh consumed by the organization**

0

**Comment**

We have no other non-renewable fuels consumption.

**Total fuel**

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

233,279.27

**Comment**

This value includes total of diesel, gasoline, natural gas, fuel oil and coal consumption for heating of buildings and fuel for vehicles. We use coal for heating in offices where natural gas infrastructure does not exist.

## 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	5,931	5,931	5,931	5,931
Heat	0	0	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**

Hydropower (capacity unknown)

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

80,000

**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)**

2012

**Comment**

Türk Telekom purchased the I-REC Certificate representing 80,000 MWh of electricity generated from renewable energy sources (Hydroelectric) in the reporting period.

Check this link to access I-REC certifications by using 2 0 8 6 0 6 7 4 verification key number:

<https://api.evident.app/public/certificates/en/IQmnebd/lkGsXTUX63GdOqzIWdJv2sUr6pnpqR9t/Fif43zuenO2aldNf3555njm>.

**Country/area of low-carbon energy consumption**

Turkey

**Sourcing method**

Unbundled procurement of energy attribute certificates (EACs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Hydropower (capacity unknown)

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

714

**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**

Türk Telekom purchased the I-REC Certificate representing 714 MWh of electricity generated from renewable energy sources (Hydroelectric) in the reporting period. Check this link to access I-REC certifications by using 2 0 8 6 0 6 7 4 verification key number: <https://api.evident.app/public/certificates/en/IQmnebd/lkGsXTUX63GdOqzIWdJv2sUr6pnpqR9t/Fif43zuenO2aldNf3555njm>.

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**Country/area of low-carbon energy consumption**

Turkey

**Sourcing method**

Unbundled procurement of energy attribute certificates (EACs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Hydropower (capacity unknown)

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

38,827

**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)**

2012

**Comment**

Türk Telekom purchased the I-REC Certificate representing 38,827 MWh of electricity generated from renewable energy sources (Hydroelectric) in the reporting period. Check this link to access I-REC certifications by using 1 9 6 8 2 6 5 1 verification key number: <https://api.evident.app/public/certificates/en/VtLY7sr9yvJ0Jrj%2FDXAH42QcacXVrUir0f%2B0zrTgzgWBHCEktQrIDxe%2Fy5ouM89U>.

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**Country/area of low-carbon energy consumption**

Turkey

**Sourcing method**

Unbundled procurement of energy attribute certificates (EACs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Hydropower (capacity unknown)

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

21,709

**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)**

2012

**Comment**

Türk Telekom purchased the I-REC Certificate representing 21,709 MWh of electricity generated from renewable energy sources (Hydroelectric) in the reporting period. Check this link to access I-REC certifications by using 1 9 6 8 2 6 5 1 verification key number: <https://api.evident.app/public/certificates/en/VtLY7sr9yvJ0Jrj%2FDXAH42QcacXVrUir0f%2B0zrTgzgWBHCEktQrIDxe%2Fy5ouM89U>.

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**Country/area of low-carbon energy consumption**

Turkey

**Sourcing method**

Unbundled procurement of energy attribute certificates (EACs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Hydropower (capacity unknown)

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

9,037

**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)**

2012

**Comment**

Türk Telekom purchased the I-REC Certificate representing 9,037 MWh of electricity generated from renewable energy sources (Hydroelectric) in the reporting period. Check this link to access I-REC certifications by using 1 9 6 8 2 6 5 1 verification key number: <https://api.evident.app/public/certificates/en/VtLY7sr9yv0Jrj%2FDXAH42QcacXVrUir0f%2B0zrTgzgWBHCEktQrIDxe%2Fy5ouM89U>.

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**Country/area of low-carbon energy consumption**

Turkey

**Sourcing method**

Unbundled procurement of energy attribute certificates (EACs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Hydropower (capacity unknown)

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

5,885

**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)**

2010

**Comment**

Türk Telekom purchased the I-REC Certificate representing 5,885 MWh of electricity generated from renewable energy sources (Hydroelectric) in the reporting period. Check this link to access I-REC certifications by using 1 9 6 8 2 6 5 1 verification key number:

<https://api.evident.app/public/certificates/en/VtLY7sr9yvJ0Jrj%2FDXAH42QcacXVrUir0f%2B0zrTgzgWBHCEktQrIDxe%2Fy5ouM89U>.

