CDP

Climate Change 2017 Information Request T.GARANTI BANKASI A.Ş.

Module: Introduction

Page: Introduction

CC0.1

Introduction

Please give a general description and introduction to your organization.

Established in 1946, Garanti Bank is Turkey's second largest private bank with consolidated assets of US\$ 90.4 billion as of March 31, 2017.

Garanti is an integrated financial services group operating in every segment of the banking sector including corporate, commercial, SME, payment systems, retail, private and investment banking together with its subsidiaries in pension and life insurance, leasing, factoring, brokerage, and asset management besides international subsidiaries in the Netherlands and Romania.

As of March 31, 2017, Garanti provides a wide range of financial services to its 14.5 million customers with more than 19 thousand employees through an extensive distribution network of 956 domestic branches; 7 foreign branches in Cyprus, one in Luxembourg and one in Malta; 3 international representative offices in London, Düsseldorf and Shanghai with 4,794 ATMs, an award-winning Call Center, internet, mobile and social banking platforms, all built on cutting-edge technological infrastructure.

Moving forward to maintain sustainable growth by creating value to all its stakeholders, Garanti builds its strategy on the principles of always approaching its customers in a "transparent", "clear" and "responsible" manner, improving customer experience continuously by offering products and services that are tailored to their needs. Its competent and dynamic human resources, unique technological infrastructure, customer-centric service approach, innovative products and services offered with strict adherence to quality carry Garanti to a leading position in the Turkish banking sector.

Following the best practices in corporate governance, Garanti's majority shareholder is Banco Bilbao Vizcaya Argentaria S.A. (BBVA) with 49.85% share. Having shares publicly traded in Turkey, depositary receipts in the UK and the USA, Garanti has an actual free float of 50.07% in Borsa Istanbul as of March 31, 2017. With its dynamic business model and superior technology integrated to its innovative products and services, Garanti continues to differentiate itself and facilitate the lives of its customers. Its custom-tailored solutions and wide product variety play a key role in reaching US\$ 74.1 billion cash and non-cash loans. The high asset quality attained through advanced risk management systems and established risk culture place Garanti apart in the sector.

Building on the Bank's core values, Garanti Bank defines Sustainability as a commitment to build a strong and successful business for the future, while minimizing negative environmental and social impacts, and sharing long-term values with its customers, staff, shareholders and the communities it operates in. Garanti further

strengthens its sustainable banking approach through community investment programs in a variety of topics ranging from sports to education, arts to nature and informing the business world.

CC0.2

Reporting Year

Please state the start and end date of the year for which you are reporting data.

The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.

We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year.

Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

Enter Periods that will be disclosed

Fri 01 Jan 2016 - Sat 31 Dec 2016

CC0.3

Country list configuration

Please select the countries for which you will be supplying data. If you are responding to the Electric Utilities module, this selection will be carried forward to assist you in completing your response.

Select country

Turkey

CC0.4

Currency selection

Please select the currency in which you would like to submit your response. All financial information contained in the response should be in this currency.

TRY

CC0.6

Modules

As part of the request for information on behalf of investors, companies in the electric utility sector, companies in the automobile and auto component manufacturing sector, companies in the oil and gas sector, companies in the information and communications technology sector (ICT) and companies in the food, beverage and tobacco sector (FBT) should complete supplementary questions in addition to the core questionnaire.

If you are in these sector groupings, the corresponding sector modules will not appear among the options of question CC0.6 but will automatically appear in the ORS navigation bar when you save this page. If you want to query your classification, please email respond@cdp.net.

If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below in CC0.6.

Further Information

Module: Management

Page: CC1. Governance

CC1.1

Where is the highest level of direct responsibility for climate change within your organization?

Board or individual/sub-set of the Board or other committee appointed by the Board

CC1.1a

Please identify the position of the individual or name of the committee with this responsibility

Garanti Bank believes that the concept of sustainability must be embedded throughout its decision-making mechanisms and business processes to create value for its stakeholders and, as a consequence, has integrated a Sustainability Committee structure with Committee Members representing relevant lines of business and departments throughout its organization.

The Sustainability Committee, established in 2010 is the highest committee that formally reviews and approves the Bank's activities related to sustainability and is chaired by a Board member. Its composition was amended in 2015 and the current membership of the Committee is as follows: Independent Board Member (Chair), CEO, Executive Vice President of Human Resources and Support Services, Chief Credit Risk Officer, Executive Vice President of Project Finance and Sustainability, Executive Vice President of Finance and General Accounting and Executive Vice President of SME Banking. In addition to this high-level committee, Garanti Bank has formed 7 working groups ("WG") based on the Bank's Sustainability Policy; namely WG focusing on Customers through Sustainable Finance (Retail&SME Banking), WG focusing on Customers through Sustainable Finance (Corporate and Commercial Banking), WG focusing on managing Environmental impact of operations, WG focusing on Communities, WG focusing on Stakeholders, WG focusing on Human Resources, WG focusing on Corporate Sustainability Governance.

The Committee is deliberately structured to integrate climate change and other environmental concerns and opportunities into all operations, products and services. In addition, this structure ensures that all efforts are consistent with internal policies and related regulations. The Sustainability Committee's role is to agree on strategic direction and action plans for the Bank. The Committee has met a total of 25 times since its inception in 2010.

In 2012, Garanti Bank established a full-time Sustainability team which resides in the Project Finance Department. This team was formed in order to enhance the efficiency of its organizational structure for sustainability. Consisting of five members in total including the Sustainability Manager and the Senior Vice President responsible for Project Finance and Sustainability, the team included three environmental engineers amongst its members as at the end of 2015.

The Sustainability team is responsible for the coordination of all sustainability-related activities at Garanti Bank on a day-to-day basis. The team, which reports to the Sustainability Committee on a regular basis, works in cooperation with the Bank's other units during the implementation of the decisions taken by the Committee. Monitoring the Bank's sustainability targets and performance on a weekly basis, the team ensures the consolidation of sustainability-related data coming from across the Bank and evaluates such data in line with the Bank's targets.

By the end of 2015, Garanti Bank reached more than 1,000 Sustainability Representatives, who are responsible for working in coordination with the Sustainability Team to collect data and support the implementation of the decisions taken by the Sustainability Committee within their own departments, from headquarters, regional directorates and branches.

Coordination among the Branches, Regional Directorates and Teams for the purposes of the EMS is achieved via the Efficiency Team, established under the Construction Department. The Efficiency Team is comprised of 5 members including the Senior Vice President of Construction Department. The Efficiency Team is responsible for the application of the EMS in the bank and ensuring the environmental sustainability of the Bank's internal activities.

Project Supervisors from the Construction Department, Mechanical/ Electrical Engineers and the Efficiency Team received 'Managing Safely' training from the Institution of Occupational Safety and Health (IOSH). The primary purpose of IOSH, which is recognized by the International Labor Organization (ILO), is to provide a more secure, safe and sustainable business environment worldwide.

CC1.2

Do you provide incentives for the management of climate change issues, including the attainment of targets?

