ENERJİSA ENERJİ A.Ş. - Climate Change 2021

C0. Introduction

C0.1

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

Enerjisa Enerji A.Ş. (“Enerjisa Enerji”, ”Enerjisa” or “Company”) is the leading electricity distribution and retail sales company in Turkey. With more than 10,000 employees, Enerjisa serves a population of 21.6 million people and have 10.1 million customers in 14 provinces across 3 distribution regions. Since 1996, Enerjisa has been one of the leading players in Turkey’s emerging electricity market thanks to its grid investments, innovative and differentiated applications and our efficiency and sustainability-focused business model. 20% of Enerjisa Enerji shares was offered to the public and Enerjisa was listed on Borsa İstanbul on February 8, 2018.

Distribution: Our electricity distribution operations are managed by Başkent EDAŞ, AYEDAŞ and Toroslar EDAŞ. Each of the regional distribution network operators are responsible for operating the distribution network in their own regions, performing necessary maintenance and repairs and making environment, security, renewal and expansion investments, maintaining and reading electricity meters, preparing demand projections and investment plans, monitoring electricity theft and loss rates, supplying electricity to cover technical and commercial losses, and taking the necessary technical and operational measures to reduce theft and loss rates and to ensure the lighting of public areas.

Retail: Retail sales of electricity is carried out by Başkent EPSAŞ, AYESAŞ and Enerjisa Toroslar EPSAŞ. Retail companies sell electricity exclusively to non-eligible customers within the Company’s distribution regions as the incumbent retail companies and to eligible customers in their respective regions and in other parts of Turkey without regional limitations.

Enerjisa Müşteri Çözümleri A.Ş. was established in 2017 to carry out customer solutions activities. In addition to our core business areas of electricity distribution and retail sales, we lead the sector in distributed energy, energy efficiency and e-mobility solutions. We closely follow opportunities in innovative business areas such as electric vehicle charging stations, electricity storage systems, smart home technologies and systems that help consumers produce their own electricity.

E-MOBILITY: EŞARJ: Enerjisa Müşteri Çözümleri A.Ş. acquired 80% of the shares of Eşarj Elektrikli Araçlar Şarj Sistemleri A.Ş. (Eşarj) in 2018, to become its controlling shareholder. In addition to our leadership in distribution and sales in the electricity sector, we aim to play an innovative and pioneering role in the electric vehicle ecosystem and play an active role in the transformation of the industry. As of the end of 2020, Eşarj had 320 charging plugs at 186 public locations, 109 of which are fast-charging plugs. Our goal is to accelerate the transition to ultrafast charging in the coming period.

Distributed generation and other customer solutions: We provide solar power plant installation services and energy efficiency applications including waste heat recovery, heating, ventilation and air conditioning (HVAC), pressurized systems, electric motors and lighting solutions using the energy performance contract (EPC/ESCO) model. We also provide Cogeneration (CHP) and Trigeneration (CCHP) and Green Energy solutions.

As a public service company and the market leader in our sector, we are aware of our special responsibility towards the public and we strive to be a role model. Operating in a dynamic industry that is being transformed by global megatrends (digitalization, decarbonization, deregulation, decentralization and urbanization), we prepare for future developments with a clear vision and prioritize value-adding opportunities with our employees and innovation culture. We prepare for these fundamental changes by helping to shape regulations and exploring new business opportunities. We lead the sector in the New Energy World by focusing on sustainable energy solutions. We develop our long-term strategies with a sustainable and holistic approach and integrate the Environmental, Social and Governance (ESG) factors to our strategy and put it at the heart of our equity story. In 2020, we developed our sustainability strategy which incorporates all key areas of ESG performance and reporting including international standards, the requirements of global indices and investor expectations.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1 2020	December 31 2020	Yes	1 year

C0.3

(C0.3) Select the countries/areas for which you will be supplying data.

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

C-EU0.7

(C-EU0.7) Which part of the electric utilities value chain does your organization operate in? Select all that apply.

Row 1

Electric utilities value chain

Distribution

Other divisions

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(s)	Please explain
Director on board	Enerjisa Enerji A.Ş. (“Enerjisa Enerji” or “Company”) has a one-tier board structure. Accordingly, CEO and CFO are not members of the Board of Directors (“Board” or “BoD”). The Board, as a whole body, defines the sustainability strategy and has ultimate responsibility for monitoring and ensuring sustainability performance including climate change. From the perspective of Enerjisa Enerji’s business model, many strategic issues discussed at Board meetings are linked to climate-related issues as Enerjisa Enerji focuses on distribution grids, retail electricity sales and customer solutions in an increasingly electrified and decentralized energy world. The board reviews the strategy of the company and provides guidance. In this context, climate-related regulatory developments are discussed as well. The Board has decided to establish a separate entity called Enerjisa Müşteri Çözümleri A.Ş. to carry out customer solution activities. Enerjisa Müşteri Çözümleri A.Ş. offers a portfolio of environmentally friendly and sustainable energy solutions, ranging from solar power plant (SPP) installation services, energy efficiency applications, cogeneration/trigeneration applications and electric vehicle charging station management to green energy certification. Another important climate-related decision made by the Board was the decision to acquire E-şarj Elektrikli Araçlar Şarj Sistemleri A.Ş., an e-mobility solutions provider, in 2018. Climate-related issues are reported to the Board by the Environmental, Social and Governance (“ESG”) Committee, which is co-chaired by the CEO and CFO.
Board-level committee	Corporate Governance Committee: Corporate Governance Committee consists of five members. The chairperson of the Committee is chosen among Independent Board members. Other members of the Corporate Governance Committee are two Board members, Enerjisa Enerji’s CFO and Head of Investor Relations, M&A and Tax. The purpose of the Corporate Governance Committee is to monitor the Company’s performance regarding compliance and to make recommendations to the Board regarding compliance and corporate governance best practices and their implementation. The Corporate Governance Committee is also responsible for monitoring the preparation of Sustainability Principles Compliance Report, which is prepared in accordance with the Capital Markets Board (“CMB”) communique. The Sustainability Principles Compliance Report, mandated by the CMB includes voluntary disclosures on climate-related issues or explanations on the reasons for non-disclosure. The Corporate Governance Committee’s responsibilities towards climate-related disclosures are expected to increase in the future with increasing regulatory requirements. In 2020, out of four meetings of Corporate Governance Committee, three of them had ESG and climate-related agendas.
Board-level committee	Early Risk Detection Committee: Early Risk Detection Committee consists of four members (two Independent Board members and two Board members). The Board delegates the monitoring of risks to the Early Risk Detection Committee. The Early Risk Detection Committee reports directly to Enerjisa Enerji’s Board. Early Risk Detection Committee is responsible for advising the Board regarding risk and opportunity definitions that may threaten Company’s existence and strategies, providing relevant mitigation actions, early detections and precautions. Following Board review, agreed actions are monitored by Enerjisa Enerji’s CFO and Early Risk Detection Committee. Climate, ESG and OHS related risks and opportunities are among the items discussed and monitored by the Early Risk Detection Committee.

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	Scope of board-level oversight	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues	<Not Applicable>	We develop our long-term strategies with a sustainable and holistic approach and integrate the ESG factors to our strategy. From the perspective of Enerjisa Enerji's business model, many strategic issues discussed at Board meetings are linked to climate-related issues as Enerjisa Enerji focuses on distribution grids, retail electricity sales and customer solutions in an increasingly electrified and decentralized energy world. The Board reviews the strategy of the Company and provides guidance. In this context, climate-related regulatory developments are discussed as well. For successful transition to low-carbon economy, networks need to be upgraded to address the increasing electrification, renewable energy systems and the growth of EV charging; and Enerjisa has a critical role in that as we carry out network investments. Additionally, Enerjisa focuses on providing its customers with sustainable and innovative solutions. In this regard, Enerjisa Enerji provides environmentally friendly and sustainable energy solutions, ranging from solar power plant installation services, energy efficiency applications, cogeneration and trigeneration applications to electric vehicle charging station management and green energy certification. The context of the non-financial reporting obligations are evaluated by Corporate Governance Committee. Meanwhile, climate-related risks and opportunities are compiled by the risk management unit and reported to the Early Risk Detection Committee. In 2020, Enerjisa Enerji made the decision to increase the coverage of its non-financial reporting, namely its GHG emissions. In order to better assess the impacts of high intensity operations (such as its SF6 containing equipment, sale of electricity) and to provide better transparency for stakeholders, Enerjisa Enerji decided to increase the scope of its GHG reporting to include all operations, along with obtaining limited assurance for its GHG reporting fist-time in 2020. The company also invested in a program to better monitor its SF6 related impacts in the future.

C1.2

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

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Sustainability committee	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	More frequently than quarterly
Chief Executive Officer (CEO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	More frequently than quarterly
Chief Financial Officer (CFO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	More frequently than quarterly
Other, please specify (Distribution Business General Manager)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Not reported to the board
Other, please specify (Retail Business General Manager)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Not reported to the board
Risk committee	<Not Applicable>	Assessing climate-related risks and opportunities	<Not Applicable>	As important matters arise
Corporate responsibility committee	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	As important matters arise
Environmental, Health, and Safety manager	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Not reported to the board
Risk manager	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Not reported to the board

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

Since 2019, we have a governance structure that enables us to develop a strategic and holistic approach to ESG factors for the purpose of creating long-term value. The Board has a critical role in defining the sustainability strategy and has ultimate responsibility for sustainability performance. The mandatory committees according to capital market legislation work actively to monitor ESG issues and report to the Board. The Company scorecard set by Board includes sustainability topics, which also contains setting a roadmap for setting CO2 reduction targets, setting and in-process measures regarding climate change strategy.

Corporate Responsibility Committee (Corporate Governance Committee) consists of five members. The chairperson of the Committee is chosen among independent Board of Directors. Other members of the Committee are two Board members, CFO and Head of Investor Relations, M&A and Tax. Purpose of the Committee is to monitor performance regarding compliance and to make recommendations to the Board of Directors of the Company regarding compliance and corporate governance best practices and their implementation. The Committee is also responsible for monitoring the preparation of Sustainability Principles Compliance report, including climate-related disclosures, mandated by the CMB.

Risk Committee (Early Risk Detection Committee): The Board delegates the monitoring of risks to the Early Risk Detection Committee. The Committee reports directly to the Board. Early Risk Detection Committee advises the Board regarding risk and opportunity definitions which may threaten Company's existence and strategies, relevant mitigation actions, early detections and precautions. Following Board review, agreed actions are monitored by the CFO and Early Risk Detection Committee. Climate, ESG and OHS related risks and opportunities are discussed and monitored by the Early Risk Detection Committee.

Sustainability Committee (ESG Committee), co-chaired by the CEO and CFO, oversees ESG practices across the Compa ny and reports about critical initiatives, developments and performance related to key performance indicators including climate-related issues and commitments to the BoardThis leadership and commitment of the ESG Committee cover the identification of environmental impacts, risks and opportunities, development of strategies and policies, identification, allocation and application of necessary resources, supervision of practices applied, measurement of performance, and the review and revision of the system.

Distribution Business General Manager is responsible for managing HSE processes, carrying out grid investments, and increasing efficiency (losses in the grid etc) in the distribution companies.

Retail Business General Manager is responsible for managing HSE processes and renewable electricity procurement (including PPAs) in retail companies. Retail business General Manager is also responsible of overseeing customer solutions business, which is core to the Enerjisa Enerji's sustainable energy strategy for transition to low-carbon economy.

HSE Managers: Both distribution and retail business lines have separate Occupational Health, Safety and Environment Units. Distribution HSE Manager reports to the Head of Distribution Business Unit, who reports directly to the CEO. Retail HSE Manager reports directly to the CEO.

The process to identify potential climate targets was initiated in 2021 with the objective to publish a climate strategy. Accordingly, Enerjisa Enerji engaged with 3rd party consultants to define the scope of emissions, to benchmark against other companies, and to review the current and emerging regulations. The target setting process is expected to be completed in 2022, while in process targets such as Solar Power Generation plants installed for customers is set within the scope of Company's investment plans.

Director of Energy Management: Reports directly to Retail Business General Manager. Responsible for the energy procurement of company's all regulated and liberal customer portfolio, including renewable energy sourcing related product development such as IREC certification, PPAs and carbon certification.

Distributed Generation and E-Mobility Manager: Reports directly to Retail Business General Manager. This position is responsible for developing and implementing targets set for distributed generation resources, energy efficiency projects and EV charging related products and solutions.

Director of Investor Relations, Tax and IR: Reports directly to the CFO. Responsible for communication of sustainability strategy to the investors, managing sustainability related reporting processes, increasing climate related reporting and transparency, and advising the upper management on value creating opportunities linked to sustainability. This position is also responsible for the company's climate-related reporting including leading the efforts for data collection and consolidation.

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	Sustainability strategy and qualitative scenario analysis has a direct impact on Enerjisa Enerji's sustainability scorecard. As a result, climate-related KPIs were included in the remuneration of C-level executives. In addition, performance evaluations of operational units now include climate-related KPIs including improving data collection & reporting and awareness building. The aforementioned studies such as qualitative scenario analysis and sustainability strategy will continue to guide our managerial and operational KPIs, which in turn will improve our reporting performances on platforms such as CDP and sustainability report.

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	Type of incentive	Activity inventivized	Comment
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction target Behavior change related indicator	CEO's Remuneration includes KPIs that drive climate-performance such as income generated by customer solutions products that generate carbon emission reductions, improving data reporting & monitoring systems Climate-related KPI's include the following: - Installed solar power plant capacity for customers - Improving data reporting and monitoring systems
Chief Financial Officer (CFO)	Monetary reward	Emissions reduction target Behavior change related indicator Company performance against a climate-related sustainability index	CFO's Remuneration Policy includes KPIs that drive climate-performance such as income generated by customer solutions products that generate carbon emission reductions, improving data reporting & monitoring systems Climate-related KPI's include the following: - Installed solar power plant capacity for customers - Improving data reporting and monitoring systems - Enerjisa Enerji's performance against-climate related sustainability indices
Other C-Suite Officer	Monetary reward	Emissions reduction target Behavior change related indicator	General Managers for Distribution and Retail businesses have KPIs that drive climate-performance such as income generated by customer solutions products that generate carbon emission reductions, improving data reporting & monitoring systems Climate-related KPI's include the following: - Installed solar power plant capacity for customers - Improving data reporting and monitoring systems
Other, please specify (IR, Tax, M&A Director)	Monetary reward	Company performance against a climate-related sustainability index	The scorecard for IR, Tax, M&A Director include KPIs for: Enerjisa Enerji's involvement and performance against-climate related sustainability indices (e.g. CDP score)
Environmental, health, and safety manager	Monetary reward	Behavior change related indicator Company performance against a climate-related sustainability index	The scorecard for Distribution and Retail HSE Managers include KPIs for: - Increasing climate change awareness in the company and representing the company in internal and external climate-related events - Increasing climate reporting performance and transparency.

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	Enerjisa Enerji's planning and forecasting process categorizes short-term risk and opportunities as exposures occurring in the current year. As these risks and opportunities has the most immediate impact on the business, the short-term planning process is frequently updated along with financial planning, with 4 forecasts and risk & opportunity assessments each year. This means that Enerjisa Enerji identifies, evaluates and plans mitigations for all risk and opportunities that are likely to occur in the existing year each quarter. Enterprise Risk Management is positioned as a central function in Enerjisa Enerji. In business units, risk coordinators are assigned to act as a bridge between departments and central risk management function. Every year we conduct a one-day risk management workshop with business unit risk coordinators and process owners. In this study, we address key highlights from previous year, annual risk management calendar and methodology regarding risk analysis, consolidation and reporting. In 2020, risk management workshops were conducted through online meeting platforms.
Medium-term	1	5	Once a year, Enerjisa Enerji performs a long-term planning including a thorough assessment of identifying all risk and opportunities that have an impact on its business, customers and environment for the upcoming 9 years, which together with the short-term planning process provides a 10-year outlook. This is conducted via a risk radar (that incorporates the medium-term time horizon (1-5 years) and 5-10 years (long-term time horizon). The medium and long-term risk & opportunity assessment is conducted together with C-level executives as well as the ESG committee members (in addition to the risk departments) in order to capture a holistic view on the upcoming drivers of our business. Both financial and non-financial impacts are evaluated in the company's long-term risk radar, in order to incorporate environmental, strategic, operational, IT, and Occupational Health and Safety outlooks. This medium/long-term time horizon planning process has been developed and incorporated during 2021, and is now a part of the standard yearly risk planning process.
Long-term	5	10	Once a year, Enerjisa Enerji performs a long-term planning including a thorough assessment of identifying all risk and opportunities that have an impact on our customers, business and environment for the upcoming 9 years, which together with the short-term planning process provides a 10-year outlook. This is conducted via a risk radar (that incorporates the medium-term time horizon (1-5 years) and 5-10 years (long-term time horizon). The medium and long-term risk & opportunity assessment is conducted together with C-level executives as well as the ESG committee members (in addition to the risk departments) in order to capture a holistic view on the upcoming drivers of our business. Both financial and non-financial impacts are evaluated in the company's long-term risk radar, in order to incorporate environmental, strategic, operational, IT, and HSE outlooks. This medium/long-term time horizon planning process has been developed and incorporated during 2021, and is now a part of the standard yearly risk planning process.

