T.SINAİ KALKINMA BANKASI A.Ş. - Climate Change 2018



C0. Introduction

C0.1

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

Founded in 1950 with the mission to finance Turkey's private sector investments, TSKB (Industrial Development Bank of Turkey) is Turkey's first privately-owned development and investment bank. TSKB offers its clients a wide array of products and services in corporate banking, investment banking and advisory business lines. With its long term funding base secured from development finance institutions, accumulated know-how and synergy created with its subsidiaries, TSKB systematically contributes to the continuous development of the Turkish private sector. TSKB supports investments in various sectors with renewable energy, energy efficiency, resource efficiency, sustainable tourism, environmental and SME loans. With the World Bank actively involved in its foundation, TSKB operates in continuous cooperation with leading participants of global markets. TSKB's international partners include international and supranational institutions such as -International Bank for Reconstruction and Development, European Investment Bank, Kreditanstalt für Wiederaufbau, Council of Europe Development, Oesterreichische Entwicklungsbank AG, Japan Bank for International Cooperation and Islamic Development Bank. In addition to state owned banks, TSKB is the only private bank which has an access to Turkish Treasury's guarantee for the funds the Bank has secured from development financial institutions.

Over the last decade TSKB has covered substantial ground with regards to sustainability. Long before the enactment of the environmental legislation in Turkey, TSKB started to include environmental due diligence as part of its project appraisal activities. TSKB prepared its environmental management system (EMS) and put it into practice towards the end of 2006. Holding the EMS (ISO 14001) and Verification of Greenhouse Gas Emissions (ISO-14064-1) certificates, TSKB is Turkey's first carbon-neutral bank and has been awarded Turkey's first ISO 14001:2015 certificate. Since 2009, TSKB has issued five sustainability reports. Last year, TSKB issued the first Integrated Report in the Turkish financial sector. All sustainability-related activities at TSKB are coordinated by the Sustainability Committee. The Committee's mission is to integrate sustainability into bank's business processes, develop new products and business opportunities in sustainable banking area, and increase the level of sustainability awareness. The Sustainability Committee consists of two members of the Board of Directors and two Executive Vice Presidents. The committee has a sub-committee consisting of 16 members from various departments.

Holding its place within the companies with the highest corporate governance ratings in BIST Corporate Governance Index since 2009, TSKB is also included in BIST Sustainability Index and FTSE4Good Emerging Index. TSKB has placed its name among achievements such as first sustainability and first integrated report in Turkish finance sector and first 'Green/Sustainable Bond' issuance in CEEMEA region. Moreover, it issued world's first subordinated sustainable bond. With its successful practices, TSKB has been awarded by international platforms such as Euromoney, Financial Times, IFC, CDP, Global Capital, and IFR.

TSKB provides equal opportunity for all employees without discrimination by gender. 55% of TSKB's employees and 55% of the executive staff are women.

68% of TSKB's loan portfolio consists of sustainable investments including energy-efficiency and renewable energy projects. TSKB achieves this with the thematic funds it secures from development finance institutions and also green financial instruments like SRI / green bonds.

In line with its "Sustainable Banking" mission, TSKB constructs its social responsibility projects around the idea of fostering an awareness– especially in the business and academic communities–of climate change, energy and carbon management, and all other environmental issues.

Türkiye İş Bankası (İşbank) Group controls a 50.7% and Vakıflar Bankası T.A.O controls an 8.4% stake in TSKB's capital, %39.1 of whose shares are traded on Borsa İstanbul (BIST) Star Market under the "TSKB" symbol. As of end-2017, the Bank's registered capital stood at \$1,200M while its paid-in capital was \$640M. Being ranked the 15th bank in terms of asset size, total assets of TSKB amounted to \$7.7B as f the end of 2017. With 375 employees working in its core banking activities, TSKB makes up a family of 573 employees taken together with its subsidiaries.

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
Row 1	January 1 2017	December 31 2017	No	<not applicable=""></not>
	<not Applicable></not 	<not Applicable></not 	<not applicable=""></not>	<not applicable=""></not>
Row 3	<not Applicable></not 	<not Applicable></not 	<not applicable=""></not>	<not applicable=""></not>
Row 4	<not Applicable></not 	<not Applicable></not 	<not applicable=""></not>	<not applicable=""></not>

C0.3

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

C0.4

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

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 consolidation approach to your Scope 1 and Scope 2 greenhouse gas inventory.

Operational control

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) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
	The highest level of direct responsibility for climate change lies with the TSKB board of directors. All the sustainability and climate change related strategy are set by the board which has authorized the TSKB Sustainability Committee, including 2 Board Members and 2 Executive Vice Presidents, to set the Bank's climate change vision and strategy, formulate applicable action plans and coordinate associated activities according to the Sustainability Policy and its supplementary policies. Being approved by the Board of Directors, Sustainability Policy covers the environmental and social dimensions of sustainable development in TSKB. Fundamental principles pertaining to the assessment and management of the environmental and social impact that may result from the activities of the bank are set forth in Environmental and Social Impact Policy. In addition, TSKB's perception and strategy on climate change, hr management, stakeholder engagement and governance are also mentioned.

C1.1b

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

Frequency	Governance					
with	mechanisms	Please explain				
which	into which					
climate-	climate-					
related	related issues					
issues are						
a	are integrated					
scheduled						
agenda						
item						
Scheduled	Reviewing and	All TSKB's direct and indirect activities that influence policy on climate change are coordinated and managed by the Sustainability Committee				
- some	guiding	which is the highest level of direct responsibility for climate change. TSKB Sustainability Committee, that includes two Board Members and two				
meetings	strategy	Executive Vice Presidents, is responsible for the Sustainability Management in the Bank. Committee sets the Bank's sustainability vision and				
meetings	Reviewing and	strategy, formulates applicable action plans, duties and responsibilities, activities to be done, time plans, bi-annual progression reports and				
	guiding major	budget. Via these targets, the bank can achieve the aimed annual emission reduction levels, percent of sustainable finance, levels of natural				
	plans of action	resources consumption, environmental and social impact assessment application to all investment projects. Being approved by the Board of				
	Reviewing and	Directors, Sustainability Policy and its supplementary policies cover the environmental and social dimensions of sustainable development in				
	guiding risk	TSKB. Fundamental principles pertaining to the assessment and management of the environmental and social impact that may result from the				
	management	activities of the bank are set forth in Environmental and Social Impact Policy. In addition, TSKB's perception and strategy on climate change,				
	policies	human resource management, stakeholder engagement and governance are also mentioned in its other major policy documents. The				
	Reviewing and	Sustainability Committee meets every three months to define the Bank's sustainability vision and strategy, to formulate applicable action plans,				
	quiding annual	to coordinate associated activities according to the Sustainability Policy and its supplementary policies. Besides, the Sustainability Management				
	budgets	System assists Sustainability Committee on this issue. Not only climate change policies and strategy but also, duties and responsibilities,				
	Reviewing and	activities to be done, time plans, bi-annual progression reports are documented within the SMS framework. That helps Sustainability Committee				
	quiding	to ensure that policies and strategies are consistent with each other and the entire process recorded within a well-structured management				
	business plans	system. In every meeting, the SC reviews each sustainability target of the bank. In case needed, extra budget can be created.				
	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					
		1				

Frequency with which climate- related issues are a scheduled agenda item	Governance mechanisms into which climate- related issues are integrated	Please explain
Sporadic - as important matters arise	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 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	If deemed necessary. Sustainability Committee has the authority to submit item to board of directors meeting agenda in order to discuss on sustainability concern.

C1.2

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

Name of the position(s	and/or committee(s)		Frequency of reporting to the board on climate- related issues
Other, please specify (He Committee)	ead of Sustainability Sub-	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly

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.

The highest level of direct responsibility for climate change lies with the TSKB executive board of directors. All the sustainability and climate change related strategy are set by the board. The board has authorized the TSKB Sustainability Committee, including two Board Members and two Executive Vice Presidents, to set the Bank's climate change vision and strategy, formulate applicable action plans and coordinate associated activities according to the Sustainability Policy and its supplementary policies such as Environmental and Social Impact Policy, Human Rights Policy, Anti-Bribery and Anti-Corruption Policy, Occupational Health & Safety Policy and Sustainable Procurement Management Policy. Being approved by the Board of Directors, Sustainability Policy and its supplementary policies cover the environmental and social dimensions of sustainable development in TSKB. Fundamental principles pertaining to the assessment and management of the environmental and social impact that may result from the activities of the bank are set forth in Environmental and Social OImpact Policy. In addition, TSKB's perception and strategy on climate change, human resource management, stakeholder engagement and governance are also mentioned in its other major policy documents.

Underneath the Sustainability Committee, and reporting directly to it, is the Sustainability Sub-Committee, which consists of16 members from various departments. Main duties of the sub-committee are; developing and managing sustainability strategies, internalizing sustainability and capacity development on sustainability, integrating sustainability into banking products and services, managing internal and external environmental impacts and associated social responsibilities, engaging in sustainability-related communication and quantifying and reporting the sustainability performance. The Sub-committee holds regular meetings. One of the Sustainability Sub-Committee members is Sustainability Coordinator, who is responsible for coordinating the sustainability activities within the Bank and acting as the secretary during the Sustainability Committee meetings. Every year, clear and measurable annual goals of the Sustainability Subcommittee are determined and these goals are reflected on the performance assessment of all members.

Under Sustainability Sub Committee there are four different working groups which are "ISO 14001 & ISO 14064 Management System Standards", "Reporting", "Stakeholder Communication" and "Sustainability Indices". BIST Sustainability Index preparations, stakeholder engagement etc. TSKB Sustainability Sub-Committee presents regular reports to the Executive Vice Presidents (who are members of Sustainability Committee) on a quarterly basis and prepares annual report that is submitted to the CEO. Reporting to Sub-Committee, there are working groups that are specialized in different tasks.

The Sustainability Management System (SMS) of TSKB, which includes climate change issues, ensures that the organization will be able to continuously improve its sustainability performance, improve the internal and external information flow, better control environmental risks related to TSKB products, comply with all relevant laws and standards, calculate and offset the carbon foot-print of the Bank periodically and conduct the banking operations on a carbon-neutral basis. The SMS was designed in compliance with the international ISO 14001 Environmental Management System standard and it has been certified since 2007. The system requires organizing Management Review Meetings annually as a part of the ISO 14001 certification. With the help of SMS, TSKB also has organized itself to set 14064 Carbon Management Certification and TSKB holds ISO 14064 since 2012. The responsibilities for climate change issues are discussed at the top management level through management review meetings. Our corporate goals include ensuring that the concept of sustainability is embraced by all employees and integrated into our business processes and services, developing new products and business opportunities in sustainable banking and increasing the level of sustainability awareness in the banking sector and business community.

C1.3

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

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues.

Who is entitled to benefit from these incentives? Corporate executive team

Types of incentives Recognition (non-monetary)

Activity incentivized

Other, please specify (Sustainability Management System Targets)

Comment

Two board members and two Executive Vice Presidents of the Sustainability Committee are responsible for setting the sustainability vision and strategy of the bank and the relevant targets to achieve this strategy. The Committee also formulates applicable action plans, and coordinates associated activities according to the Bank's Sustainability Policy and its supplementary policies. Via these targets, the bank can achieve the aimed annual emission reduction levels, percent of sustainable finance, levels of natural resources consumption, environmental and social impact assessment application to all investment projects.

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Recognition (non-monetary)

Activity incentivized

Other, please specify (Communicating climate change issues)

Comment

Training of all employees about sustainability and Bank's sustainability activities is one of the targets of the Bank's sustainability management. In previous years, all employees of TSKB were trained about the issues. All employees of TSKB are informed about TSKB's work and strategy on sustainability and they are encouraged to bring new ideas and suggestions for the topic. There exists a "suggestions portal" in the intranet for such feedback. All employees can access this portal to contribute to the Bank's strategy on sustainability and climate change tackling.

Who is entitled to benefit from these incentives?

Other, please specify (Sustainability Sub-Committee)

Types of incentives

Monetary reward

Activity incentivized

Behavior change related indicator

Comment

Sustainability Sub-Committee consists of 16 members from various departments of TSKB. They are responsible for the integration of sustainability concept into all business processes and services, developing new services and opportunities in sustainable banking, increasing the level of sustainability awareness in the banking sector and business community. The Sub-Committee targets are assigned to sub-committee members and relevant sustainability related working groups. Achievement status of the targets are followed and evaluated in annual performance reviews. Incentives are determined based on these evaluations. Via these targets, the bank can achieve the aimed annual emission reduction levels, percent of sustainable finance, levels of natural resources consumption, environmental and social impact assessment application to all investment projects.

Who is entitled to benefit from these incentives?

Other, please specify (ISO 14001/ISO 14064 Working Group)

Types of incentives Monetary reward

Activity incentivized

Other, please specify (Emission & energy reduction target)

Comment

Performance indicator about CO2 emission reduction, energy and natural resources consumptions. These data are verified according to both ISO 14001 and ISO 14064 standards annually. The Working Group targets are assigned directly to group members and they are tracked in annual performance reviews. Via these targets, the bank can achieve the aimed annual emission reduction levels and levels of natural resources consumption.

Who is entitled to benefit from these incentives?

Other, please specify (ISO 14001/ISO 14064 Working Group)

Types of incentives Monetary reward

Activity incentivized

Other, please specify (ISO14001 EMS Recertification)

Comment

This working group is responsible for successful audit and recertification of ISO 14001 and ISO 14064 certifications. It involves

management of all internal environmental KPIs, including consumption of natural resources, generation of wastes, and application of environmental and social impact assessment to each investment project and emitting of CO2 emissions. The Working Group targets are assigned directly to group members and they are tracked in annual performance reviews.

Who is entitled to benefit from these incentives?

Other, please specify (Sustainability Index Working Group)

Types of incentives

Monetary reward

Activity incentivized

Other, please specify (To be listed in BIST S. Index)

Comment

EIRIS assessed TSKB based on international sustainability criteria. Sustainability Index Working Group is responsible for providing the required feedback and execute the in-house improvement activities in order to enhance the KPIs that are not scored in the assessments. For the activities with the related departments in the Bank, briefings to relevant departments are conducted and improvement studies are coordinated. In 2017, TSKB has been listed for the third time in the index but the assessment will continue in the following years and the SI Working Group targets will be revised for the KPI score improvements. TSKB has entered FTSE4GOOD Emerging Markets Index as of 2016. Sustainability Index working group activities also cover the relevant activities for this index. The Working Group targets assigned directly to group members and they are tracked in annual performance reviews.

C2. Risks and opportunities

C2.1

(C2.1) Describe what your organization considers to be short-, medium- and long-term horizons.

		To (years)	Comment	
Short- term	0	3	KB is a development bank with operations only in Turkey. Full credit portfolio and activities are in the territory of Turkey. Therefore, TSKB's nate-related risks and opportunities are directly linked to the country policy, regulations, international agreements and the climate conditions of country. In such conditions, short-term is considered as the term until the year 2020.	
Medium- term	3	6	Turkey has not yet ratified Paris Agreement and its stance is expected to be clarified by 2020. The relevant political and regulatory environments will be shaped accordingly. Also Turkey's national climate change action plan covers the years 2011-2023. On the other hand, TSKB's strategic plan is prepared for a period of 3 years, being revised annually. So, since 2020 is considered as short term, the plan will cover years 2020 -2023. For the above mentioned reasons, year 2023 is considered as medium-term.	
Long- term	6	13	Turkey's INDC was given until the year 2030. For the year 2023 and beyond, the political or regulatory environment regarding climate change cannot be foreseen clearly. For this reason, 2023-2030 is considered as long-term horizon.	

C2.2

(C2.2) Select the option that best describes how your organization's processes for identifying, assessing, and managing climaterelated issues are integrated into your overall risk management.

Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes

C2.2a

(C2.2a) Select the options that best describe your organization's frequency and time horizon for identifying and assessing climaterelated risks.

	of monitoring	How far into the future are risks considered?	
Row 1	Six-monthly or more frequently	,	The Sustainability Committee meets every three months to define the Bank's sustainability vision and strategy. If deemed necessary, Sustainability Committee has the authority to submit items to board of directors' meeting agenda in order to discuss on sustainability concern. On the other hand, TSKB's strategic plan is prepared for a period of 3 years, being revised annually. In all above mentioned meetings, climate-related risks and time horizons are reviewed and revised if necessary.

C2.2b

(C2.2b) Provide further details on your organization's process(es) for identifying and assessing climate-related risks.