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**Country/area of low-carbon energy consumption**

Turkey

**Sourcing method**

Unbundled procurement of energy attribute certificates (EACs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Hydropower (capacity unknown)

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

537

**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)**

2010

**Comment**

Türk Telekom purchased the I-REC Certificate representing 537 MWh of electricity generated from renewable energy sources (Hydroelectric) in the reporting period. Check this link to access I-REC certifications by using 1 9 6 8 2 6 5 1 verification key number: <https://api.evident.app/public/certificates/en/VtLY7sr9yvJ0Jrj%2FDXAH42QcacXVrUir0f%2B0zrTgzgWBHCEktQrIDxe%2Fy5ouM89U>.

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**Country/area of low-carbon energy consumption**

Turkey

**Sourcing method**

Unbundled procurement of energy attribute certificates (EACs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Hydropower (capacity unknown)

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

11,693

**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)**

2008

**Comment**

Türk Telekom purchased the I-REC Certificate representing 11,693 MWh of electricity generated from renewable energy sources (Hydroelectric) in the reporting period. Check this link to access I-REC certifications by using 1 9 6 8 2 6 5 1 verification key number: <https://api.evident.app/public/certificates/en/VtLY7sr9yvJ0Jrj%2FDXAH42QcacXVrUir0f%2B0zrTgzgWBHCEktQrIDxe%2Fy5ouM89U>.

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**Country/area of low-carbon energy consumption**

Turkey

**Sourcing method**

Unbundled procurement of energy attribute certificates (EACs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Hydropower (capacity unknown)

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

7,212

**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)**

2008

**Comment**

Türk Telekom purchased the I-REC Certificate representing 7,212 MWh of electricity generated from renewable energy sources (Hydroelectric) in the reporting period. Check this link to access I-REC certifications by using 1 9 6 8 2 6 5 1 verification key number: <https://api.evident.app/public/certificates/en/VtLY7sr9yvJ0Jrj%2FDXAH42QcacXVrUir0f%2B0zrTgzgWBHCEktQrIDxe%2Fy5ouM89U>.

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**Country/area of low-carbon energy consumption**

Turkey

**Sourcing method**

Unbundled procurement of energy attribute certificates (EACs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Hydropower (capacity unknown)

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

5,100

**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)**

2015

**Comment**

Türk Telekom purchased the I-REC Certificate representing 5,100 MWh of electricity generated from renewable energy sources (Hydroelectric) in the reporting period. Check this link to access I-REC certifications by using 1 9 6 8 2 6 5 1 verification key number: <https://api.evident.app/public/certificates/en/VtLY7sr9yvJ0Jrj%2FDXAH42QcacXVrUir0f%2B0zrTgzgWBHCEktQrIDxe%2Fy5ouM89U>.

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**Country/area of low-carbon energy consumption**

Turkey

**Sourcing method**

Unbundled procurement of energy attribute certificates (EACs)

**Energy carrier**

Heat

**Low-carbon technology type**

Geothermal

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

23,091

**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)**

2013

**Comment**

Türk Telekom purchased the I-REC Certificate representing 23,091 MWh of electricity generated from renewable energy sources (Geothermal) in the reporting period. Check this link to access I-REC certifications by using 1 9 6 8 2 6 5 1 verification key number:

<https://api.evident.app/public/certificates/en/VtLY7sr9yvJ0Jrj%2FDXAH42QcacXVrUir0f%2B0zrTgzgWBHCEktQrIDxe%2Fy5ouM89U>.

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**Country/area of low-carbon energy consumption**

Turkey

**Sourcing method**

Unbundled procurement of energy attribute certificates (EACs)

**Energy carrier**

Heat

**Low-carbon technology type**

Geothermal

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

21,207

**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)**

2013

**Comment**

Türk Telekom purchased the I-REC Certificate representing 21,207 MWh of electricity generated from renewable energy sources (Geothermal) in the reporting period. Check this link to access I-REC certifications by using 1 9 6 8 2 6 5 1 verification key number: <https://api.evident.app/public/certificates/en/VtLY7sr9yvJ0Jrj%2FDXAH42QcacXVrUir0f%2B0zrTgzgWBHCEktQrIDxe%2Fy5ouM89U>.