Yes

CC1.2a

Please provide further details on the incentives provided for the management of climate change issues

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
Corporate executive team	Monetary reward	Emissions reduction project Emissions reduction target Efficiency project Efficiency target Behavior change related indicator Other: Other incentivized performance indicators include the ones indicated in the comment box	The KPI given below is an example to environmental KPIs and result in better management of the Bank's environmental footprint and affects corporate executive team who is entitled to benefit from incentives: % share of digital sales in total. This indicator is linked to resource efficiency due to digitalization since it decreases the work load of resource-intense delivery channels i.e. conventional branches. Digitalization of banking operations results in reduction of Scope 1, 2 & 3 emissions.
Business unit managers	Monetary reward	Emissions reduction project Emissions reduction target Efficiency project Efficiency target Behavior change related indicator Other: Other incentivized performance indicators	The KPI given below is an example to environmental KPIs and result in better management of the Bank's environmental footprint and affects business unit managers who is entitled to benefit from incentives: The number of environmental reporting made to international initiatives and indices such as CDP and DJSI. This indicator result in better management of climate change related risks since the reporting systems require the Bank to be more transparent about its climate change performance.

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment		
		include the ones indicated in the comment box			
Environment/Sustainability managers	Monetary reward	Emissions reduction project Emissions reduction target Efficiency project Efficiency target Behavior change related indicator Supply chain engagement Other: Other incentivized performance indicators include the ones indicated in the comment box	The KPIs given below are examples to environmental KPIs and result in better management of the Bank's environmental footprint and affects environment/sustainability managers who is entitled to benefit from incentives: Expanding the scope of E&S Risk Management System, launching new credit lines to support environmental investments, number of environmental reporting based on international standards, supporting customers to increase their awareness on environmental issues including new developments on climate chnage (i.e. carbon pricing, TCFD work, etc.), organizing awareness raising events to support real&financial sectors' knowledge on climate-related issues (e.g. organizing CDP CC report launching event with CDP Turkey), receiving third party assurance on both the implementation and data quality related to environmental factors. These indicators are related to Scope 1, Scope 2 & 3 emissions.		
Other: Sustainability Supervisors and Associates	Monetary reward	Emissions reduction project Emissions reduction target Efficiency project Efficiency target Behavior change related indicator Other: Other incentivized performance indicators include the ones indicated in the comment box	The KPIs given below are examples to environmental KPIs and result in better management of the Bank's environmental footprint and affects Sustainability Supervisors who is entitled to benefit from incentives: Expanding the scope of E&S Risk Management System (Scope 3 emissions), Launching new credit lines to support environmental investments (Scope 3 emissions), number of environmental reporting, supporting customers to increase their awareness on environmental issues including new developments on climate chnage (i.e. carbon pricing, TCFD work, etc.), organizing awareness raising events to support real& financial sectors' knowledge on climate-related issues (e.g. organizing CDP CC report launching event with CDP Turkey), receiving third party assurance on both the implementation and data quality related to environmental factors		
Other: Energy Efficiency and Environmental Management	Monetary reward	Emissions reduction project	The KPIs given below are examples to environmental KPIs and result in better management of the Bank's environmental footprint and affects Energy Efficiency		

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
Supervisors and Associates		Emissions reduction target Efficiency project Efficiency target Behavior change related indicator	and Environmental Management Supervisors and Associates who is entitled to benefit from incentives: Implementation of ISO14001 EMS, improvements in environmental data management, receiving third party assurance on both the implementation and data quality related to environmental factors, which result in the management of Scope 1 and 2 emissions.
Other: Budgeting, Reporting and Payments Manager, Construction Department	Monetary reward	Emissions reduction project Emissions reduction target Efficiency project Efficiency target Behavior change related indicator	The KPI given below is an example to environmental KPIs and result in better management of the Bank's environmental footprint and affects Budgeting, Reporting and Payments Manager who is entitled to benefit from incentives: Implementation of ISO14001 EMS, which result in the management of Scope 1 and 2 emissions.

Further Information

Page: CC2. Strategy

CC2.1

Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities

Integrated into multi-disciplinary company wide risk management processes

CC2.1a

Please provide further details on your risk management procedures with regard to climate change risks and opportunities

Frequency of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
Six-monthly or more frequently	Board or individual/sub-set of the Board or committee appointed by the Board	Garanti's efforts to manage climate change related risks and opportunities can be classified into two categories, i.e. asset level risks and opportunities which are associated to loan portfolio and company level risks and opportunities which are related to the physical infrastructure and the human resources of the Bank In both cases, the systems and procedures cover Garanti Bank's operations in Turkey.	> 6 years	The Sustainability Committee meets quarterly in order to monitor the progress on and to provide input to all sustainability efforts. The Committee is deliberately structured to integrate sustainability concerns and opportunities into all operations, products and services. In addition, this structure ensures that all efforts are consistent with internal policies and related regulations. The Sustainability Committee's role is to agree on strategic direction and action plans for the Bank. Besides, major changes are presented to the Board of Directors if required.

CC2.1b

Please describe how your risk and opportunity identification processes are applied at both company and asset level

i. Company level risks and opp.:

Based on our Environmental Management System, Sustainability Representative of each facility certified to ISO14001 is responsible for identifying climate-change related risks, such as increase in paper consumption.

The Sustainability Team ("ST") is responsible for the identification of company-level risks such as the ones associated to a future ETS or water scarcity. The Construction Department is responsible for the identification of site-specific energy/carbon reduction opportunities, which are related to company infrastructure. However, ST consolidates all the efforts of these different units, reports to the Sustainability Committee ("SC") and contributes to the development of mitigation measures where necessary.

ii. Asset level risks and opp.:

The Project Finance and Commercial & Corporate Loans Departments are responsible for the identification and assessment of climate change related risks associated to large projects in their portfolio, based on the E&S Risk Mgmt. process of the Bank. They are also responsible for climate-related new market opportunities, such as energy-efficiency and renewable energy projects.

iii. Reporting: ST reviews the efficiency and effectiveness and suggests accordingly amendments to environmental policies and management systems in place. ST then informs SC through regular meetings and gets SC's approval about those amendments. After that, ST keeps all relevant departments informed of emerging climate change related risks and opportunities through direct communication or through WG meetings. The relevant departments develop suggestions about measures to mitigate negative impacts of the emerging risks and to capture opportunities in collaboration with the ST through the 7 WG operating under SC, as

detailed under CC1.1a. The frequencies of the SC and WG meetings vary from once every month to once a year, depending on the topics to be discussed.

CC2.1c

How do you prioritize the risks and opportunities identified?

In order to be able to identify and prioritize risks and opportunities to Garanti, the Bank places great importance on listening to the views of its key stakeholder groups as part of this process.

As part of the materiality analysis, we first identify the topics relevant to our organization and to our stakeholders based on a stakeholder consultation process. We assessed the topics relevant to our organization and to our stakeholders making use of a variety of sources such as the Bank's commitments, media searches, questionnaires and surveys and comparison against peer companies nationally and internationally. We then link these to the risks and opportunities and consider whether the aspect is material within our organization, outside the organization, or both.