TSKB developed a well-structured Management System in 2005 in order to manage its risks and opportunities on environmental issues including climate change. It has been certified with ISO 14001 since 2007. TSKB applies its experience in sustainability to its internal operations and documents according to Sustainability Policy. TSKB ensures that all level risks & opportunities are identified and managed via Sustainability Management System (SMS)'s internal procedures.

Company level risks occur due to uncontrolled use of natural sources for Bank's operation activities. They are identified, measured and their performance is continually improved within the SMS framework by the ISO 14001 & 14064 Working Group. The group works on environmental dimension list of internal impacts, risks and describing waste/source specific methodologies and actions should be taken to prevent the occurrence and tracking the performance. Moreover, GHG emissions of the bank are also calculated, verified, offset and reduced by the same working group according to ISO 14064, since 2012.

At asset level, external environmental and social risks of the clients and their projects related with the lending activities of TSKB is managed within the SMS framework by the ISO Working Group. TSKB developed a tool (ERET) that includes a detailed query to determine the clients' and their projects' environmental and social risks. It classifies clients' and their projects' risks as A, B, B+ and C, where A is the highest. The risk category clarifies acceptable limits for risks involved and ensures that the project complies with general lending policies of TSKB. It determines a risk score and offers a proper action plan to minimize and manage environmental and social risks of projects. In terms of asset level opportunities, one of the responsibilities of sustainability sub-committee -which consists of members from corporate marketing, engineering and development finance institutions departments- is climate-related new thematic funds and market development.

C2.2c

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	The Turkish Government has been supporting the renewable energy investments financially via regulations since 2005. According to the related regulation, there is a purchasing guarantee per kWh electricity generation from a determined price for the first ten years of their operation for the power plants that have come into operation before the end of 2020. The government will decide on the incentives that will be given to power plants that come into operation after 31 December 2020. This support mechanism prompts investors to invest in renewable energy investments. In case this support mechanism is not continued or incentive fees are reduced after 2020, renewable energy investments may decrease. Till then, the renewable energy investments are boosted. As TSKB finds the opportunity finance such projects with its climate-themed funds, this contributes to TSKB's financial strength. If the support mechanism is not continued further, renewable energy investments in Turkey and hence the demand for TSKB's climate change themed funds in terms of renewable energy may decrease. This situation is considered as an asset level risk.
Emerging regulation	Relevant, always included	Even though it is not yet ratified by the parliament, Republic of Turkey signed the Paris Climate Change Agreement on 22nd of April 2016. Parallel to the content of the Paris Agreement, emission trading systems and carbon tax issues have been widely in discussion in the last years by the Ministry of Environment and Urbanization and other relevant authorities in Turkey. Thus, next step is expected to be a regulation concerning the cap and trade system and/or taxation for the carbon. Companies in energy-intense sectors will have to invest in emission reduction or energy-efficiency practices to comply with the regulations. Also, a potential cap and trade market may increase the investment appetite of renewable energy investors. Both cases are expected to increase the demand for TSKB's products for financing of these potential investments. This situation is considered as an asset level opportunity.

		Please explain	
	& inclusion		
Technology	Relevant, sometimes included	With the development of technology, it is predicted that the foreign-origin equipment of wind and solar power plants will cheapen. In this case, the investment costs of these projects are expected to decrease. This may increase investment appetite and encourage investors to enter the renewable energy market. This is an asset level financing opportunity for TSKB which is closely being followed.	
Legal	Relevant, always included	ERET model is designed to analyze social and environmental risk with respect to international and Turkish legislation. In asset level, every project is analyzed in terms of its environmental and social impacts in detail (via Environmental Risk Evaluation Tool – ERET), taking into consideration both the current and future aspects and financial and legal liabilities, independent of the investment amounts. According to the results of the evaluation and risk categorization, TSKB formulates a plan with the customer to monitor the environmental impact and mitigate. Loan monitoring is performed after the credit is approved. Hence especially environmental and social legal aspects are always considered and analyzed in terms of asset level risk at TSKB.	
Market	Relevant, always included	Turkey expects to have a regulation concerning the cap and trade system and/or taxation for the carbon soon. Companies in energy-intense sectors will have to invest in emission reduction or energy-efficiency practices to comply with the regulations. Also, a potential cap and trade market may increase the investment appetite of renewable energy investors. Both cases are expected to increase the demand for TSKB's products for financing of these potential investments. This situation is considered as an asset level opportunity.	
Reputation	Relevant, always included	TSKB breaks new grounds in sustainability related fields by placing sustainability at the heart of its business model. To start with, TSKB is the fit company in Turkish finance industry that developed an environmental management system. Last year, TSKB published its first integrated report the Turkish finance sector. Moreover, in 2016 Turkey's first Green/Sustainable Bond that was issued by TSKB received five awards on prestigio platforms such as Thomson Reuters, Bonds and Loans and EMEA Finance. In the following year, TSKB issued first "Subordinated Sustainable Bond" in the world. This helps TSKB to gain a competitive advantage in the market and also trust of its stakeholders, including investors and several international financial institutions. With these valuable experiences, TSKB created a demand in SMS, EMS, reporting (CDP, sustainabilit reporting, integrated report), green bond consultancy to other companies both in finance and other sectors via its subsidiary Escarus. This is considered as an asset level opportunity for TSKB. Having a mission of being the pioneering bank in Turkey's sustainable development, failure t address climate change issues in strategies, daily businesses or poor disclosure of environmental and social management and climate change management methodology may impose a risk on TSKB's reputation in this manner. As a result, TSKB's stakeholders may lose interest which m lead to a decrease in the demand of its services and also on its stocks. This situation is considered as an asset level risk for TSKB.	
Acute physical	Relevant, always included	Climate change has the potential to alter weather patterns and precipitation extremes such as storms, hurricanes, typhoons, heavy rains, droughts, etc. The risk of mean weather alteration could affect the working conditions of the Bank. In 2017 summer, Istanbul city experienced t altered weather conditions on separate days. TSKB employees were unable to reach the office building. In total, the Bank lost two work days. T manage this risk, physical measures were taken for infrastructure strengthening studies of the office building. This is considered as a company level risk for TSKB. Also, the Bank invested on a remote working system for such conditions which will be implemented in 2018. On the other hand, mean weather alteration can affect the working principles of renewable (wind, solar and hydro) energy power plants. For example, hurricanes/typhoons could prevent wind power plants from functioning due to high wind speed. Or changes in precipitation patterns can affect clients mostly the farmers and hydro power plant owners. Renewable power plants wouldn't function properly at extreme weather conditions. In conclusion, these conditions could negatively affect the electricity generation in renewable energy power plants. In such cases, the operating/owning companies would not be able to repay their loans. This is considered as an asset level risks.	
Chronic physical	Relevant, sometimes included	Studies show that Turkey will confront serious problems regarding water scarcity by 2050. Water scarcity would affect human, environment and business world and this would also cause economic, social, governmental and political problems. Especially water intense industries would be affected negatively and there would be challenging competition between the companies that try to obtain the required amount of water. In that regard, obtaining the water in good condition would become tougher and in some regions may be impossible and the value and price of the water would be considerably high. This may cause companies in water intense industries to reduce their capacity or even close down their businesses. Almost all of TSKB's customers use water in their processes thus problems related with water scarcity for sure will have its effect on their cash flows. Furthermore, other industries would experience spillover effects and consequently making new investments would be harder. When this risk is analyzed, TSKB foresees that number of investments related to water consumption reduction and desalination will increase. The Bank considers this as an asset level opportunity that involves financing these new investments, increasing number of clients and developing new products for tackling climate change.	
Upstream	Relevant, always included TSKB is a non-deposit taking institution so that all the external financial resources mostly rely on loans from multilateral development institutions and issued bonds. Securing funds can be considered as the upstream risks/opportunities for TSKB. Being the pioneer bar industry, TSKB has gained reputation and the opportunity that enables TSKB to access more, environmentally responsible and also lo stakeholders in business. The collaboration with stakeholders enables TSKB to access both climate specific loans and investors in its competitive success. TSKB expects to increase the number and size amount of the sustainability thematic loans. The developed know sustainability issues, built technical capacity in assessments of climate related benefits of the investments and environmental and soc assessment capability help TSKB to construct new thematic loans. Due to adverse economic and market conditions, the total amount agreements on a specific theme that are signed during 2017 stood at \$160M. TSKB also issued Basel 3 compliant Sustainable Tier 2 of \$300M.		
Downstream	Relevant, always included	TSKB's client-related risks and opportunities could be considered as its downstream risks and opportunities as described in all the above risk/opportunity types (current regulation, emerging regulation, etc.), at asset level.	

C2.2d

Company level risks are measured and monitored continually. Their performance is tracked by the ISO 14001 & 14064 Working Group within the SMS framework. The group implements action plans, sets targets to improve the performance and reports to Sustainability Sub-Committee. Sub-committee reports the results to Sustainability Committee. Thus, these risks are managed in board-level.

Internal consumptions and carbon footprint caused by Bank's operational activities are main influence sources of SC for building the Bank's sustainability and climate change tackling strategy. The strategy includes climate change related tackling methodologies in where risks and opportunities take an important role during development phase. All internal consumptions and GHG emissions are calculated according to ISO 14001 and ISO 14064 standards within the scope of SMS framework.

TSKB's asset level risks are defined with Environmental Risk Evaluation Tool. Every project is analyzed in terms of its environmental and social impacts in detail with this tool, taking into consideration both the current and future aspects and financial and legal liabilities, independent of the investment amounts. According to the results of the evaluation and risk categorization, TSKB formulates an action plan with the customer to monitor and minimize the risks. Loan monitoring is performed after the credit is approved. In terms of asset level opportunities, Sustainability sub-committee, consisting of members from corporate marketing, engineering and development finance institutions departments, is responsible for climate-related new thematic funds and market development.

The asset level risks are prioritized considering the feedback from its stakeholders via stakeholder engagement process, potential cost/profit impact, its brand value, impacts on TSKB's core business activities and carbon footprint, international developments and agreements on climate change and the bank's sustainability policy. As a development bank, TSKB takes into consideration its investments' contribution to the national development and climate change strategy of the country.

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? Customer

Risk type Transition risk

Primary climate-related risk driver

Policy and legal: Increased pricing of GHG emissions

Type of financial impact driver

Policy and legal: Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

Company- specific description

After the publication of the regulation concerning measurement, verification and reporting of GHG Emissions for some of the energy intense sectors in Turkey in 2011, in 2014 GHG Monitoring Legislation has been published which mandates energy-intense industries to prepare measurement reports to be submitted to the Ministry of Environment and Urbanization, starting from 2016. Even though it is not yet ratified by the parliament, Republic of Turkey signed the Paris Climate Change Agreement on 22nd of April 2016. Parallel to the content of the Paris Agreement, emission trading systems and carbon tax issues have been widely in discussion in the last years by the Ministry of Environment and Urbanization and other relevant authorities in Turkey. Thus, next step is expected to be a regulation concerning the cap and trade system and/or taxation for the carbon. Due to the potential increase in the operational and/ or investment costs for managing,

reporting and verifying the GHG emissions, and also carbon emission management and/or reduction activities, energy-intense clients of TSKB may be faced with additional cost which may result in contracting margins and hence difficulties in loan repayments in the future, increasing TSKB's credit risk.

Time horizon

Long-term

Likelihood Likely

Magnitude of impact Medium

Potential financial impact 2000000

Explanation of financial impact

In case some of TSKB's customers are not well prepared for the changes in regulation, and not take into account all the cost increase anticipations, customers may face risk of not achieving desired and planned levels of profitability and hence risk of repaying their loan amounts. Almost 30% of TSKB's loan portfolio is composed of energy-intense sectors such as non-renewable energy, construction, logistics, etc. As an investment and development bank, which does not take deposits, TSKB's non-performing loan (NPL) ratio is 0.3% whereas the banking sector average in Turkey is around 3%. Although it is quite difficult to quantify the effects, an increase in TSKB's NPL ratio is certainly expected. A relevant cost as high as \$2M could be expected.

Management method

In the last 6 years, TSKB didn't finance any greenfield/significant capacity increase investments of high carbon emitting industry projects (like coal fired thermal plants). For other energy-intense sectors, in order to take into account, the impacts of climate-change and climate-change related costs and regulations; TSKB has an in-house technical specialist team, focusing on the potential risks of climate change to the energy-intense sectors and specifically for the projects that are at the appraisal stage at TSKB. Every project is analyzed in terms of its environmental and social impacts in detail (via ERET), taking into consideration both the current and future aspects and financial and legal liabilities, independent of the investment amounts. According to the results of the evaluation and risk categorization, TSKB formulates a plan with the customer to monitor the environmental impact and mitigate. Loan monitoring is performed after the credit is approved. The cost of loan monitoring actions consists of labor costs and traveling costs. The ERET activities cause additional workload during the lending operations of the projects. The costs consist mainly of labor costs which occurs during inspections. Also TSKB builds inner capacity and attends conferences held by Ministry of Environment and Urbanization on PMR (Partnership for Market Readiness Programme) conducted with World Bank. The total annual cost estimation of all above mentioned activities are \$100K.

Cost of management 100000

Comment

Identifier Risk 2

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

Risk type Transition risk

Primary climate-related risk driver

Policy and legal: Increased pricing of GHG emissions

Type of financial impact driver

Policy and legal: Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

Company- specific description

Before COP21, Turkey submitted its Intended Nationally Determined Contributions (INDC) on 30 September 2015 in order to declare its emission reduction strategy. According to the Paris agreement that was signed by 195 countries including Turkey, all countries committed to realize their INDC's and report their progress in every 5 years. Other than this, Turkey has an objective to be a member of European Union and this objective requires new regulations for Turkey. Therefore, new environmental regulations have been introduced in line with European Union Norms. In order to achieve its objectives, Turkey will have to adopt these new regulations and also make new laws regarding to the control of SOx/NOx emissions in stricter limits towards the minimization of its impact on climate, or else. These new regulations may force energy intense companies to launch new investments to comply with these regulations. Furthermore, these companies may have to shut down their stranded assets, which could not meet the legal requirements and generate their expected economic returns anymore due to new regulations. As a result, this may affect the cash flow of TSKB's customers and their repayments to TSKB, increasing also TSKB's business risk.

Time horizon

Medium-term

Magnitude of impact Medium-low

Wediam-low

Potential financial impact 2000000

Explanation of financial impact

In case of some customers of TSKB would not be well prepared for the changes in regulation, and would not take into account all the cost increase in their future plans, they would face risk of not achieving desired and planned levels of profitability and hence risk of repaying their loan amounts. Almost 30% of TSKB's loan portfolio is composed of energy-intense sectors such as non-renewable energy, construction, logistics, etc. As an investment and development bank, which does not take deposits, TSKB's non-performing loan (NPL) ratio is 0.3% whereas the banking sector average in Turkey is around 3%. Although it is quite difficult to quantify the effects, TSKB certainly expects an increase in its NPL ratio. A relevant cost as high as \$2M could be expected.

Management method

In order to take into account, the impact of climate-change related costs and regulations, TSKB has an in-house technical specialist team, focusing on the potential risks of climate change to the energy-intense sectors and specifically for the projects that are at the appraisal stage at TSKB. Every project is analyzed in terms of its environmental and social impact in detail (via ERET), taking into consideration both the current-future aspects. According to the results of the evaluation and risk categorization, TSKB formulates a plan with the customer to monitor the environmental impact and mitigate. Moreover, loan monitoring is performed after the credit is approved. If any disruptions occur in repayments, TSKB will recover the related amount from warranty letter or mortgaged assets. TSKB have been managing this process for 66 years via its experienced team. TSKB attends to the related international meetings (i.e. COP23) that could contribute to its strategy. The cost of loan monitoring activities consists of labor costs and travel costs. The ERET activities cause additional workload during the lending operations of the investment projects. Additionally, four people from TSKB attended to the COP23 in Bonn in 2017. In Bonn, TSKB attended two different panel discussions as speaker and gave information about significance of sustainability investments, financing renewable energy and climate change investments, negative effects of climate change and green bonds.