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**Country/area of low-carbon energy consumption**

Turkey

**Sourcing method**

Unbundled procurement of energy attribute certificates (EACs)

**Energy carrier**

Heat

**Low-carbon technology type**

Geothermal

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

5,803

**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)**

2013

**Comment**

Türk Telekom purchased the I-REC Certificate representing 5,803 MWh of electricity generated from renewable energy sources (Geothermal) in the reporting period. Check this link to access I-REC certifications by using 1 9 6 8 2 6 5 1 verification key number: <https://api.evident.app/public/certificates/en/VtLY7sr9yvJ0Jrj%2FDXAH42QcacXVrUir0f%2B0zrTgzgWBHCEktQrIDxe%2Fy5ouM89U>.

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**Country/area of low-carbon energy consumption**

Turkey

**Sourcing method**

Unbundled procurement of energy attribute certificates (EACs)

**Energy carrier**

Heat

**Low-carbon technology type**

Geothermal

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

2,306

**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**

Türk Telekom purchased the I-REC Certificate representing 2,306 MWh of electricity generated from renewable energy sources (Geothermal) in the reporting period. Check this link to access I-REC certifications by using 1 9 6 8 2 6 5 1 verification key number: <https://api.evident.app/public/certificates/en/VtLY7sr9yvJ0Jrj%2FDXAH42QcacXVrUir0f%2B0zrTgzgWBHCEktQrIDxe%2Fy5ouM89U>.

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**Country/area of low-carbon energy consumption**

Turkey

**Sourcing method**

Unbundled procurement of energy attribute certificates (EACs)

**Energy carrier**

Heat

**Low-carbon technology type**

Geothermal

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

7,791

**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**

Türk Telekom purchased the I-REC Certificate representing 7,791 MWh of electricity generated from renewable energy sources (Geothermal) in the reporting period. Check this link to access I-REC certifications by using 1 9 6 8 2 6 5 1 verification key number: <https://api.evident.app/public/certificates/en/VtLY7sr9yv0Jrj%2FDXAH42QcacXVrUir0f%2B0zrTgzgWBHCEktQrIDxe%2Fy5ouM89U>.

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**Country/area of low-carbon energy consumption**

Turkey

**Sourcing method**

Unbundled procurement of energy attribute certificates (EACs)

**Energy carrier**

Heat

**Low-carbon technology type**

Geothermal

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

9,699

**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**

Türk Telekom purchased the I-REC Certificate representing 9,699 MWh of electricity generated from renewable energy sources (Geothermal) in the reporting period. Check this link to access I-REC certifications by using 1 9 6 8 2 6 5 1 verification key number:

<https://api.evident.app/public/certificates/en/VtLY7sr9yvJ0Jrj%2FDXAH42QcacXVrUir0f%2B0zrTgzgWBHCEktQrIDxe%2Fy5ouM89U>.

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**Country/area of low-carbon energy consumption**

Turkey

**Sourcing method**

Unbundled procurement of energy attribute certificates (EACs)

**Energy carrier**

Heat

**Low-carbon technology type**

Geothermal

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

10,365

**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**

Türk Telekom purchased the I-REC Certificate representing 10,365 MWh of electricity generated from renewable energy sources (Geothermal) in the reporting period. Check this link to access I-REC certifications by using 1 9 6 8 2 6 5 1 verification key number: <https://api.evident.app/public/certificates/en/VtLY7sr9yvJ0Jrj%2FDXAH42QcacXVrUir0f%2B0zrTgzgWBHCEktQrIDxe%2Fy5ouM89U>.

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**Country/area of low-carbon energy consumption**

Turkey

**Sourcing method**

Unbundled procurement of energy attribute certificates (EACs)

**Energy carrier**

Heat

**Low-carbon technology type**

Geothermal

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

11,582

**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**

Türk Telekom purchased the I-REC Certificate representing 11,582 MWh of electricity generated from renewable energy sources (Geothermal) in the reporting period. Check this link to access I-REC certifications by using 1 9 6 8 2 6 5 1 verification key number: <https://api.evident.app/public/certificates/en/VtLY7sr9yvJ0Jrj%2FDXAH42QcacXVrUir0f%2B0zrTgzgWBHCEktQrIDxe%2Fy5ouM89U>.

---

**Country/area of low-carbon energy consumption**

Turkey

**Sourcing method**

Unbundled procurement of energy attribute certificates (EACs)

**Energy carrier**

Heat

**Low-carbon technology type**

Geothermal

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

11,768

**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**

Türk Telekom purchased the I-REC Certificate representing 11,768 MWh of electricity generated from renewable energy sources (Geothermal) in the reporting period. Check this link to access I-REC certifications by using 1 9 6 8 2 6 5 1 verification key number: <https://api.evident.app/public/certificates/en/VtLY7sr9yvJ0Jrj%2FDXAH42QcacXVrUir0f%2B0zrTgzgWBHCEktQrIDxe%2Fy5ouM89U>.