Topics were prioritized based on their significance of impact – their potential influence on Garanti Bank's ability to deliver on its vision and strategy as well as their potential influence on the decision-making of the Bank's main stakeholder groups.

The following are criteria frequently used for assessing materiality at Garanti Bank though the exact considerations will vary depending on the specific risk or opportunity:

- Impact on key stakeholders,
- External trend analysis,
- Relevance to Garanti's strategy,
- · Executive interviews.
- Direct financial impact and risk,
- Legal, regulatory and policy drivers.
- Opportunities for innovation.
- Industry norms, best practices and competitive advantage

The results of this prioritization process, which were approved by the Executive Vice President for Project Finance and Sustainability, and Secretary General of the Sustainability Committee, determined the focus.

Please explain why you do not have a process in place for assessing and managing risks and opportunities from climate change, and whether you plan to introduce such a process in future

Main reason for not having a process

Do you plan to introduce a process?

Comment

CC2.2

Is climate change integrated into your business strategy?

Yes

CC2.2a

Please describe the process of how climate change is integrated into your business strategy and any outcomes of this process

i. In 2013, Garanti Bank has carried out a number of analyses to develop an overarching Sustainability Policy, and its new Sustainability Strategy. The studies include a peer group analysis, stakeholder analysis, desk research and an internal analysis including interviews with 15 senior staff members of Garanti, in order to map current level of sustainability performance and benchmark it against sector leaders. With these analyses, Garanti Bank aimed to identify emerging risks and opportunities and finally determine the potential areas for improvement. The studies were coordinated and assessed by the Sustainability Team. The Sustainability Committee, was kept informed by the Team throughout the process and the final policy and strategy were drafted based on the Committee's feedback. Both the Policy and Strategy were approved by the CEO and the Board in 2014. The Sustainability Policy Statement acts as an "umbrella policy" with a time horizon of 5 to 10 years. The Sustainability Strategy has, in general, a shorter time horizon (3-5 years).

ii. Garanti believes that climate change is a strategic issue that merits full integration with all business processes and decision-making mechanisms.

Need for Adaptation: Climate change impacts create new concerns for lenders and financial institutions. Extreme weather events, such as severe storms or floods, cannot only damage retail banking facilities, but also impact vulnerable sectors dependent on stable weather patterns, such as agriculture. This can potentially lead to income loss and affect the ability of customers to repay loans. Garanti believes that the main water related risks their company is exposed to lie in downstream impacts arising from financing activities.

Developing Green Business: Garanti has identified that one of the most significant areas that customers need support from Banks is development of innovative products for renewables. Consequently, Garanti Bank has included a long-term target in its strategy related to developing products and services that help catalyze the transition towards a more sustainable economy. Garanti also sees investing in energy efficiency projects listed in CC3.3.b within owned facilities as an opportunity to reduce costs and a tool to mitigate possible future risks associated to increasing fuel prices. Moreover, Garanti develops products and services for climate change adaptation and mitigation. In Q1 2015, Garanti launched Agricultural Irrigation Systems Loan to promote efficient irrigation systems and sustainable energy use in irrigation for agricultural sector. Turkey is at severe risk in terms of water scarcity and drought due to climate change.

Possible regulatory changes: A possible future carbon tax scheme, or an ETS might bring corporate liabilities. However, foreseeing them and shaping climate

change strategy based on it will allow us to turn this potential risk into an opportunity.

Based on these aspects we published our Climate Change Position Statement and Action Plan in 2015.

iii. In addition to our leading position in sustainable energy financing, we are committed to take action to further enhance our contribution to environmental sustainability by making progress on our direct impact. For instance, 100% of our employees in Turkey are working at IS014001 certified buildings. Thus each office sets its own GHG emission target. Garanti is also targeting to increase the number of supplier contracts which include specific provisions regarding compliance with the bank's EMS. In order to manage our indirect water footprint, we ensure, request and monitor that appropriate measures are taken to minimize environmental impacts and to reduce the consumption of water and other resources, ensure recycling is undertaken and that negative impacts on water quality are minimized. iv. Garanti Bank defines activities having potentially a significant impact on the business performance, environment and society as "strategic priorities". As a "strategic priority" Garanti Bank focuses on customers through sustainable finance by setting a) environmental and social risk processes across the Bank and its local and international subsidiaries to minimize the negative impact of lending and investment activities, and b) by developing products and services that help catalyze the transition towards a more sustainable economy. For instance, in 2016 Garanti lowered its monetary limit for projects subject to Environmental Social Impact Assessment Model to US\$ 10mio from US\$ 20 mio, which will reshape its Environmental Social Impact Assessment Process in the long run. Both a) and b) are covering Garanti Bank's efforts to mitigate the long term risks and capture mid to long-term opportunities which are associated to climate change. v. Garanti Bank's approach on climate change increases its appetite on renewable energy and its expertise on the topic helps the bank gain strategic advantage over the competitors. For instance Garanti Bank is a strong supporter of wind energy projects. As one of the first banks to play an a

vi. Garanti, with climate change embedded to its business strategy, has set a long term emission reduction target to be achieved by 2020. In 2016 after COP21 and our commitment to Paris-Pledge we decided to take action and determine a long term target emission intensity reduction target that covers our yearly-basis targets. The target is 50% reduction in Garanti's total Scope 1 & 2 scope emissions per its total assets from 2012 to 2020. The base is selected 2012, since Garanti's Environmental Management System was implemented in 2012. Besides, as a pioneer in renewable energy finance in Turkey and as the Bank financed most wind power plants, carbon price application will allow us to prioritize renewable energy investments even more. Therefore, 100% of the total resources allocated to new energy investments in 2016 was allocated to renewable investments. In line with our Climate Change Action Plan, Garanti will continue to prioritize renewable energy in its energy portfolio. In 2017, the bank took its pledge a step further and committed to a renewable energy share at a minimum of 70% of its new power sector financing to be provided by 2020.

vii. Three substantial business decisions related to climate change management were made in the last 2-3 years. One of them was to "put a price on carbon" in cash flows of all greenfield/brownfield fossil fuel based and renewable energy production investments in our project finance activities. The second one was to put a cap on financing fossil fuel investments. The third one was to endorse TCFD support letter sent by Michael Bloomberg to climate-leader companies in each country. All these decisions result in better management of climate risks in our Bank.

CC2.2b

Please explain why climate change is not integrated into your business strategy

Does your company use an internal price on carbon?

Yes

CC2.2d

Please provide details and examples of how your company uses an internal price on carbon

The projects in Turkey generate voluntary carbon credits, but there is not a CO2 taxation mechanism nor an ETS which would impact negatively the cash flow of carbon-intensive projects.

Despite the difficulties in determining the cost of carbon in the absence of a regulatory framework, Garanti has been utilizing a fixed 'forestation' fee for carbon-intensive projects in order to reflect the cost of carbon in project financing. However, as stated in our Climate Change Action Plan, we are now enhancing our approach to better reflect the global trend on carbon pricing among the private sector and to further increase the share of low-carbon investments in our loan portfolio.