Cost of management 100000

Comment

Identifier Risk 3

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

Risk type Transition risk

Primary climate-related risk driver

Policy and legal: Mandates on and regulation of existing products and services

Type of financial impact driver

Policy and legal: Increased costs and/or reduced demand for products and services resulting from fines and judgments

Company- specific description

The Turkish Government has been supporting the renewable energy investments financially via regulations since 2005. According to the related regulation, there is a purchasing guarantee per kWh electricity generation from a determined price for the first ten years of their operation for the power plants that have come into operation before the end of 2020. The government will decide on the incentives that will be given to power plants that come into operation after 31 December 2020. This support mechanism prompts investors to invest in renewable energy investments. Including to the above mentioned reason, due to the increase in the energy project investments over the last years and due to the slow growth in the electricity demand, Turkey has been facing excess supply in the electricity market. Currently, the total installed capacity of Turkey is approximately 87 GW, whereas the total electricity demand for the year of 2017 was 295 GWh. Excess supply in the electricity market has been reducing the electricity market price, therefore the feed in tariff on renewable energy investments have been bringing additional pressure on not extending the feed in tariff mechanism after 2020. In case this support mechanism is not continued or incentive fees are reduced after 2020, renewable energy investments may decrease. This situation may also lead to a decrease in demand for TSKB's renewable energy finance products as well.

Time horizon Short-term

Likelihood Likely

Magnitude of impact Medium-low

Explanation of financial impact

Renewable energy loans attained a weight of around 30% within the total loan portfolio of TSKB, through an installed capacity of 5693 MW. Therefore, reduction in the renewable energy investments may be expected to influence TSKB's business negatively and cause a reasonable decrease in incomes that can be estimated as \$10M.

Management method

Turkey has become one of the fastest growing energy markets in the world with its growing economy and its electricity demand has been increasing continuously. According to TSKB's projections, electricity demand growth trend of Turkey will continue in the future thus renewable energy will become more important for Turkey to meet the demand. In this perspective, TSKB emphasizes the significant role of renewable energy investments in every platform that it takes place. TSKB takes additional steps to support the energy sector through the provision of thematic renewable energy funds of multilateral development finance institutions and also by issuing green bonds. TSKB follows recent developments in renewable energy sector and participates in various relevant events. In 2017, TSKB took place in IICEC-TUSIAD "World Energy and Climate Outlook After Paris Climate Change Conference", 8th Energy Efficiency Forum and Summit Business Council for Sustainable Development Turkey (SKD), 2nd International Geothermal Energy Congress and Exhibition, 4th İstanbul Carbon Summit, COP23 etc. The cost of attending events like seminars, workshops etc. including governmental organizations consists of labor costs and travel costs. To sum up, the total cost of new renewable energy theme development, inner capacity development, green bond issuance and reporting efforts are \$150K per year.

Cost of management

150000

Comment

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Customer

Risk type Physical risk

Primary climate-related risk driver

Chronic: Changes in precipitation patterns and extreme variability in weather patterns

Type of financial impact driver

Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)

Company- specific description

Water scarcity is considered as one of the most significant risks in the world according to the Global Risk Report prepared for World Economic Forum and also according to Turkey's water risk report prepared by World Wide Fund for Nature (WWF). Studies show that Turkey will confront with serious problems regarding water scarcity by 2050. The precipitation in the Mediterranean reservoir has decreased by 20% during last 25 years. Water supply problem is not only related with precipitation but also related with social, economic and ecological factors. Water scarcity would affect human, environment and business world and this would also cause economic, social, governmental and political problems. Especially water intense industries would be affected negatively and there would be challenging competition between the companies that try to obtain the required amount of water. In that regard, obtaining the water in good condition would become tougher and in some regions may be impossible and the value and price of the water would be considerably high. This may cause companies in water intense industries to reduce their capacity or even close down their businesses. Almost all of TSKB's customers use water in their processes thus problems related with water scarcity for sure will have its effect on their cash flows. Furthermore, other industries would experience spillover effects and consequently making new investments would be harder. As a result, TSKB would be negatively affected because of the investment limitation in the industries and difficulties of repayments of effected customers.

Time horizon

Long-term

Likelihood More likely than not

Magnitude of impact Medium-low

Potential financial impact 50000000

Explanation of financial impact

This potential risk would affect TSKB, due to the potential disruption in such companies' loan repayments. Considering that water intense sectors constitute around 24.2% of the loan portfolio of TSKB, this portion of the loan portfolio may be effected negatively and TSKB's income may decrease around \$50M.

Management method

TSKB believes that sustainability of fresh water is a global issue has a very critical role for sustainability of life. Believing in the important role played by efforts energy efficiency(EE) and resource efficiency(RE) in tackling climate change, TSKB has been supporting the ee-re projects of many enterprises that manufacture in an array of industries, with medium and long term loans. In that regard, TSKB finances resource efficiency projects including water efficiency. Up to now, 53 RE projects have been financed by TSKB. The engineering team of TSKB assesses all projects specifically and calculates gains from resource savings. As of 2017, 1.2 million m3 of water savings have been realized annually by financing resource efficiency investments from various industries like cement, steel, tourism, chemical, automotive, plastics, textile etc. TSKB has experienced engineering and marketing teams in order to finance the best resource efficiency investments and contribute to the investment by providing consultancy to the customers. TSKB also increases the water awareness by visiting customers and informing them about resource efficiency including water supply by verbal communication and booklets. Moreover, with its experiences, TSKB provides SMS-EMS consultancy services (through its subsidiary Escarus) to other companies. In these means, TSKB helps these companies to measure and monitor their water consumptions. Annual cost for all these activities are \$150K.

Cost of management

150000

Comment

Identifier Risk 5

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

Risk type

Physical risk

Primary climate-related risk driver Chronic: Rising mean temperatures

Type of financial impact driver

Increased operating costs (e.g., inadequate water supply for hydroelectric plants or to cool nuclear and fossil fuel plants)

Company- specific description

The gradual increase in the average global temperature can cause significant cost increases due to TSKB's office heating and cooling systems.

Time horizon

Current

Likelihood Likely

Magnitude of impact

Low

Potential financial impact

20000

Explanation of financial impact

In such a case, a predicted 20% increase in the electricity consumption would increase the operation costs by \$20K.

Management method

The business world bears tremendous responsibilities for ensuring that the growth and development that it brings today do not threaten the lives and resources of future generations. Through the trail-blazing sustainability practices, TSKB has integrated sustainability into all of its own banking service processes. TSKB also does the required energy efficiency investments for its own buildings, when required. In order to decrease the greenhouse gas emissions, TSKB supplies its electricity from a distribution company, which uses renewable energy. Therefore, TSKB uses 100% green energy in all its offices. Every year maintenance team of TSKB and outsourced maintenance companies, perform periodic maintenances and improvement activities in accordance with the annual schedule. In 2017, such activities costed \$180K.

Cost of management 180000

Comment

Identifier Risk 6

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

Risk type

Physical risk

Primary climate-related risk driver

Chronic: Changes in precipitation patterns and extreme variability in weather patterns

Type of financial impact driver

Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)

Company- specific description

Climate change has the potential to alter weather patterns and precipitation extremes such as storms, hurricanes, typhoons, heavy rains, droughts, etc. The risk of mean weather alteration could affect the working principles of renewable (wind, solar and hydro) energy power plants. For example, hurricanes/typhoons could prevent wind power plants to function due to high wind speed. Or changes in precipitation patterns can affect the clients mostly the farmers and hydro power plant owners. Renewable power plants wouldn't function properly at extreme weather conditions. In conclusion, global warming could negatively affect the electricity generation in renewable energy power plants. In such ways that the operating/owning companies would not be able to repay loans.

Time horizon Medium-term

Likelihood Likely

Magnitude of impact Medium

Potential financial impact 100000000

Explanation of financial impact

Renewable energy investments play a crucial role in TSKB's credit portfolio. The defined risks could discourage investors to invest in renewable energy resources. Other than this, the current renewable energy plants, financed by TSKB, may not be able to produce projected electricity to compensate loan payments. Currently, the magnitude of the impact could be \$100M.

Management method

In order to take into account, the impact of climate-change related costs and regulations, TSKB has an in-house technical specialist team, focusing on the potential risks of climate change to the energy-intense sectors and specifically for the projects that are at the appraisal stage at TSKB. Every project is analyzed in terms of its environmental and social impact in detail (via ERET), taking into consideration both the current-future aspects. According to the results of the evaluation and risk categorization, TSKB formulates a plan with the customer to monitor the environmental impact and mitigate. Moreover, loan monitoring is performed after the credit is approved. If any disruptions occur in repayments, TSKB will recover the related amount from warranty letter or mortgaged assets. TSKB have been managing this process for 66 years via its experienced team. TSKB attends to the related international meetings (i.e. COP23) that could contribute to its strategy. The cost of loan monitoring activities consists of labor costs and travel costs. The ERET activities cause additional workload during the lending operations of the investment projects. Additionally, four people from TSKB attended to the COP23 in Bonn in 2017. In Bonn, TSKB attended two different panel discussions as speaker and gave information about significance of sustainability investments, financing renewable energy and climate change investments, negative effects of climate change and green bonds.

Cost of management 150000

Comment

Identifier Risk 7

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

Risk type Transition risk

Primary climate-related risk driver

Reputation: Increased stakeholder concern or negative stakeholder feedback

Type of financial impact driver

Reputation: Reduction in capital availability

Company- specific description

Having a mission of being the pioneering bank in Turkey's sustainable development, failure to address climate change issues in strategies, daily businesses or poor disclosure of environmental and social management and climate change management methodology may impose a risk on TSKB's reputation in this manner. As a result, our stakeholders may lose interest on TSKB, which may lead to a decrease in the demand of TSKB's services and also on its stocks.

Time horizon Medium-term

Likelihood About as likely as not

Magnitude of impact Medium

Potential financial impact 8000000

Explanation of financial impact

In case this risk is realized; as a result of scarce demand from investors, customers, development finance institutions, etc. along with the reputation loss, the estimated financial impact for the Bank could be elevated funding costs. TSKB is a non-deposit bank which mainly relies on external financial funding in the form of loans from development finance institutions and issued bonds. In the last 3 years, the average amount of funding agreements that TSKB secured under the scope of climate change has been \$280M. Moreover, the Bank issued two sustainable/green bonds each amounting to \$300M between 2016 and 2017. Should the Bank have to resort to eurobonds instead of DFI funding and greenbonds, the additional cost of funding per year is calculated as \$8M.

Management method

Every safeguard issue (climate change, environmental and social (E/S) issues, governance, etc.) which can adversely affect TSKB's reputation is considered in the Bank's daily business. Sustainability Management System enables significant issues to be discussed with senior managers, including board members. All projects are analysed in terms of their E/S impacts by engineering department during credit evaluation processes. According to results, TSKB seeks for solutions with investors to manage investments' risks. The financing is only possible if TSKB is sure that investor has implemented necessary E/S control and management measures. TSKB also has the right to drop the credit, withdraw the previous disbursed amount due to projects' and adverse impacts. In order to inform stakeholders about its activities, TSKB publishes annual financial report, sustainability report and UN Global Compact Communication on progress report. In 2017, TSKB published the first Integrated Report of Turkish finance sector which is a combination of annual financial report and sustainability report. It highlights the values TSKB creates for the society and stakeholders in every aspect and TSKB's strategy to improve these values. Besides, TSKB developed and published Declaration of Climate Change to express its position regarding climate change in 2016. Every multilateral development bank has its own E/S requirements which TSKB has to fulfil and TSKB has arranged its SMS accordingly.

Cost of management 150000

Comment

The major cost driver is employee cost for these activities. The other important cost item includes, collection of sustainability and climate change related data, public disclosure of this information and third party verification and assurance of the performance indicators. All internal KPIs regarding to environmental and social issues, including GHG emissions are verified in accordance with the ISO 14001 and ISO 14064 certifications annually. Costs also include external stakeholder and employee engagement domestic and global memberships and signatories, e.g. TUSIAD, UNEP FI, Global Compact and others. These costs equate to approximately \$150K annually.

Identifier

Risk 8

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

Risk type Physical risk

Primary climate-related risk driver Acute: Increased severity of extreme weather events such as cyclones and floods

Type of financial impact driver

Reduced revenue and higher costs from negative impacts on workforce (e.g., health, safety, absenteeism)

Company- specific description

In Istanbul city, two extreme weather events occurred in 2017. Istanbul was hit by a flood on July 2017, with hail during the heavy rainfall increasing the damage. At least ten people have been injured as heavy rain, hail and strong winds knocked down trees and a stone wall and flooded streets in the Turkish city. Nine days ago from the hailstorm, Istanbul was pounded by heavy rains and winds of up to 50mph, which flooded streets and metro stations. The rain in Istanbul inundated roads, causing havoc in the city. Some cars were even submerged in torrential downpours that followed lightning flashes across the city. Due to the hail storm and the flood, TSKB employees were unable to reach the office building on both occasions which affected the workforce negatively.

Time horizon

Current

Likelihood

Very likely

Magnitude of impact Medium-high

Potential financial impact 105000

Explanation of financial impact

Due to the hail storm and flood on different days, TSKB employees were unable to reach the office building and TSKB lost two work days which has \$100K financial impact on the Bank. Also, company cars were damaged due to the hailstorm which created \$5K additional cost for repair works.

Management method

For health and safety issues and to prevent lost work days in such cases, TSKB installed remote working system infrastructure to start functioning in 2018. The license of the system and employee cost for installing the system has cost around \$25K. Moreover, physical measures were taken for infrastructure strengthening studies of the office building such as front and rear façade insulation works, additional discharge and pump line construction. The cost of these studies were \$35K.

Cost of management

60000

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? Customer

Opportunity type Products and services

Primary climate-related opportunity driver

Shift in consumer preferences

Type of financial impact driver

Increased revenue through new solutions to adaptation needs (e.g., insurance risk transfer products and services)

Company- specific description

After the publication of the regulation concerning measurement, verification and reporting of GHG Emissions for some of the energy intense sectors in Turkey in 2011, in 2014 GHG Monitoring Legislation has been published which mandates energy-intense industries to prepare measurement reports to be submitted to the Ministry of Environment and Urbanization, starting from 2016. Republic of Turkey signed the Paris Climate Change Agreement on 22nd of April 2016. Parallel to the content of the Paris Agreement, emission trading systems and carbon tax issues have been widely in discussion in the last years by the Ministry of Environment and Urbanization and other relevant authorities in Turkey. Thus, next step is expected to be a regulation concerning the cap and trade system and/or taxation for the carbon. Companies in energy-intense sectors will have to invest in emission reduction or energy-efficiency practices to comply with the regulations. Also, a potential cap and trade market may increase the investment appetite of renewable energy investors. The both cases are expected to increase the demand for TSKB's lending and hedging products for financing of these potential investments.

Time horizon

Medium-term

Likelihood

More likely than not

Potential financial impact 75000000

Explanation of financial impact

Because of the potential cap and trade system, the demand for TSKB's products in energy- efficiency or renewable energy investments may increase. 68% of TSKB's loan portfolio consists of sustainable investments including energy-efficiency and renewable energy projects. TSKB achieves this with the thematic funds it secures from multilateral development finance institutions and also green financial instruments like SRI / green bonds it issues. Together with these instruments, TSKB may expect about \$75M per year of additional financing opportunities to satisfy the above-mentioned increased demand.

Strategy to realize opportunity

TSKB has been financing renewable energy and energy-efficiency projects since mid-2000s, making it one of the leaders in this area. It has committed more than \$5B to renewable energy and energy efficiency projects so far. These projects are also financed by TSKB's Green/SRI Bond. Additionally, TSKB's sustainability committee members follow closely the developments in Turkey regarding the carbon market activities and preparations. TSKB has a broad experience on renewable energy and energy efficiency projects, need to closely follow up the engineering and technical consultancy team, which is responsible for the technical evaluation of the projects, need to closely follow up the improvements in the technology. This strong internal expertise is also one of the key strengths of the Bank in terms of issuance of Green/SRI Bond. The cost of inner capacity development, including research, attending conferences and trainings amounts up to \$150K per year.

Cost to realize opportunity

150000

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur? Customer

Opportunity type Products and services

Primary climate-related opportunity driver

Shift in consumer preferences

Type of financial impact driver

Increased revenue through demand for lower emissions products and services

Company- specific description

Due to the goal of limiting global warming to 1.5-2 degrees Celsius, it is expected that the number of emission reduction projects will increase. TSKB also expects an increase in such projects' finance, including resource efficiency, energy efficiency and renewable energy projects. According to Turkey's declared INDC, Turkey plans to increase its solar power plant capacity to 10 GW, and wind power plant capacity to 16 GW till 2030. These plans indicate a potential increase also in TSKB's business volume especially in renewable energy sector with the support of the legislations.