---

**Country/area of low-carbon energy consumption**

Turkey

**Sourcing method**

Unbundled procurement of energy attribute certificates (EACs)

**Energy carrier**

Heat

**Low-carbon technology type**

Geothermal

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

12,500

**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**

Türk Telekom purchased the I-REC Certificate representing 12,500 MWh of electricity generated from renewable energy sources (Geothermal) in the reporting period. Check this link to access I-REC certifications by using 1 9 6 8 2 6 5 1 verification key number: <https://api.evident.app/public/certificates/en/VtLY7sr9yvJ0Jrj%2FDXAH42QcacXVrUir0f%2B0zrTgzgWBHCEktQrIDxe%2Fy5ouM89U>.

## 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)**

1,178,800

**Consumption of self-generated electricity (MWh)**

5,931

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

0

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

233,279.27

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

1,418,010.27

## C9. Additional metrics

### C9.1

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

---

**Description**

Waste

**Metric value**

28,284,367

**Metric numerator**

kg

**Metric denominator (intensity metric only)**

**% change from previous year**

0.47

**Direction of change**

Decreased

**Please explain**

Covered are all wastes listed in the MoTAT (National Waste Declaration System) system. The amount of waste generated by our facilities has decreased from 28,420,600 kilograms last year to 28,284,367 kilograms this year despite a 10% year-on-year increase in total number of employees to 39,433 as of the end of 2022.

## 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**

Reasonable assurance

**Attach the statement**

 Türk Telekom CDP CC Assurance Report\_2023 Opinion.pdf

**Page/ section reference**

5, 7, 8

**Relevant standard**

ISAE3000

**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**

Reasonable assurance

**Attach the statement**

 Türk Telekom CDP CC Assurance Report\_2023 Opinion.pdf

**Page/ section reference**

5, 7, 8

**Relevant standard**

ISAE3000

**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

### Verification or assurance cycle in place

Annual process


### Status in the current reporting year

Complete

### Type of verification or assurance

Reasonable assurance

### Attach the statement

 Türk Telekom CDP CC Assurance Report\_2023 Opinion.pdf

### Page/section reference

5, 7, 8

### Relevant standard

ISAE3000

### 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
-------------------------------------------	---------------	-----------------------	----------------



C8. Energy	Energy consumption	ISAE3000	The verification statement also includes verification of energy consumptions and emissions referred to in sections 6-7-8.
C9. Additional metrics	Waste data	ISAE3000	The verification statement also includes verification of waste consumptions referred to in section 9.

## 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?**

No, but we anticipate doing so in the next two years

## C12. Engagement

### C12.1

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

Yes, our suppliers

Yes, our customers/clients

Yes, other partners in the value chain

### C12.1a

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

---

**Type of engagement**

Information collection (understanding supplier behavior)

**Details of engagement**

Collect GHG emissions data at least annually from suppliers

**% of suppliers by number**

15

**% total procurement spend (direct and indirect)**

89

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

97

**Rationale for the coverage of your engagement**

Our supplier performance assessment procedure begins with a segmentation analysis. As part of the purchasing decisions made for segmented suppliers, we apply an evaluation that varies according to the segment in which the supplier resides,

**Impact of engagement, including measures of success**

In the segmentation study conducted in 2022, approximately 15% of companies and 89% of purchasing volume (450 Suppliers) were segmented. Scorecards were created for approximately 80% of the segmented companies which are also companies we worked-with. The number of companies we worked with among the segmented companies was 407, while the number of companies for which scorecards were created was 318. Sustainability and climate-related questions were included in the scorecard procedure.

**Comment**

Climate-related supplier evaluation questions involve assessing a supplier's policy or commitment statement, which should include climate change impact, water use, biodiversity impacts, waste reduction, resource usage. The policy should cover Scope 1 emissions, which are directly linked to the organization's activities, Scope 2 emissions, which can be reduced by purchasing electricity from renewable sources or increasing energy efficiency, and Scope 3 emissions, which consist of indirect greenhouse gas emissions arising from raw material production, transport or product use.

Example Supplier Assessment Questions:

Do you have a supplier/procurement policy?

Do you measure and verify your scope 1,2 and 3 emissions? Please explain.