The principles below explain our new carbon pricing scheme in order to build on existing efforts about putting a shadow price on carbon.

We apply our own shadow carbon price in evaluating the economics of all greenfield/brownfield fossil fuel based and renewable energy production investments in our project finance activities.

If the host country already implements an emissions trading scheme (both voluntary and regulatory) or a carbon tax, then we use the actual price for carbon. If not, we use a fixed price per tonne of CO2e emitted. The price is determined taking into consideration the market dynamics and is reviewed by the Sustainability Team on a regular basis and updated when necessary.

Besides, Garanti became a membe rof Carbon Pricing Leadership Coalition in 2016.

CC2.3

Do you engage in activities that could either directly or indirectly influence public policy on climate change through any of the following? (tick all that apply)

Direct engagement with policy makers Trade associations Other

CC2.3a

On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
Cap and trade	Support	Garanti Bank has been in touch with public authorities, private sector and NGOs related to sustainability initiatives as part of its low carbon strategies, as stated its environmental and social loan policies and also its climate change action plan, during the reporting year.	In order to better understand the business impact of market based mechanisms to the Turkish economy, Garanti supported and contributed to the "Addressing Climate Change from Economic Policy Perspective Report" published in December 2016, under the leadership of Turkish Industry and Business Association (TÜSİAD) Environment and Climate Change Working Group. Garanti is also the Vice Chair of the WG. The report evaluates the economic impacts of market based tools such as carbon tax, ETS, renewable investments etc. using different scenario analyses. The solution offered in the report was to use a mixture of such tools, rather than implementing a single mechanism.
Clean energy generation	Support	Garanti Bank has been in touch with public authorities, private sector and NGOs related to sustainability initiatives as part of its stakeholder engagement process during the reporting year. An example to this engagement process is the meeting held with Energy Ministry, where Garanti Bank presented energy sector risks, projections and insight on financial markets, as well as its suggestions for renewables. These suggestions include the improvement of public Support mechanism for renewable projects, since they reduce Turkey's current account deficit.	Our suggestions include increasing feed-in tariff for renewables and speeding up the process for increasing the incentives for the usage of local equipment in renewable energy investments.
Climate finance	Support	Garanti Bank participated in the preparation of "Greening Banking Workstream Report" by the "G20 Green Finance Study Group".	The report's aim is to identify regulatory, institutional and market barriers to a green banking system, and analyze options on how to enhance the ability of the banking system to mobilize private capital and mainstream environmental factors. The results of this report and the Study Group's recommendations to address these issues were presented to the G20

CC2.3b

Are you on the Board of any trade associations or provide funding beyond membership?

Yes

Please enter the details of those trade associations that are likely to take a position on climate change legislation

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
The Banks Association of Turkey (TBA)	Consistent	TBA has working groups and many publications to mainstream sustainable banking approach and practices.	Garanti Bank has been actively involved in the Role of the Financial Sector in Sustainable Growth Working Group of TBA from which aims to play a role in raising overall stakeholder awareness and helping to disseminate and assimilate best practices, particularly as it relates to finance of the a low-carbon economy. As a member of this working group Garanti participated in the preparation of Sustainable Banking Guidelines Report published by TBA. TBA also provides distant-learning trainings for banks in environmental and social risk assessment. In 2015 the Working Group also held a meeting to discuss Emissions Trading System (ETS) in Turkey. Besides, Our CEO is a board member of the Banks Association of Turkey (TBA).
Turkish Industry and Business Association	Consistent	TUSIAD is a strong supporter of sustainability issues among Turkish companies. They have many publications and organize many events to raise awareness and share best practices.	Garanti Bank is a member of TUSIAD's Climate and Environment Working Group. This working group embarked on a study to publish a report on the financial impacts of climate change in Turkey. The report covered all implications under different scenarios. TUSIAD also has a working group for Integrated Reporting where companies are encouraged to include environmental, social and governance (ESG) issues into their financial indicators. The working group published Integrated Reporting Guidance in 2015.

CC2.3d

Do you publicly disclose a list of all the research organizations that you fund?

CC2.3e

Please provide details of the other engagement activities that you undertake

Garanti Bank participates in leading global and local sustainability organizations. These include participating the annual general meetings of United Nations Environment Program Finance Initiative (UNEP FI), and at least semi-annual WG meetings of the United Nations Global Compact (UNGC), the Turkish Business Council for Sustainable Development (BSCD Turkey), the Banks Association of Turkey (TBA) Role of the Financial Sector in Sustainable Growth Workgroup, International Integrated Reporting Council (The IIRC), its Turkish network Integrated Reporting Türkiye Network (ERTA) and Turkish Green Building Council (CEDBİK). Garanti is also a member of TUSIAD (Turkish Industry and Business Association) Climate and Environment Working Group, and is in the Executive Committee of "Climate Change from the Economy Perspective" study that will reveal the financial impacts of climate change in Turkey. These organizations allow for widespread, high-leverage engagement of the business community with numerous national and international organizations, including governments and policymaking bodies.

Topics typically include sharing of best practices, integration of sustainability and governance into operations and high-level advocacy for policy, including specific measures focused on climate change. Garanti Bank is actively involved in several working groups of these organizations and, through these, aims to play a role in raising overall stakeholder awareness, actively contributing to policy efforts and helping to disseminate and assimilate best practices, particularly as they relate to finance of a low-carbon economy.

In order to introduce new practices to Turkey that go beyond common practices and compliance to relevant national laws and regulations, Garanti Bank gives importance to external capacity building activities. For instance, with an aim of spreading its approach to other deposit Banks in Turkey, Garanti Bank has organized an a Sustainable Finance Conference together with UN Global Compact, UNEP-FI and the Turkish Business Council for Sustainable Development in 2015.

Moreover, Garanti Bank became head of sustainable finance working group initiated by BCSD Turkey and Finance working group of ÇEDİK. Besides, Garanti became the main sponsor of CDP Water in Turkey in 2015.

Besides there are several initiatives related to climate change of which Garanti Bank is a signatory. For instance, Garanti became the first Turkish Bank to join the Caring for Climate Initiative, which supports the stance of the business world against climate change and became the only Turkish Bank to be included as a case study in the UN components report named "The Business Case for Responsible Corporate Adaptation: Strengthening Private Sector and Community Resilience". Moreover, Garanti became the first bank in Turkey to sign the UNGC Business Leadership Criteria on Carbon Pricing.

CC2.3f

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?

Garanti Bank's Sustainability organization, including above all the Sustainability Committee, plays a vital role in ensuring that the priorities of the Bank, the needs and expectations of stakeholders, the initiatives participated and the actions taken in this field are all in line with an overarching sustainability policy.

To better explain, the Sustainability Team plays a coordination role between the Sustainability Committee and all departments of the Bank. Additionally, Garanti Bank uses its intranet, awareness raising videos, e-mails and a variety of sustainability training programs tailored to specific business units in order to ensure that all engagement activities undertaken by various departments of the Bank are consistent with Garanti's sustainability policy.