C2.1b

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

Risk management is recognized as an integral component of robust governance. Our Risk Management Framework aims to define all risks and opportunities, which may have impact on financial, operational and strategic plans and makes it possible to assess, classify and mitigate these risks through various methodologies.

The ultimate goal of the framework is to provide transparency to management functions and support decision-making processes via regular reporting. The Company's overall risk assessment and governance is under direct board oversight, via the Early Risk Detection Committee (ERDC). The ERDC committee consists of four members, including two independent board members. The ERDC meets at least 6 times during a year and reviews all risk and opportunity forecasts as well as the company's risk governance structure and processes.

To ensure a comprehensive and comparable risk profile of each of our business lines, each unit line needs to report all risk and opportunities (no threshold exists). Once a risk or opportunity is identified, it must be defined according to its cause, its effect and its financial impact. For example, an increased inflation rate (cause) will impact the customer deposit rates (effect) which in turn will negatively affect the financial expenses (Underlying Net Income impact). Once categorized by cause, each risk and opportunity is allocated to an effect and they are mapped to a financial impact, which is clustered within the risk categories further described in this chapter.

Enerjisa Enerji identifies all risks and opportunities through a detailed assessment process. We map qualitative and non-qualitative risks by identifying their impact on our sector and operations. The risks mapping process has three phases: defining, evaluating and categorizing, which enable us to ensure transparency and influence decision-making processes via regular reporting. The risk categories include environment (including climate change) risk and opportunities. All risk identified also has a direct owner within the organization that is responsible for the risk and opportunity, as well as incorporating the proper mitigations our monitor procedures to manage the risks.

Quantitative risk and opportunity methodology: For each risk and opportunity; best, base and worst case scenarios are collected from the business units and assigned a probability of occurrence, simulated using numeric analysis methodologies and grouped based on their expected values. Correlations are considered during consolidation of risk and opportunity impacts and fluctuations which may impact our net income are reported.

Along with each risk category, the largest risks which account for the 70% of the total net income impact are analysed and discussed further in during the Early Risk Detection Committee meetings.

Qualitative risk reporting methodology: The risks, of which their direct financial affect cannot be calculated but have a potential to adversely affect the strategic and operational activities of the company, are prioritized through scales defined according to impact levels and likelihoods; and reported through heat maps. These assessments form the basis of the Risks and Opportunities Report, which is presented to top management and the Early Risk Detection Committee.

Qualitative risks (non-financial risks) are categorized in a 1-25 scoring matrix, where probability of occurrence is rated on a scale 1-5 and multiplied with the impact of the risk which also ranges from 1-5. The qualitative risks are summarized on a heat-map, transparently visualizing the severity of the qualitative scores. For qualitative risks, there are many inputs to determine the severity scale (impact on environment, reputation, impact on health& safety and economic impact). For example, within the economic impact (for those impacts that are not easy to quantify and requires many assumptions), we define monetary loss of more than 100 million TL, within the "Severe" category, and monetary loss within the range of 10mn TL-100mnTL within the "Significant" category. Economic impact is not the only criteria for the classification of the risks. For example, for environment risks, even if we cannot calculate a financial impact, we define large scale, irreversible or very long lasting environmental damage within severe category. Or any fatality risk is categorized within severe category based on our definitions.

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
The Board delegates the monitoring of risks to the Early Risk Detection Committee. The Early Risk Detection Committee (ERDC) reports directly to Enerjisa Enerji's Board. Early Risk Detection Committee consists of four members (two Independent Board members and two Board members). The Early Risk Detection Committee is responsible for advising the Board regarding risk and opportunity definitions, which may threaten the Company's existence and strategies, relevant mitigation actions, early detection and precautions. Following Board review, the agreed upon actions are monitored by our CFO and Early Risk Detection Committee. Risk management is recognized as an integral component of robust governance. Our Risk Management Framework aims to define all risks and opportunities, which may have impact on financial, operational and strategic plans and makes it possible to assess, classify and mitigate these risks through various methodologies. Risk management is recognized as an integral component of robust governance. Our Risk Management Framework aims to define all risks and opportunities, which may have impact on financial, operational and strategic plans and makes it possible to assess, classify and mitigate these risks through various methodologies. The ultimate goal of the framework is to provide transparency to management functions and support decision-making processes via regular reporting. The Company's overall risk assessment and governance is under direct board oversight, via the Early Risk Detection Committee (ERDC). The ERDC committee consists of four members, including two independent board members. The ERDC meets at least 6 times during a year and reviews all risk and opportunity forecasts as well as the company's risk governance structure and processes. To ensure a comprehensive and comparable risk profile of each of our business lines, each unit line needs to report all risk and opportunities (no threshold exists). Once a risk or opportunity is identified, it must be defined according to its cause, its effect and its financial impact. For example, an increased inflation rate (cause) will impact the customer deposit rates (effect) which in turn will negatively affect the financial expenses (Underlying Net Income impact). Once categorized by cause, each risk and opportunity is allocated to an effect and they are mapped to a financial impact, which is clustered within the risk categories further described in this chapter. Enerjisa Enerji identifies all risks and opportunities through a detailed assessment process. This work is elaborated through two separate approaches: Quantitative risk and opportunity methodology: For each risk and opportunity; best, base and worst-case scenarios are collected from the business units and assigned a probability of occurrence, simulated using numeric analysis methodologies and grouped based on their expected values. Correlations are considered during consolidation of risk and opportunity impacts and fluctuations which may impact our net income are reported. Qualitative risk reporting methodology: The risks, of which their direct financial impact cannot be calculated but have a potential to adversely affect the strategic and operational activities of the company, are prioritized through scales defined according to impact levels and likelihoods; and reported through heat maps. These assessments form the basis of the Risks and Opportunities Report, which is presented to top management and the Early Risk Detection Committee. We map financial and non-financial risks by identifying their impact on our sector and operations. The risks mapping process has three phases: defining, evaluating and categorizing, which enable us to ensure transparency and influence decision-making processes via regular reporting. The risk categories include environment (including climate change) risk and opportunities. All risk identified also has a direct owner within the organization that is responsible for the risk and opportunity, as well as incorporating the proper mitigations our monitor procedures to manage the risks. Short-term climate-related risks are identified, evaluated and assessed every quarter, through a bottom-up approach with risk coordinators and risk owners (management responsible for the business). The climate risks are identified via the quarterly risk assessment process that combines and aggregates all the company's risks via trend analysis and Monte Carlo simulations to establish the likelihood of a financial outcome. Examples of climate-related risks and opportunities captured in this process are potential impacts that can be caused by severe weather such as storms/ wildfires/ heavy snowfalls (intensified by climate change) that have severe impact on the safety of our employees and infrastructure as well as interrupted power supply for our customers. For example, heavy snowfalls in some of our distribution regions are expected to increase due to climate change in the upcoming years. Enerjisa Enerji is responsible for running its power grid without any malfunctions and is penalized by amount of blackouts (based on the number of customers that are without energy for more than 10 hours at a time, as well as the number of customers that are without energy for 48 aggregated hours during each calendar year). Therefore, severe weather events and their impacts on the short-term are closely monitored. Medium-term and long-term climate-related risks are identified, evaluated and asses on a yearly basis with an outlook horizon of 1-10 years. All identified climate-related risk and opportunities, that are captured together the company's top executives and risk coordinators as well as the company's ESG committee, are documented in the company's risk radar and shared with Early Risk Detection Committee. The risk radar, which is the document including all major risk and opportunities identified for the upcoming 10 years, are used as a strategic and operational planning tool to incorporate mitigation activities into the company's business plan and strategy. As such, medium- & long-term risk & opportunities, including climate-related risks, are an integrated part of the company's business plan. Examples of climate-related risks and opportunities captured in the risk radar for medium- to long-term outlook are emerging climate-related regulation or opportunities related to changes in customer behaviour and the increasing demand for more climate-friendly products and services. Chronic and acute physical risks are also considered. For example, emerging regulations such as ETS Regulation, Turkish Climate Law, and F-gas related regulations are all closely monitored as these may have large impacts on Enerjisa Enerji's business in the future.

C2.2a

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Current regulations are always considered in climate-related risk assessments because Enerjisa Enerji operates in a highly regulated market. While most of the regulations covering distribution operations are not climate-related, any regulation that affects the electricity generation and distribution sectors has an impact on our business directly. The current regulations that are covered by Enerjisa Enerji's climate-related risk assessments include the Green Tariff Regulation, F-Gas Regulation, YEK-G (renewable energy exchange), YEKDEM (Renewable generation incentives), Unlicensed Generation Regulation. Apart from the F-gas regulation, which has the potential to impact Enerjisa's direct operations due to the use of SF6 on switchgear equipment, most of the impacts are either downstream or upstream. As climate change awareness increases, so do the demand for renewable power generation. Through renewable incentives, green tariffs, IREC sales and unlicensed generation, both the demand and supply of renewable generation have been increasing rapidly. As an electricity distribution company, Enerjisa Enerji is responsible for connecting new renewable generation assets to its distribution network. Therefore, not investing sufficiently into the grid may pose risks from a regulation standpoint. From the opportunity side, Enerjisa Enerji has invested in Customer Solutions to provide its customers electricity from renewable sources, renewable certificates, distributed generation turnkey solutions and e-mobility services. Turkey's Energy Efficiency Regulations also offer various incentives to reduce energy consumption (including cash subsidies) and various obligations (as energy assessments requirement for large-scale energy users in their premises every year, energy reduction targets for public institutions, etc). We believe under the incentives and obligations set by regulations, the focus to increase the energy efficiency for corporate customers will further increase. With our energy performance contracting (EPC/ESCO) model, we offer energy efficiency solutions such as waste heat-recovery solutions; heating, ventilation and air conditioning (HVAC) pressurized systems; electric motors and lighting.

	Relevance & inclusion	Please explain
Emerging regulation	Relevant, always included	Emerging regulations are always considered in climate-related risk assessments because Enerjisa Enerji operates in a highly regulated market. Turkey is also in a transitionary period and climate-related actions and regulations are upcoming in the near future. For example, the draft Climate Law aims to reduce the country's impact on climate change and references the temperature targets as laid out in the Paris Agreement, namely keeping global warming 2oC below pre-industrial times and additionally support limiting the temperature increase below 1.5oC. The Climate Law is aimed to be the main legal framework to achieve this target. The main planned mechanisms to reduce GHG emissions are market-based mechanisms, with emission trading system (ETS) considered as the main mechanism. No Enerjisa Enerji operations are covered under the current CO2 monitoring regulation, therefore we are not expecting any mandates from an ETS regulation as well in the near horizon. However, the draft Climate Law also references other market-based mechanisms; such as trade of energy efficiency certificates (white certificate), trade of renewable energy certificates (green certificate), results-oriented financing and scaled-up credit mechanisms. The Law also references strong and efficient financial incentives to increase carbon sequestration, increasing ecologically rich areas under protection, disseminating energy efficiency projects, using alternative fuels instead of fossil fuels, switching to sustainable production and consumption models in energy, transportation and waste both in public and private sector, and especially development and innovation of technologies to reduce GHG emissions in energy-intensive sectors. Enerjisa Enerji, foreseeing the shift towards low carbon economy in the energy sector already has been investing in services such as energy efficiency, green energy solutions, electric vehicle charging stations, R&D towards decentralized energy networks, smart grids and cities, and etc. While not covered by the market-based mechanisms stipulated by the draft law, Enerjisa Enerji will be looking to leverage the potential incentives and other market-based approaches that may be included later as the Law-making progresses.
Technology	Relevant, always included	Enerjisa Enerji conducts climate risk evaluation of emerging regulation, technologies and scientific studies. In addition, Enerjisa relies on internal estimates by our experts or external partners & shareholders. The area of "Technology" is covered by the risk category "Operational Risks & Opportunities". Enerjisa Enerji's operations relies heavily on complex information technology, which brings many risks and opportunities. The power markets are evolving to be more decentralized, renewable (highly intermittent) and decarbonized, and for success of these trends, digitalization is paramount Digitalization is an important tool to increase system flexibility and enable integration across entire energy systems. Enerjisa is exploring a wider use of many digitalization projects and technologies such as IoT Grid Solutions, Smart Grids, Smart Homes, Advanced Sensors, Artificial Intelligence, Smart City Solutions and Blockchain Energy Trading. In 2020, in order to holistically enhance sustainability with digitalization, we developed our Digital Transformation Model E-TERNAL. To integrate our digital initiatives; in-depth benchmark analysis and engagement with internal and external stakeholders have been carried out. As a result, we designed our digital transformation journey and patented our model as a first application in energy sector. With this model, we aim to dedicate all of our digital initiatives with our Purpose and align them with global and mega energy trends. In 2020, our R&D unit launched "İvme Entrepreneurship Acceleration Program" in order to develop and offer solutions to current problems that the energy sector focuses on such as energy efficiency and developing low carbon products to formulate scalable and easily implementable technologies and to contribute to the formation and growth of next-generation enterprises. Our corporate entrepreneurship and innovation program, NAR, has been harvesting innovative ideas from our employees for 6 years. The 6th term of the Nar Program has been completed in 2020 with the theme of "Digital Solutions for Efficiency". In 2020, 15 ideas were accepted to the acceleration phase of the Nar Program, which received 160 idea applications. 8 of these ideas have been transferred to the relevant business units for their fast implementation and 4 of these are in the incubation stage of the pilot process, and 3 of them have climate change related links.
Legal	Relevant, always included	Enerjisa Enerji operates in a highly regulated market, therefore legal risks are always considered as part of the company's risk assessment procedures. We closely follow the regulations. Enerjisa Enerji Compliance Management Unit is responsible for determination and prevention of compliance risks, carrying out the necessary awareness-raising and training activities, monitoring violations and implement an effective compliance management system. We initiated the process for ISO 37301 Compliance Management Certification for an effective Compliance Management System. The certification process is expected to be completed by the end of 2021. Regulatory changes, risks and opportunities are monitored at an operational level by dedicated teams within our distribution and retail business units. In addition to regulations, climate-related risks, especially ones that may cause legal compliance issues such as acute physical ones (flooding, wildfires, etc.) that may harm others through disruptions on and damages to Enerjisa Enerji network are closely monitored as well. In addition to operational teams closely monitoring climate-related physical risks, Enerjisa Enerji ensures the safety of its operations through its ISO 45001 Occupational Health and Safety Management System, where physical risk aspects are also considered. Business Interruption Scenarios, Crisis Management and Emergency Recovery plans are updated annually and then reviewed by the Early Detection of Risks Committee and crisis management team. Enerjisa Enerji distribution companies maintain, "general liability insurance" which includes third-person liability insurance (product liability insurance/voltage fluctuation and material damages from fire) and Emloyer's liability insurance. Third-party insurance protects companies against third-party lawsuits involving injuries or property damages. Another general liability insurance is "Employer's Liability Insurance" for compensation of all physical damages that may occur upon the employees. Employers liability insurance can pay the compensation amount and legal costs if an employee claims compensation for work-related illness, injury, and in cases of deaths.
Market	Relevant, always included	Our Risk Management Framework aims to define all risks and opportunities, which may impact financial, operational and strategic plans and makes it possible to assess, classify and mitigate these risks through various methodologies. In line with this, Enerjisa Enerji conducts climate risk evaluation and monitor customer behaviors, and conduct strategic exercises to assess the future market dynamics and direction of new developments. Operating in a dynamic industry that is being transformed by global mega trends (digitalization, decarbonization, deregulation, decentralization and urbanization), we prepare for future developments with a clear vision and prioritize value-adding opportunities with our employees and innovation culture. We prepare for these fundamental changes by helping to shape regulations and exploring new business opportunities and focus on sustainable energy solutions in addressing the mega trends. Risks and opportunities related to providing products and services that are increasingly becoming more sought after is an integral part of the company's business plan and risk monitoring. In 2017, we established a separate entity called Enerjisa Müşteri Çözümleri A.Ş. to carry out customer solution activities. Another important climate-related decision we made was the decision to acquire E-şarj Elektrikli Araçlar Şarj Sistemleri A.Ş., an e-mobility solutions provider in 2018. Enerjisa Enerji's customer solutions arm develops energy efficiency solutions and green products such as roof top solar PV, E-mobility charging stations, green energy certificates, and energy efficiency applications to help customers reduce their carbon footprint and secure their reliance on green energy. The adoption of these products and services is assessed via the risk and opportunities related to market dynamics, such as price, accessibility, incentives schemes and public opinion. Adoption of new energy efficiency solutions and green energy products are among the risks we are subject to.
Reputation	Relevant, always included	Our Risk Management Framework aims to define all risks and opportunities, which may have an impact on financial, operational and strategic plans and makes it possible to assess, classify and mitigate these risks through various methodologies. In line with this, Enerjisa Enerji conducts climate risk evaluation and monitors customer behavior, and conducts strategic exercises to assess the future market dynamics and direction of new developments. While the world's power markets are evolving to be more decentralized and decarbonized, consumers are increasingly looking to engage with companies that offer products and services with purpose. Purpose can drive operations towards outcomes that customers value, creating deeper connection and opportunities for new products and services. Enerjisa Enerji firmly believes that the new energy world of tomorrow is green, digital, decentral, urban and decarbonized. And accordingly is focusing on sustainable energy solutions. Risks and opportunities related to the reputation and profile of Enerjisa Enerji as a proactive and environmental conscious energy company is evaluated, and related actions are integrated into the company's operations and business plans. In 2021, Enerjisa Enerji conducted a series of climate-related videos and commercials to increase the awareness in Turkey on pollution and global warming, with the message that "no one can do everything, but everybody can do something – join us in the combat to protect our planet for the generations to come". The company was also recognized as a global thought leader by CBS that did extensive profiling on Enerjisa Enerij's management related to its future strategy to build out the new and green energy world. Additionally, as Enerjisa we participate in national and international collaborations to support the activities to combat climate change.
Acute physical	Relevant, always included	Enerjisa Enerji assesses the likelihood and impacts of acute physical risks such as storms, heavy snow falls, floods and wildfires Based on historical observations and trend analyses, the frequency of storms and other severe event-driven weather impacts are modelled and concluded to have an increasing impact on our business. The Electricity Licensing Regulation requires distribution companies to insure their assets related to electricity distribution activities with "all risk insurance" against natural disasters, fires, earthquakes, floods, terrorism, sabotage and similar risks. Going forward, increasing severity of climate-related weather events may result in an increase in insurance premiums if the assets are not kept up to date, or additional mitigating actions precautions are not taken. The overhead lines are more exposed to the impacts of natural disasters compared to underground lines. To mitigate the impacts, we increased the ratio of underground lines from 19% in 2015 to 25% in 2020 in our distribution regions. Our overhead lines might pass through forecast lines and the climate change increases the risks of fires. Energy transmission lines are cleared of vegetation in a certain cross-section in accordance with applicable regulations. When necessary, trees are removed from the area by cutting or pruning. With Daphne project, via choosing a tree species, we aimed to ensure line security and prevent possible fires by planting suitable tree species instead of underline cutting or pruning. The increasing frequency of natural events might cause more frequent and longer interruptions in customers' access to energy. Enerjisa Enerji, as a power distribution company, is responsible for preventing blackouts and in case of occurrence as soon as possible, so that customers are customer's power absence is at a minimum. Heavy snowfalls and intense storm inhibits our repair fleet to reach the infrastructure causing the power interruption and thus increasing the duration of blackouts. The risk is identified in the company's risk register. Enerjisa Enerji has also developed a mitigation action, that transforms the tires of the maintenance fleet vehicles to continuous tracks (like tanks) which increases the ability to reach the sites with unfavourable weather conditions.
Chronic physical	Relevant, always included	Climate-related physical impacts are observed with higher frequency in Turkey. Coastal regions are flooded more frequently, while drought seasons are getting longer in more internal regions. The impact of global temperature increase on the Mediterranean region is expected to be quite significant as even a 1.5 degree scenario increases annual hot days by at least 8 and increases summer maximum daily temperatures by 1.1 degrees celcius. Warm extremes over land are expected to increase 173% in Southern Europe/Mediterranean. Rainfall is also expected to increase by 7% (to 17% in a +3 degree scenario). In 2020, the hydropower generation (reservoir and run-of-river) accounted for 27% of power generation in Turkey. Excessive heat and decreasing rain and snowfall in Turkey might result in droughts, which in turn might impact energy supply and prices. Demand is impacted considerably by heating and cooling needs during winter and summer times. In case of any extremities in temperature, the requirements for network investments might increase. The peak in supply along with droughts might lead to increases in prices. Enerjisa carries out hedges to mitigate the price risks. Droughts can have negative financial impacts on sectors with water input (agricultural irrigation etc.) in their activities. These customers can experience difficulties in their payments. Some of our distribution lines can run through forests and climate change increases the risk of forest fires. Enerjisa conducts tree cutting or pruning near the distribution lines, to mitigate the impacts of fire risks on its network. The overhead lines are more exposed to the impacts of natural events compared to underground lines. To mitigate the impacts, we increased the ratio of underground lines from 19% in 2015 to 25% in 2020 in our distribution regions. As increases in frequencies and intensities might be harder to detect and mitigate, there is higher risk related to the malfunction of the network grid. Chronic heat waves and increased temperature increases the likelihood of shortening the life span of assets as well as more likely malfunctions (leading to higher frequency of blackouts as well as HSE related accidents). Heatwave-related risks are a part of the company's risk identification and include mitigation activities to deal with related impacts.