Do you have a carbon reduction (for e.g., net zero) target for decarbonisation and climate transition plan?

Do you have low carbon product/service projects?

Do you have risk management mechanism (include climate change)?

Are there measures taken to manage the environmental impacts of your products?

Do you have company involvement in commitment to initiatives or frameworks for environmental impacts in the supply chain?

How do you support your suppliers' targets for decarbonisation and renewable energy use?

Do you use technological innovations to increase efficiency and reduce waste in the supply chain?

The policy should also include a carbon reduction target for decarbonization strategy, monitoring decarbonization efforts, low-carbon product and service projects, adaptation projects against climate change, reporting on decarbonization and environmental issues, training provided on sustainability to supply chain, conducting environmental risk assessments, managing environmental impacts, and involving the company in environmental initiatives or frameworks.

Sustainable material and raw material use policies should be implemented in the supply chain, and suppliers should be supported for decarbonization and renewable energy usage. Sustainability criteria should be considered in process of choosing a supplier. Moreover, technological innovations should be used to increase efficiency and to reduce waste while waste recycling projects are supported. To reinforce sustainability steps, reporting on all of these efforts is crucial for the company.

## C12.1b

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

---

### **Type of engagement & Details of engagement**

Education/information sharing

Run an engagement campaign to education customers about your climate change performance and strategy

### **% of customers by number**

50

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

0

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

As Türk Telekom, we organize communication campaigns for our customers to raise awareness on climate-oriented issues. In 2022, we aim to inform our customers and employees about the related works through the communication campaigns we carry out on Energy Savings, World Water Day, International Zero Waste Day and Environment Day, as well as the bulletins we share with the public, and our social media posts.

According to our estimations, we assume that reach more than 50% of our customers and their families.

### **Impact of engagement, including measures of success**

The news was published in 10 national and 5 local newspapers, and reached to 2,376,177 people. The related news received 322 online reflections.

## C12.1d

### **(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.**

Türk Telekom with more than 180 years of history, is PSTN and wholesale broadband services provider of Türkiye. Retail internet service providers get wholesale service from Türk Telekom and provide internet service to end users in the retail market. In this structure, Türk Telekom is the main infrastructure investor in the country.

As one of the companies making the largest infrastructure investments in Türkiye, we make significant contributions to the country's digital transformation. With the digital transformation investments, internet access speeds are increasing and thus the capacity of individuals and corporates to produce online solutions is increasing day by day. Türk Telekom is transforming its old copper network into low-carbon fibre network with the investments it has been making for many years. While this change provides faster access, it also provides benefits in energy consumption. Because fibre infrastructure provides lower energy, compared to copper infrastructure.

55% of Türk Telekom's total capital expenditure (13.9 bn TRY) in 2022 was spent on fixed investments.

Rising data demand requires new infrastructure investment. Fiber optic cable line length, as a key infrastructure indicator, has been enlarged to the 517k km length in Türkiye as of 2022YE. Türk Telekom's fibre cable network length increased to 403K km as of 2022 from 366K km as of 2021. This infrastructure constitutes 78% of the total fibre network in the country. Fibre network covered 31.4 mn households by the end of 2022 compared to 30.2 mn as of 2021, reflecting the ongoing focus on fibre rollouts. FTTC homepass was 21.0 mn while FTTH/B homepass increased to 10.4 mn.

## 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**

Türk Telekom attaches importance to ensuring that its relations with companies such as dealers, contractors and business partners, with which it has engaged in commercial

business relations, are proper, consistent and reliable, and that all kinds of business is carried out in conformity with the relevant contracts, laws or regulations. In the contracts signed with the mentioned companies, objective criteria such as compliance with principles and practices, and the benefits and costs by taking into account the opinions of legal and relevant business units, are taken into consideration. Corporate Governance Policies are Disclosure, Dividend, Remuneration, Board of Directors Women Membership, Donation, Compensation, Business Ethic Codes, Sustainability, Human Rights, Human Resources, Anti-Bribery and Anti-Corruption, Information Security, Procurement, Integrated Management Policy.

The Business Ethics Codes of Türk Telekom are based on and implement the essential business values to our company's success. We expect all of our suppliers to adhere to an ethical code. Our procurement and sustainability policies are interdependent. All of our suppliers are required to sign our purchasing contracts, which outline our expectations regarding climate change. Our suppliers who breach the contract are subject to sanctions. This sanction's result in the termination of the contract and the cessation of all cooperation with the supplier.