As defined in its Sustainability Policy, some of Garanti Bank's strategic priorities include minimizing the negative impact of lending and investment activities,

educating customers on sustainability and developing products and services that help catalyze the transition towards a more sustainable economy.

Garanti Bank believes that those three aspects can be better achieved if the awareness level of both real and finance sector is higher than today and there is strong collaboration between private and public sector with the aim of developing solutions for transition to a more sustainable economy.

Besides Garanti Bank published it Climate Change Position Statement and Action Plan stating it long and short term targets as well as its strategy on climate change in 2015. This document provides more specific targets and the cornerstones of how it integrates climate change to the way it does business.

To this end, Garanti Bank structured its engagement strategy with a range of stakeholders with the aim of disseminating its sustainability approach, sharing best practices and facilitating collaboration between all parties related to sustainability topics.

CC2.3g

Please explain why you do not engage with policy makers

Further Information

Page: CC3. Targets and Initiatives

CC3.1

Did you have an emissions reduction or renewable energy consumption or production target that was active (ongoing or reached completion) in the reporting year?

Intensity target

CC3.1a

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions covered by target (metric tonnes CO2e)	Target year	Is this a science- based target?	Comment

CC3.1b

Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions covered by target	Target year	Is this a science- based target?	Comment
Int1	Scope 1+2 (location- based)	100%	50%	Metric tonnes of CO2e per billion (currency) funds under management	2012	498.2	2020	No, but we anticipate setting one in the next 2 years	As Garanti Bank we have been submitting yearly basis emissions intensity reduction targets. However, in 2016 after COP21 and our commitment to Paris-Pledge we decided to take action and determine a long term target emission intensity reduction target that covers our yearly-basis targets. The target is 50% reduction in our total Scope 1 & 2 scope emissions per our total assets from 2012 to 2020. The base is selected 2012 as our Environmental Management System was implemented in 2012.

CC3.1c

Please also indicate what change in absolute emissions this intensity target reflects

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comment
Int1	Decrease	15.5			The intensity target includes only Scope 1 and Scope 2 emissions.

CC3.1d

Please provide details of your renewable energy consumption and/or production target

ID	Energy types covered by target	Base year	Base year energy for energy type covered (MWh)	% renewable energy in base year	Target year	% renewable energy in target year	Comment	
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CC3.1e

For all of your targets, please provide details on the progress made in the reporting year

ID	% complete (time)	% complete (emissions or renewable energy)	Comment
Int1	50%	100%	In 2016 after COP21 and our commitment to Paris-Pledge we set a long term target emission intensity reduction target that covers our yearly-basis targets. The target is 50% reduction in our total Scope 1 & 2 scope emissions per our total assets from 2012 to 2020. The base is selected 2012 as our Environmental Management System was implemented in 2012. Since 2012, with our increasing coverage of our Environmental Management System and our energy efficiency initiatives we have managed to decrease our emission intensity by 56% since 2012.

CC3.1f

Please explain (i) why you do not have a target; and (ii) forecast how your emissions will change over the next five years

CC3.2

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

CC3.2a

Please 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 aggregatio n	Description of product/Grou p of products	Are you reporting low carbon product/s or avoided emissions	Taxonomy, project or methodolog y used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/ s in the reportin g year	% R&D in low carbon product/ s in the reportin g year	Comment
Group of products	Garanti Bank provides funding to its clients for renewable energy projects and enables greenhouse gas emissions to be avoided or reduced by third parties. Garanti Bank considers financing of renewable energy projects a critical part of enabling Turkey to avoid GHG emissions. The Bank gives most support to wind and solar energy	Avoided emissions	Other: Garanti Bank's own taxonomy (includes wind, hydro, geothermal and solar power plants)	6.8%	Less than or equal to 10%	Garanti Bank also views energy-efficiency and the use of renewable sources in industrial and manufacturing operations as well as in buildings as a significant opportunity to cut Scope 1 & 2 emissions of its customers. Garanti Bank therefore provided loans to small and medium sized energy efficiency and renewable energy projects through Tur-SEFF and Mid-SEFF, both of which are supported by the EBRD and EIB. TurSEFF, for example, covers projects in residences, small and medium enterprises, factories, and commercial buildings. As of December 2016, the total avoided emissions due to operational wind and hydro power plants that were financed by Garanti Bank was 6.3 million tCO2e based on the latest available TEIAŞ data of electricity generation in Turkey. Wind turbines and dams have a typical life span of about 25 and 50 years, respectively. Due to the wide variety of projects covered by these funds, Garanti Bank has not attempted to calculate total potential emissions reductions. Nevertheless, the company believes these efforts will be significant by directly reducing emissions and by helping to launch a variety of new markets and technologies. Calculation for estimated reductions from wind farms and hydro plants: Annual Energy Generated [MW/year] = Capacity [MW] x Capacity Factor [Dimensionless] x Total hours in a year [hrs/year] Annual CO2e Emissions Avoided [metric tons/year] = Annual Energy Generated [MWh/year] x CO2e Grid Emission Factor [metric tons/MWh] MWh Capacity Factor for Wind: 35% (conservative estimate) MWh Capacity Factor for Hydro: 40% (conservative estimate) Time: 365 [days/year] x 24 [hrs/day] = 8,760 hrs/year Turkish Emission Factor: 0.492 metric tons/MWh (2016) as calculated by Garanti GWPs based on IPCC, AR4, 2007 (100 year lifetime) CO2: 1 CH4: 25 N2O: 298 All the renewable energy investment amounts and the indirect emission reduction due to wind and hydroelectric power plants have verified by EY within the scope of 2016 Sustainability Report.

Level of aggregation	Description of product/Grou p of products	Are you reporting low carbon product/s or avoided emissions	Taxonomy, project or methodolog y used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/ s in the reportin g year	% R&D in low carbon product/ s in the reportin g year	Comment
	projects because of their minimal environmental and social effects and the positive contribution they make to the current account deficit of Turkey. Garanti Bank's share in Turkey's total operational installed capacity of wind power is 32%. Garanti also provides funding for energy efficiency and waste management projects for SMEs. As of December 31,					

Level of aggregation	Description of product/Grou p of products	Are you reporting low carbon product/s or avoided emissions	Taxonomy, project or methodolog y used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/ s in the reportin g year	% R&D in low carbon product/ s in the reportin g year	Comment
	2016, Garanti Bank had allocated: - US Dollar 2.35 billion to wind farm projects which will have a total installed capacity of 2,135 MW once all commissioned , - US Dollar 2.02 billion to hydroelectric power plant projects which will have a total installed capacity of 2,448 MW once all commissioned , - US Dollar 204 million to geothermal power plant projects which					

Level of aggregatio n	Description of product/Grou p of products	Are you reporting low carbon product/s or avoided emissions	Taxonomy, project or methodolog y used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/ s in the reportin g year	% R&D in low carbon product/ s in the reportin g year	Comment
	will have a total installed capacity of 202 MW once all commissioned US Dollar 195 million to solar energy projects which will have a total installed capacity of 228 MW once all commissioned , and - US Dollar 15 million to biomass energy projects which will have a total installed capacity of 12 MW once all commissioned					
Group of	Funds	Avoided	Other:	1%	Less	Through these funds so many building and industrial energy efficiency