Time horizon Medium-term

Likelihood More likely than not

Magnitude of impact Medium

Potential financial impact 500000000

Explanation of financial impact

In the context of COPs, it is expected that the number of resource and energy efficiency and renewable energy investments would increase and TSKB aims to finance such investments amounting to approximately \$500M. In the following years, TSKB also expects an increase in the industry's awareness on these topics and the number of these kinds of investments Would boom in order to approach to the target mentioned in Turkey's INDC.

Strategy to realize opportunity

TSKB supports sustainable investments for a sustainable future and has renewable energy portfolio of the 15% of total renewable energy of Turkey. TSKB's experienced engineering team studies renewable energy industry regularly which enables TSKB to have a high capability of assessing the renewable energy, energy efficiency and resource efficiency projects and also to perform a detailed

environmental and social risk evaluation. So far, \$5B financing has been provided to such projects. Other than the engineering team, TSKB also has a dedicated marketing team for solar, wind, geothermal and energy and resource efficiency projects. Sustainability sub-committee develops special theme loans with supranational finance institutions. This experience will be the key issue in focusing on the right projects in terms of financial and technical aspects. TSKB has corporate marketing, project finance, engineering and technical consultancy, economic research, loans and loan monitoring departments working on climate change issues. These activities are built in the daily business of the staff in these departments. Performing such activities and internal capacity building activities are calculated as \$350K per year. In addition, TSKB has given 26 consultancy services through its subsidiary Escarus company with a paid-in capital of \$300K.

Cost to realize opportunity

650000

Comment

Identifier

Opp3

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

Opportunity type Resource efficiency

Primary climate-related opportunity driver Other

Type of financial impact driver

Reduced operating costs (e.g., through efficiency gains and cost reductions)

Company- specific description

TSKB is the first company in Turkish finance industry with an environmental management system. TSKB has implemented ISO 14001 and ISO 14064 standards which enables to identify and control environmental and social impacts and especially constantly improve environmental performance through more efficient use of resources and reduction of waste. This helps TSKB to gain a competitive advantage in the market and also trust of its clients and stakeholders, including investors and several international financial institutions.

Time horizon

Current

Likelihood Very likely

Magnitude of impact Medium

Potential financial impact 50000

Explanation of financial impact

TSKB sets numerical improvement targets regarding its internal environmental impacts. One of them was reducing GHG emissions by 2.5% annually until the end of 2016 in comparison to 2012 levels. This target has been achieved and overreached by 7% as of 2016. Regarding to this target, electricity cost avoidance is approximately \$10K for the reporting year. TSKB has set a new target of reducing its average GHG emissions at least 10% below of the average consumption value of the last 5 years till the end of 2021. Besides, TSKB consumes 32% less electricity, 44% less natural gas, 45% less paper and 50% less paper today since the management system first developed.

Strategy to realize opportunity

TSKB has a well-structured Sustainability Management System (SMS) in which tasks and roles are defined clearly and distributed across different departments. The system has been certified with ISO 14001 standard since 2007. GHG emissions have been calculating, verifying and offsetting in accordance with ISO 14064 since 2012. TSKB purchases Gold Standard Carbon Certificates to offset its GHG emissions. The SMS is managed by the Sustainability Committee who consists of 2 board members and 2 executive vice presidents. The Sustainability Sub-Committee and its 4 working groups (WG) assist the Sustainability Committee in achieving its targets. Especially, "ISO 14001 and ISO 14064 Management System Standards Working Group" is dedicated to work for renewal of these ISO certifications and following up targets. For both ISO 14001 and ISO 14064 certifications, TSKB works with accredited third party consultants. ISO Working Group members are responsible for managing these voluntary agreements. These full time employees cost, third party consultants cost and the green power cost for offsetting GHG emissions constitute the management cost of this activity. It is approximately \$30K as of 2017.

Cost to realize opportunity

30000

Comment

Identifier

Opp4

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

Opportunity type

Markets

Primary climate-related opportunity driver

Access to new markets

Type of financial impact driver

Increased revenues through access to new and emerging markets (e.g., partnerships with governments, development banks)

Company- specific description

TSKB has broken new grounds in the Turkish finance sector in different areas. TSKB is the first company in Turkish finance industry with an environmental management system. TSKB has implemented ISO 14001 and ISO 14064 standards which enables to identify and control environmental and social impacts and especially constantly improve environmental performance through more efficient use of resources and reduction of waste. TSKB has published its first "Integrated Report" in 2016 which is a document that involves sustainability approach and the Bank's future strategy. In 2016 Turkey's first Green/Sustainable Bond that was issued by TSKB received five awards on prestigious platforms such as Thomson Reuters, Bonds and Loans and EMEA Finance. In the following year, TSKB issued first "Subordinated Sustainable Bond" in the world. These helps TSKB to access new markets with consultancy services. In order to perform these services, TSKB established its subsidiary Escarus which provides sustainability consultancy services.

Time horizon

Current

Likelihood Very likely

Magnitude of impact Medium

Potential financial impact

Explanation of financial impact

With its valuable experiences, through its subsidiary Escarus Sustainability Consultancy, TSKB provides SMS and EMS, green bond issuance, reporting (CDP, sustainability and integrated report, carbon emission report) consultancy services to other companies both in finance and other sectors. These services contributes to integrate climate relate issues to the agendas of the related companies with an organized structure. In 2017, TSKB provided 26 consultancy service through its subsidiary Escarus. The additional income created with these services is confidential since Escarus is a subsidiary group.

Strategy to realize opportunity

TSKB has given 26 consultancy services through its subsidiary Escarus company with a paid-in capital of \$300K.

Cost to realize opportunity 300000

Comment

Identifier

Opp5

Where in the value chain does the opportunity occur? Customer

Opportunity type Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Type of financial impact driver

Increased revenue through demand for lower emissions products and services

Company- specific description

Turkish government policies about renewable energy sector have been changing fast over the last few years and the Turkish government strongly supports the renewable energy investments in order to fulfil the electricity demand and maintain its own energy security. Additionally, feed-in incentive tariff will be valid until 2020. This situation prompts the renewable energy investments in the next couple of years until 2020. In near future, new promoting regulations and support mechanisms may come in force in order to encourage the investors. As a result, the demand for TSKB's renewable energy financing products is expected to increase.

Time horizon

Likelihood Very likely

Magnitude of impact Medium-high

Potential financial impact 650000000

Explanation of financial impact

Renewable energy is a crucial part of climate change mitigation. Renewable energy investments have increased in the recent years with the decreasing cost of technology and established legislative promoting mechanism. TSKB's renewable energy loans attained a weight of around 30% within the total loan portfolio. In the future, regulatory incentives or any other supports and new technological developments may boost the renewable energy investments which will contribute to TSKB's financial strength. TSKB estimates that up to 2020, the potential for financing this area is about \$650M.

Strategy to realize opportunity

TSKB was the first bank in Turkey to grant a loan linked to environmental protection and industrial pollution control. TSKB has started intensive renewable energy financing in mid 2000s. TSKB supports sustainable development of Turkey through an installed capacity of 5,693 MW in renewable energy projects which TSKB has funded, the acceleration of transition to a low-carbon economy through the prevention of 12 million tons carbon emission on an annual basis. Within this scope, TSKB provides international funds, most of which are aimed to use climate friendly investments in order to mitigate global climate change. These funds are developed with the coordination of development finance institutions department. TSKB has Development Finance Institutions, Engineering and Technical Consultancy, Corporate Marketing and Project Finance Departments in order to manage the activities like finding international funds, developing customer relations and analyzing the investments for renewable energy. On behalf of TSKB, all of these departments have a vision of assessing, implementing and financing sustainable energy investments. As having built in their daily business definitions, approximately \$450K can be considered as the cost to manage all of these activities including inner capacity development, trainings and market research.

Cost to realize opportunity

450000

Comment

Identifier

Opp6

Where in the value chain does the opportunity occur? Customer

Opportunity type Products and services

Primary climate-related opportunity driver Shift in consumer preferences

Type of financial impact driver

Better competitive position to reflect shifting consumer preferences, resulting in increased revenues

Company- specific description

According to the water risk report of Turkey prepared by WWF, Turkey will confront with serious problems regarding water scarcity by 2050. Some regions of Turkey are already faced with drought and water shortages due to the temperature increase. Therefore, number of investments which are related to decrease the water consumption and desalination are expected to increase. TSKB considers this as an opportunity that involves financing these new investments, increasing number of clients and developing new products for tackling climate change.

Time horizon

Long-term

Likelihood Very likely

Magnitude of impact High

Potential financial impact 50000000

Explanation of financial impact

Resource efficiency investments are expected to gain more importance in the near future and TSKB has financed water efficiency projects amounting to a total of \$73.5M investment so far. On the other hand, TSKB set a target of financing 5 new water efficiency projects along

with 10 new energy and/or resource efficiency projects in 2015 – 2016 period. TSKB has achieved this target successfully as of 2016. \$29.5M amount of resource efficiency target is set for 2017. Considering that water intense sectors such as cement, steel, tourism, chemical, automotive, plastics, textile etc. constitute 24.2% of the loan portfolio of TSKB, in the future this portion of the loan portfolio will conduct water consumption reduction and desalination projects which will create a new investment opportunity for TSKB that would be around \$50M.

Strategy to realize opportunity

TSKB targets to finance water efficiency projects in order to protect the natural resources. Especially technical team of TSKB specifically studies these projects. Also employees from various departments attend to water efficiency trainings, panels and summits related to water issues. TSKB's engineering team studies water scarcity issue. Marketing team seeks for water efficiency projects to finance such investments. Also, TSKB works on a project to secure water efficiency theme funds from DFIs. The estimated cost of market and technical research, allocated working hours is approximately \$100K.

Cost to realize opportunity

100000

Comment

Identifier

Opp7

Where in the value chain does the opportunity occur? Customer

Opportunity type Products and services

FIDUUCIS and Services

Primary climate-related opportunity driver Development and/or expansion of low emission goods and services

Type of financial impact driver

Increased revenue through demand for lower emissions products and services

Company- specific description

TSKB has been proceeding its activities with mission of being the pioneering bank in sustainability growth of Turkey and also climate chance issues. This adopted manner has provided opportunity to access as well as secure climate specific loans, which comprise the 68% of the Bank's overall portfolio as of 2017. These loans are developed to tackle climate change through mitigation and adaptation investments. There are many things to do to support transition to a low-carbon economy, and enlarge the green markets of Turkey. In this way, TSKB is a partner of its stakeholders, including investors, International Financial Institutions, policy makers, NGOs, etc. In this manner, TSKB has gained reputation and the opportunity that enables TSKB to access more, environmentally responsible and also long-term stakeholders in business. Moreover, this reputation gains attention to TSKB consultancy services in this field. Through its subsidiary Escarus, TSKB provides SMS and EMS, green bond issuance, reporting (CDP, sustainability and integrated report, carbon emission report) consultancy services to other companies both in finance and other sectors. These services contributes to integrate climate relate issues to the agendas of the related companies with an organized structure.

Time horizon Short-term

Likelihood Very likely

Magnitude of impact High

Potential financial impact 100000000

Explanation of financial impact

TSKB has a wide range of sustainable products; renewable energy, energy efficiency, resource efficiency finance etc. The collaboration with stakeholders enables TSKB to access both climate specific loans and investors in its long-term competitive success. TSKB is expecting to increase the number and size amount of the sustainability thematic loans. For this issue, TSKB is expected to sign nearly \$1B sustainability themed loan agreements in 2018. Another KPI is the share of loans with a sustainability theme in the overall loan portfolio. It was reached to 68% as of 2017 year-end. TSKB also expects to receive higher demands for its other green products. Accordingly, TSKB issued the first Sustainable Basel 3 Compliant Subordinated Tier 2 Bond in the global international market in 2017. In 2017, TSKB provided 26 consultancy service through its subsidiary Escarus. The additional income created with these services is confidential since Escarus is a subsidiary group.

Strategy to realize opportunity

TSKB has a well-structured Sustainability Management System (SMS) in which tasks and roles are defined clearly and distributed across different departments. The SMS is managed by the Sustainability Committee consisting of 2 board members and 2 executive vice presidents. The Sustainability Sub-Committee and its 4 working group (WG) assist the Sustainability Committee in achieving its targets.

The developed know-how on sustainability issues, built technical capacity in assessments of climate related benefits of the investments and environmental and social impact assessment capability help the institution to construct new thematic loans. For Sustainable Basel 3 Compliant Subordinated Tier 2 Bond, Sustainability Committee supported bond issuing departments in development phase of the concept, use of proceeds, and eligibility criteria of the Bond. All members of SMS play an important role in the management of SMS's activities. The System members, around 30 employees, create and/or support the basic management cost. It is approximately \$150K as of 2017 which arises from the internal works, including man-hours of various department's staffs. In addition, the consultancy services of TSKB through its subsidiary Escarus company costs with a paid-in capital of \$300K.

Cost to realize opportunity 450000

Comment

C2.5

(C2.5) Describe where and how the identified risks and opportunities have impacted your business.

	Impact	Description
Products and services	Impacted	i. The Turkish Government has been supporting the renewable energy (REN) investments financially via regulations since 2005. It is a question mark that the government will continue this support mechanism after 2020. In case this support mechanism is not continued after 2020, REN investments may decrease which may lead to a decrease in demand for TSKB's re finance products as well which is a risk. But also, this situation prompts the REN investments in the next couple of years until 2020. In near future, new promoting regulations and support mechanisms may come in force in order to encourage the investors. As a result, the demand for TSKB's REN financing products is expected to increase in the short term. By the end of 2017, TSKB funded REN installed capacity has reached to 5,693 MW, with a total investment amount of \$9.6B of which \$4.1B was committed by TSKB, between 2003 - 2017. ii. Due to water scarcity, companies in water intense industries can reduce their capacity or even close down their businesses. Almost all of TSKB's customers use water in their processes thus problems related with water scarcity for sure will have its effect on their cash flows. TSKB could be negatively affected because of the investment limitation in the water-related industries. Nevertheless, number of investments which are related to the water consumption reduction and desalination are expected to increase. TSKB considers this as an opportunity that involves financing these new investments, increasing number of clients and developing new products for tackling climate change. As of 2017, 1.2 million m3 of water savings have been realized annually by financing resource efficiency investments from various industries like cement, steel, tourism, chemical, automotive, plastics, textile etc. This figure was 367,000 m3 last year. iii-TSKB has broken new grounds in the Turkish finance sector in different areas. To share these valuable experiences, TSKB established its subsidiary Escarus which provides consultancy services on sustainability
Supply chain and/or value chain	Impacted	Being the pioneer bank in the industry, TSKB has gained reputation and the opportunity that enables TSKB to access more, environmentally responsible and also long-term stakeholders in business. The collaboration with stakeholders in its value chain enables TSKB to access both climate specific loans and investors in its long-term competitive success. TSKB expects to increase the number and size amount of the sustainability thematic loans. In 2017, TSKB obtained a total of \$160M climate specific loans from multilateral development finance institutions. TSKB issued its first Green/SRI bond in 2016 which was the first green bond issuance in Turkey and CEEMEA region. In 2017, TSKB issued Basel 3 compliant Sustainable Tier 2 Bond worth \$300M which was the first issuance in the world. TSKB has set an example in the industry in tackling climate change with this new product. With these experiences, TSKB also started to provide Green Bond issuance consultancy services to other companies in Turkey throught its subsidiary Escarus.
Adaptation and mitigation activities	Impacted	For mitigation activities, TSKB sets numerical improvement targets regarding to internal environmental impacts. One of them was reducing GHG emissions by 2.5% annually until the end of 2016 in comparison to 2012 levels. This target has been achieved and overreached by 7% as of 2016. TSKB has set a new target of reducing its average GHG emissions at least 10% below of the average consumption value of the last 5 years till the end of 2021. Besides, TSKB consumes 32% less electricity, 44% less natural gas, 45% less paper and 50% less paper today since the management system first developed. TSKB has achieved \$10K savings in 2017 in this mean. On the other hand, TSKB's renewable energy loans attained a weight of 30.4% within the total loan portfolio. By renewable energy and energy efficiency investments, TSKB contributes to low-carbon and environmentally friendly economic growth and development by annual CO ₂ e emission reduction by 12 million tons.
Investment in R&D	Impacted	As technology develops, companies should keep p track with the developments to save their place in the market. TSKB's renewable energy, energy and resource efficiency products provide solution to companies for technology developments. TSKB foresees that energy and resource efficiency projects will increase in the future. In means of R and D investments, TSKB develops its inner technical capacity. To do so, TSKB has three engineers with energy management certification. Two of them have been trained and certified in 2017. TSKB invested around \$20K for these trainings. Energy and resource efficiency projects represented 6% of TSKB's loan portfolio as of 2017 year-end. For the last 8 years, TSKB has been supporting efforts to improve resource efficiency in our country's private sector by offering medium-term and long-term funding. The Bank extended a funding of approximately \$900M so far for 131 projects on energy and raw material efficiency.
Operations	Impacted	Climate change has the potential to alter weather patterns and precipitation extremes such as storms, hurricanes, typhoons, heavy rains, droughts, etc. The risk of mean weather alteration could affect the working conditions of the Bank. In 2017 summer, Istanbul city experienced two altered weather conditions on separate days. TSKB employees were unable to reach the office building. In total, the Bank lost two work days. To manage this risk, physical measures were taken for infrastructure strengthening studies of the office building. This is considered as a company level risk for TSKB. Also, TSKB invested on remote working system for such conditions which will be implemented in 2018.
Other, please specify	Please select	

C2.6

(C2.6) Describe where and how the identified risks and opportunities have factored into your financial planning process.