C2.3

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

C2.3a

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

Identifier
Risk 1

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Current regulation	Mandates on and regulation of existing products and services

Primary potential financial impact
Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Non-compliance with current SF6 regulatory targets. There is a risk that Enerjisa Enerji fails to comply with the current Fluorinated Gas regulation active today in Turkey. The current regulation, which was issued on January 4, 2018, requires companies in our sector to comply with 12 obligatory items that regulates the handling of equipment containing potential SF6 emission. SF6 is a widely used in the power distribution sector, due to its effective electrical insulation capabilities. Examples of obligatory items Enerjisa has to comply with as stated by the regulation are the inspection of installation, maintenance and repair activities a by certified third party agencies, and the procurement of components that include SF6 labels and manometers (pressure measurements to detect leakage). In addition, companies need to timely and accurately report data to Turkey's Ministry of Environment and Urbanization. The risk of non-conformity can lead to specific fines specified by the ministry. Fines are calculated based on the number of violations in each of the cities that the company operates in. The specific elements that are of highest risk are: (i) assuring proper inspection on all installation, maintenance and repair activities due to the scarce number of certified third party agencies, and (ii) ensuring SF6 labels and manometers are included on old equipment that still have a substantial technical life time left but cannot, for technical and regulatory reasons, be retrofitted to fit a manometer. Currently, database of T.C. Ministry of Environment and Urbanization on recording of F-Gas equipment is in testing-stage. Turkey currently does not have a target of reducing, abating/replacing, banning of SF6.

Time horizon
Short-term

Likelihood
Unlikely

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
336000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
The penalty structure in place fines any (or several) identified non-conformities of meeting the 12 obligations with 24,000 TL. The penalty is based on location (i.e. that the non-conformity only applies in the city where it was identified) resulting in the risk of receiving multiple penalties, subject to the company's geographical footprint. As Enerjisa Enerji operates in 14 cities in Turkey the potential penalty is 336,000 TL (24,000 TL x 14 cities).

Cost of response to risk
4000000

Description of response and explanation of cost calculation
Enerjisa Enerji mitigation activities are based on adapting the operational process to follow with the 12 obligations set-up by the Ministry of Environment and Urbanization. This means that the company purchases all new material with SF6 labels and manometers and certifies its installation, maintenance and repair activities. However, it is not possible to quantify the additional costs of including labels and manometers as their cost is already integrated in the cost of purchased equipment (not broken down per component). Likewise, the certification costs are borne by third-party agencies as part of agreements and not broken down per component. However, in order to combat environmental impacts and especially SF6 emissions where regulation is still not sufficiently outlined, Enerjisa Enerji takes part in projects, initiatives and industry organizations that exchanges best practices on environmental management. As an example, Enerjisa Enerji participated in the Climate Project Regarding SF6 Gas Usage in the Electric Sector financed by the EU and carried out by the Association of Waste Paper and Recyclers (AGED) and the Association of Distribution System Operators (ELDER). Main objective of the Project is establishing cooperation and sustainable dialogue between Turkey and EU in order to standardize the handling, monitoring and recycling of SF6 gas. Enerjisa Enerji is also working to develop R&D projects in coordination with EMRA to use SF6-free air insulated switchgears. The project is currently at an early phase, and if approved by EMRA, we will start working on the project to enable using gases with lower GHG emissions and shorter lifetimes. The cost provided (4mn TL) for the SF6 related R&D project (subject to approval) is a rounded figure for commercial reasons.

Comment

Identifier
Risk 2

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

Risk type & Primary climate-related risk driver

Emerging regulation	Carbon pricing mechanisms

Primary potential financial impact
Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
There is a risk that Enerjisa Enerji fails to comply with the current Fluorinated Gas regulation active today in Turkey. The current regulation, which was issued on January 4, 2018, requires companies in our sector to comply with 12 obligatory items that regulates the handling of equipment containing potential SF6 emission. SF6 is a widely used in the power distribution sector, due to its effective electrical insulation capabilities. Examples of obligatory items Enerjisa has to comply with as stated by the regulation are the inspection of installation, maintenance and repair activities a by certified third-party agencies and the procurement of components that include SF6 labels and manometers (pressure measurements to detect leakage). In addition, companies need to timely and accurately report data to Turkey's Ministry of Environment and Urbanization. Currently, database of T.C. Ministry of Environment and Urbanization on recording of F-Gas equipment is in testing-stage. Turkey currently does not have a target of reducing, abating/replacing, banning of SF6. Likewise, the current regulation on monitoring GHG emissions and the draft climate law does not stipulate any mandates on SF6 or electricity distribution companies. However, once there is a national database to document the existing SF6 inventory, regulations on reducing and replacing SF6 gases might emerge with a transition period. Enerjisa Enerji tries to minimize any leakage (and thus targets to mitigate any potential fine that might be implemented in the future) with the belief that it is the company's moral obligation and the assumption that Turkey can implement such a regulation, in line with other international developments on climate change. The risk of such an implementation is explained further (and quantified based on Enerjisa's current SF6 footprint) in the calculation section.

Time horizon
Medium-term

Likelihood
Very unlikely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
7089780

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
The European Commission is in the process of reviewing the current F-gas Regulation The current Regulation strengthened the previous measures and introduced far-reaching changes by: • Limiting the total amount of the most important F-gases that can be sold in the EU from 2015 onwards and phasing them down in steps to one-fifth of 2014 sales in 2030. This will be the main driver of the move towards more climate-friendly technologies; • Banning the use of F-gases in many new types of equipment where less harmful alternatives are widely available, such as fridges in homes or supermarkets, air conditioning and foams and aerosols; • Preventing emissions of F-gases from existing equipment by requiring checks, proper servicing and recovery of the gases at the end of the equipment's life. Currently, there are no specifics on planned actions for SF6 gases used in electricity industry by European Commission, which could be a benchmark for Turkish regulations. Some studies indicate that a shift to SF6 free solutions may result in an initial cost increase of up to 20%, rising to 30% in exceptional cases, compared to systems using SF6; while the cost differential might decline as the new technologies are adopted. Given the potential complexities of a cost calculation, we decided to implement a worst-case scenario, assuming a carbon tax on our current SF6 emissions. Enerjisa Enerji is planning to increase the controls around its SF6 emissions does not expect emissions to go higher than current levels in the long term. The price assumption for carbon tax is also unlikely given the currency mismatch. However, considering a worst-case scenario, and assuming a carbon tax of 50 EUR/tCO2e per current ETS prices, the risk for Enerjisa can be calculated as 17,640*50 = 882,000 EUR p.a, which corresponds to TL 7,089,780 at 2020 average EUR/TL rate of 8.0383.

Cost of response to risk
4000000

Description of response and explanation of cost calculation
Enerjisa Enerji mitigation activities are based on adapting the operational process to follow with the 12 obligations set-up by the Ministry of Environment and Urbanization. This means that the company purchases all new material with SF6 labels and manometers and certifies its installation, maintenance and repair activities. However, it is not possible to quantify the additional costs of including labels and manometers as their cost is already integrated in the cost of purchased equipment (not broken down per component). Likewise, the certification costs are borne from third-party agencies as part of agreements and not broken down per component. However, in order to combat environmental impacts and especially SF6 emissions where regulation is still not sufficiently outlined, Enerjisa Enerji takes part in projects, initiatives and industry organizations that exchanges best practices on environmental management in addition to lobby for more transparent and demanding regulations. As an example, Enerjisa Enerji participated in the Climate Project Regarding SF6 Gas Usage in the Electric Sector financed by the EU and carried out by the Association of Waste Paper and Recyclers (AGED) and the Association of Distribution System Operators (ELDER). Main objective of the Project is establishing cooperation and sustainable dialogue between Turkey and EU in order to standardize the handling, monitoring and recycling of SF6 gas. Enerjisa Enerji is also working to develop R&D projects in coordination with EMRA to use SF6-free air insulated switchgears. The project is currently at an early phase, and if approved by EMRA, we will start working on the project to enable using gases with lower GHG emissions and shorter lifetimes. The cost provided (4mn TL) for the SF6 related R&D project (subject to approval) is a rounded figure for commercial reasons.

Comment

Identifier
Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical	Increased severity and frequency of extreme weather events such as cyclones and floods

Primary potential financial impact
Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Interruption in energy supply to customers is an undesired but unavoidable event in any energy business. Due to either energy supply shortage or malfunction of the power distribution grids blackouts do occur and cause customers to be without power for several minutes or hours, which for corporate energy users can have severe economical and operational effects. One of the main reasons for malfunction of power distribution grids is weather-related interruptions. Storms or heavy snow might cause trees to fall over the power lines or break poles bearing power lines. These types of extreme weather-related energy interruptions are observed to become more frequent and intense with climate change. Strong storms and heavy snowfalls do not only cause interruptions in the energy supply but also delay the lead time until the energy flow is restored. Due to the severe weather conditions, the repair and maintenance workforce of energy distribution companies might have further difficulties in accessing the sites on time. As global warming and its climate impacts intensify, the risk for more frequent and longer blackouts increases. Enerjisa Enerji, as a power distribution company might be subject to fines as per regulations, depending on the number of customers without energy and for how long the energy flow is interrupted.

Time horizon
Short-term

Likelihood
More likely than not

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)
26000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Calculations are based on the current energy regulation related to energy supply, that penalizes companies (depending on their scale of operations), based on the number of customers that are without energy for more than 10 hours at a time, as well as the number of customers that are without energy for 48 aggregated hours during each calendar year. The calculation basis for the potential financial impact, is based on a worst-case scenario on back of trend analysis and storm modelings, leading to interrupted energy flows with the following assumptions: a) 162,000 of Enerjisa Enerji's 10 million customers to be without energy for more than 10 hours at a time (13 million TL penalty) as well as B) 324,000 of Enerjisa Enerji's 10 million customers being without energy for more than 48 hours during the whole calendar year (13 million TL penalty). The total impact is thus 26 million TL by the combination of the two categories above.

Cost of response to risk
1000000

Description of response and explanation of cost calculation
In order to minimize the risk of blackouts and storm-related energy interruptions, Enerjisa heavily invests in modernizing its grid and building out new energy lines that are more tolerant and robust (for example by placing power lines underground and minimizing the risk of falling trees or breaking poles). In the fourth regulatory period (2021-2025), Enerjisa has an initial allowed Capex of TL 13,549 million (with October 2020 prices), which will be invested for expanding and modernizing the power distribution grid (where one of the requirements for a deemed necessary portion is weather resistance). Recently, Enerjisa also developed and launched a new technology that enables repair vehicles to have easier and faster access to remote and blocked areas that were previously difficult to reach due to snow or sand. PENÇE, which is Enerjisa Enerji's own in-house R&D development, limits the time of blackout by putting transforming wheels to continuous tracks (similar to tanks) and thus enables them to reach snow or sand-filled hills. The R&D technology was developed for a cost of 1 million Turkish Lira (rounded due to confidentiality). In addition, Enerjisa also conducts tree cutting or pruning near the distribution lines, to mitigate the risks of falling trees on overhead cables and/or contact of trees with overhead lines to minimize the risk of blackouts.

Comment

Identifier
Risk 4

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Acute physical	Increased severity and frequency of extreme weather events such as cyclones and floods

Primary potential financial impact
Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Damage to energy infrastructure due to climate-related storms/blizzards/rain. The power infrastructure (distribution grids, grid poles, transformation stations, power boxes) is designed and maintained to handle weather conditions based on historic extremes natural events. However, due to the increase in the intensity of extreme weather

conditions (more rapid shifts in weather and increased intensity of storms/floods/heat waves), the infrastructure may experience damages. Climate changes caused by global warming (the gradual heating of the earth's ecosystem in the human-induced Anthropocene era and greenhouse gas accumulation in the atmosphere), the risk for experiencing an extreme weather condition in areas where Enerjisa Enerji's infrastructure is located has increased. Climate change increases the risks of damages on the infrastructure itself due to storms, floods, or wildfires as well as costs of protecting the infrastructure in case of wildfires in the surrounding area.

Time horizon
Short-term

Likelihood
More likely than not

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)
18000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Every incident with the outcome of physical damage to the grid equipment is archived with incident reports and insurance estimates. These estimates are the main inputs in forecasting the financial impact of extreme weather events on grid. After we come up with an expected cost per event from such historical data, we use a separate model for estimating future frequencies of extreme weather events in magnitude of damaging the grid equipment. Future incident frequencies, according the trend output provided from that model, are multiplied with expected cost per event to quantify the potential impact of financial cost distribution network is being posed to under the risk of storms, floods, wild fires and all extreme climate conditions fueled with global warming.