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

15

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

15

**Mechanisms for monitoring compliance with this climate-related requirement**

Supplier self-assessment

Grievance mechanism/Whistleblowing hotline

**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, we fund organizations or individuals whose activities 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?**

No, but we plan to have one in the next two years

**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**

Türk Telekom has been answering to climate-related policy, law and regulations thought national and international organizations.

## C12.3c

**(C12.3c) Provide details of the funding you provided to other organizations or individuals in the reporting year whose activities could influence policy, law, or regulation that may impact the climate.**

---

**Type of organization or individual**

Non-Governmental Organization (NGO) or charitable organization

**State the organization or individual to which you provided funding**

International Investors Association (YASED)

**Funding figure your organization provided to this organization or individual in the reporting year (currency as selected in C0.4)**

44,000

**Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate**

European Commission Restriction for Carbon Border Adjustment Mechanism (CBAM)  
With the legislative process on the Regulation coming into force after its signature by the European Executive Council on 10 May 2023, the regulation was published in the EU Official Journal of 16 May 2023, L 130/52. The public consultation process on taxes and their annexes in the transition period, which will start on 1 October 2023, will be on 13 June 2026 and will continue until 11 July 2023. In this process, as Türk Telekom, we are working on Carbon Border Adjustment Mechanism (CBAM) documents and follow their current work through NGOs. We shared our views related to climate related issues through the Association. Our contributions to university, NGO, public and private sector cooperation will continue.

**Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

---

**Type of organization or individual**

Other, please specify

TUSIAD

**State the organization or individual to which you provided funding**

Turkish Industry and Business Association (TUSIAD)

**Funding figure your organization provided to this organization or individual in the reporting year (currency as selected in C0.4)**

141,000

**Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate**

Within the scope of our TUSIAD membership, the association participates in working groups in areas such as fintech, ICT, earthquake, tax, competition, intellectual and industrial rights, and contributes to forming opinions on strategies, policy documents and regulations that affect our industry. The events organized by the association are followed, and participation is provided both physically and online. Contribution is made to the preparation processes of the reports prepared and published by the association regarding our sector.

**Have you evaluated whether this funding 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**

 TT-2022-annual-report.pdf

**Page/Section reference**

p. 59

**Content elements**

Governance  
Strategy  
Risks & opportunities  
Emission targets

**Comment**

Türk Telekom 2022 Annual Report Climate Change and Environment: "Reducing our carbon footprint systematically targeting to reduce emissions by 35%"

## 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	UN Global Compact	Türk Telekom became a UNGC signatory on 20 January 2020. By adopting the 10 principles of the UN Global Compact, in which the basic responsibilities of the business world in the fields of human rights, labor standards, environment and anti-corruption are determined, we work on a voluntary basis to align the company's strategy and operations with these principles. We are publishing a progress report explaining how UNGC is putting the 10 principles into practice within the company. With the UN Global Compact membership, we, as Türk Telekom, take our sustainability efforts to the next level. Türk Telekom has implemented many successful projects in the field of sustainability in order to use energy resources efficiently, to expand renewable energy resources and to reduce the negative impact on the environment.

## 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
Row 1	No, but we plan to have both within the next two years

### 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
--	-----------------------------------------------------------------------------------------------------------------



Row 1	No, and we do not plan to do so within the next 2 years
----------	---------------------------------------------------------

### 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 and we don't plan to within the next two years

#### Dependencies on biodiversity

**Indicate whether your organization undertakes this type of assessment**

No and we don't 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?	
Row 1	No, and we do not plan to undertake any biodiversity-related actions

### 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	No	State and benefit 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
No publications		

## 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.**

### 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	Investor Relations and Sustainability Director	Environment/Sustainability Manager

## SC. Supply chain module

### SC0.0

**(SC0.0) If you would like to do so, please provide a separate introduction to this module.**

### SC0.1

**(SC0.1) What is your company’s annual revenue for the stated reporting period?**

	Annual Revenue
Row 1	

## SC1.1

**(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.**

## SC1.2

**(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).**

## SC1.3

**(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?**

Allocation challenges	Please explain what would help you overcome these challenges

## SC1.4

**(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?**

## SC2.1

**(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.**

## SC2.2

**(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?**

## SC4.1

**(SC4.1) Are you providing product level data for your organization's goods or services?**

## Submit your response

In which language are you submitting your response?

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		Public

Please confirm below