	Relevance	Description	
Revenues	Impacted	i. The Turkish Government has been supporting the renewable energy investments financially via regulations since 2005. It is a question mark that the government will continue this support mechanism after 2020. Thus, the renewable energy investments has increased and will increase in the next couple of years until 2020. In 2017, TSKB funded an installed capacity of 5,693 MW in renewable energy projects, the acceleration of transition to a low-carbon economy through the prevention of 12 million tons carbon emission on an annual basis. Renewable energy investments have increased in the recent years with the decreasing cost of technology and established legislative promoting mechanism. TSKB's renewable energy loans attained a weight of around 30% within the total loan portfolio. In the future, regulatory incentives or any other supports and new technological developments may boost the renewable energy investments which will contribute to TSKB's financial strength. TSKB estimates that up to 2020, the potential for financing this area is about \$650M. ii. TSKB subsidiaries operate in areas that are parallel to or complementing the Bank's main activities. One of TSKB's subsidiaries is Escarus Sustainability Consultancy. The objective of Escarus is to provide the best solutions designed for its clients thanks to its cooperation with advisors and companies having expertise on their fields. Escarus services, which are based on TSKB's long standing environment and sustainability approach, are SMS and EMS consultancy, green bond issuance consultancy, reporting services based on CDP, integrated reporting, sustainability reporting and carbon emission reporting. Also Escarus provides services on energy efficiency and resource efficiency consultancy. In 2017, TSKB provided 26 consultancy service through its subsidiary Escarus, that has a paid-in capital of \$300K.	
Operating costs	Impacted	Within the framework of ISO 14001 and ISO 14064 Standards, TSKB is committed to having its carbon footprint periodically measured and delivering banking operations through zero-carbon principles by offsetting its carbon footprint in the upcoming years. Also, Bank aims to manage its entire environmental impacts in water, electricity, paper etc. as well as its greenhouse emissions. TSKB sets numerical improvement targets regarding to internal environmental impacts. One of them was reducing GHG emissions by 2.5% annually until the end of 2016 in comparison to 2012 levels. This target has been achieved and overreached by 7% as of 2016. Regarding to this target, cost avoidance is approximately \$10K for the reporting year. TSKB has set a new target of reducing its average GHG emissions at least 10% below of the average consumption value of the last 5 years till the end of 2021. Besides, TSKB consumes 32% less electricity, 44% less natural gas, 45% less paper and 50% less paper today since the management system first developed. ISO Working Group members are responsible for managing these voluntary agreements. These full time employees cost, third party consultants cost and the green power cost for offsetting GHG emissions constitute the management cost of this activity. It is approximately \$30K annually as of 2017.	
Capital expenditures / capital allocation	Impacted	i- TSKB believes that having the right employees on its side is critical for the growth of the business. One of the main strategies of the Bank is to develop inner capacity. TSKB has Development Finance Institutions, Engineering and Technical Consultancy, Corporate Marketing, Project Finance Departments in order to manage the activities like finding international funds, developing customer relations and analyzing the investments for renewable energy. On behalf of TSKB, all related departments have a vision of assessing, implementing and financing sustainable energy investments. As having built in their daily business definitions, approximately \$450K can be considered as the cost to manage all of these activities including inner capacity development, trainings and market research. Also, TSKB follows recent developments in renewable energy sector and participates in various relevant events. In 2017, TSKB took place in IICEC-TUSIAD "World Energy and Climate Outlook After Paris Climate Change Conference", 8th Energy Efficiency Forum and Summit Business Council for Sustainable Development Turkey (SKD), 2nd International Geothermal Energy Congress and Exhibition, 4th Istanbul Carbon Summit, COP23 etc. The cost of attending events like seminars, workshops etc. including governmental organizations consists of labor costs and travel costs. To sum up, the total cost for new renewable energy theme development efforts, green bond issuance and reporting efforts is around \$150K per year. These can be listed as investment in human capital. Ii- In Istanbul, due to the extreme weather events that occurred in summer 2017, since the employees couldn't reach the office building, TSKB lost two work day which costed \$100K. The company cars were damaged as well. The repair works costed \$5K. In order to manage the risk physical measures are taken for infrastructure strengthening studies of the office building that costed \$35K. These activities are manufacture capital investments.	
Acquisitions and divestments	Impacted	In the last six years, TSKB did not finance any greenfield or significant capacity increase investments of high carbon emitting industry projects (like coal fired thermal plants). For other energy intense sectors, in order to take into account, the impacts of climate-change and climate change related costs and regulations, TSKB has an in-house technical specialist team, focusing on the potential risks of climate change to the energy intense sectors and specifically for the projects that are at the appraisal stage at TSKB. Instead of high carbon emitting industry projects, TSKB prefers to invest on projects that creates positive value on climate such as renewable energy projects. TSKB has been financing renewable energy and energy-efficiency projects so far. This helps TSKB to gain a competitive advantage in the market and also trust of its stakeholders, including investors and several international financial institutions which creates a valuable platform to secure funds from these institutions. The share of sustainability themed loans is 68% of the portfolio as of 2017 year-end. For renewable energy finance, TSKB financed 245 projects varying from hydro to solar, wind, biomass and geothermal, with a 5,693 MW total installed capacity representing 15% of Turkey's total installed capacity. (In 2016, the total estimated installed capacity for the 211 projects financed stood at 5,332 MW) In Turkey, the total investment on projects funded between 2003 and 2017 was \$9.6B of which \$4.1B was committed by TSKB.	
Access to capital	Impacted	Rate of sustainability themed loans in loan portfolio as at end of 2017 is 68%. The Bank aims to maintain the same level in the future. To ensure this, the Bank will continue to receive climate related resources. Despite challenging domestic and international circumstances, \$160M climate change themed loan agreements were signed with IFC and EBRD in 2017. Also, TSKB issued its first "Subordinated Sustainable Bond" in 2017 worth \$300M.	
Assets	Impacted	TSKB subsidiaries operate in areas that are parallel to or complementing the Bank's main activities. One of TSKB's subsidiaries is ESCARUS Sustainability Consultancy. The objective of Escarus is to provide the best solutions designed for its clients thanks to its cooperation with advisors and companies having expertise on their fields. Escarus services, which are based on TSKB's long standing environment and sustainability approach, are SMS and EMS consultancy, greenbond issuance consultancy, reporting services based on CDP, integrated reporting, sustainability reporting and carbon emission reporting. Also Escarus provides services on energy efficiency and resource efficiency consultancy. In 2017, TSKB provided 26 consultancy service through its subsidiary Escarus, that has a paid-in capital of \$300K.	
Liabilities	Impacted	In the scope of climate change mitigation, TSKB supports its customers by offering sustainable products and services that provide low carbon and high efficient solutions. Renewable energy, energy efficiency and resource efficiency finance thematic loans are constituted as sustainability products. TSKB signs new funding agreements with development finance institutions to strengthen its sustainable funding base which are European Investment Bank, German Development Bank, World Bank, French Development Agency and Council of Europe Development Bank. Despite challenging domestic and international circumstances, \$160M climate change themed loan agreements were signed with IFC and EBRD in 2017. Also, TSKB issued its first "Subordinated Sustainable Bond" in 2017 worth \$300M. Energy and resource efficiency projects represented 6% of TSKB's loan portfolio as of 2017 year-end.	
Other	Please select		
1			

C3.1

(C3.1) Are climate-related issues integrated into your business strategy? Yes

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform your business strategy? No, but we anticipate doing so in the next two years

C3.1c

(C3.1c) Explain how climate-related issues are integrated into your business objectives and strategy.

i- Having created its own Management System in 2005 and published first Environmental Policy, TSKB has started environmental & social topics' integration into its business processes more than 10 years ago. In following years, the policy was revised in order to meet the needs and expectations of the Bank, finally the current Sustainability Policy was approved in 2015 by the Board. The Policy and strategy are set by Sustainability Committee (SC), having 2 Board members and 2 Executive Vice Presidents. Sustainability & finance, discussions regarding stakeholder analyses, the brand value, sector assessments, actual developments in fields of sustainability & finance, discussions regarding climate change, regulatory environment, the Bank's portfolio's exposure to climate change related risks & opportunities, measurement of the Bank's internal impacts & carbon footprint calculated each year. SC then provides its recommendations regarding sustainability Sub-Committee (SSC) is responsible for conducting the activities sustainability strategy requires on behalf of SC. 4 working groups on "ISO 14001 & ISO 14064 Management System Standards", "Reporting", "Stakeholder Communication" & "Sustainability Indices" perform detailed studies & provide feedback on their assigned topics to the SSC. Moreover, TSKB sets the goal of attending COP events annually & playing an active role in climate change related NGOs, primarily in local partners of WBCSD, UNGC, CDP and also UNEP FI. The information & impressions gathered are provided to SC, to be considered in TSKB's sustainability strategy discussions.

ii- Customers of TSKB are faced with climate related risks & opportunities. TSKB supports its customers by offering sustainable products & services that provide low carbon & high efficient solutions. Renewable energy, energy efficiency & resource efficiency finance thematic loans are constituted as sustainability products.

iii- The share of sustainability themed loans is 68% of the portfolio as of 2017 year-end. For renewable energy finance, TSKB financed 245 projects varying from hydro to solar, wind, biomass and geothermal, with a 5693 MW total installed capacity representing 15% of Turkey's total installed capacity. The total investment of projects funded between 2003 &2017 was \$9.6B of which \$4.1B was committed by TSKB. As of 2017 year end, the Bank extended a funding of approximately \$900M for 131 projects on energy & raw material efficiency.

TSKB issued its first Green/Sustainable Bond in in Turkey & CEEMEA in 2016. In line with the targets of SC, TSKB has set an example in the industry in tackling climate change with this new product. The bond has a size of \$300M & a tenor of 5 years. The framework of the Bond has been designed to fund climate change mitigation, adaptation & sustainable infrastructure projects. During the development phase, an internationally recognized independent sustainability consultant, Sustainalytics, provided a second party opinion on the bond framework. It includes the assessment of the framework's alignment with the transparency and reporting requirements of the Green Bond Principles (GBPs). The framework has followed the four key pillars of the GBPs that are, use of proceeds, eligible investment selection process, management of proceeds and reporting; it was fully aligned with the GBPs. The Bond was oversubscribed by 13 times & received the largest ever orderbook for a RegS only transaction out of Turkey. TSKB has been awarded for the SRI Bond of the Year' by the IFR, Thomson Reuters Awards 2016 & EMEA Green/SRI Bond Deal of the Year in the CEEMEA region by the Global Capital Awards. In 2017, TSKB has published the Impact Report of the Bond which contains the information about the projects financed by the Bond, the CO2 emissions & the KPI's.

In the following year, TSKB issued its "Subordinated Sustainable Bond". The issuance totaling \$300M on a 10-year maturity, was 4 times

oversubscribed by international investors. Such demand was highly welcome as an indicator of the confidence in Turkey's economy as well as the Bank.

As part of its support to Turkey's transition to low carbon economy, TSKB has set targets of financing solar power plant of at least 50 MW, a wind power plant of 150 MW, a geothermal power plant of 130 MW and a project on biogas/ biomass power of 15 MW capacity by the end of 2018. TSKB extended new financing to a wind power plant of 130 MW, a geothermal power plant of 170 MW & a project on biogas/biomass power of 26 MW in 2017. TSKB plans to sign 15 new loan agreements on energy and/or resource efficiency projects in 2017 – 2018 period. In 2017, loan agreements were signed for a total of 9 projects comprising of 3 energy efficiency projects and 6 resource efficiency projects. TSKB has implemented its targets for 2015-2016 period successfully. By the end of 2018, TSKB will again achieve its targets and be one of the most effective players in the area of energy and RE with thematic funds it provides from supranational institutions.

iv- One of the tools utilized in assessing the asset level (external) risks &opportunities, is TSKB's own environmental & social management approach & risk assessment tool (ERET) for the projects in its portfolio; applied regardless of scope, size and loan amount of investment projects. TSKB's environmental methodology is above and beyond the Turkish official requirements.

v- Company level (internal) risks and opportunities are led by ISO Working Group and audited with ISO14001 & ISO14064. TSKB had successfully recertified its ISO 14001 certificate according to the revised standard in 2015 for the first time in Turkey. TSKB measures its carbon footprint stemming from its operations annually since 2006 and offsets it by purchasing voluntary Gold Standard Carbon Certificate since 2009. TSKB also uses green energy in all its service buildings since 2009. Reducing GHG emissions by 2.5% annually until the end of 2016 in comparison to 2012 levels is another target of TSKB. It is achieved and overreached by 7% as of 2016. TSKB has set a new target of reducing its average GHG emissions at least 10% below of the average consumption value of the last 5 years till the end of 2021. The emissions stood at 902 tons as of the end of 2017, which is 3% below the average of the last 5 years. Besides, TSKB consumes 32% less electricity, 44% less natural gas, 45% less paper and 50% less paper today in comparison to 2005.

vi- TSKB has been evaluated by national & international indexes that measure the performances of companies' regarding their financial as well as the environmental, social & corporate governance aspects. TSKB is included in the BIST Corporate Governance Index since 2009 & BIST Sustainability Index since 2015. TSKB was selected for FTSE4GOOD Emerging Markets Index in 2016.

C3.1g

The Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) published its recommendations in 2017 for the voluntary disclosure of climate-related risk and opportunities by financial institutions and other entities. As put forward by prominent scientific research institutions, finance world and investors are at the very start of the journey of understanding, implementing, and reporting on climate-related financial risks. TSKB shares the viewpoint that we are all sailing in "uncharted waters", therefore a robust baseline assessment and capacity building should be the first steps of all financial institutions regardless of the economy they operate in.

In the next two years, TSKB will envisage implementing a robust capacity-building program, which will enable TSKB staff to conduct more advanced stress tests on the loan portfolios against a range of climate, energy and development scenarios. Considering the multifaceted nature and scale of the climate change problem, TSKB aims to assess various sets of physical and transitional risks and cascading impacts on Turkish economy and sectors.

TSKB is very well aware of the fact that slow and rapid onset extreme events with significant adverse impacts on economies already taking place all over the world. The Bank acknowledges that mitigating short-term risks associated with unavoidable climate change require sophisticated tools and skills other than scenario-based assessments which are used for assessing longer-term time horizons. TSKB will use the next two years to determine such short-term risks and draft building blocks of its strategy to adequately address them. The bank already uses in-house tools such as its Environmental and Social Risk Assessment Tool (ERET) and would like to expand its capabilities to address the needs associated with climate-related risk assessment.

TSKB acknowledges the fact that climate change already poses serious financial risks at all levels and future profile of related risks depend on the complex evolution of our political, economic and social systems. TSKB believes that climate-related financial disclosures should become an industry norm for financial institutions to evaluate and manage systemic risks better. The Bank not only seeks ways on how to best understand, manage and mitigate climate-related risk in its loan portfolios and credit lines but also develop Turkey specific capacity by building on its vast experience in low carbon and sustainable banking area. TSKB thinks that numerous opportunities are emerging with regards to supporting actions that its clients may take in response to climate-related risks and intends to develop services and products that will fulfill their needs.

TSKB closely follows the outputs of UNEP Finance Initiative's program on assessing credit risk and opportunities in a rapidly changing climate to tailor-made its capacity building program. This program in the context of which, 16 banks piloting the TCFD Recommendations offer invaluable insights and best practices regarding above-mentioned emerging concepts. TSKB also utilizes the existing guidelines and technical notes to develop its internal skills and to tailor-made Turkey specific capacity building program.