Cost of response to risk
10000000

Description of response and explanation of cost calculation
As a primary mitigation and response, Enerjisa Enerji procures relevant insurances for protecting its assets and related damages. Besides limiting the financial exposure, the insurances ensure paying all costs related to these damages, so that necessary response measures can be conducted without the dependency on the company's liquidity or financial health (e.g. SOS departments carrying out expensive but necessary firefighting activities via helicopter). Insurance and risk management of critical infrastructure equipment is critical because apart from direct financial impacts, equipment malfunction and breakdown causes further impacts such as fines for blackouts, reduced reputation, etc. In 2020, Enerjisa Enerji's insurance expenses combined were 32 million TL. The cost of all risk insurance of our distribution network against natural disasters, fires, earthquakes, floods, terrorism and similar risks was around 10 million TL in 2020. In addition, Enerjisa Enerji is currently working on a R&D project that studies the robustness of different dimensions and materials for power line bearing poles in order to develop the optimal pole for each geographical condition, and thus better withstand heavy storms and snowfalls. The project is being conducted in collaboration with other players in Enerjisa Enerji's industry and is currently under study, thus the financial cost of the project is finalized yet.

Comment

Identifier
Risk 5

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Chronic physical	Rising mean temperatures

Primary potential financial impact
Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Reduced customer payments due to droughts The increasing impacts of climate change cause an increased risk of droughts. The excessively increasing temperature and decreasing rainfall in Turkey increase the likelihood and severity of droughts, especially in more inner regions, with possible negative effects, especially for corporate and small-and-medium enterprise customers that are dependent of water in their operations or productions (e.g. iron and steel manufacturers, food industry, agricultural companies). Due to the financial burden placed on some of these customers, with already slim operating margins, the increased cost related to the drought (increased water prices and increased pumping costs), there is a risk that a certain portion of the customers will have difficulties in paying their electricity bills, thus causing a negative impact to Enerjisa Enerji earnings.

Time horizon
Short-term

Likelihood
More likely than not

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)
10000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
The financial impact is calculated for the receivable risk. Input parameters are the collection rate impact of -0.5%for invoices of 7-18 months, of both the top 100 customers (which stands for the 70% of the risk exposure) of agricultural irrigation and related water dependant sectors and the remaining related large and medium customers (that accounts for 30% of the exposure). These operations and sectors were selected due to their high sensitivity to droughts (i.e. a drought event can significantly impact the customer's ability to pay for that period). The figure provided is the potential annual amount.

Cost of response to risk
0

Description of response and explanation of cost calculation
In order to minimize the financial impact of the unpaid invoices due to the impact of droughts on customers' payment capability, Enerjisa Enerji closely follows customer receivables and works with risk mitigation measures and debt restructurings.

Comment

C2.4

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

C2.4a

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

Identifier
Opp1

Where in the value chain does the opportunity occur?
Downstream

Opportunity type
Markets

Primary climate-related opportunity driver
Access to new markets

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
Power grids around the world are becoming more decentralized, resulting in distributed energy resources that are transforming energy markets. Distributed energy resources are small-scale on-site generation facilities at consumers' premises through which the customer can manage and safeguard energy consumption in addition to choosing its energy resource type. Distributed energy helps to reduce losses and costs in electricity production, transmission and distribution, ensure supply security, lower foreign dependency, decrease greenhouse gas emissions, promote renewable energy sources and ensure regional development. It helps to combat climate change on both the local and global scale by using renewable energy resources. Customer awareness and demand for distributed energy resources, energy efficiency solutions and green products are increasing due to declining LCOE (levelized cost of energy), climate-change awareness and supply security risks. In order to play a role in combatting the climate crisis and to fulfil the increasing demands of our customers, we are working on distributed generation models in parallel to the centralized energy model. In addition to our core business areas of electricity distribution and retail sales, we lead the sector in distributed energy, energy efficiency and e-mobility solutions. We closely follow opportunities in innovative business areas such as electric vehicle charging stations, electricity storage systems, smart home technologies and systems that help consumers produce their own electricity. End-to-end solutions aimed at increasing the energy efficiency and reducing carbon emissions of corporate customers were restructured under Energy of My Business in October 2020. This portfolio includes many environmentally friendly and sustainable energy solutions, ranging from solar power plant installation services, energy efficiency applications, cogeneration and Trigeneration applications to electric vehicle charging station management and green energy certifications. At the end of 2020, the total capacity of SPPs served by Enerjisa Enerji was 9 MWp. We aim to increase this capacity to over 100 MWp by the end of 2025. While energy efficiency solutions will demonstrate strong growth, we expect distributed generation to be the core driver of growth in our customer solutions business.

Time horizon
Medium-term

Likelihood
Very likely

Magnitude of impact
High

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
1000000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
We estimate the rooftop SPP capacity potential in Turkey to be above 4,000 MW, while current capacity is around 500MW. At the end of 2020, the total capacity of SPPs served by Enerjisa Enerji was 9 MWp. We aim to increase this capacity to over 100 MWp by the end of 2025. While energy efficiency solutions will demonstrate strong growth, we expect distributed generation to be the core driver of growth in our customer solutions business. Our customer solutions business Enerjisa Müşteri Çözümleri A.Ş., acquired 80% of the shares of Eşarj Elektrikli Araçlar Şarj Sistemleri A.Ş. (Eşarj) in 2018 and became its controlling shareholder. In addition to our leadership in distribution and sales in the electricity sector, we aim to play an innovative and pioneering role in the electric vehicle ecosystem and play an active role in the transformation of the industry. We believe our customer solutions business and Esarj combined has the potential to reach 1 billion TL annual revenues by 2025.

Cost to realize opportunity
1000000000

Strategy to realize opportunity and explanation of cost calculation
We established Enerjisa Müşteri Çözümleri A.Ş. in 2017 to carry out customer solutions activities. The security of the energy supply and maintaining an uninterrupted supply of electricity is at the top of the sustainability agenda and we adapt various business models such as ESCO/ EPS to achieve these goals. In addition to our core business areas of electricity distribution and retail sales, we lead the sector in distributed energy, energy efficiency and e-mobility solutions. We closely follow opportunities in innovative business areas such as electric vehicle charging stations, electricity storage systems, smart home technologies and systems that help consumers produce their own electricity. Our focus is providing our customers with sustainable and innovative solutions. In this regard, end-to-end solutions aimed at increasing the energy efficiency of corporate customers and reducing their carbon emissions were restructured under the roof of Energy of My Business in October 2020. This portfolio includes many environmentally friendly and sustainable energy solutions, ranging from solar power plant installation services, energy efficiency applications, cogeneration and Trigeneration applications to electric vehicle charging station management and green energy certification. For our distributed generation and energy efficiency solutions, we make our investments through ESCO/EPS model and in the accounting of this model our CAPEX investments are recorded under COGS. The cost provided (1 bn TL) includes COGS for distributed generation and energy efficiency solutions and CAPEX for EŞARJ over a 5 year-period. The number is rounded for confidentiality purposes.

Comment

Identifier
Opp2

Where in the value chain does the opportunity occur?
Downstream

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 through access to new and emerging markets

Company-specific description
Energy transition for a sustainable world requires a decrease in the carbon intensity of the energy sector. This requires energy efficiency, distributed energy resources and low emission electricity. In 2018, transport sector accounted for 22% of carbon emissions in Turkey. Electrification of transportation has emerged as a critical driver to reduce global GHG emissions. There were 23 million vehicles in Turkey in 2020, out of which approximately 2,600 are electric vehicles (EV). However, the future targets of both domestic and foreign brands indicate that the number of EVs will grow exponentially. Turkey's Automobile Joint Venture Group Inc. (TOGG), which will locally manufacture Turkey's first EV, has announced that it will start production by the end of 2022 with the target of reaching 1 million vehicles by 2030. Enerjisa Müşteri Çözümleri A.Ş. acquired 80% of the shares of Eşarj Elektrikli Araçlar Şarj Sistemleri A.Ş. (Eşarj) in 2018, to become its controlling shareholder. In addition to our leadership in distribution and sales in the electricity sector, we aim to play an innovative and pioneering role in the electric vehicle ecosystem and play an active role in the transformation of the industry. With Eşarj, we aim to create a national network of stations and an operating system of charging stations to offer nationwide charging solutions with a wide range of products for our customers and contribute to the infrastructure in Turkey. Our main offerings consist of EV charging solutions as well as public charging infrastructure for cities and individuals. Eşarj had 320 charging plugs at 186 public locations in 2020, 109 of which were fast-charging plugs. Our goal is to accelerate the transition to ultrafast charging in the future. As of July 1st, Eşarj's public stations have been operating solely on renewable energy, a first among charging operators. Through International Renewable Energy Certificates (IREC), Eşarj has certified to its users that the electricity used during charging is produced solely by wind and solar plants. With this development, Eşarj is aiming to act as an enabler for reducing carbon emissions further. In 2020, 55% of all charging-related electricity consumption was sourced from renewable sources. In 2021, this ratio will increase to 100%.

Time horizon
Medium-term

Likelihood
Very likely

Magnitude of impact
High

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
1000000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
It is estimated that in 2030 there will be more than 2 million electric vehicles in Turkey. This requires significant investments into the charging infrastructure and creates demand for hardware as well as software solutions. Enerjisa will benefit from this trend as increasing grid modernization and additional capacity increase demands will require more CAPEX and investments are main driver of income in regulated distribution revenues. Enerjisa's subsidiary Eşarj will profit from increasing EV penetration and charging needs, and we target to increase the share of revenues of Esarj in our consolidated revenues. We believe our customer solutions business and Esarj combined has the potential to reach 1 billion TL annual revenues by 2025.

Cost to realize opportunity
1000000000

Strategy to realize opportunity and explanation of cost calculation
Enerjisa Müşteri Çözümleri A.Ş., acquired 80% of the shares of E-şarj with an amount of TL 4,000,000 on 26 April 2018. E-şarj is mainly involved in the operation of charging network for electric vehicles and supply of charging stations equipment. Our investments include/will include investments in setting the charging station network, but we are not able to share the exact figures due to confidentiality. With Eşarj, we aim to create a national network of stations and an operating system of charging stations to offer nationwide charging solutions with a wide range of products for our customers and contribute to the infrastructure in Turkey. As of the end of 2020, Eşarj had 320 charging plugs at 186 public locations, 109 of which are fast-charging plugs. Our goal is to accelerate the transition to ultrafast charging in the coming period. In 2021, we target to increase the number of public charging stations to 340. In 2020, Eşarj was selected as an e-mobility business-solution partner by the passenger car manufacturers that launched electric and hybrid cars in 2020. Additionally, Eşarj collaborated with various brands from supermarket operators to gas stations to install charging stations. Beginning July 1st, Eşarj's public stations have been operating solely on renewable energy, a first among charging operators. Through the International Renewable Energy Certificate (IREC), Eşarj has certified to its users that the electricity used during charging is produced solely by wind and solar plants. With this development, Eşarj aims to support the reduction of carbon emissions. In 2020, 55% of all charging related electricity consumption was sourced from renewable sources. In 2021, this ratio will increase to 100%. For our distributed generation and energy efficiency solutions, we make our investments through ESCO/EPS model and in accounting of this model our CAPEX investments are recorded under COGS. The cost provided (1 bn TL) includes COGS for distributed generation and energy efficiency solutions and CAPEX for EŞARJ over a 5 year-period. The number is rounded for confidentiality purposes.

Comment

Identifier
Opp3

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

Opportunity type
Markets

Primary climate-related opportunity driver
Other, please specify (Regulated asset base growth)

Primary potential financial impact
Other, please specify (Increased income from regulated asset base growth)

Company-specific description
Electrification of transport and heating is becoming increasingly critical to reduce GHG emissions and for low-carbon transition of the economy. Electricity distribution networks need to be upgraded and expanded to address the increasing electrification, changing patterns in demand and introduction of distributed renewable energy systems and EV chargers to the grid. Increase in electricity demand due to increasing electrification, growing number of smaller intermittent distributed generation facilities and the EV charging requirements are expected to increase the required investments on the grid. In such an environment, distribution grids have an enhanced role. Turkey targets to increase the share of renewables in installed capacity from c.45 GW in 2019 (2020A: c.50 GW) to c.57 GW by 2023. To ensure a secure and resilient grid Turkey plans to modernize and invest more in its grid networks as outlined in the Smart Grid Road Map and new distribution tariff parameters. We estimate that solely connecting renewable energy sources to our grid requires investments of approximately 100 million TL p.a. in the fourth regulatory period, leading to a growth of our Regulated asset-base, and respective revenues of Enerjisa.

Time horizon
Medium-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)
780000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
In our distribution business, we have a guaranteed return on our investment for each regulatory period of 5 years. One component of guaranteed return is financial income that is set based on regulatory WACC plus inflation, and the other is Capex reimbursements over a period of 10 years. The capex spending of 500 mn TL(with current PPI) in the fourth regulatory period (2021-2025) will lead to an incremental operating income of around 780 mn TL in at current PPI (financial income+ Capex reimbursement) over the reimbursement period (until end of 2034).

Cost to realize opportunity
500000000

Strategy to realize opportunity and explanation of cost calculation
Investment on distribution grids is a key driver of our business model and we expect the investment requirement to increase as the energy systems become more integrated, complex and electrified. We expect the growth in share of renewables in installed capacity to increase in line with Turkey's 2019-2023 strategic plan. We make our investment plans for a5-5-year horizon, in line with regulatory period (2021-2025 for fourth regulatory period). In our 5-year investment plan, we expect c.1.5 GW renewable energy sources to be connected to our distribution grid, and the estimated figure of c.500 mn TL (100 mn TL p.a. with current PPI) is based on that assumption. The calculation does not incorporate for other investment requirements such as further digitalization of the distribution grid in response to increasing share of renewables.

Comment

Identifier
Opp4

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

Opportunity type
Markets

Primary climate-related opportunity driver
Other, please specify (Other, please specify (Increased diversification of funding resources))

Primary potential financial impact
Increased access to capital

Company-specific description
Green financing mechanisms, namely green bonds, play a crucial role in the financing green investments. According to the CBI, the green bond market is expected to reach $400 billion this year. By means of Green financing or bonds, a company receives funds that must be used exclusively to finance or refinance (partly or fully) projects with a positive impact on the environment. The price of green financing is similar to that of conventional financing, being subject to market conditions. It is however true that there would be an increasing appetite from financial institutions and investors, and this would bring an opportunity for the company to have access to additional resources, and diversify its funding sources. There have been only a few examples of green financing by Turkish real economy. Therefore, Enerjisa is eager to contribute to the development of the green financing concept in Turkey and to be a role model. In this context, Enerjisa utilized loans from EBRD in an amount of 225 million USD, to be used for the infrastructure and technology investments required for the improvement and extension of the grid with the purpose of providing uninterrupted, clean, and reliable energy in line with sustainable development principles, targeting both “green” and “inclusive” qualities; leading to a reduction of technical losses and improved network operation, resulting in incremental CO2 savings, and promoting women's access to economic opportunities in a male-dominated sector. Enerjisa is preparing annual reports for its implementation of the ESAP (Environmental Action Plan) and has the institutional capacity to implement the EBRD’s Performance Requirements (PRs). Furthermore, Enerjisa is currently working on the development of a Green Finance Framework (GFF) in line with ICMA Green Bond Principles and LMA Green Loan Principles, as well as a reporting structure for relevant impact reporting. We hope to see green financing become more attractive and growing in Turkey, and target to contribute to the development of that market. At the same time, Enerjisa aims to attract additional funding sources and diversify its financing structure, while being proud of having a positive impact on the environment.

Time horizon
Medium-term

Likelihood
Very likely

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
50000

Potential financial impact figure – maximum (currency)
100000

Explanation of financial impact figure
The pricing benefit of green financing vs. non-green financing is rather hard to measure. We have assumed 1-2bps price differential in our calculations. Our financing size usually ranges between TL250-500mn. Depending on the size of the issuance and the cos advantage, the annual cost advantage can vary between TL25,000 (1bps, issue size: TL 250 mn) to TL 100,000 (2bps, issue size: TL 100 mn)

Cost to realize opportunity
300000

Strategy to realize opportunity and explanation of cost calculation
Enerjisa is currently working on developing its Green Finance Framework (GFF) in line with ICMA Green Bond Principles and LMA Green Loan Principles, by identifying some potential projects, which would be eligible for green financing, mainly in the domains of Renewable Energy, Energy Efficiency and Clean Transportation. The GFF will feature all key categories of green projects which Enerjisa may consider financing in the future. It will also outline in high-level terms Enerjisa’s green / sustainability strategy and targets. In this way, Enerjisa aims to communicate how green finance helps achieve its low-carbon ambitions. The framework would then be the basis for all of Enerjisa’s future green financing – including a potential green loan, future green bond, sustainability-linked bonds/loans, etc. Together with GFF, Enerjisa is working on a comprehensive Green/Sustainable finance report, which will consolidate reporting on all green finance (green loan, future green bond, etc.) based on the same standards. The possible costs include one-off fees to be paid for external consultancy in relation to the preparation of green financing framework and reporting requirements as well as the fee for getting second party opinion for the green financing framework to be approved (TL250,000 -TL350,000 range)

Comment

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization’s strategy and/or financial planning?
Yes

C3.1b

(C3.1b) Does your organization intend to publish a low-carbon transition plan in the next two years?