Level of aggregatio n	Description of product/Grou p of products	Are you reporting low carbon product/s or avoided emissions	Taxonomy, project or methodolog y used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/ s in the reportin g year	% R&D in low carbon product/ s in the reportin g year	Comment
products	provided by EBRD such as MidSEFF and TurSEFF played an important catalyst role in financing renewable energy projects. As Garanti, we provided €150 million financing under MidSEFF and US\$60 million under TurSEFF up to now. We view energy-efficiency in industrial and manufacturing operations, as well as in buildings, a significant	emissions	Garanti Bank's own taxonomy (includes energy efficiency projects)		than or equal to 10%	projects were funded such as • efficient equipment replacement, • efficient lighting systems, • efficient HVAC systems, • building automation systems, • insulation, • process optimization, • efficient electric motors projects, etc. You can find more details about TurSEFF. http://www.ebrd.com/downloads/sector/sei/TURSEFF_Case_Study_Jan_201 4.pdf (p 5,10)

aggregatio n r	Description of product/Grou o of products	Are you reporting low carbon product/s or avoided emissions	Taxonomy, project or methodolog y used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/ s in the reportin g year	% R&D in low carbon product/ s in the reportin g year	Comment
p tu n e e e p tu T S E F F S M S E F F S W S tu tu tu tu tu tu tu tu tu tu tu tu tu	opportunity to cut Scope 1 & 2 emissions of cur customers. So we crovided loans o small and medium sized energy efficiency crojects hrough furkey Sustainable Energy Financing Facility (Tur-SEFF and Mid-Sized Sustainable Energy Financing Facility (Mid-SEFF), both of which are supported by the EBRD and the EIB.					

Level of aggregatio n	Description of product/Grou p of products	Are you reporting low carbon product/s or avoided emissions	Taxonomy, project or methodolog y used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/ s in the reportin g year	% R&D in low carbon product/ s in the reportin g year	Comment
	SMEs with small scale program and industry moguls by large scale program, these projects significantly contributed to Turkey's energy efficiency goals. Avoided emissions Other: Garanti Bank's own taxonomy (includes energy efficiency projects) 1% Less than or equal to 10% Through these funds so many building and industrial energy					

Level of aggregatio n	Description of product/Grou p of products	Are you reporting low carbon product/s or avoided emissions	Taxonomy, project or methodolog y used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/ s in the reportin g year	% R&D in low carbon product/ s in the reportin g year	Comment
	efficiency projects were funded such as • efficient equipment replacement, • efficient lighting systems, • efficient HVAC systems, • building automation systems, • insulation, • process optimization, • efficient electric motors projects, etc. In June 2017, Garanti released its first Green Mortgage product in collaboration with IFC. It is also Turkey's					

Level of aggregatio n	Description of product/Grou p of products	Are you reporting low carbon product/s or avoided emissions	Taxonomy, project or methodolog y used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/ s in the reportin g year	% R&D in low carbon product/ s in the reportin g year	Comment
	first mortgage covered bond in local currency. \$150 million in the equivalent of Turkish lira in covered bonds issued by Garanti, half of which to be used to provide Green Mortgages. Garanti also recently rolled out Green Auto Loan.					

CC3.3

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

Yes

CC3.3a

Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation		
To be implemented*		
Implementation commenced*	1	140
Implemented*	4	3493
Not to be implemented		

CC3.3b

For those initiatives implemented in the reporting year, please provide details in the table below

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Processes	The highest carbon emissions per m2 in Garanti Bank's physical service buildings are derived from the use of servers. With the server virtualization	2952	Scope 2 (location- based)	Voluntary	2610000	1407680	<1 year	6-10 years	

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	project that was started in 2007, servers in the Bank's data centers throughout Turkey started to be virtualized. With the use of this technology that allows the efficient utilization of server capacity, reductions in the electricity consumption and cooling requirement of the servers were achieved. In 2016, growth, including the virtualization of the Call Center physical servers, was 20%. Garanti Bank has saved 6 million kWh of electricity in 2016, corresponding to 2,952 tCO2 equivalent.								
Energy efficiency: Building services	In recently opened or renovated branches, Garanti Bank has been using airconditioning units that are more efficient in a bid to increase energy efficiency. In 2016, a total of 857 new airconditioning units were installed, saving about 565,924 kWh of energy in the year, compared to business as usual. This will result in a voluntary reduction of primarily Scope 2 emissions.	278	Scope 2 (location- based)	Voluntary	203732	2872000	4-10 years	3-5 years	
Energy efficiency:	Conceptual changes applied to the lightings, downlight	139	Scope 2 (location-	Voluntary	91017	99966	<1 year	6-10 years	The annual monetary saving TRY 91017 is

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Building services	armatures replaced with hanging lights in new or renovated branches.Increased efficiency through using hanging lights in portfolio rooms. Estimated energy savings of 282,660 kWh, This is a voluntary reduction of Scope 2 emissions.		based)						only due to consumption savings. However, saving of TRY 307834 due lower cost of the new armatures have been also made in 2016. The investment cost of new armatures are much lower than installing the older version.
Energy efficiency: Building services	Garanti Bank launched a project to replace lighting with LEDs in 2014. Replacements continued in 2015 and 2016. LED lighting in new or renovated branches where feasible have achieved energy savings of 252,046 kWh. This is a voluntary reduction of Scope 2 emissions.	124	Scope 2 (location- based)	Voluntary	81159	878310	1-3 years	6-10 years	The investment amount is for the cumulative investment made for the all LED lighting that have been replaced.

Method	Comment
Financial optimization	All energy-efficiency projects are screened for payback period and investment amount to ensure that we are finding ways to reduce
calculations	carbon emissions while optimizing cost efficiency.
Employee engagement	Over the past year, employee engagement has included widespread involvement and outreach via our Sustainability Committee and Sustainability Team to increase company-wide communication and engagement on CO2 emissions and reduction efforts. All employees are now required to receive training on sustainability; for new employees this is part of their orientation. In addition to a full-time Sustainability Team, Garanti Bank has identified and selected more than 1,000 sustainability representatives from all bank departments and some of the regional directorates and branches to support all sustainability efforts as needed. Lastly, Garanti Bank has been conducting an internal communications strategy for sustainability, which includes climate change.
Internal price on carbon	We apply our own shadow carbon price in evaluating the economics of all greenfield/brownfield fossil fuel based and renewable energy production investments in our project finance activities as well as we evaluate a carbon price based on European ETS during our energy efficiency implementations to minimize our direct environmental impact.
Dedicated budget for energy efficiency	Garanti Bank's Construction Department has a dedicated budget and a dedicated team for energy efficiency activities. Garanti's Pendik Technology Campus is being built under LEED Gold criteria. Also there is an ongoing process for Zincirlikuyu Head Office to get LEED Platinum certificate, the building already has WWF Green Office Diploma. Garanti will increase the number of its green offices as stated in its Climate Change Action Plan. The Bank already applied for WWF Green Office Diploma for 6 more buildings.
Internal incentives/recognition programs	In 2015 Garanti expanded the scope of its ISO 14001 Environmental Management System to 1,013 locations covering 100% of its employees and buildings in Turkey. In 2016 coverage of 100% has been sustained. Garanti collects environmental footprint data such as energy consumption and water consumption from each and every location through Sustainability Representatives. In 2015 Garanti added ISO 14001 criteria as one of its SPOT awards, which is an internal awards program to recognize and celebrate successful employees and also has a monetary reward. Therefore, successful Sustainability Representatives who manages their location's environmental impacts successfully will be rewarded under SPOT Awards.