C4. Targets and performance

C4.1

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

C4.1a

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

Target reference number Abs 1

Scope

Scope 1+2 (market-based) +3 (upstream)

% emissions in Scope 100

% reduction from base year

2

Base year 2016

Start year

2017

Base year emissions covered by target (metric tons CO2e) 928

Target year 2017

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

% achieved (emissions) 100

Target status

New

Please explain

The absolute target of TSKB is to reduce average GHG emissions of 2012-2016 by 10% until the end of 2021. The road map to achieve this target is to decrease the emissions by 2% each year compared to the base year-(2012-2016 average). Science Based Targets initiative (SBTI) has not yet fully developed how to properly assess financial institutions' Scope 3 emissions against a 2°C trajectory so the SBTI cannot currently verify the Bank'S targets (Scope 1, 2 and Scope 3) as fully aligned with the eligibility criteria. Because TSKB has submitted the attached commitment letter (please see in the attachments) to "Call to Action", SBTI will continue to recognize TSKB as a committed company on the Science Based Targets Initiative, CDP and "We Mean Business Coalition" websites. TSKB closely follows and assess the TCFD outputs, including best practises in finance sector which will help to set up a science based target in the next 2 years.

Target reference number

Abs 2

Scope Scope 1 +2 (market-based)

% emissions in Scope 100

% reduction from base year 100

Base year 2017

Start year 2017

Base year emissions covered by target (metric tons CO2e) 530

Target year 2017

Is this a science-based target?

No, but we anticipate setting one in the next 2 years

% achieved (emissions) 100

Target status

Underway

Please explain

TSKB measures its carbon footprint stemming from its operations annually since 2006 and offsets it by purchasing voluntary Gold Standard Carbon Certificate since 2009. In 2012, TSKB decided to verify greenhouse gas emissions for the organizational level by a third party. TSKB completed the audit on 7th September 2012. Since 2011, greenhouse gas emission of TSKB has been verified by a third party and since 2012, TSKB has been offsetting verified emissions by Gold Standard Carbon Credits annually. 2017 Scope 1 and Scope; 2 GHG

Target reference number

Abs 3

Scope Scope 3 (upstream)

% emissions in Scope

% reduction from base year 100

Base year 2017

Start year 2017

Base year emissions covered by target (metric tons CO2e) 398

Target year 2017

Is this a science-based target?

No, but we anticipate setting one in the next 2 years

% achieved (emissions) 100

Target status Underway

Please explain

TSKB measures its carbon footprint stemming from its operations annually since 2006 and offsets it by purchasing voluntary Gold Standard Carbon Certificate since 2009. In 2012, TSKB decided to verify greenhouse gas emissions for the organizational level by a third party. TSKB completed the audit on 7th September 2012. Since 2011, greenhouse gas emission of TSKB has been verified by a third party and since 2012, TSKB has been offsetting verified emissions by Gold Standard Carbon Credits annually. 2017 Scope-3 GHG emission of TSKB was off-set via Alize Keltepe Wind Power Plant which has verified Gold Standard Carbon Credits.

C4.2

(C4.2) Provide details of other key climate-related targets not already reported in question C4.1/a/b.

Target

Renewable energy consumption

KPI – Metric numerator %100 renewable energy usage

KPI - Metric denominator (intensity targets only)

Base year 2009

Start year 2009

Target year 2021

KPI in baseline year 53.26

KPI in target year 100

% achieved in reporting year

Target Status Underway

Please explain

Since July of 2009, TSKB has been consuming green electricity produced from renewable energy production plants and sourcing 100% electricity from the renewable energy company of Bereket Energy. The official document taken from Bereket Energy is attached in the Further section below. TSKB revise its 5-year Strategic Plan each year. Based on the strategic plans, TSKB will continue to use the green electricity until the end of 2021.

Part of emissions target

TSKB intends to use green-electricity in order to achieve zero-emission in Scope 2.

Is this target part of an overarching initiative?

Science-based targets initiative

Target Waste

KPI – Metric numerator

% recycling of waste paper

KPI - Metric denominator (intensity targets only)

Base year 2017

Start year 2017

Target year 2017

KPI in baseline year 100

KPI in target year 100

% achieved in reporting year 100

Target Status Underway

Please explain

In 2017, all waste paper was separately collected and sent to recycling facilities. TSKB will continue to send all paper consumed in its premises to recycling facilities and maintain the practice of 100% recycling of waste paper in the upcoming years.

Part of emissions target

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

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

100

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

	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation		
To be implemented*		
Implementation commenced*		
Implemented*	6	821
Not to be implemented		

C4.3b

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

Activity type

Low-carbon energy purchase

Description of activity Hydro

Estimated annual CO2e savings (metric tonnes CO2e) 635

Scope Scope 2 (market-based)

Voluntary/Mandatory Voluntary

Annual monetary savings (unit currency - as specified in CC0.4) 17000

Investment required (unit currency - as specified in CC0.4) 0

Payback period

<1 year

Estimated lifetime of the initiative Ongoing

Comment

Until the decision is changed by the top management, TSKB will continue to use the green electricity. In the past years, green electricity usage had been resulting to 0.015 USD/kwh annual monetary savings. Due to the market conditions in the reporting period, TSKB has no annual monetary saving from green electricity usage.

Activity type

Other, please specify (Behavioral change-Changes in operations)

Description of activity <Not Applicable>

Estimated annual CO2e savings (metric tonnes CO2e)

5

Scope

Scope 3

Voluntary/Mandatory Voluntary

Annual monetary savings (unit currency - as specified in CC0.4) 5000

Investment required (unit currency - as specified in CC0.4)

0

Payback period

<1 year

Estimated lifetime of the initiative Ongoing

Comment

Delivering reports in soft format and using both sides of paper while printing since 2010.

Activity type

Energy efficiency: Building services

Description of activity Lighting

Estimated annual CO2e savings (metric tonnes CO2e) 44

Scope 2 (market-based)

Voluntary/Mandatory Voluntary

Annual monetary savings (unit currency – as specified in CC0.4) 8000

Investment required (unit currency – as specified in CC0.4) 5000

Payback period

<1 year

Estimated lifetime of the initiative Ongoing

Comment

Integrating sensors to the lighting units since 2010.

Activity type

Fugitive emissions reductions

Description of activity Other, please specify (Maintenance program)

Estimated annual CO2e savings (metric tonnes CO2e) 106

Scope 1

Voluntary/Mandatory Voluntary

Annual monetary savings (unit currency – as specified in CC0.4) 2800

Investment required (unit currency – as specified in CC0.4) 4600

Payback period

<1 year

Estimated lifetime of the initiative Ongoing

Comment

Since 2012, refrigerants pipelines have been maintained periodically to prevent any leakage from the lines.

Activity type

Other, please specify (Changes in operations)

Description of activity <Not Applicable>

Estimated annual CO2e savings (metric tonnes CO2e)

1

Scope

Scope 3

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4) 0

Investment required (unit currency – as specified in CC0.4)

0

Payback period

<1 year

Estimated lifetime of the initiative Ongoing

Comment

Credit evaluation reports in digital format has been started to be delivered among managers with theirs track change format since 2012.

Activity type

Other, please specify (Transportation Emission reduction)

Description of activity

<Not Applicable>

Estimated annual CO2e savings (metric tonnes CO2e)

30

Scope 3

Voluntary/Mandatory Voluntary

Annual monetary savings (unit currency – as specified in CC0.4) 30000

Investment required (unit currency - as specified in CC0.4)

0

Payback period

<1 year

Estimated lifetime of the initiative

Ongoing

Comment

Since 2000, employees living on the Asian side of Istanbul, has been carried via water transportation rather than the highway for the Üsküdar-Kabataş line only. A ferry rented from a private company carries all the employees for this line which is a 4 km route. If these employees were carried on the highway the distance would be 10 km. Annually, the reduction in total km for personnel transportation (about 51000 km) provides 30 tons CO2e saving.

C4.3c

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

Method	Comment

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

TSKB supports its customers by offering sustainable products and services that provide low carbon and high efficient solutions. Renewable energy, energy efficiency (EE) and resource efficiency (RE) finance thematic loans are constituted as sustainability products. The share of sustainable finance loans have reached approximately 33% in renewable energy and approximately 6% for EE of the total loan portfolio as of 2017 year-end. Rate of sustainability themed loans in loan portfolio as at end of 2017 is 68%. By the end of 2017, TSKB funded renewable energy installed capacity has reached to 5693 MW and 245 projects, with a total investment amount of \$9.6B of which \$4.1B was committed by TSKB, between 2003 and 2017. These figures were 5332 MW, 211 projects, \$9B and \$3.4B respectively, by the end of 2016. As of 2017, TSKB allocated \$750M to 131 EE and RE projects. Annual GHG emissions in Turkey were reduced by 12M tons by financing these sustainable products including renewable energy, EE and RE investments. Moreover, TSKB issued its Green/Sustainable Bond which is the first issuance in Turkey and CEEMEA in 2016. TSKB has set an example in the industry in tackling climate change with this new product. The bond has a size of \$300M and a tenor of 5 years. In 2017, TSKB issued its first subordinated bond, which was also a Subordinated Sustainable Bond and was thus crowned as the first of its kind in the world. The bond issuance worth USD 300 million was four times oversubscribed through investor diversification, reflecting the long-term confidence investors had in the Bank's issuance. In order to report renewable energy funding results based on carbon dioxide reduction and performance indicators, TSKB calculated Turkey's emission factor for its own internal use. Starting from 2009, this emission factor is required to calculate and report carbon reductions in renewable energy and EE investments. TSKB discloses publicly avoided GHG emissions of investments that are financed under its funds periodically and public on its website. To conclude, with its successful sustainable products and services, TSKB has been awarded by international platforms such as Euromoney, Financial Times, IFC, CDP, Global Capital and IFR.

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 Other, please specify (Finance Sector Products(Climate change))

% revenue from low carbon product(s) in the reporting year 13.5

Comment

C5.1

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

Scope 1

Base year start January 1 2012

Base year end December 31 2016

Base year emissions (metric tons CO2e) 530

Comment

Scope 2 (location-based)

Base year start January 1 2012

Base year end December 31 2016

Base year emissions (metric tons CO2e) 0

Comment

Scope 2 (market-based)

Base year start January 1 2012

Base year end December 31 2016

Base year emissions (metric tons CO2e)

0

Comment

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.

Defra Voluntary 2017 Reporting Guidelines

IPCC Guidelines for National Greenhouse Gas Inventories, 2006

ISO 14064-1

US EPA Climate Leaders: Direct HFC and PFC Emissions from Use of Refrigeration and Air Conditioning Equipment Other, please specify (IPCC Fifth Assessment Report)

C5.2a

(C5.2a) Provide details of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.

IPCC Fifth Assessment Report (AR5 - 100 year)

C6. Emissions data

C6.1

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

Row 1

Gross global Scope 1 emissions (metric tons CO2e) 416

End-year of reporting period <Not Applicable>

Comment

C6.2

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

Row 1

Scope 2, location-based We are not 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?

Row 1

Scope 2, location-based <Not Applicable>

Scope 2, market-based (if applicable) 0

End-year of reporting period <Not Applicable>

Comment

TSKB supplies electricity from renewable energy power plants of Bereket Energy. Therefore, TSKB does not have any indirect emissions to report under Scope-2 since July 2009. The official document taken from Bereket Energy is attached in the Further section below.

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? Yes

C6.4a

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

Source

Water stations (HFC-134A) and refrigerators (HFC-600A)

Relevance of Scope 1 emissions from this source

Emissions are relevant and calculated, but not disclosed

Relevance of location-based Scope 2 emissions from this source

Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)

Emissions are not relevant

Explain why the source is excluded

Since emissions from fugitive gas of HFC-134A used in water stations and HFC-600A used in refrigerators are less than 1 % of the total GHG emissions of TSKB, it has been decided that the HFC-134A and HFC-600A contributions to total GHG emissions have been considered as an additional uncertainty of Scope-1 (0.4023 %)

Source

TSKB Sariyer Forest

Relevance of Scope 1 emissions from this source

Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source

No emissions from this source

Relevance of market-based Scope 2 emissions from this source (if applicable) Emissions are not relevant

Explain why the source is excluded

TSKB has a forest in Sarıyer. It has not been included in our disclosure. It is believed that the future addition of this sink does not significantly change the TSKB's carbon footprint.

C6.5

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

Purchased goods and services

Evaluation status Relevant, calculated

Metric tonnes CO2e

6

Emissions calculation methodology

EPA (Please see the "2017 TSKB Greenhouse Gas Inventory" report for all details about the methodology).

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

Explanation

Emission due to paper consumption has been determined according to the methodology given in EPA.

Capital goods

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

0

Emissions calculation methodology

There is no specific methodology used for this source (Please see the "2017 TSKB Greenhouse Gas Inventory" report for all details about the methodology).

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

100

Explanation

This source is not one of the TSKB emission sources in Scope-3. Therefore, it equals to zero.

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

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

0

Emissions calculation methodology

There is no specific methodology used for this source (Please see the "2017 TSKB Greenhouse Gas Inventory" report for all details about the methodology).

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

100

Explanation

This source is not one of the TSKB emission sources in Scope-3. Therefore, it equals to zero.

Upstream transportation and distribution

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

0

Emissions calculation methodology

There is no specific methodology used for this source (Please see the "2017 TSKB Greenhouse Gas Inventory" report for all details about the methodology).

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

100

Explanation

This source is not one of the TSKB emission sources in Scope-3. Therefore, it equals to zero.

Waste generated in operations

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

0

Emissions calculation methodology

There is no specific methodology used for this source (Please see the "2017 TSKB Greenhouse Gas Inventory" report for all details about the methodology).

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

Explanation

Business travel

Evaluation status Relevant, calculated

Metric tonnes CO2e

370

Emissions calculation methodology

IPCC 2006, Defra, GHG Protocol (Please see the "2017 TSKB Greenhouse Gas Inventory" report for all details about the methodology).

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

100

Explanation

GHG Scope-3 emissions due to taxi usage, bus and air travels have been analyzed as emissions from business travels. Defra has been the reference for the determination of emissions from air travels. Based on the methodology of IPPC and GHG Protocol, emissions from business travels have been determined.

Employee commuting

Evaluation status

Relevant, calculated

Metric tonnes CO2e

110

Emissions calculation methodology

IPCC 2006, Defra, GHG Protocol, EPA (Please see the "2017 TSKB Greenhouse Gas Inventory" report for all details about the methodology)

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

100

Explanation

GHG Scope-3 emissions from personnel service busses and personnel ferry travelling from Üsküdar to Kabataş have been categorized as emissions of purchased goods and services. IPCC, Defra and GHG protocol has been used for the calculation of emissions from employee commuting.

Upstream leased assets

Evaluation status

Not relevant, calculated

Metric tonnes CO2e 0

Emissions calculation methodology

There is no specific methodology used for this source (Please see the "2017 TSKB Greenhouse Gas Inventory" report for all details about the methodology).

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

100

Explanation

This source is not one of the TSKB emission sources in Scope-3. Therefore, it equals to zero.

Downstream transportation and distribution

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

0

Emissions calculation methodology

There is no specific methodology used for this source (Please see the "2017 TSKB Greenhouse Gas Inventory" report for all details about the methodology).

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

Explanation

Processing of sold products

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

0

Emissions calculation methodology

There is no specific methodology used for this source (Please see the "2017 TSKB Greenhouse Gas Inventory" report for all details about the methodology).

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

100

Explanation

This source is not one of the TSKB emission sources in Scope-3. Therefore, it equals to zero.

Use of sold products

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

0

Emissions calculation methodology

There is no specific methodology used for this source (Please see the "2017 TSKB Greenhouse Gas Inventory" report for all details about the methodology).

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

100

Explanation

This source is not one of the TSKB emission sources in Scope-3. Therefore, it equals to zero.

End of life treatment of sold products

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

0

Emissions calculation methodology

There is no specific methodology used for this source (Please see the "2017 TSKB Greenhouse Gas Inventory" report for all details about the methodology).

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

100

Explanation

This source is not one of the TSKB emission sources in Scope-3. Therefore, it equals to zero.

Downstream leased assets

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

0

Emissions calculation methodology

There is no specific methodology used for this source (Please see the "2017 TSKB Greenhouse Gas Inventory" report for all details about the methodology).

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

TUC

Explanation

Franchises

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

0

Emissions calculation methodology

There is no specific methodology used for this source (Please see the "2017 TSKB Greenhouse Gas Inventory" report for all details about the methodology).