	Intention to publish a low-carbon transition plan	Intention to include the transition plan as a scheduled resolution item at Annual General Meetings (AGMs)	Comment
Row 1	Yes, in the next two years	No, we do not intend to include it as a scheduled AGM resolution item	Scheduled resolution items at Enerjisa Enerji's AGMs include major investment decisions, Annual Report and Sustainability Principles Compliance Report. Sustainability Principles Compliance report includes assessment and reporting of our environment related performance and relevant processes, systems and procedures. While the implementation of the sustainability principles is not currently mandatory (either implement or disclose principle), we would like to increase our adherence and provide transparency on our performance to the stakeholders. As regulations progress we will also plan accordingly and consider including low-carbon transition plan as a separate resolution item in the future. Currently, relevant low-carbon transition plans and climate-related risks & opportunities are presented at the AGM under Annual Report and Sustainability Principles Compliance Report (a part of Annual Report) agenda items. Enerjisa Enerji is transitioning towards developing its low-carbon transition plan. Enerjisa Enerji conducts qualitative climate-related impact assessments, including a comprehensive identification of risks and opportunities, and scenario analyses based on Turkey's NDCs, IRENA, BNEF NEO and IEA's sustainable development scenarios. We assess the impacts of increasing distributed energy resources and technological advancements on our network. These analysis and assessments also include extreme weather scenarios to measure physical impacts on both distribution grids from an operational perspective and customer payment behaviour from a financial perspective. As a result, the outcomes feed into company's sustainability strategy & roadmap. Enerjisa Enerji has been working with 3rd party consultants to assess and improve its data quality, to increase organizational awareness of climate-related issues and to develop its sustainability strategy and roadmap. Its goal is to expand the scope of aforementioned studies with an external 3rd party consultant to develop a low-carbon transition plan.

C3.2

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

Yes, qualitative, but we plan to add quantitative in the next two years

C3.2a

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

Climate-related scenarios and models applied	Details
IRENA IEA Sustainable development scenario BNEF NEO Nationally determined contributions (NDCs) Other, please specify (IICEC Turkey Energy Outlook)	Currently Enerjisa Enerji is in a transition stage and on the path to developing quantitative climate change scenarios. Enerjisa Enerji conducts qualitative climate-related impact assessments, including comprehensive identification of risks and opportunities, and scenario analyses based on Turkey's NDCs and several scenarios from BNEF NEO, IRENA and IEA. These scenarios are selected because of their detailed analysis of the energy sector specifically. As a distribution company, Enerjisa Enerji follows the most recent developments regarding renewable energy technologies and distributed generation to prepare its distribution network to potential disruptive technologies and cost related developments. We assess the impact of increasing distributed energy resources and technological advancements on our network. The analysis and assessments also include extreme weather scenarios to measure the impact on both distribution grids from an operational perspective and customer payment behaviour from a financial perspective. As a result, the outcomes feed into the company's sustainability strategy & roadmap. Scenario analysis are mostly conducted at a 5-year timeline, in line with Enerjisa Enerji's investment and financial plans. In 2020, Enerjisa Enerji developed its sustainability strategy, which incorporates all key areas of ESG performance and reporting guidelines including international standards, the requirements of global indices and investor expectations. Internationally recognized best practices and peer performances were also assessed as part of Enerjisa sustainability strategy study. With participation from all related business units, Enerjisa Enerji further discussed its strategy and set ESG key performance indicators (KPIs) for high level management. Sustainability strategy and qualitative scenario analysis had a direct impact on Enerjisa's sustainability scorecard. Climate-related KPIs were included in the remuneration of C-level executives. In addition, performance evaluations of operational units include climate-related KPIs including data collection & reporting and awareness building. Aforementioned studies such as qualitative scenario analysis and sustainability strategy will continue to guide our managerial and operational KPIs, which in turn will improve our reporting performances on platforms such as CDP and sustainability report. Enerjisa Enerji has been working with 3rd party consultants to assess and improve its data quality, to increase organizational awareness of climate-related issues and to develop its sustainability strategy and roadmap. Its goal is to expand the aforementioned studies' scope with an external 3rd party consultant to include climate-related quantitative scenario analysis for Enerjisa Enerji's operations. Thus, Enerjisa Enerji will be planning its transition plan this year and the scope of this scenario analysis will be both quantitative and qualitative based on credible models. As a result, an impact map will be prepared along with relevant scenario and stress test analysis on Enerjisa Enerji's electricity distribution network and retail operations. In addition, Enerjisa Enerji also plans to set emission reduction targets. Therefore we are actively researching quantitative climate scenario analyses that are best suited for our aim to set these targets, in line with scenarios such as the below 2 degrees and well-below 2 degree scenarios.

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	Foreseeing the shift in energy generation towards distributed energy systems, Enerjisa Enerji actively seeks opportunities in sustainable and innovative business areas. These areas include electric vehicle charging stations, electricity storage systems, smart home technologies, green energy, energy efficiency solutions, and systems that help consumers produce their own electricity and reduce their emissions. In 2017, Enerjisa established a separate business line called Customer Solutions to offer the aforementioned sustainable products and services. One of the biggest examples of how climate-related issues affected our strategic decisions regarding products and services we offer was the acquisition of Eşarj, an e-mobility solutions provider, in 2018. Through Eşarj, we provide e-mobility solutions, which consist of private charging equipment and operation of public charging station network with 320 charging plugs at 186 public locations including 109 fast plugs. Renewable electricity is procured for all public Eşarj locations through wind and solar IREC certificates, allowing us to reduce the carbon footprint of our products and services further. Enerjisa Enerji also offers alternative energy products and services, and energy efficiency services to its customers. These solutions include Green Energy Solutions (Carbon Reduction Certificates and Renewable Energy Certificates), Energy Efficiency Solutions (EPC/ESCO Model), Cogeneration and Tri-Generation, which are growing rapidly as more and more customers are looking to manage their climate-related risks and reduce their environmental impacts. We also provide alternative energy products and services to our customers with solar power plant (SPP) installation services through a performance-based long-term sales model. In 2020, we sold 7,000 tons CO2e Carbon Reduction Certificates, 44,000 MWh of renewable energy certificates, LED projects that will allow 3,300 MWh of electricity savings along with 1,600 MWh of electricity savings from other efficiency solutions and installed 3.2 MWp of rooftop solar projects for our customers. Going forward, Enerjisa Enerji aims to increase the revenue generated from Eşarj and Distributed Energy Resources business lines. For example, we aim to increase the capacity of our SPP solutions to 100 MWp at the end of 2025 (from 9 MWp in 2020).
Supply chain and/or value chain	Yes	In our retail business, electricity purchased and resold accounts for the largest share of our indirect emissions Thus, we focus on reducing the carbon emissions related to the electricity we buy and sell to our customers. We started to make Power Purchase Agreements for direct renewable energy sourcing. In December 2020, for the first time, we signed bilateral agreements (PPA) in order to supply electricity directly from power plants that generate electricity from renewable energy resources. As a result, we aim to provide energy to our eligible customers by partly using the electricity directly supplied from renewable resources. Doing so, we are also aiming to manage the climate-related risks associated with non-renewable generators in the grid. Climate change also brings opportunities in renewable energy in terms of technology and reducing costs. As the designated network operator in our regions, we contribute to the increase of distributed renewable energy sources such as solar energy. We carry out the investments to address the requests of renewable energy generators to be connected to the distribution grid. The capacity of licensed and unlicensed renewable generation assets connected to our grid in 2020 was 210 MW. Supply chain management plays a critical role in our grid investments. We have more than 2,000 suppliers working on grid infrastructure, construction, repair and maintenance; building construction and renovation related services, as well as other goods and services. Approximately 100 of these suppliers are considered critical suppliers. We expect our suppliers to meet minimum standards of good ESG performance. We carefully select our business partners and monitor their compliance with our principles and policies. We are willing to work with our suppliers to ensure that they comply with “Enerjisa Supplier Compliance Declaration” and our Environmental Policy, which includes combatting climate change and reducing environmental impacts.
Investment in R&D	Yes	Traditional power generation technologies are transitioning into green and distributed energy generation technologies, and this brings many opportunities to the power sector. Foreseeing the shift in energy generation towards distributed energy systems, Enerjisa Enerji actively seeks opportunities in innovative business areas, including roof top solar generation, electric vehicle charging stations, electricity storage systems, smart home technologies and systems that help consumers produce their own electricity. Our R&D business unit focuses on developing new products, systems and designs. We carry out studies on renewable energy resources, electric vehicles, microgrid and storage systems, the Internet of Things (IoT), information and communication technologies, artificial intelligence, big data and cybersecurity technologies for building a smart and sustainable future. Additionally, as the outputs of the designed projects are shared with Energy Market Regulatory Authority (EMRA), they also help shape future legislation. In 2020, around TL 6.7 million was invested in sustainability focused R&D projects, funded by the European Union Framework Programs, the Scientific and Technological Research Council of Turkey (TÜBİTAK) and the EMRA’s R&D Fund. Examples of these projects are: Smart Grids and Microgrid controls for compatibility with renewable energy systems and battery storage. In this context for example, Başkent EDAŞ aims to test micro grid technologies by installing a 420 kWH lithium ion battery system. In addition to leveraging on climate-related opportunities, we work towards reducing our climate-related risks through R&D projects as well such as Daphne project (plantation of trees to mitigate fire risks) and portable vehicle palette system, Pençe (for harsh winter conditions).
Operations	Yes	We are aware of the climate-related risks we face in our operations. One of the biggest risks in our own operations is the use of SF6 gases in our distribution network. In 2020, we started to monitor SF6 much more accurately, which will allow us to set reduction targets in the future. While climate-related impacts of rest of our operations are much lower, we still aim to reduce our emissions by purchasing green energy and investing in increasing energy efficiency where possible. In 2020, we purchased %100 renewable energy for all locations; essentially eliminating our related Scope 2 emissions Enerjisa Enerji is responsible for operating the distribution networks in its own regions, performing necessary maintenance and repairs. With this mandate, Enerjisa gives additional importance to grid renewal projects, which will eventually decrease technical losses, thereby decreasing its carbon footprint.

C3.4

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

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Indirect costs Capital expenditures Acquisitions and divestments Access to capital	Revenues Enerjisa Enerji's revenues are directly linked to network investments in our distribution regions. Our mission is to support electrification, to facilitate the connection of renewable distributed energy resources, and to provide uninterrupted electricity supply. We prioritize grid investments to renew and expand our grid to be prepared better for climate-related risks such as harsh weather conditions and increased share of new distributed energy resources. The most apparent climate-related impact on our revenues would come from grid investments. As the decline in the cost of intermittent renewable generation resources such as solar and the emergence of electrification of transport become the critical enabling factors for reducing emissions, the distribution grid becomes more critical. Networks need to be upgraded to address the increasing electrification, renewable energy systems, and the growth of EV charging. As our business model benefits from increasing grid investments such as connecting new renewable energy projects to the grid, increasing investment in our distribution network will allow for more renewable energy projects connected to the grid, which in turn will have a positive impact on our revenues. While the impact of our customer solutions services is low compared to total revenues, we are aiming to grow the share of this business in revenues as we foresee an increase in demand for more low-carbon solutions. Our customer solutions include solar PV, CHP, energy efficiency and green energy solutions. We have several targets to increase the revenue generation from customer solutions. Distributed Generation Solutions: 9MWp SPP capacity by the end of 2020, target investments aim to reach 100MWp by 2025. Energy Efficiency Solutions for customers: 6,400 light fixtures replaced with LED, enabled a reduction in energy consumption of more than 1,600 MWh and elimination of at least 870 metric tons of CO2 emissions annually. CHP and CCHP Solutions: 3.8 MWe installed capacity, expected to eliminate 30,000 metric tons of CO2 emissions within the next decade. Electrification of transportation has emerged as a critical driver to reduce global GHG emissions. In that respect, we acquired 80% of the shares of Eşarj in 2018, becoming its controlling shareholder. We aim to play an innovative and pioneering role in the electric vehicle ecosystem and play an active role in the transformation of the industry. We believe our customer solutions business and Esarj together have the potential to reach 1 billion TL annual revenues by 2025. Direct and indirect costs To limit operational risk from physical climate aspects, we continually improve our network management. We are also implementing operational and infrastructure improvements to enhance the reliability of distribution networks, even under extraordinarily adverse conditions; we factor in the operational and financial impacts of climate-related environmental risks into our emergency plan and risks & opportunities. We extended our fleet operations by including electric and/or hybrid vehicles; 8% of the administrative vehicle pool was switched to EV and hybrid vehicles as of 2020 year-end. We constantly assess the impact of climate change related actions on our costs and make decisions accordingly. Thus, we expect a minor increase in our direct costs in the future as well. We monitor our electricity consumption closely in order to boost efficiency through root-cause analysis and improvement projects. In 2020, we launched a pilot project to monitor electricity consumption in real-time via the OSOS system in the distribution business unit (98 buildings). In 2021, we plan to expand this project to other regions (74 buildings). We also switched to automated led lighting systems at our operational headquarters to decrease our electricity consumption. Access to capital Investing to combat climate change and managing climate risks are important sources of attracting diverse capital resources. Our company utilized loans from EBRD in different tranches between March 2020 and May 2021 for distribution CAPEX investments. The total amount of the loans is 225 million USD equivalent and was used for the infrastructure and technology investments required for the grid, aiming CO2 reduction and women's employment as well As the importance equity investors put on sustainability and green financing increase, more options become available for green financing. Enerjisa started to explore other options such as green bonds as well. Capital expenditures In 2020, we continued our investment plans by taking energy demand, grid requirements and all other investment needs into consideration for the regions in which we operate. Our goal is to improve the quality, which as a result increases grid efficiency and decreases carbon emissions resulting from inefficiencies. CAPEX increased from TL 1.4 billion in 2019 to TL 1.8 billion in 2020. The most apparent climate-related impact on our CAPEX is grid investments. As the decline in the cost of intermittent renewable resources such as solar and the emergence of electrification of transport become the critical enabling factors for reducing emissions, the distribution grid becomes more critical. Networks need to be upgraded to address the increasing electrification, renewable energy systems and the growth of EV charging. Smart city solutions need to be integrated to the power network for sustainable urbanization. We established a new Outage Management System (OMS) in our distribution regions to identify inventories where outages occur more frequently and carry out detailed maintenance and improvement. As a result, we aim to reduce our System Average Interruption Duration Index (SAIDI)/ System Average Interruption Frequency Index (SAIFI) values further over the years, which will help lower our operational emissions due to decrease in the necessity to dispatch repair teams for system interruptions. Acquisitions & Divestments Operating in a dynamic energy industry transformed by megatrends, Enerjisa Enerji prepares for future developments with a clear vision and prioritizes value-adding opportunities, exploring potential acquisition opportunities in growth areas of the future; such as e-mobility, smart cities and energy storage. Enerjisa Müşteri Çözümleri A.Ş. acquired 80% of the shares of Eşarj Elektrikli Araçlar Şarj Sistemleri A.Ş. (Eşarj) in 2018. In addition to our leadership in distribution and sales in the electricity sector, we aim to play an innovative and pioneering role in the electric vehicle ecosystem and play an active role in the transformation of the industry. As of the end of 2020, Eşarj had 320 charging plugs at 186 public locations, 109 of which are fast-charging plugs. Our goal is to accelerate the transition to ultrafast charging stations.

C3.4a

(C3.4a) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

COVID-19 marked the world agenda in 2020, highlighting the importance of managing social issues including healthcare. In the meantime, climate change remains as one of the biggest threats to the world. While fundamental shifts in the energy market continue as economies and energy markets rebound from the short-term effects of COVID-19, the energy transition is expected to accelerate rapidly in the coming years.

The importance of electricity networks becomes more pronounced in delivering faster energy transition. Flexibility and grids are biggest enablers of clean and secure electricity as they support electricity transformations around the world by helping integrate the rapid growth of intermittent renewables. Smart grids have a vital role to play in supporting the penetration of renewable energy generation

Operating in a dynamic industry that is being transformed by global mega trends (digitalization, decarbonization, deregulation, decentralization and urbanization), we prepare for future developments with a clear vision and prioritize value-adding opportunities with our employees and innovation culture. We prepare for these fundamental changes by helping to shape regulations and exploring new business opportunities. We lead the sector in the New Energy World by focusing on sustainable energy solutions. We develop our long-term strategies with a sustainable and holistic approach and integrate the Environmental, Social and Governance (ESG) factors to our strategy and put it at the heart of our equity story

We believe that in order to successfully manage future challenges, our sustainability strategy needs to be fully integrated into the business strategy. For us, this means that all of our sustainability efforts are channeled towards achieving our strategic business targets while ensuring that all of our business initiatives are in line with our sustainability efforts. In 2020, we developed our sustainability strategy which incorporates all key areas of ESG performance and reporting including international standards, the requirements of global indices and investor expectations. We also considered internationally recognized best practices and our peers' performances. With participation from all related business units, we further discussed the strategy and set our ESG key performance indicators (KPIs).

At the core of the sustainability strategy, we placed the equity story of the Company and we grouped our strategic priorities into three main areas: Role Model within the Sector, Reliable Public Service and Shaping the New Energy World.