CC3.3d

If you do not have any emissions reduction initiatives, please explain why not

Further Information

Page: CC4. Communication

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	Status	Page/Section reference	Attach the document	Comment
In mainstream reports (including an integrated report) but have not used the CDSB Framework	Complete	15, 16, 90, 93, 94, 95, 96, 97, 102	https://www.cdp.net/sites/2017/29/21129/Climate Change 2017/Shared Documents/Attachments/CC4.1/Garanti-Bank-2016-Annual-Report.pdf	Garanti Bank 2016 Annual Report Pages 15, 16, 90, 93, 94, 95, 96, 97, 102
In voluntary communications	Complete	40, 41, 42, 152-183	https://www.cdp.net/sites/2017/29/21129/Climate Change 2017/Shared Documents/Attachments/CC4.1/Garanti_srdr_2016_final_web_EN_7Haziran.pdf	Garanti Bank 2016 Sustainability Report 40, 41, 42, 152- 183
In voluntary communications	Complete	All	https://www.cdp.net/sites/2017/29/21129/Climate Change 2017/Shared Documents/Attachments/CC4.1/climate_change_position_statement_action_plan_v6_081015.pdf	Climate Change Position Statement and Action Plan - Published in 2015

Further Information

Module: Risks and Opportunities

Page: CC5. Climate Change Risks

CC5.1

Have you identified any inherent climate change risks that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

Risks driven by changes in regulation Risks driven by changes in physical climate parameters Risks driven by changes in other climate-related developments

CC5.1a

Please describe your inherent risks that are driven by changes in regulation

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Cap and trade schemes	Turkey seeks to establish its own emissions trading scheme (ETS) as per the PMR project conducted in collaboration with the WBG In preparation for this, the regulatory framework on 'Monitoring GHGs Emissions' was published by the Ministry of Environment and	Increased operational cost	3 to 6 years	Indirect (Client)	About as likely as not	Medium- high	We do believe that such regulation could result in an additional cost of TRY 2.6 million, based on our current energy consumption.	In anticipation of such climate-related regulations, Garanti Bank already includes potential future carbon taxes in financial modeling and projections of thermal power plant projects to ensure that they would still fulfill their financial obligations. Additionally, Garanti Bank has developed a more comprehensive	Inclusion of carbon cost into Project performance evaluations has been built into existing procedures. As such, there is no increase in cost associated with this action. To increase energy efficiency, over the past year, we have invested roughly TRY 4.7 million. Further, for our

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	Urbanization in the official gazette on 17 May 2014. The regulation will require companies from energy-intensive sectors to monitor, report and verify their CO2 emissions. While ETS would not apply directly to Garanti, it could indirectly impact the company in at least two ways: (1) by imposing new demands on loan recipients, especially for project finance, which could impact Project performance and ability to repay and (2) by leading to an increase in the cost of energy or energy intensive materials (estimated cost could be as high as TRY 2.6 million).							approach to analyze each project against specific environmental and social criteria. Environmental and Social Loan Policies constitute the environmental and social principles governing the extension of loans at Garanti Bank. Within the framework of these policies, the Bank runs the Environmental and Social Impact Assessment Process. Further, to insulate from price increases, Garanti Bank has invested roughly TRY 4.7 million in energy efficiency across its operations.	new company campus, we expect to pay a roughly 2% increase to meet LEED-certification, which is expected to drive significant carbon reductions.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Carbon taxes	Use of a carbon tax could be used to support emissions reduction target related to Turkey's INDC, especially if Turkey later decides to abandon the attempt to join the ETS. It is expected that such a development would also impact the company in the same two ways as a cap and trade scheme: (1) by imposing new demands on loan recipients, especially for project finance, which could impact Project performance and ability to repay and (2) by leading to an increase in the cost of energy or energy intensive	Increased operational cost	3 to 6 years	Indirect (Client)	About as likely as not	Medium- high	We do believe that such regulation could result in an additional cost of TRY 2.6 million, based on our current energy consumption.	In anticipation of such climate-related regulations, Garanti Bank already includes potential future carbon taxes in financial modeling and projections of thermal power plant projects to ensure that they would still fulfill their financial obligations. Additionally, Garanti Bank has developed a more comprehensive approach to analyze each project against specific environmental and social criteria. Environmental and Social Loan Policies constitute the environmental and social principles governing the extension of loans at Garanti Bank. Within the framework of these policies, the Bank runs the Environmental and Social Impact	Inclusion of carbon cost into Project performance evaluations has been built into existing procedures. As such, there is no increase in cost associated with this action. To increase energy efficiency, over the past year, we have invested roughly TRY 4.7 million. Further, for our new company campus, we expect to pay a roughly 2% increase to meet LEED-certification, which is expected to drive significant carbon reductions.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	materials (estimated cost could be as high as TRY 2.6 million).							Assessment Process. Further, to insulate from price increases, Garanti Bank has invested roughly TRY 4.7 million in energy efficiency across its operations.	
Fuel/energy taxes and regulations	Turkey's Regulation on Energy Performance in Buildings came into force in December of 2008. As of January 2011, all qualifying new buildings must meet minimum design requirements for energy efficiency. This law is expected to apply to new Garanti Bank Office buildings, for example our Pendik Technology Campus.	Increased operational cost	Up to 1 year	Direct	Virtually certain	Low- medium	As we already build new facilities to achieve energy efficiency savings, we would expect this law to impose negligible additional costs. Energy efficiency requirements typically impose a maximum 2% increase in traditional building costs.	Garanti Bank expects to exceed the design requirements of this law for new buildings based solely on ability to generate attractive costs savings. It is expected that this will include virtually all aspects of building design, structural orientation and thermal envelope, selection of building materials and systems for heating, cooling, lighting and ventilation. For example, the bank expects to achieve certification under the Leadership in Energy Efficiency	Building to LEED certification or similar energy efficiency performance imposes a roughly 2% increase over traditional building. However, these investments typically pay for themselves in less than 3 years.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								and Design (LEED) program for its planned Pendik Technology Campus.	
Emission reporting obligations	The Regulatory Framework on 'Monitoring GHGs Emissions' was published by the Ministry of Environment and Urbanization in the official gazette on 17 May 2014. A revision was released on 31 May 2017. The regulation will require companies from energy-intensive sectors to monitor, report and verify their CO2 emissions until 31 October 2017. While the new regulation would not apply directly to Garanti, it could indirectly impact the company in at least two ways:	Increased operational cost	Up to 1 year	Indirect (Client)	Very likely	Medium- high	We do believe that such regulation could result in an additional cost of TRY 2.6 million, based on our current energy consumption.	In anticipation of such climate-related regulations, Garanti Bank already includes potential future carbon taxes in financial modeling and projections of thermal power plant projects to ensure that they would still fulfill their financial obligations. Additionally, Garanti Bank has developed a more comprehensive approach to analyze each project against specific environmental and social criteria. Environmental and Social Loan Policies constitute the environmental and social principles governing the extension of loans at Garanti Bank.	Inclusion of carbon cost into Project performance evaluations has been built into existing procedures. As such, there is no increase in cost associated with this action. To increase energy efficiency, over the past year, we have invested roughly TRY 4.7 million.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	(1) by imposing new demands on loan recipients, especially for project finance, which could impact Project performance and ability to repay and (2) by leading to an increase in the cost of energy or energy intensive materials (estimated cost could be as high as TRY 2.6 million).							Within the framework of these policies, the Bank runs the Environmental and Social Impact Assessment Process. Further, to insulate from price increases, Garanti Bank has invested roughly TRY 4.7 million in energy efficiency across its operations.	