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

100

Explanation

This source is not one of the TSKB emission sources in Scope-3. Therefore, it equals to zero.

Investments

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

0

Emissions calculation methodology

There is no specific methodology used for this source (Please see the "2017 TSKB Greenhouse Gas Inventory" report for all details about the methodology).

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

100

Explanation

This source is not one of the TSKB emission sources in Scope-3. Therefore, it equals to zero.

Other (upstream)

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

0

Emissions calculation methodology

There is no specific methodology used for this source (Please see the "2017 TSKB Greenhouse Gas Inventory" report for all details about the methodology).

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

100

Explanation

This source is not one of the TSKB emission sources in Scope-3. Therefore, it equals to zero.

Other (downstream)

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

0

Emissions calculation methodology

There is no specific methodology used for this source (Please see the "2017 TSKB Greenhouse Gas Inventory" report for all details about the methodology).

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

Explanation

(C6.7) Are carbon dioxide emissions from biologically sequestered 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 0.0000014606

Metric numerator (Gross global combined Scope 1 and 2 emissions)

416

Metric denominator unit total revenue

Metric denominator: Unit total 284808000

Scope 2 figure used Market-based

% change from previous year 19

Direction of change Decreased

Reason for change

Compared to 2016, TSKB GHG emissions in Scope1 and Scope 2 increased from 391 tons to 416 tons CO2e while TSKB total revenue has been carried our around 284,808,000 USD in 2017. Due to %31 increase in total revenue, our intensity rate has been decreased by %19.

Intensity figure

1.152

Metric numerator (Gross global combined Scope 1 and 2 emissions) 416

Metric denominator full time equivalent (FTE) employee

Metric denominator: Unit total 361

Scope 2 figure used Market-based

% change from previous year

1

Direction of change Decreased

Reason for change

Compared to 2016, TSKB GHG emissions in Scope1 and Scope 2 increased from 391 tons to 416 tons CO2e while TSKB full time equivalent employee was increased by 7%. Main reason for %1 decrease is arising from the increase in number of employee in the year 2017. In other words, GHG emission increase rate in Scope1 and Scope2 is lower than the employee growth rate.

Intensity figure

0.0248

Metric numerator (Gross global combined Scope 1 and 2 emissions)

416

Metric denominator

square meter

Metric denominator: Unit total 16784

Scope 2 figure used Market-based

% change from previous year

9

Direction of change Increased

Reason for change

The main reason behind this decrease is the squaremeter change in TSKB buildings in the year 2017. m2 use of TSKB decreased from 17236 to 16784. In addition, compared to 2016, TSKB GHG emissions in Scope1 and Scope 2 increased from 391 tons to 416 tons CO2e. Hence, the combination effect of increase in GHG emissions and decrease in m2 usage resulted to an unestimated rise in intensity.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization have greenhouse gas emissions other than carbon dioxide? 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 203 IPCC Fifth Assessment Report (AR5 – 100 year)		IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	1	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	1	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	211	Other, please specify (ASHRAE Standard 34-for refrigerantblends)

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	416

C7.3

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

C7.3c

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

Activity	Scope 1 emissions (metric tons CO2e)
Natural gas boiler	136
Transportation	69
Cooling units	211
Generators	0

C7.5

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

С	, ,		based (metric tons	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Т	urkey	0	0	1116

C7.6

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

C7.6c

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

Activity	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Electricity (green)	0	0

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)		Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	TSKB uses green-electricity in its buildings. Thus, there is no emission released for electricity consumption activity.
Other emissions reduction activities		<not Applicable></not 		
Divestment	0	No change	0	Not relevant
Acquisitions	0	No change	0	Not relevant
Mergers	0	No change	0	Not relevant
Change in output	0	No change	0	Not relevant
Change in methodology	0	No change	0	Not relevant
Change in boundary	0	No change	0	Not relevant
Change in physical operating conditions	25	Increased	6.4	Compare to previous year, TSKB Scope1 and Scope 2 GHG emissions due to change in physical conditions increased by around 6.4% because of the following reasons; 1- Since the number of FT employee increased compare to 2016, the cooling gas consumption increased from 9 kg to 22 kg. This led to 32.5 ton CO2e emission increase in Scope 1 emissions of TSKB within the year of 2017, comparing to 2016. 2- As a result of increase in FT employee x metersquare usage (TSKB), GHG emissions based on natural gas consumption were decreased around %2 (2.5 tons) year-over-year. 3-On the other side, depending on the banking activities in the operating boundaries, the emissions from business travels by TSKB owned cars were decreased around %7 comparing to previous year. As a total of 3 issues mentioned above, Scope 1 and Scope 2 emissions have been increased 25 tons CO2e which correspond to around %6.4 more comparing to 2016.
Unidentified		<not Applicable></not 		
Other		<not Applicable></not 		

C7.9b

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

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy? More than 95% but less than or equal to 100%

C8.2

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

	Indicate whether your organization undertakes this energy-related activity
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	Yes
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 MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)		1192	1192
Consumption of purchased or acquired electricity	<not applicable=""></not>	1116		1116
Consumption of purchased or acquired heat	<not applicable=""></not>		671	671
Consumption of purchased or acquired steam	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Consumption of purchased or acquired cooling	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Consumption of self-generated non-fuel renewable energy	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Total energy consumption	<not applicable=""></not>	1116	1863	2979

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 steam	Yes
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) Jet Kerosene	
Heating value LHV (lower heating value)	
Total fuel MWh consumed by the organization 443	
MWh fuel consumed for the self-generation of electricity <not applicable=""></not>	
MWh fuel consumed for self-generation of heat	
MWh fuel consumed for self-generation of steam	
MWh fuel consumed for self-generation of cooling	

<Not Applicable>

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

Fuels (excluding feedstocks) Diesel

Heating value LHV (lower heating value)

Total fuel MWh consumed by the organization 703

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

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

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

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

Fuels (excluding feedstocks) Liquefied Petroleum Gas (LPG)

Heating value LHV (lower heating value)

Total fuel MWh consumed by the organization

44

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

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

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

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

Fuels (excluding feedstocks) Petrol

Heating value LHV (lower heating value)

Total fuel MWh consumed by the organization

1

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

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

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

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

C8.2d

(C8.2d) List the average emission factors of the fuels reported in C8.2c.

Diesel

Emission factor

0.00272

Unit

metric tons CO2e per liter

Emission factor source

IPCC Guidelines for National Greenhouse Gas Inventories, 2006

Comment

http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_3_Ch3_Mobile_Combustion.pdf - http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_1_Ch1_Introduction.pdf

Jet Kerosene

Emission factor

0.00025

Unit

Please select

Emission factor source

Defra Voluntary 2017 Reporting Guidelines

Comment

unit: ton of CO2e per passenger kilometer (Reference: https://www.carbonfootprint.com/docs/2016 defra emission factors v10.xlsx)

Liquefied Petroleum Gas (LPG)

Emission factor 0.00165

Unit

metric tons CO2e per liter

Emission factor source

IPCC Guidelines for National Greenhouse Gas Inventories, 2006

Comment

http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_3_Ch3_Mobile_Combustion.pdf - http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_1_Ch1_Introduction.pdf

Petrol

Emission factor

Unit Please select

Emission factor source

Comment

C8.2f

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

Basis for applying a low-carbon emission factor

Contract with suppliers or utilities (e.g. green tariff), supported by energy attribute certificates

Low-carbon technology type

Hydropower

MWh consumed associated with low-carbon electricity, heat, steam or cooling 1116

Emission factor (in units of metric tons CO2e per MWh)

0.569

Comment

TSKB has been sourcing green electricity (market-based) from Bereket Energy. The renewable energy portfolio of Bereket consists generally of hydroelectric resources which are Bereket 1-2, Dalaman 1-2-3-4-5, Feslek, Gökyar, Mentaş, Koyulhisar, Toros, Göktaş Hydroelectric Power Plants. Since July 2009, TSKB has been using green electricity from these hydroelectric power plants of Bereket Energy. Since July of 2009, TSKB has been using green electricity (market-based) from renewable energy production plants of Bereket Energy. By this way, TSKB reduced 635 tonnes of CO2e reduction in the greenhouse gas emissions of 2017.

C9. Additional metrics

C9.1

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

Description Waste

Metric value 10530

Metric numerator tons

Metric denominator (intensity metric only)

% change from previous year 18.5

Direction of change Decreased

Please explain

Recyled waste (including glass, plastics, paper) has been decreased around %18.5 in 2017 year-over-year.

Description

Energy use

Metric value 0.18

Metric numerator kwh

Metric denominator (intensity metric only) m^{2*}capita

% change from previous year 14.2

Direction of change Increased

Please explain

Due to the increase in electricity consumption in 2017, intensity figure defined above has risen around %14.2 comparing to previous year.

Description

Energy use

Metric value

0.01

Metric numerator m3

mo

Metric denominator (intensity metric only) m^{2*}capita

% change from previous year

5

Direction of change

Decreased

Please explain

As a result of increase in FT employee x metersquare usage (TSKB), natural gas consumption were decreased around %5 based on the intensity figure given above.

Description

Other, please specify (Water Consumption)

Metric value

18

Metric numerator

m3

Metric denominator (intensity metric only) capita

% change from previous year 4.8

Direction of change Decreased

Please explain

Total water consumption per capita of TSKB in 2017 was decreased around %4.8 comparing to previous year.

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 and/or Scope 2 emissions and attach the relevant statements.

Scope 1

Verification or assurance cycle in place Annual process

Annual process

Status in the current reporting year Complete

Type of verification or assurance Reasonable assurance

Attach the statement Scope 1&2 Emissions Verification.pdf

Page/ section reference Page 1/3

Relevant standard ISO14064-3

Proportion of reported emissions verified (%) 100

Scope 2 location-based

Verification or assurance cycle in place Annual process

Status in the current reporting year Complete

Type of verification or assurance Reasonable assurance

Attach the statement Scope 1&2 Emissions Verification.pdf

Page/ section reference Page 1/3

Relevant standard ISO14064-3

Proportion of reported emissions verified (%) 100

Scope 2 market-based

Verification or assurance cycle in place Annual process

Status in the current reporting year Complete

Type of verification or assurance Please select

Attach the statement Scope 1&2 Emissions Verification.pdf

Page/ section reference Page 1/3

Relevant standard ISO14064-3

Proportion of reported emissions verified (%) 100

C10.1b

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

Scope

Scope 3- all relevant categories

Verification or assurance cycle in place Annual process

Status in the current reporting year Complete

Attach the statement Scope 3 Emissions Verification.pdf

Page/section reference Page 1/3

Relevant standard ISO14064-3

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
C4. Targets and performance	Year on year change in emissions (Scope 1 and 2)	Reasonable Assurance by third parties	GHG emission breakdowns of TSKB has been verified by BSI for the year 2017. Please see the attacments, in which relevant statements can be found. Scope 1&2 Emissions Verification.pdf
C4. Targets and performance	Year on year change in emissions (Scope 3)	Limited Assurance by third parties	GHG emission breakdowns of TSKB has been verified by BSI for the year 2017. Please see the attacment, in which relevant statements can be found.
C5. Emissions performance	Other, please specify (Emission methodology)	Reasonable Assurance by third parties	GHG emission calculation metholodogy of TSKB has been verified by BSI for each source since 2011. Please see the attacments, in which relevant statements can be found. TSKB GHG Inventory Report.pdf TSKB_VerificationReport_2018.pdf Scope 3 Emissions Verification.pdf Scope 1&2 Emissions Verification.pdf
C7. Emissions breakdown	Year on year change in emissions (Scope 1)	Reasonable Assurance by third parties	GHG emission breakdowns of TSKB has been verified by BSI for the year 2017. Please see the attacments, in which relevant statements can be found. Scope 1&2 Emissions Verification.pdf
C7. Emissions breakdown	Year on year change in emissions (Scope 2)	Reasonable Assurance by third parties	GHG emission breakdowns of TSKB has been verified by BSI for the year 2017. Please see the attacment, in which relevant statements can be found. Scope 1&2 Emissions Verification.pdf
C7. Emissions breakdown	Year on year change in emissions (Scope 3)	Limited Assurance by third parties	GHG emission breakdowns of TSKB has been verified by BSI for the year 2017. Please see the attacments, in which relevant statements can be found. Scope 3 Emissions Verification.pdf

Disclosure module verification	Data verified	Verification standard	Please explain	
relates to				
C9. Additional metrics	Other, please specify (Water & Recycled waste data)	Limited Assurance by third parties	Water and recycled waste datas were assured by Ernst and Young within the scope of TSKB 2017 Integrated Report, which is attached below. TSKB_Integrated Report_2017_ING_web_uy.pdf	
C9. Additional metrics	Other, please specify (Electricity & Natural Gas Consumptions)	Reasonable Assurance by third parties	Electricity and natural gas consumptions of TSKB has been verified by BSI for the year 2017. TSKB_VerificationReport_2018.pdf	
C11. Carbon pricing	Other, please specify (Carbon offsetting)	In the reporting period, TSKB has offset Scope-1, Scope 2 and Scope 3 emissions (902 ton CO2e) by Gold Standard Carbon Credit created by Alize- Keltepe Wind Power Plant. (20.7 MW-Vintage 2009-902# VER credits)	In the reporting period, TSKB has offset Scope-1, Scope 2 and Scope 3 emissions (902 ton CO2e) by Gold Standard Carbon Credit created by Alize-Keltepe Wind Power Plant. (20.7 MW-Vintage 2009-902# VER credits). Relevant certificates and documents can be found in the attachment. GSVer-Offset MARKIT registry screenshot.bmp TSKB Carbon Offset Certificate-2017.pdf	
C8. Energy	Renewable energy products	TSKB supplies electricity from renewable energy power plants of Bereket Energy. Therefore, TSKB does not have any indirect emissions to report under Scope-2 since July 2009. The official document taken from Bereket Energy is attached in the attachment below.	TSKB supplies electricity from renewable energy power plants of Bereket Energy. Therefore, TSKB does not have any indirect emissions to report under Scope-2 since July 2009. The official document taken from Bereket Energy is attached in the attachment below. TSKB-Green Electricity Usage Letter.pdf	
C0. Introduction	Other, please specify (Financial Data)	As of end-2017, the Bank's registered capital stood at \$1,200M while its paid-in capital was \$640M.	Relevant data is assured by Ernst and Young within the context of TSKB 2017 Annual Report. TSKB Annual Report 2017.pdf	
C2. Risks and opportunities	Other, please specify (Financial Data)	The total amount of funding agreements on a specific theme that are signed during 2017 stood at \$160M. TSKB also issued Basel 3 compliant Sustainable Tier 2 Bond worth of \$300M.	Relevant data is assured by Ernst and Young within the context of TSKB 2017 Integrated Report and TSKB's 2018 Allocation and Impact Report which can be found in the attachment. TSKB Integrated Report 2017.pdf TSKB 2018 Allocation and Impact Report.pdf	
C2. Risks and opportunities	Other, please specify (Financial Data)	TSKB's non-performing loan (NPL) ratio is 0.3% whereas the banking sector average in Turkey is around 3%.	Relevant data is assured by Ernst and Young within the context of TSKB 2017 Annual Report. TSKB Annual Report 2017.pdf	
C2. Risks and opportunities	Renewable energy products	Renewable energy loans attained a weight of around 30% within the total loan portfolio of TSKB, through an installed capacity of 5693 MW.	Relevant data is assured by Ernst and Young within the context of TSKB 2017 Integrated Report. TSKB Integrated Report 2017.pdf	
C2. Risks and opportunities	Emissions reduction activities	Up to now, 53 resource efficiency projects have been financed by TSKB. The engineering team of TSKB assesses all projects specifically and calculates gains from resource savings. As of 2017, 1,208,000 m3 of water savings have been realized annually by financing resource efficiency investments from various industries like cement, steel, tourism, chemical, automotive, plastics, textile etc.	Relevant data is assured by Ernst and Young within the context of TSKB 2017 Integrated Report. TSKB Integrated Report 2017.pdf	
C2. Risks and opportunities	Other, please specify (Rate of Sustainable themed loans)	Rate of sustainability themed loans in loan portfolio as at end of 2017 is 68%.	Relevant data is assured by Ernst and Young within the context of TSKB 2017 Integrated Report. TSKB Integrated Report 2017.pdf	
C2. Risks and opportunities	Emissions reduction activities	TSKB contributes to low-carbon and environmentally friendly economic growth and development by annual CO2e emission reduction by 12 million tons.	Relevant data is assured by Ernst and Young within the context of TSKB 2017 Integrated Report. TSKB Integrated Report 2017.pdf	
C3. Business strategy	Renewable energy products	The share of sustainability themed loans is 68% of the portfolio as of 2017 year- end. For renewable energy finance, TSKB financed 245 projects varying from hydro to solar, wind, biomass and geothermal, with a 5693 MW total installed capacity representing 15% of Turkey's total installed capacity.	Relevant data is assured by Ernst and Young within the context of TSKB 2017 Integrated Report. TSKB Integrated Report 2017.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, but we anticipate being regulated in the next three years

(C11.1d) What is your strategy for complying with the systems in which you participate or anticipate participating?