In 2021, we reviewed our Purpose, Vision and Mission in response the mega trends in our industry. Our Purpose is "To connect people and industries to energy and to provide a safer, cleaner and better energy future in Turkey for generations to come". Our Vision: "Everyone can live in a sustainable energy world". Our Mission: " To accelerate the sustainable energy transformation by building the needed infrastructure and services of tomorrow.

C4. Targets and performance

C4.1

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

C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number
Int 1

Year target was set
2019

Target coverage
Business division

Scope(s) (or Scope 3 category)
Scope 2 (location-based)

Intensity metric
Metric tons CO2e per megawatt hour (MWh)

Base year
2015

Intensity figure in base year (metric tons CO2e per unit of activity)
0.0445

% of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure
99

Target year
2020

Targeted reduction from base year (%)
10

Intensity figure in target year (metric tons CO2e per unit of activity) [auto-calculated]
0.04005

% change anticipated in absolute Scope 1+2 emissions
10

% change anticipated in absolute Scope 3 emissions
0

Intensity figure in reporting year (metric tons CO2e per unit of activity)
0.0398

% of target achieved [auto-calculated]
105.61797752809

Target status in reporting year
Achieved

Is this a science-based target?
No, but we anticipate setting one in the next 2 years

Target ambition
<Not Applicable>

Please explain (including target coverage)
Enerjisa Enerji has a target to reduce the impacts from theft/loss emissions. (10% reduction of theft/loss emissions compared to 2015 levels, therefore 10% reduction in theft/loss related Scope 2 emissions intensity target was set). Bearing the effects of theft/loss related emissions in mind, even despite the negative impact of pandemic on field operations, Enerjisa distribution companies have outperformed their theft/loss targets. Emissions related to power distribution losses (technical and non-technical) are the main driver of our Scope 2 emission. In Turkey, regulatory periods for distribution companies are determined for 5 year periods; and we plan our targets accordingly. Therefore, in preparation for our 3rd Regulatory Period (2016 to 2020) we set 2015 as our base year and established a 10% reduction target for intensity of power distribution losses by the end of our tariff period in 2020. Our power distribution loss related emission intensity decreased by 10.7% over the 5 years.

Target reference number
Int 2

Year target was set
2020

Target coverage
Business division

Scope(s) (or Scope 3 category)
Scope 2 (location-based)

Intensity metric
Metric tons CO2e per megawatt hour (MWh)

Base year
2020

Intensity figure in base year (metric tons CO2e per unit of activity)
0.0398

% of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure
99

Target year
2025

Targeted reduction from base year (%)
5

Intensity figure in target year (metric tons CO2e per unit of activity) [auto-calculated]
0.03781

% change anticipated in absolute Scope 1+2 emissions
5

% change anticipated in absolute Scope 3 emissions
0

Intensity figure in reporting year (metric tons CO2e per unit of activity)
0.0398

% of target achieved [auto-calculated]
0

Target status in reporting year
New

Is this a science-based target?
No, but we anticipate setting one in the next 2 years

Target ambition
<Not Applicable>

Please explain (including target coverage)
Enerjisa Enerji has a target to reduce the impacts from theft/loss emissions. (5% reduction of theft/loss emissions compared to 2020 levels until 2025, therefore 5% reduction in theft/loss related Scope 2 emissions intensity target was set). In preparation for our 4th Regulatory Period (2021 to 2025) we set 2020 as our base year and established a minimum 5% reduction in intensity of our power distribution loss emission intensity by the end of our tariff period in 2025. This target was set after the previous target was achieved in 2020.

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?
Target(s) to increase low-carbon energy consumption or production
Other climate-related target(s)

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number
Low 1

Year target was set
2019

Target coverage
Company-wide

Target type: absolute or intensity
Absolute

Target type: energy carrier
Electricity

Target type: activity
Consumption

Target type: energy source
Renewable energy source(s) only

Metric (target numerator if reporting an intensity target)
Percentage

Target denominator (intensity targets only)
<Not Applicable>

Base year
2019

Figure or percentage in base year
7

Target year
2020

Figure or percentage in target year
100

Figure or percentage in reporting year
100

% of target achieved [auto-calculated]
100

Target status in reporting year
Achieved

Is this target part of an emissions target?
No

Is this target part of an overarching initiative?
No, it's not part of an overarching initiative

Please explain (including target coverage)
Enerjisa Enerji has set a target to use 100% renewable electricity in its operations. As part of our goal to reduce energy indirect Scope 2 emissions, we procured 100% of electricity consumption from green energy for all Enerjisa through renewable energy certificates (I-REC). Moreover, a total of 176 service buildings in the Başkent, İstanbul Anadolu Yakası and Toroslar regions now also use 100% green energy via renewable energy certifications. This target was set in 2019 for 2020 as a rolling target. Enerjisa Enerji will continue to use 100% green energy in the future for its electricity consumption.

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number
Oth 1

Year target was set
2019

Target coverage
Site/facility

Target type: absolute or intensity
Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Land use change	hectares reforested

Target denominator (intensity targets only)
<Not Applicable>

Base year
2019

Figure or percentage in base year
0

Target year
2020

Figure or percentage in target year
1.25

Figure or percentage in reporting year
1.25

% of target achieved [auto-calculated]
100

Target status in reporting year
Achieved

Is this target part of an emissions target?
No

Is this target part of an overarching initiative?
No, it's not part of an overarching initiative

Please explain (including target coverage)
Target to increase forestation: Planting 5,500 bay saplings to a 1.25 ha area in the relevant distribution zone. Trees from distribution zones are removed per EMRA regulations, therefore Enerjisa volunteered to reforest a different area with the same amount of trees removed. Trees under power transmission lines can cause outages and fires due to physical contact with the lines after the installation. Energy transmission lines are cleared of vegetation in a certain cross-section in accordance with applicable regulations. When necessary, trees are removed from the area by cutting or pruning. However, this process has an important ecological and financial impact. In this project, we aimed to ensure line security and prevent possible fires by planting suitable tree species instead of underline cutting or pruning. Thus, we aimed not only to ensure the safety of the distribution line, but also the sustainability of nature and the environment. Thus, malfunctions and losses caused by trees in energy distribution lines will be reduced, long-term power cuts will be prevented, loss costs will be reduced, and the balance and ecological conditions of nature will be preserved. By focusing on literature and research, we focused on choosing a tree with high added value and economical return for planting. Based on the results, the daphne plant was chosen. Within the scope of the project, 5,500 bay tree saplings were planted in the selected area in the province of Bartın. This project has various direct and indirect results, such as reduction of workload for maintenance teams, preventing possible accidents, reducing repair costs, and cutting energy losses.

C4.3

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

C4.3a

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

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	5	
To be implemented*		
Implementation commenced*		
Implemented*	2	169.77
Not to be implemented		

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	Lighting

Estimated annual CO2e savings (metric tonnes CO2e)
115.3

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

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
111524

Investment required (unit currency – as specified in C0.4)
125012

Payback period
1-3 years

Estimated lifetime of the initiative
16-20 years

Comment
In order to reduce our Scope 2 emissions, we run a program to retrofit fixtures in our distribution business offices to LEDs. A total of 804 LED fixture replacements were made in 2020 that will allow annual savings of 81,705 KWh.

Initiative category & Initiative type

Transportation	Company fleet vehicle replacement

Estimated annual CO2e savings (metric tonnes CO2e)
54.47

Scope(s)
Scope 1

Voluntary/Mandatory
Please select

Annual monetary savings (unit currency – as specified in C0.4)
149124

Investment required (unit currency – as specified in C0.4)
0

Payback period
<1 year

Estimated lifetime of the initiative
3-5 years

Comment
Enerjisa Enerji replaces its fleet vehicles with hybrid and electric options where possible. In 2020, 22 hybrid and 4 EVs were added to the fleet to replace gasoline & diesel alternatives. The calculations are based on potential fuel savings on annual 20,000 kms driven for these vehicles (3 litres / 100km savings for hybrid vehicles and 9 litres / 100 km savings for electric vehicles – considering an average car's fuel consumption of 9 litres/100km, hybrid's 6 litres/100km and an EV's 0 litres/100km) multiplied by the average gasoline prices in Turkey for January 2021.

C4.3c

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

Method	Comment
Compliance with regulatory requirements/standards	We conduct our operations in accordance with international standards such as the ISO14001:2015 Environmental Management System. We define our annual energy and natural source consumption reduction targets based on the location-specific ISO 14001 Environmental Management System by effectively monitoring the electricity, water and fuel consumption in the buildings. We have 100% coverage for ISO14001 certification at all Enerjisa Enerji locations.
Dedicated budget for energy efficiency	We have a team dedicated specifically for energy efficiency solutions under our Customer Solutions Department. As Enerjisa, we also support Energy Efficiency projects in our intrapreneurship (NAR) and entrepreneurship (Ivme) programs and provide funding for the selected projects.
Dedicated budget for low-carbon product R&D	Through our Ivme Entrepreneurship Acceleration Program, Enerjisa R&D Department partner with start-ups in developing low-carbon products.
Dedicated budget for other emissions reduction activities	Enerjisa prioritizes emission reduction activities such as increasing electric/hybrid vehicles in our fleet, LED transformation projects, certification of our electricity consumptions with renewable energy and expanding our EŞARJ electric vehicle charging sub-stations.
Employee engagement	As we believe behavioral changes are essential in carbon reduction efforts, we have implemented several ways to involve our employees. For example, we have a Sustainability section in our mobile application for employees (IKON), in which sustainability ideas from our employees are collected. We post notes for our employees in our bathrooms, light switches, trashcans etc. to encourage them for saving energy, and we share our advertisement highlighting climate change with our employees first before presenting it to the public. We also aim to increase coverage EŞARJ electric vehicle charging stations coverage of our office locations.
Internal incentives/recognition programs	As Enerjisa, we participate in Golden Collar Awards program of our shareholder, Sabancı Holding,that recognizes the achievements of employee developed projects in 5 categories, one of which is Sustainability. For the 12th Golden Collar Awards that recognize the achievements of 2020 projects, we are presenting 3 sustainability projects. For the World Environment Day, we send environment and climate change related questions to our employees, and we give prizes to the people who answer correctly and encourage our employees to research the answers.
Partnering with governments on technology development	We collaborate with and are in constant communication with the Ministry of Energy and Natural Resources as well as EMRA (Energy Market Regulatory Authority) on developing new technologies. The main funding source of our R&D projects is the EMRA's R&D Fund, while other sources include the European Union Framework Programs, ITEA Horizon 2020, and EUROGIA.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

Level of aggregation

Group of products

Description of product/Group of products

•Green Energy Solutions: We provide two types of certificates to allow our customers to reduce or neutralize greenhouse gas emissions caused by their electricity consumption. (Renewable Energy Certificate, PPAs, and Carbon Reduction Certificate). •Energy Efficiency Solutions: With our energy performance contracting (EPC/ESCO) model, we offer energy efficiency solutions such as waste heat recovery solutions heating, ventilation, and air conditioning (HVAC) pressurized systems, electric motors and lighting •Cogeneration (CHP) and Trigeneration (CCHP) Solutions: Thanks to the efficiency provided by the cogeneration and trigeneration systems delivered turn-key, total energy costs decrease significantly, and the decline in primary energy consumption enables a reduction in carbon emissions. • Renewable Energy Solutions - Solar Power Plants (SPP): We offer end-to-end solar energy solutions by providing project design, turn-key installation and maintenance services. As part of these services, we provide professional engineering support services along with administrative processes regarding permit and connection procedures, turn-key installation, maintenance services during the contract term, and performance and product warranty during the contract term. We provide integrated end-to-end solutions that include energy storage and electric vehicle charging infrastructures as required. • Esarj: In 2018, Enerjisa became the controlling shareholder of Elektrikli Araçlar Şarj Sistemleri A.Ş. (Eşarj) as Enerjisa Müşteri Çözümleri A.Ş. acquired the majority shares of Esarj. Being a pioneer in the distribution and retail sales industry, we also aim to position ourselves in the electric vehicles business and transform the industry. As of today, we provide e-mobility solutions which consist of both private charging stations, and charging station network operating 320 charging plugs at 186 public locations including 109 fast plugs. With Eşarj, we aim to create a national network of stations and an operating system of charging stations to offer nationwide charging solutions with a wide range of products for our customers and contribute to the infrastructure in Turkey.

Are these low-carbon product(s) or do they enable avoided emissions?

Low-carbon product and avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Climate Bonds Taxonomy

% revenue from low carbon product(s) in the reporting year

91

% of total portfolio value

<Not Applicable>

Asset classes/ product types

<Not Applicable>

Comment

The reported 91% revenue figure is the share among customer solutions products and does not represent the share among global revenue.

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
38933.86

Comment

Scope 2 (location-based)

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
1775386.94

Comment

Scope 2 (market-based)

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
1774899.47

Comment

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.
IPCC Guidelines for National Greenhouse Gas Inventories, 2006
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

C6. Emissions data

C6.1

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

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
44482

Start date
January 1 2020

End date
December 31 2020

Comment

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)
38933

Start date
January 1 2019

End date
December 31 2019

Comment

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

C6.3

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

Reporting year

Scope 2, location-based
1837853

Scope 2, market-based (if applicable)
1830600

Start date
January 1 2020

End date
December 31 2020

Comment

Past year 1

Scope 2, location-based
1775386

Scope 2, market-based (if applicable)
1774899

Start date
January 1 2019

End date
December 31 2019

Comment

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 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
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Emissions from purchased goods and services are extremely minor compared to other Scope 3 emissions, therefore are considered to be not relevant.

Capital goods

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
There are no emissions from capital goods, therefore are not relevant.

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

Evaluation status
Relevant, calculated

Metric tonnes CO2e
21560658

Emissions calculation methodology
Emissions from fuel- and energy-related activities include well-to-tank emissions of purchased fuels and emissions from electricity sold and distributed to customers. Well-to-tank emissions are calculated by fuel consumption with DEFRA emission factors. Emissions from sold and distributed electricity are calculated by the total sold and distributed electricity (minus T&D losses accounted in Scope 2) multiplied by Turkey's average grid emission factor.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Emissions from fuel- and energy-related activities include well-to-tank emissions of purchased fuels and emissions from electricity sold and distributed to customers. Emissions from electricity sold and distributed to customers take the lion share among our emissions.

Upstream transportation and distribution

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
There are no relevant upstream transportation and distribution activities.

Waste generated in operations

Evaluation status
Relevant, calculated

Metric tonnes CO2e
263

Emissions calculation methodology
Waste data in kg is multiplied by emission factors from DEFRA.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
While minor, Enerjisa monitors waste generated and disposed of in its operations. Therefore we are able to provide Scope 3 emissions from waste generated.

Business travel

Evaluation status
Relevant, calculated

Metric tonnes CO2e
196

Emissions calculation methodology
Includes taxi and flights. Calculations are based on KM per passenger and emission factors from Defra, IPCC and ICAO are utilized.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
97

Please explain
We are able to accurately track business travels made by taxis and flights. We obtain annual destination-based flight information from our travel agency,.

Employee commuting

Evaluation status
Relevant, calculated

Metric tonnes CO2e
250

Emissions calculation methodology
Litres of diesel multiplied by diesel emission factor (IPCC).

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
Employees are provided by ring buses for their commutes. We obtain this service from a supplier and receive the route data from them. Total route data is then multiplied by he average fuel consumption of the abuse to come up with the Litres of diesel burned for ring buses.

Upstream leased assets

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
No emissions from upstream leased assets.

Downstream transportation and distribution

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
There are no downstream transportation activities.

Processing of sold products

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Enerjisa sells and distributes electricity, it has no product that can be processed.

Use of sold products

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Enerjisa sells and distributes electricity. Emissions from sold and distributed electricity are accounted for under fuel- and energy-related activities.

End of life treatment of sold products

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Enerjisa sells and distributes electricity. This category is not relevant to its business.

Downstream leased assets

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
No emissions from downstream leased assets.

Franchises

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
There are no franchise operations.

Investments

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
There are no investments to account for that results in emissions.

Other (upstream)

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
No other upstream sources.

Other (downstream)

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
No other downstream sources.

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 CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure
0.000334299

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
1837853

Metric denominator
unit total revenue

Metric denominator: Unit total
5609000000

Scope 2 figure used
Market-based

% change from previous year
14.75

Direction of change
Decreased

Reason for change
Our consolidated revenues were increased by 12% in 2020.

Intensity figure
0.0407

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
1837853

Metric denominator
megawatt hour transmitted (MWh)

Metric denominator: Unit total
46100000

Scope 2 figure used
Market-based

% change from previous year
2.93

Direction of change
Increased

Reason for change
SF6 emissions inventory quality was increased in 2020, resulting in an emissions increase. Therefore most of our emission increase comes from this improvement.

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	29044	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	106	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	384	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	64	IPCC Fifth Assessment Report (AR5 – 100 year)
SF6	14885	IPCC Fifth Assessment Report (AR5 – 100 year)

C-EU7.1b

(C-EU7.1b) Break down your total gross global Scope 1 emissions from electric utilities value chain activities by greenhouse gas type.

	Gross Scope 1 CO2 emissions (metric tons CO2)	Gross Scope 1 methane emissions (metric tons CH4)	Gross Scope 1 SF6 emissions (metric tons SF6)	Total gross Scope 1 emissions (metric tons CO2e)	Comment
Fugitives	0	0	0.633	14885	Fugitive SF6 emissions from switchgear equipment.
Combustion (Electric utilities)	27050	40	0	0	Diesel combustion from ancillary power generation and distribution during blackouts and maintenance in remote regions.
Combustion (Gas utilities)	0	0	0	0	
Combustion (Other)	0	0	0	0	
Emissions not elsewhere classified	0	0	0	0	

C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
Turkey	44482

C7.3

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

By business division

C7.3a

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

Business division	Scope 1 emissions (metric ton CO2e)
Retail Electricity Sales	872
Electricity distribution	43610

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Net Scope 1 emissions , metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Electric utility activities	42350	<Not Applicable>	Only SF6 emissions and emergency power generation from ancillary power generators during blackouts and maintenance in remote regions are considered electric utilities value chain activities.
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (midstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

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?

Increased

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	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	7252	Decreased	0.4	Enerjisa Enerji increased its renewable electricity consumption in 2020 to 100% of its buildings, resulting in decreasing its Scope 2 emissions by 7,252 tCO2e. S1+S2 emissions for2019 were 1,814,282 tCO2e (location-based). (-7252/1814282)*100 = -0.4%
Other emissions reduction activities	94.67	Decreased	0.01	Enerjisa Enerji implemented emission reduction projects (LED transformation and switching to Hybrid and EVs) in 2020 Scope 1 emissions 94.67 tCO2e. S1+S2 emissions for2019 were 1,814,282 tCO2e (location-based). (-94.67/1814282)*100 = -0.01%
Divestment		<Not Applicable>		
Acquisitions		<Not Applicable>		
Mergers		<Not Applicable>		
Change in output	54899	Increased	3	In 2020, Enerjisa Enerji's total S1+S2 emissions were 3.75% more (location-based) than its 2019 emissions. Impact of emission reduction activities and change in boundary was removed from the total increase figure. As a result net output increase impact was calculated as 54,899 tCO2e. S1+S2 emissions for2019 were 1,814,282 tCO2e (location-based). (54899/1814282)*100 = 3%
Change in methodology		<Not Applicable>		
Change in boundary	5807	Increased	0.32	Enerjisa Enerji improved its reporting scope for SF6 emissions, covering all locations that include SF6 emissions compared to 2019. This calculation was done by subtracting 2020 SF6 emissions from 2019 SF6 emissions: 5807 tCO2e. S1+S2 emissions for2019 were 1,814,282 tCO2e (location-based). (5807/1814282)*100 = 0.32%
Change in physical operating conditions		<Not Applicable>		
Unidentified		<Not Applicable>		
Other		<Not Applicable>		

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?
Location-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?
More than 0% but less than or equal to 5%

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	No

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	110561	110561
Consumption of purchased or acquired electricity	<Not Applicable>	14744	0	14744
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Total energy consumption	<Not Applicable>	14744	110561	125305

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.

Fuels (excluding feedstocks)
Natural Gas

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
6728

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Emission factor
2.03

Unit
kg CO2e per m3

Emissions factor source
IPCC (2006) for CO2/GJ, GWP from IPCC AR5 Energy Efficiency in Buildings Regulation (Turkey) for LHV of fuels.

Comment

Fuels (excluding feedstocks)
Diesel

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
108283

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
<Not Applicable>

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Emission factor
2.64

Unit
kg CO2e per liter

Emissions factor source
IPCC (2006) for CO2/GJ, GWP from IPCC AR5 Energy Efficiency in Buildings Regulation (Turkey) for LHV of fuels.

Comment

Fuels (excluding feedstocks)
Motor Gasoline

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
758

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
<Not Applicable>

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Emission factor
2.27

Unit
Please select

Emissions factor source

Comment
IPCC (2006) for CO2/GJ, GWP from IPCC AR5 Energy Efficiency in Buildings Regulation (Turkey) for LHV of fuels.

C-EU8.4

(C-EU8.4) Does your electric utility organization have a transmission and distribution business?

Yes

C-EU8.4a

(C-EU8.4a) Disclose the following information about your transmission and distribution business.

Country/Region

Turkey

Voltage level

Distribution (low voltage)

Annual load (GWh)

46000

Annual energy losses (% of annual load)

8.08

Scope where emissions from energy losses are accounted for

Scope 2 (location-based)

Emissions from energy losses (metric tons CO2e)

1830600

Length of network (km)

236064

Number of connections

11400000

Area covered (km2)

109663

Comment

C9. Additional metrics

C9.1

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

C-EU9.5a

(C-EU9.5a) Break down, by source, your total planned CAPEX in your current CAPEX plan for power generation.

Primary power generation source	CAPEX planned for power generation from this source	Percentage of total CAPEX planned for power generation	End year of CAPEX plan	Comment

C-EU9.5b

(C-EU9.5b) Break down your total planned CAPEX in your current CAPEX plan for products and services (e.g. smart grids, digitalization, etc.).

Products and services	Description of product/service	CAPEX planned for product/service	Percentage of total CAPEX planned products and services	End of year CAPEX plan
Other, please specify (Distribution networks)	Investments in distribution networks. We do not have further refined data on distribution networks, smart grids etc.	2055000000	98	2020
Other, please specify (Retail)	Investments in retail.	38000000	1.8	2020
Other, please specify (Customer solutions and other)	Customer solutions and holdco (parent company investments). For our distributed generation and energy efficiency solutions, we make our investments through ESCO/EPS model and in accounting of this model our CAPEX investments are recorded under COGS. We do not include the investments recorded under OPEX here	4000000	0.2	2020

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	Traditional power generation technologies are transitioning into green and distributed energy generation technologies, and this brings many opportunities to the power sector. Foreseeing the shift in energy generation towards distributed energy systems, Enerjisa Enerji actively seeks opportunities in innovative business areas, including rooftop solar generation, electric vehicle charging stations, electricity storage systems, smart home technologies and systems that help consumers produce their own electricity. Our R&D business unit focuses on developing new products, systems and designs. We carry out studies on renewable energy resources, electric vehicles, microgrid and storage systems, energy efficiency, the Internet of Things (IoT), information and communication technologies, artificial intelligence, big data and cybersecurity technologies for building a smart, low carbon and sustainable future.

C-CO9.6a/C-EU9.6a/C-OG9.6a

(C-CO9.6a/C-EU9.6a/C-OG9.6a) Provide details of your organization's investments in low-carbon R&D for your sector activities over the last three years.

Technology area	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (optional)	Comment
Smart grids	Pilot demonstration	≤20%		Average % of total R&D investment (7%) is given as percent of sustainability focused R&D investments.
Smart meters	Pilot demonstration	≤20%		Average % of total R&D investment (5%) is given as percent of sustainability focused R&D investments.
Smart meters	Applied research and development	≤20%		Average % of total R&D investment (3%) is given as percent of sustainability focused R&D investments.
Smart grids	Basic academic/theoretical research	≤20%		Average % of total R&D investment (1%) is given as percent of sustainability focused R&D investments.
Other, please specify (Energy efficiency project)	Applied research and development	≤20%		R&D investment (3%) is given as percent of sustainability focused R&D investments.
Other, please specify (Energy efficiency project)	Pilot demonstration	≤20%		R&D investment (3%) is given as percent of sustainability focused R&D investments.
Digital technology	Basic academic/theoretical research	≤20%		R&D investment (1%) is given as percent of sustainability focused R&D investments.
Energy storage	Pilot demonstration	≤20%		R&D investment (16%) is given as percent of sustainability focused R&D investments.

C10. Verification

C10.1

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

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

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

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Enerjisa CDP Assurance Report_2020.pdf

Page/ section reference
6

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 market-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Enerjisa CDP Assurance Report_2020.pdf

Page/ section reference
6

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

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Enerjisa CDP Assurance Report_2020.pdf

Page/section reference
6

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

Scope 3 category
Scope 3: Waste generated in operations

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Enerjisa CDP Assurance Report_2020.pdf

Page/section reference
6

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

Scope 3 category
Scope 3: Business travel

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Enerjisa CDP Assurance Report_2020.pdf

Page/section reference
6

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

Scope 3 category
Scope 3: Employee commuting

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Enerjisa CDP Assurance Report_2020.pdf

Page/section reference
6

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	ISAE 3000	Total energy consumption is verified. Please see the independent assurance statement on page 80 of attached Enerjisa 2020 Sustainability Report. Enerjisa_Sustainability_Report_2020.pdf

C11. Carbon pricing

C11.1

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

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

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

No

C11.3

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

No, and we do not currently 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
Yes, other partners in the value chain

C12.1a

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

Type of engagement

Compliance & onboarding

Details of engagement

Code of conduct featuring climate change KPIs
Climate change is integrated into supplier evaluation processes

% of suppliers by number

13

% total procurement spend (direct and indirect)

51

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

0

Rationale for the coverage of your engagement

Our Code of Conduct and Supplier Compliance Declaration are our key binding documents that regulate our relationship with our suppliers. We take initiatives to help our suppliers achieve better ESG performance. We diligently select our Business Partners and monitor their compliance with the Company's Code of Conduct. At Enerjisa Enerji, we are willing to work with our suppliers to ensure that they comply with Enerjisa Supplier Compliance Declaration, Human Rights Policy, Anti-Bribery and Anti-Corruption Policy, Occupational Health and Safety Policy, Environmental Policy and Third-Party Relations Policy. Within the framework of these policies, we expect our suppliers to respect human rights, create suitable working conditions for their employees, reduce their environmental impacts and apply ethical and moral business standards to their work. We expect our suppliers to take measures to protect the environment, to establish and maintain an appropriate environmental management system; to encourage the development and dissemination of environmentally friendly technologies to reduce environmental impacts and to protect the environment more in their daily operations. We also support our suppliers and business partners with training and supplier financing programs. We have more than 2,000 suppliers from which we procure goods and services. We audit adherence of all our critical contractors to environment and health & safety related compliance, and 13% of suppliers by number and 51% total procurement spent represent our critical supplier information. Enerjisa Enerji tracks its Scope 1-2-3 emissions and strive to improve its environmental reporting each year. In order to maintain the transparency and the consistency expectations of our stakeholders, we constantly monitor and improve our reporting methodology. One of the initiatives we have to better track our emission performance and improve data collection systems, is the assurance of our emission data for the first time.

Impact of engagement, including measures of success

Our suppliers commit to preserving the environment and providing a safe and healthy work environment for their employees. For example, our suppliers are required to have waste management plans within the scope of their operations. Within that framework, classification, recycling or disposal pursuant to legislation is coordinated. While we do not start the on boarding process of our suppliers before they sign Enejisa Supplier Compliance Declaration, we also reserve the right to monitor them. In this respect, we categorize the risk levels of the tasks our critical contractors perform and make regular visits to audit their adherence to health, safety and environment related

requirements. We have not had any environment or climate related fines to this date and we strive to set the bar in our sector by promoting sustainable practices in our day to day work.

Comment
We have more than 2,000 suppliers from which we procure goods and services. We audit adherence of all our critical contractors to environment and health & safety related compliance, and 13% of suppliers by number and 51% total procurement spent represent our critical supplier information. Enerjisa Enerji tracks its Scope 1-2-3 emissions and strive to improve its environmental reporting each year. In order to maintain the transparency and the consistency expectations of our stakeholders, we constantly monitor and improve our reporting methodology. One of the initiatives we have to better track our emission performance and improve data collection systems, is the assurance of our emission data for the first time. We have also improved the quality of our data collection systems for reporting GHG emissions in 2020 and expanded our Scope definitions as follows: Scope 1: 2020 Additional Scope: Extended to include SF6 emissions from all locations in scope and extended to include F-gases and better classification of vehicle fuels Scope 2: 2020 Additional Scope: Reporting boundary for GHG reporting was extended and distribution technical and non-technical losses were included. Scope 3: 2020 Additional Scope: Extended to include emissions from electricity sold to our customers This year, our coverage for Scope 3 emissions included electricity purchased for sales to customers, service vehicles, business travel and waste. We aim to expand the scope of our emission monitoring and reporting further and become a Sustainability Leader in our sector.

Type of engagement
Innovation & collaboration (changing markets)

Details of engagement
Run a campaign to encourage innovation to reduce climate impacts on products and services
Other, please specify (Run an engagement campaign to educate suppliers about climate change)

% of suppliers by number
50

% total procurement spend (direct and indirect)

% of supplier-related Scope 3 emissions as reported in C6.5
0

Rationale for the coverage of your engagement
In 2020, our R&D unit launched “ivme Entrepreneurship Acceleration Program” in order to develop and offer solutions to current problems that the energy sector focuses on such as energy efficiency and developing low carbon products to formulate scalable and easily implementable technologies and to contribute to the formation and growth of next-generation enterprises. Aiming to support initiatives that make an impact in the energy sector, the İvme Entrepreneurship Acceleration Program brings together start-ups with Enerjisa Distribution Companies, addresses the existing problems and opportunities of the future, helps start-ups overcome the difficult step between prototype product and commercialization.

Impact of engagement, including measures of success
In the first term of the İvme Entrepreneurship Acceleration Program, 10 start-ups were selected from among 44 start-up applications under 8 main focus areas. With these initiatives, Proof of Concept (POC) studies were carried out on OHS, micro-solar solutions, consumption analytics, image processing, smart lighting and drone solutions. An EMRA project on product development was prepared with 6 start-ups, and studies on co-marketing of the product were initiated with one start-up. The İvme projects that has climate change related impacts are as follows: • AREYLight: AREYLight offers advanced technology solutions that provide efficiency up to 60% by reducing energy and maintenance costs for outdoor lighting in cities and large complex areas (streets, parks, industrial and university areas) with artificial intelligence technology, as well as environmentally friendly solutions that bring the smart city concept to the regions they are installed. • CY Enerji: Conducting R&D studies to develop a uniaxial solar tracking system for rooftop solar panels, CY Enerji aims to maximize the efficiency of solar panels through its micro-solar solutions and solar tracking systems. • Massive Energy: Massive Energy analyzes household energy consumption by using its own social research and big data without any hardware installation. It provides electricity distribution and retail companies with products that help them build interactive relations with their users. • Eye of the Power/Rtm Elektronik: Working in the field of electronic hardware, the Eye of the Power/Rtm Elektronik produces lighting control, remote control, energy monitoring and control products exclusively over the internet of things and cloud-supporting system. • Geodo Technology: Geodo Technology carries out field exploration and measurement activities. In line with industrial needs requiring precise land measurement, the Start-Up performs marking, mapping and reporting services with a portable terminal (with the help of a base station of their own production where necessary)

Comment
Out of 10 start-ups that were selected to be included in the program, 5 of them have climate-change related impacts. These start-ups are not our typical suppliers that we work with for our operational activities, but rather a part of an innovation program for solving energy sector’s problem. Our calculation of 50% includes the ratio of number of start-ups with projects that have climate change impact to the total number of companies that participated in the program.

C12.1b

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

Type of engagement
Education/information sharing

Details of engagement
Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

% of customers by number
100

% of customer - related Scope 3 emissions as reported in C6.5
100

Portfolio coverage (total or outstanding)
<Not Applicable>

Please explain the rationale for selecting this group of customers and scope of engagement
Behavioral changes in energy use are essential for holistic transformation of the energy sector and to accelerate reduction in carbon emissions. There is a growing need for training and awareness campaigns for changing day-to-day choices about how consumers use energy. As an energy provider, our goal is also to support efficient use of energy by the society. In our new advertising campaign, we aimed to highlight the importance of leaving a smarter, greener future. At Enerjisa, being a leader means being a guide, designing the future. We are aware that smart cities that generate and store their energy will be more efficient and will protect our future. Our reported customer-related Scope 3 emissions constitute almost all of our Scope 3 emissions.

Impact of engagement, including measures of success
Our documentary is publicly available online and frequently featured on TV. It has received more than 13 million views, reaching our stakeholders including customers, suppliers and investors. The documentaries can be viewed from below links: https://www.linkedin.com/posts/enerjisa_as-enerjisa-what-we-take-from-this-land-activity-6746782626289336321-dMn4/ https://www.linkedin.com/posts/enerjisa_our-thousands-of-team-members-are-always-activity-6748283192962236416-W4Od/

Type of engagement
Collaboration & innovation

Details of engagement
Other, please specify (Procurement of electricity from renewable sources for consumers)

% of customers by number
1

% of customer - related Scope 3 emissions as reported in C6.5
19

Portfolio coverage (total or outstanding)
<Not Applicable>

Please explain the rationale for selecting this group of customers and scope of engagement
We are aware of our role in combating climate change, which is increasingly impacting our lives. The international and national regulatory framework is also urging companies to take bold steps. Our goal is to decrease our direct and indirect GHG emissions in all processes. Hence, we track our Scope 1-2-3 emissions and take actions to reduce our environmental impact. In addition to this, we are undertaking important steps in the procurement and sale of green energy. In our retail business, electricity purchased and resold accounts for the largest share of our indirect emissions. Thus, we focus on reducing the carbon emissions related with the electricity we buy and sell to our customers. We have started to use renewable energy in our direct operations and also to make Power Purchase Agreements (PPAs) for direct renewable energy sourcing. In December 2020, for the first time, we signed a PPA in order to supply electricity directly from power plants that generate electricity from renewable energy resources. As a result, we aim to provide green energy to our eligible customers.