Even though it is not yet ratified by the parliament, Republic of Turkey signed the Paris Climate Change Agreement on 22nd of April 2016. Parallel to the content of the Paris Agreement, emission trading systems and carbon tax issues have been widely in discussion in the last years by the Ministry of Environment and Urbanization and other relevant authorities in Turkey. Thus, next step is expected to be a regulation concerning the cap and trade system and/or taxation for the carbon. Companies in energy-intense sectors will have to invest in emission reduction or energy-efficiency practices to comply with the regulations.

Also, a potential cap and trade market may increase the investment appetite of renewable energy investors. The both cases are expected to increase the demand for TSKB's products for financing of these potential investments. This situation is considered as asset level opportunity. The share of sustainability themed loans is 68% of the portfolio as of 2017 year-end. As of 2017, TSKB allocated \$750M to 131 EE & RE projects. For renewable energy finance, TSKB financed 245 projects varying from hydro to solar, wind, biomass and geothermal, with a 5693 MW total installed capacity representing 15% of Turkey's total installed capacity. The total investment of projects funded between 2003 - 2017 was \$9.6B of which \$4.1B was committed by TSKB.

Customers of TSKB are faced with climate related risks & opportunities driven by cap and trade schemes, international agreements, renewable energy regulation, change in temperature extremes and change in precipitation extremes and droughts. TSKB supports its customers by offering sustainable products and services that provide low carbon and high efficient solutions. Renewable energy, energy efficiency (EE) and resource efficiency (RE) finance thematic loans are constituted as sustainability products.

C11.2

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

C11.2a

(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.

Credit origination or credit purchase Credit purchase

Project type

Wind

Project identification

In the reporting period, TSKB has offset Scope-1, Scope 2 and Scope 3 emissions (902 ton CO2e) by Gold Standard Carbon Credit created by Alize-Keltepe Wind Power Plant. (20.7 MW-Vintage 2009-902# VER credits)

Verified to which standard

Gold Standard

Number of credits (metric tonnes CO2e)

902

Number of credits (metric tonnes CO2e): Risk adjusted volume

902

Credits cancelled Yes

Purpose, e.g. compliance Voluntary Offsetting

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

C11.3a

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

Objective for implementing an internal carbon price

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

GHG Scope

Scope 1 Scope 2 Scope 3

Application

Based on its internal impacts (consumption of natural resources), TSKB calculates its carbon emissions each year. These emissions are verified according to ISO 14064 by an accredited 3rd party consultant since 2012 and offset by purchasing voluntary Gold Standard Certificate annually, since 2009.

Actual price(s) used (Currency /metric ton)

2.61

Variance of price(s) used

Differentiated pricing methodology is used while gathering offers from different members in Voluntary Emission Market in which many renewable energy based power plants has Gold Standards verified carbon certificates. Off-set price range is around 2-5 USD/ton CO2e in Voluntary Emission Market in Turkey.

Type of internal carbon price

Offsets

Impact & implication

When renewable energy projects financed by TSKB include plans to obtain voluntary VCS or Gold Standard Certificate to sell in the voluntary carbon market, this revenue is considered in the cash flow. In the last five years, TSKB did not finance any greenfield or significant capacity increase investments of high carbon emitting industry projects. For this reason, there has not been a necessity to consider an internal shadow price on carbon in the cash flow studies yet. It is also anticipated that regulations will be set regarding CO2 taxation and/or ETS mechanism in the near future in Turkey. TSKB pursues carbon related activities closely on government and private sector sides. Also, TSKB has capability to reflect carbon price to the investment project assessment procedure immediately, when relevant regulations are developed and implemented. In addition, TSKB's GHG emissions are verified according to ISO 14064 by an accredited 3rd party consultant since 2012 and offset by purchasing voluntary Gold Standard Certificate annually, since 2009.

C12. Engagement

C12.1

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

Yes, our customers

C12.1a

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

Type of engagement Compliance & onboarding

Details of engagement

Included climate change in supplier selection / management mechanism

% of suppliers by number

60

% total procurement spend (direct and indirect)

51.2

% Scope 3 emissions as reported in C6.5 22.6

Rationale for the coverage of your engagement

TSKB has a headquarter in Istanbul consisting of 2 buildings and two branches in Ankara and Izmir Provinces. It has several suppliers engaged primarily in catering, employee transportation and stationery and office stuff services. Environmental and social adverse impacts of the suppliers are principally taken into consideration in prioritization of the engagements.

Impact of engagement, including measures of success

TSKB has developed good business relationships with catering and transportation service suppliers (ferry and service buses) in terms of their environmental and social performance. These 3 companies represent 51.5% of TSKB's total spend among all the other suppliers. The catering enterprise has been certified with ISO 14001 certificate to comply with the prerequisite of TSKB to work with. TSKB checks the persistence of the certificate in annual meetings with the Company. On the other hand, the entire emissions caused from highway and ferry transportation are calculated individually by TSKB engineers and declared in "TSKB Greenhouse Gas Emissions Inventory" every year. A softcopy of this report is sent to the Company in order to inform them about their results. TSKB shows best effort to make the Company set GHG emission targets to improve their own performance in this field. Moreover, TSKB offsets the emission sourced from employee transportation annually which depends on the engagement between the Company and TSKB who are in contact by monthly meetings and telephone for safety information flow. To conclude, TSKB has adopted the approach that requires these companies to apply best practices in their workplaces and encourages them to improve environmental and social performances while reducing their GHG emissions.

Comment

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

Type of engagement

Education/information sharing

Details of engagement

Share information about your products and relevant certification schemes (i.e. Energy STAR)

Size of engagement

% Scope 3 emissions as reported in C6.5

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

Under its Sustainability Policy framework, TSKB launched a well-structured Sustainability Management System in 2005 which has been certified with ISO 14001 since 2007. Under SMS, TSKB has a particular procedure to manage environmental and social risks arise from lending activities. Within the procedure, TSKB developed an environmental and social risk evaluation tool on voluntary basis called ERET in 2005, in order to identify and manage external risks related with the lending activities of TSKB. The model is based on studying the environmental impacts of investment projects subject to credit evaluation and other activities of the project owner with both current and future perspective. It defines the dimensions of the environmental risk, clarifies acceptable limits for the risks involved and ensures that the project complies with the general lending policies of TSKB. It also covers reducing/offsetting potential risks and the related environmental and social action plans to reduce the environmental and social impacts. In case of a high environmental and social risk factor, a plan is prepared in cooperation with the client on how to reduce the impacts and to trace them. Also, TSKB supports its clients by offering sustainable products and services that provide low carbon and high efficient solutions. This is the way of TSKB in building the engagement with its clients to improve their climate change tackling strategies, primarily through requiring applying best practices in their investments.

Impact of engagement, including measures of success

Renewable energy, energy efficiency (EE) and resource efficiency (RE) finance thematic loans are constituted as sustainability products. The share of sustainability themed loans is 68% of the portfolio as of 2017 year-end. TSKB financed various renewable energy projects varying from hydro to solar, wind, biomass and geothermal with a 5693 MW total installed capacity representing 15% of Turkey's total installed capacity. TSKB with its wide experience and technical knowledge gained in renewable energy sector, assists and encourages investors in this field. Moreover, TSKB calculates financed investments' GHG emission to use in internal and external reports with the corporation of clients. As a development bank, TSKB takes into consideration financed investments' contribution to the national development and climate change strategy of the country which requires a strong engagement with its customers.

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 Other

C12.3a

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

Focus of	Corporate	Details of	Proposed legislative solution
legislation	position	engagement	

Focus of legislation		Details of engagement	Proposed legislative solution
Climate finance	Support	TSKB has been a member of leading national NGOs, which advocate tackling climate change with collaboration of private sector. Turkish Business Council of Sustainable Development (TBCSD) and the Turkish Industry and Business Association TUSIAD's Environment and Climate Change Working Group, focusing on climate change issues especially.	TSKB attends meetings of working groups to discuss climate change related issues and seek for solutions with industry sector participants. The outcomes of the meetings are shared with related authorities to orient developing policies towards climate change issues.
Cap and trade	Support	The Environment and Urbanization Ministry carries out the Partnership for Market Readiness Project (PMR) which is supported by the World Bank to evaluate different carbon pricing instruments in the country. As part of the project, the Ministry holds several consultation and informative meetings which TSKB also attends.	TSKB supports development of convenient regulations for carbon cap, trade and/or tax according to national carbon market dynamics. TSKB attends these meetings regularly to follow the progress closely and provides feedback if required.
Adaptation or resilience	Support		Using its experience in sustainable development, TSKB was involved in this major project as a stakeholder in 2017. The project called "Due Diligence for Turkey Under the UN Sustainable Development Goals" kicked off by the Turkish Ministry of Development in order to establish the current status of SDGs in Turkey is coordinated by TSKB and Escarus, a TSKB subsidiary offering consultancy services on sustainability.

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Cap and trade	Support	Since 2015/COP21, different employees from different departments of TSKB attend United Nations Climate Change Conference of Parties to share the Bank's expertise in international arena as invited panel speakers at the global summit.	Four employees attended COP23 in 2017. Two managers from TSKB that were speakers at two different panels shared their experiences on myriad fields from renewable energy investments to green bond issuances in Turkey.
Climate finance	Support	TSKB is a member of International Development Finance Club, IDFC. Since 2011, the IDFC has conducted a periodic mapping exercise of its member institutions' contributions to green finance. The green mapping report exists to illustrate the contributions that IDFC members provide to green and climate finance.	TSKB annually reports climate change finance data to IDFC to support the study. 2017 report is given in the following link. https://www.idfc.org/Downloads/Publications/01_green_finance_mappings/IDFC_Green_Finance_Mapping_Report_2017_12_11.pdf
Climate finance	Support	The Sustainable Banking Network (SBN) is a unique community of financial sector regulatory agencies and banking associations from emerging markets committed to advancing sustainable finance in line with international good practice. To date, 15 countries, including Turkey, have launched national policies, guidelines, principles, or roadmaps focused on sustainable banking.	In 2017, TSKB has fulfilled SBN survey requested by BDDK, to demonstrate its contribution to Turkey's sustainable banking capacity.

Focus of Corp legislation posit	orate Details tion engage		sed legislative solution
Climate finance	private s Green F Working (GRFIN) together stakehoi identify s promote markets that sup develop growth of finance. includes represen from ma institutio investor commer banks, r agencie other int stakehoi well as p sector collabor. Broad th covered include s green fin market, collabor.	sector was heilinance Meeting Group finance fi	s a member of GRFIN Working Group since its foundation. TSKB is the only member institution from Turkey. The first meeting Id on July 12, 2016. The group comes together 2-3 sessions annually. TSKB is mainly involved in the IIF-IMF Autumn gs. The last meeting TSKB attended was held on October 2017. The agenda of the meeting was updates on global green developments and green finance in emerging markets.

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

Turkish Industry and Business Association

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

TUSIAD, one of the most important NGOs of Turkish private sector who has a significant representative capacity of the economic activity in Turkey. Its activities are aimed at creating a social order based on the competitive market economy and sustainable development.

How have you, or are you attempting to, influence the position?

TUSIAD established the Sustainable Development Roundtable (SDR) to promote sustainable development in the country through the contribution of private sector. TSKB is a member of SDR and represented by the Bank's CEO. In order to reach SDR targets, the Climate Change and Environment Working Group has been constituted. TSKB engineers attend meetings of this working group to discuss climate change related issues and seek for solutions with industry sector participants. The outcomes of meetings are shared with related authorities to orient developing policies towards climate change issues.

CEO of TSKB is in the board of The Banks Association of Turkey (TBA). TSKB regularly attends TBA meetings on sustainable finance.

TSKB is a member of Turkish Business Council of Sustainable Development (TBCSD) and has been appointed as a member of board of directors. TSKB is in the "energy", "circular economy", "sustainable finance" and "women employment and equal opportunities" working groups of TBCSD. TSKB supports sustainable development activities in Turkey by taking active roles in NGOs.

TSKB is a founding member (founded in 2011) of International Development Finance Club (IDFC), which works on a program compiling environmental, climate and social development topics, under the vision of building on climate finance and sustainable development. IDFC's 23 members had total assets of more than \$3500B, and their total financing commitments amounted more than \$780B.

TSKB is a member of Long Term Investors Club (LTIC), which is focused on long term vision of finance and economy to get a strong, sustainable and balanced growth in global economy.

TSKB is among the founders of the European Association of Long-Term Investors (ELTI) launched by the most influential 16 long-term financial institutions of Europe to foster more sustainable, smart and inclusive European growth.

TSKB is a member of TUSIAD's Environment and Climate Change Working Group, focusing on climate change issues especially.

In December 2016, TSKB also became a member of ERTA / Integrated Reporting Network Turkey.

TSKB is a member of the Global Compact Turkey Network and plays an active role in its activities.

TSKB is a stakeholder of several volunteer initiatives such as GRI, UNGC, UNEP – FI, CDP, etc. The aim of TSKB by being a member of these organizations is not only submitting reports about its enhancements, but also to initiate awareness regarding climate change issues in the sector.

Apart from these activities, TSKB actively responds to questionnaires and official opinion requests of drafts reports of the Ministries and Government regarding environment, energy, climate change, etc.

Through its good relations with policy makers and public institutions and its power to provide independent opinions, TSKB;

- Contributes to the country's economy and development
- Provides independent opinions from private to public sector
- Serves as a bridge between private sector and public sector
- Creates diversity of funds for economic development
- Contributes to the development of the market / legislation work.

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?

All TSKB's direct and indirect activities that influence policy on climate change are coordinated and managed by the Sustainability Committee. The Committee consists of two Board Members and two Executive Vice Presidents. Main duties and responsibilities of the Committee are defining the Bank's sustainability vision and strategy, formulating applicable action plans, coordinating associated activities according to the Sustainability Policy, and its supplementary policies. Under Sustainability Committee, there is the Sustainability Sub - Committee, consisting of several members from different departments, reporting directly to the Sustainability Committee. One of the responsibilities of the Sub-Committee is implementing action plans to achieve the Sustainability Committee's targets which indicates that overall climate change strategy is integrated into all direct and indirect activities of the Bank by the established Sustainability Management System.

Besides, the Sustainability Management System assists Sustainability Committee on this issue. Not only climate change policies and strategy but also, duties and responsibilities, activities to be done, time plans, bi-annual progression reports are documented within the SMS framework. That helps Sustainability Committee to ensure that policies and strategies are consistent with each other and the entire process recorded within a well-structured management system.

TSKB has published its "Climate Change Declaration" in 2016, stating clearly its strategy and goals regarding climate change. The declaration briefly explains how TSKB's main activities are managed in consistency with its climate change strategy. It is publicly available in TSKB's website in the following link.

http://www.tskb.com.tr/en/sustainable-banking/tskb-and-sustainable-banking

Moreover, TSKB has published its first "Integrated Report" in 2016 which is a document that involves sustainability approach and the Bank's future strategy. In the development phase of the report, valuable opinions and feedbacks of employees from various management levels through workshops were taken into consideration in order to enable employees to take part in the process. Thus their contribution played a crucial role in both preparation of the report and building climate change strategy of the Bank. TSKB continued publishing its integrated report also in 2017.

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 voluntary communications

Status Complete

Attach the document GHG Inventory Report 2017.pdf

Content elements

Emissions figures

Publication

In mainstream reports

Status Complete

Attach the document TSKB Annual Report 2017.pdf

Content elements

Governance

Publication

In voluntary communications

Status Complete

Attach the document TSKB Integrated Report 2017.pdf

Content elements Governance

Strategy Risks & opportunities

C14. 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.

C14.1

(C14.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Çiğdem İçel - Executive Vice President	Other, please specify (Sustainability Commitee Member)

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	Public or Non-Public Submission	I am submitting to
I am submitting my response	Public	Investors

Please confirm below

I have read and accept the applicable Terms