Impact of engagement, including measures of success
We believe that renewable PPAs will be critical in supporting the shift from incentive based renewable investments to market driven renewable investments. We target to have 100 GWh renewable PPA volume for electricity sold in liberalized market for 2021, and we aim to surpass 300 GWh for 2022. Our reported customer related Scope 3 emissions constitute almost all of our Scope 3 emissions. PPA deal we carried out in late 2020 represents around 1% of liberalized sales volume and our reported customer related Scope 3 emissions constitute almost all (100%) of our Scope 3 emission. In 2021, we target to secure volumes through PPAs for at least 3% of our liberalized sales for 2022.

Type of engagement
Collaboration & innovation

Details of engagement
Other, please specify (Sustainable solutions for customers)

% of customers by number
100

% of customer - related Scope 3 emissions as reported in C6.5
100

Portfolio coverage (total or outstanding)
<Not Applicable>

Please explain the rationale for selecting this group of customers and scope of engagement
Our focus is to provide our customers with sustainable and innovative solutions via our customer solutions business line. In this regard, end-to-end solutions aimed at increasing the energy efficiency of corporate customers and reducing their carbon emissions were restructured under the roof of Energy of My Business in October 2020. This portfolio includes many environmentally friendly and sustainable energy solutions, ranging from solar power plant installation services, energy efficiency applications, cogeneration and trigeneration applications to electric vehicle charging station management and green energy certification. Through EŞARJ, we provide e-mobility solutions which consist of both private charging stations and charging station network operating 320 charging plugs at 186 public locations including 109 fast plugs as 2020 year end as well. We aim to create a national network of stations and an operating system of charging stations to offer nationwide charging solutions with a wide range of products for our customers and contribute to the infrastructure in Turkey. In order to educate the public and promote the use of these sustainable energy solutions, we also have information sessions and presentations about them at universities, public institutions, associations as well as industrial zones. Especially during the pandemic, these events were usually broadcasted online to increase the extent of reach.

Impact of engagement, including measures of success
In 2020, Eşarj was selected as an e-mobility business-solution partner by the passenger car manufacturers that launched electric and hybrid cars in 2020. Additionally, Eşarj collaborated with various brands from supermarket operators to gas stations to install charging stations. Beginning July 1st, Eşarj's public stations have been operating solely on renewable energy, a first among charging operators. Through the International Renewable We contribute to efficiency in energy use via our products and raising awareness in both our customers and society. Through renewable energy certificate (IREC), Eşarj has certified to its users that the electricity used during charging is produced solely by wind and solar plants. With this development, Eşarj aims to support the reduction of carbon emissions. At the end of 2020, the total capacity of SPPs Enerjisa's customer solutions served was 9 MWp. We aim to increase this capacity to over 100 MWp by the end of 2025. In 2020, we signed two roof-top SPP projects with a total installed capacity of 3.2 MWp which will supply electricity for the customers' self-consumption. These projects will eliminate at least 2,200 metric tons of CO_2 emissions. On the Green Energy Solutions side, Enerjisa sold CO_2 emission reduction certificates equivalent to 7,000 metric tons and 44,000 MWh of renewable energy certificates in for 2020. In addition, we have helped eliminate at least 870 metric tons of CO_2 emissions and reduce 3,300 MWh electricity consumption annually through our energy efficiency solutions especially in LED transformation as of 2020 year end. In 2021, we aim to help save an additional 1,600 MWh through LED projects and reach 1,600 MWh saving through other energy efficiency solutions.

C12.1d

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

In 2020, we developed our sustainability strategy which incorporates all key areas of ESG performance and reporting including international standards, the requirements of global indices and investor expectations. We also considered internationally recognized best practices and our peers' performances. With participation from all related business units, we further discussed the strategy and set our ESG key performance indicators (KPIs). At the core of the sustainability strategy, we placed the equity story of the Company and we grouped our strategic priorities into three main areas: Role Model within the Sector, Reliable Public Service and Shaping the New Energy World. Ultimately, this will help us be able to operate as an energy company that provides sustainable energy solutions and accomplishes ground-breaking achievements in providing value to our stakeholders.

We are among the signatories of the United Nations Global Compact (UN Global Compact). Since 2019, we have been listed in the BIST Sustainability Index, which includes companies trading on Borsa İstanbul with the best corporate sustainability performance.

Our companies utilized loans from EBRD in different tranches between March 2020 and May 2021 for the CAPEX investments. The total amount of the loans is 225 million USD equivalent and were used for the infrastructure and technology investments required for the improvement an extension of the grid with the purpose of providing uninterrupted, clean and reliable energy in line with sustainable development principles, targeting both green and inclusive qualities. The loans ultimately aimed to lead a reduction of technical losses and improved network operation, resulting in CO2 emission reduction and promoting women's access to economic opportunities in a male dominated sector. Furthermore, Enerjisa is currently working on development of a Green Finance Framework (GFF) in line with ICMA Green Bond Principles and LMA Green Loan Principles, as well as a reporting structure for relevant impact reporting.

Non-governmental organisations:

We actively take part in the non-governmental organizations and initiatives to contribute to activities that advance our sector and extend sustainability vision in private sector at the leadership levels. For instance, the Enerjisa Enerji Chairman acts as the Chairman of the Turkish Industry and Business Association (TÜSİAD) Energy Working Group and is a Board Member of the Sabancı University Istanbul International Center for Energy and Climate - IICEC which is an independent body that conducts energy policy research. Our Chairman also serves as the Chairman of the Association of Distribution System Operators (ELDER) and is an Advisory Council Member at SHURA Energy Transition Center.

In 2020, we established collaborations with NGOs and participated in the TÜSİAD Environment and Climate Change Working Group and Circular Economy Sub-Working Group in order to improve environmental performance. The Enerjisa Enerji CEO serves as the Chairman of EUROGIA2020, which is the EUREKA Cluster for low carbon energy technologies. EUROGIA2020 is a bottom-up, industry-driven, market-oriented program which addresses all areas of the energy mix, from renewable energy to efficiency and reduction of the carbon footprint of fossil fuels. Our CEO is also a Board Member at ELDER.

Climate Project Regarding SF6 Gas Usage in the Electric Sector: We participated in the Climate Project Regarding SF6 Gas Usage in the Electricity Sector financed by the European Union and carried out by the Association of Waste Paper and Recyclers (AGED) and the Association of Distribution System Operators (ELDER). The purpose of the Project is the develop a framework to monitor and recycle SF6 gas, a GHG that is widely used in the power sector, in compliance with the provisions of the Regulation on Fluorinated Greenhouse Gases, thus mitigating the climate change impact of SF6.

Society: We run corporate social responsibility projects to create awareness. Behavioral changes in energy use are essential for holistic transformation of the energy sector and to accelerate reduction in carbon emissions. There is a growing need for training and awareness campaigns for changing day-to-day choices about how consumers use energy. As an energy provider, our goal is also efficient use of energy by the society, and we believe it can start with the education of our children. Since 2010, the project named I Protect the Energy of the World is raising awareness in children about energy efficiency. We provide energy efficiency training to children between the ages of 7 and 10. 420 enthusiastic employees are involved in the project so far and we have trained over 300,000 students from 650 schools in 14 provinces.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Direct engagement with policy makers
Trade associations
Funding research organizations
Other

C12.3a

(C12.3a) On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Adaptation or resilience	Support with minor exceptions	With a decline in the cost of renewables and the emergence of electrification of transport and heating as a critical factor in reducing emissions, the distribution grid becomes more critical. Networks need to be expanded and upgraded to address the increasing electrification and renewable energy systems and the growth of EV charging. Our relationships with public institutions and regulatory bodies are independent of any political view and are based on the principles of justice, honesty, equality, and independence and managed as indicated in our code of conduct and corporate identity. In Turkey, regulatory periods for distribution companies are determined for 5-year periods. For the 4th regulatory period (2021-2025), We played an active role in regulatory parameter (tariff) discussions based on the investment requirements of the networks. In the fourth regulatory period, there will be a 72% real increase in Initial Capex allowance for Enerjisa compared to the third regulatory Period. We believe the parameters announced for the new regulatory period will encourage progress and transparency, incentivize investments and improvement in quality metrics, support the electrification of the energy systems.	Details of the 4th electricity distribution regulatory period covering 2021-2025.
Mandatory carbon reporting	Support	The Capital Markets Board (CMB) published a regulation for public companies to disclose sustainability information in annual reports, including CO2 emissions and climate-related strategies. While the implementation of the sustainability principles is not currently mandatory (either implement or disclose principle), it is still a major step for increased transparency for stakeholders Enerjisa Enerji, along with TÜSİAD Energy and Environment Roundtable has provided comments and support for the regulation.	Sustainability disclosures in financial filings.
Adaptation or resilience	Support	Setting the regulatory framework for electric vehicle charging solutions is very critical. Through the charging committee under TEHAD, EŞARJ provides inputs to relevant ministries for the development of the regulation.	Including electric vehicle charging points in public car parks.

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association
TÜSIAD (Turkish Industry and Business Association); Energy and Environment Roundtable a) Energy Working group b) Environment and Climate Change working group

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
Energy and Environment Roundtable proposes innovative, technology and efficiency-focused and environment-friendly solutions for a competitive and predictable energy market. The Roundtable also carries out studies for combating climate change, development of low carbon economy, circular economy, resource-efficient, and waste management in the environment area. The Roundtable has two working groups 1) Energy 2) Environment and Climate Change TÜSİAD has provided inputs to many ministries and government institutions which were prepared by the Roundtable, some of which are as below • Draft Sustainability Principles Compliance Framework (to Borsa İstanbul) • Draft Climate Law, ETS Communique (to Ministry of Environment and Urbanization) • Development of the Energy Efficiency sector (Ministry of Energy and Natural Resources) • The renewable energy incentives post 2020 (Ministry of Energy and Natural Resources) • The transition to zero carbon from the perspective of renewable energy (Ministry of Energy and Natural Resources) • The law on the establishment of Turkish environment policy (to environment commission of the Parliament) • Inputs to the New Climate Regime through the Lens of Economic Indicators" report launch prepared by TÜSİAD

How have you influenced, or are you attempting to influence their position?
We have active participation in TÜSİAD's working groups. Enerjisa Enerji's Chairman is the Chairman of TÜSİAD, Energy Working Group. Enerjisa HSE leader is a member of this sub-working group as well. TÜSİAD's views on climate change are towards enabling the low carbon transition of Turkey and are consistent with Enerjisa Enerji.

Trade association
ELDER (Association of Distribution System Operators)

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
ELDER, Association of Distribution System Operators, is a non-governmental organization conducting its activities as an umbrella organization for the electricity distribution companies dealing with electricity distribution throughout the country. It carries out its activities in collaboration with both public and private institutions on issues related to electricity distribution as per the charter of the association in line with the aims of its establishment. Since its foundation, it has aimed to contribute to the formation of a free, competitive market in electricity. ELDER's mission is to ensure that electricity distribution services are delivered to all users with good quality, consistently, cost-effectively and without distinction between equal parties. ELDER provides a common platform for all stakeholders, primarily electricity distribution companies and consumers, to increase added value in electricity distribution activities, raise service quality and increase economic utility. ELDER produce data, information and reports to contribute to the energy policies determined by the Ministry of Energy and Natural Resources and the energy regulations created by EMRA. Believing that it is critical to establish effective communication between the sector and the public and to develop public-private sector cooperation. We participated in the Climate Project Regarding SF6 Gas Usage in the Electric Sector financed by the European Union and carried out by the Association of Waste Paper and Recyclers (AGED) and the Association of Distribution System Operators (ELDER). The purpose of the Project is to develop a framework to monitor and recycle SF6 gas, a GHG that is widely used in the power sector, in compliance with the provisions of the Regulation on Fluorinated Greenhouse Gases, thus mitigating the climate change impact of SF6. HASAT Project: With the aim of developing innovative practices and methodologies that will increase energy efficiency in the electricity distribution sector and define a road map for energy efficiency, the HASAT Project was initiated in collaboration with ELDER and with the support of other Electricity Distribution Companies. The goal of the project is to develop practices to define the infrastructure and systemic improvement requirements in line with initiatives to increase efficiency and encourage consumers to use energy more efficiently.

How have you influenced, or are you attempting to influence their position?
We have active participation in ELDER. Enerjisa Enerji's Chairman became the Chairman of the ELDER Board of Directors in 2021. Enerjisa Enerji CEO is also a Board Member at ELDER.

C12.3d

(C12.3d) Do you publicly disclose a list of all research organizations that you fund?
No

C12.3e

(C12.3e) Provide details of the other engagement activities that you undertake.

Enerjisa is a member of Business Council for Sustainable Development Turkey (BCSD Turkey).The Council shares knowledge on sustainability with its members and stakeholders through the activities of its working groups. BCSD Turkey focuses its activities on the following five areas within the framework of the UN's Sustainable Development Goals, and we work with the leader companies of Turkey on sustainability: Transition to Low Carbon Economy and Efficiency, Sustainable Agriculture and Access to Food, Sustainable Industry and Circular Economy, Social Inclusion and The Sustainable Finance Forum.

EUROGIA is a bottom-up, industry driven, market-oriented programme which addresses all areas of the energy mix, from renewable energy to efficiency, and reduction of carbon footprint of fossil fuels. From June 2013 onwards, EUROGIA continues its activities under the name of EUROGIA2020, following the main targets of EUROGIA+ with more comprehensive Technology Roadmap. The Enerjisa Enerji CEO serves as the Chairman of EUROGIA2020 since 2017.

Enerjisa Enerji Chairman is an Advisory Council Member at SHURA. SHURA Energy Transition Center contributes to decarbonisation of the energy sector via an innovative energy transition platform. SHURA's mission is to support the debate on transition to a low-carbon Turkey's energy system through energy efficiency and renewable energy by fact-based analysis and best available data. Considering all relevant perspectives by a multitude of stakeholders, the center contributes to an enhanced understanding of the economic potential, technical feasibility and the relevant policy tools for this transition.

In line with this mission, SHURA provides a wide range of knowledge products and services to the Turkish energy community through thematic work clusters of policy, economics, technology and strategic partnership and dialogue across all sectors of the energy system, power, heating and cooling and transport.

SHURA is an innovative energy transformation platform. While contributing to the decarbonization of the energy sector; it brings together many different perspectives in the sector, blends them and opens the political, technological and economic aspects of the sector to discussion. The products and discussions released so far are the best examples of this. The most beneficial studies for the sector are communicated at the Ministry of Energy and Natural Resources level.

Enerjisa Enerji Chairman is a Board Member at Sabancı University Istanbul International Energy and Climate Center (IICEC). IICEC produces energy policy research and uses its convening power at the energy crossroad of the world. Utilizing this strategic position, IICEC provides national, regional and global energy analyses as a research and an international networking center. Since it was established in 2010, IICEC has leveraged Istanbul's strategic position to host high-level Forums featuring sector leaders from government, international organizations, industry and academia fostering substantive discussion among key stakeholders with the aim of charting a sustainable energy future. IICEC also hosts seminars and webinars on important energy policy, market and technology areas.

In 2020, IICEC issued Turkey Energy Outlook (TEO) report with alternative scenarios until the end of 2040. The recommendations laid out in the report include, but not limited to the following: Increasing renewable and nuclear power with more flexibility in the power grid including demand side services, increased energy and fuel efficiency in all sectors supported by fuel shifts towards electrification and renewables, faster uptake of electric vehicles and charging infrastructure.

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

Climate-related issues are managed at the highest possible level in Enerjisa Enerji. Therefore, all activities that influence policy are reported to the Board of Directors through the sustainability committee chaired by the CEO and the CFO. Enerjisa Enerji supports Turkey's low carbon transition and develops long-term strategies with a sustainable and holistic approach while integrating ESG factors into its strategy, with climate-related topics being among the most crucial ones. Enerjisa Enerji is Turkey's only listed electricity distribution company, therefore its ESG performance, and especially its climate resilience is considered essential to its long-term performance.

In addition to high level representation through its Chairman and CEO in trade associations, all views and activities to influence policy is reviewed by the Compliance and Legal Director, who is also a member of the Sustainability Committee. Thus, ensuring Enerjisa's comments and views towards influencing policymaking are ensured to be consistent with its climate strategy of supporting low carbon transition.

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
Enerjisa_Annual_Report_2020.pdf

Page/Section reference
111, 130, 131, 132

Content elements
Governance
Strategy
Other metrics

Comment

Publication
In voluntary sustainability report

Status
Complete

Attach the document
Enerjisa_Sustainability_Report_2020.pdf

Page/Section reference
22, 25, 26, 55, 56

Content elements
Governance
Strategy
Emissions figures
Emission targets
Other metrics

Comment

C15. 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.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	CFO	Chief Financial Officer (CFO)

Submit your response

In which language are you submitting your response?
English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission
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