CC5.1b Please describe your inherent risks that are driven by changes in physical climate parameters

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in mean	A mean increase in heat (during	Increased operational	Up to 1 year	Direct	More likely than not	Low- medium	A mean increase in heat (during	As part of a wider campaign to	Garanti Bank has invested roughly

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
(average) temperature	summer) and/or cold (during winter) could meaningfully increase (as high as 3%) our cooling and/or heating costs, especially considering the high cooling need of our IT equipment. This would result in an additional cost of TRY 1.5 million.	cost					summer) and/or cold (during winter) could meaningfully increase (as high as 3%) cooling and/or heating costs, which would result in an additional cost of TRY 1.5 million.	reduce operational expenses, Garanti Bank has undertaken numerous efforts aimed at reducing energy use at new and existing facilities. or existing facilities, these include changes in lighting, mechanical systems, airconditioning, information technology and more. For new facilities, Garanti intends to build to industryleading standards for energy efficiency. For example, Garanti's new Pendik Technology Campus, is being built to meet LEED-certification.	TRY 4.7 million in energy efficiency efforts, which could insulate the company from energy costs associated with increased heating and cooling needs. For its new LEED-certified facility, we are assuming a total price premium of roughly 2%.
Change in precipitation	Water scarcity and drought caused by	Inability to do	3 to 6 years	Indirect (Client)	More likely than not	High	Droughts that might occur due to	Garanti tried to avoid hydro	Garanti Bank has invested roughly

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
extremes and droughts	climate change has a direct impact on hydro power plants financed by Garanti in terms of operation and financial return. Droughts that might occur due to drastic fall of precipitation rate might cause hydro power plants to become nonoperational. This might prevent the plant operating/owning company from repaying its loan with cash flow generated from the project and sponsor support will be necessary.	business					drastic fall of precipitation rate might cause hydro power plants to become nonoperational. This would prevent the plant operating/owning company from repaying its loan. Such a case might prevent the plant operating/owning company from repaying its loans (up to TRY 3.6 billion in total by the end of 2016) with cash flow generated from the project and sponsor support will be necessary. For instance in 2016, total damages that borrowers faced due to water access problems was approximately TRY 37 million.	projects as much as possible, for their impact on the environment is much more significant and they have much higher construction risks compared to wind projects. Garanti also expects from its customers to examine impacts of climate change on HEPP projects thoroughly. Garanti Bank subjects loan requests for investments with an investment amount more than US\$ 10 million to the Bank's ESIAM. With this internal model, projects are categorized and graded according to their characteristics, size, sensitivity, location and their possible social	TRY 285 thousand on formation and implementation of Environmental Social Impact Assessment Model by cooperating with consultants. Besides, each Project evaluated under ESIAM undergoes detailed environmental social impacts assessments and due diligences. However, the cost of these Project based assessments is paid by the clients. Approximate cost of the workshop was approximate TRY 17 thousand.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								(including with respect to human rights) and environmental impacts. The Bank's decisions are based on the risk rating calculated in accordance with the model). Water-related criteria in the assessment process are as follows: • Selection of location & project area (If a project is located in a RAMSAR area, it is immediately rejected regardless of the size) • Current characteristics of water prior to the project • Impact on ground water • Impact on surface water • Water quality and quantity after the project • Alternative water supply sources. With this	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								process, Garanti is able to support its customers to better manage their water-related risks. Regarding E&S risks at power and infrastructure sectors, we conducted a workshop for our clients in 2016.	

CC5.1c Please describe your inherent risks that are driven by changes in other climate-related developments

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Reputation	Stakeholders increasingly expect companies, especially banks, to proactively address climate change issues. Garanti Bank believes that these expectations demand that a	Reduced demand for goods/services	3 to 6 years	Direct	About as likely as not	Medium- high	Reputational damage due to controversial issues could result in early withdrawal of time deposits worth TRY 150 million.	Driven in large part to ensure that Garanti Bank retains a reputation for excellence and leadership in the Turkish market, the Bank has and will continue to institute comprehensive	Investments related to the efforts described include TRY 4.7 million focused on operational energy efficiency, four full-time employees

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	company have a comprehensive climate change program. While such programs necessarily focus on emissions from owned and operated sources, they should also include key value chain issues. Banks, in particular, face risks associated with loans that could be associated with high greenhouse gas emissions or flashpoint issues capable of generating significant negative publicity, such as an oil spill. Failure to meet these expectations could damage reputation resulting in a loss of investor support and customer loyalty, among other challenges.							efforts to address climate change. These include establishment of a Sustainability Committee and Sustainability Team to manage climate change issues, development of a comprehensive Environmental Management System which is certified to ISO 14001, communication of climate change activities (most recently in Garanti's Sustainability Report and the sustainability section of Garanti's web page), participation in CDP, striving to exceed the companywide carbon reduction goal, strengthening environmental criteria in our project finance activities, the financing of renewable energy	devoted to sustainability, more than US\$ 4.8 billion in loans for renewable energy projects by the end of 2016.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								projects and the launch of numerous specific projects under the above structures.	

CC5.1d

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC5.1e

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC5.1f

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

Further Information

Page: CC6. Climate Change Opportunities

CC6.1

CC6.1a

Have you identified any inherent climate change opportunities that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

Opportunities driven by changes in regulation Opportunities driven by changes in physical climate parameters Opportunities driven by changes in other climate-related developments

Please describe your inherent opportunities that are driven by changes in regulation

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Cap and trade schemes	Turkey seeks to form its own emissions trading scheme (ETS). In preparation for this, the regulatory framework	New products/business services	3 to 6 years	Indirect (Client)	About as likely as not	Medium- high	While ETS would not apply direct to Garanti, it could indirectly drive opportunities for the company in at least one way: accelerating the demand for	Garanti Bank has already begun to position as a leader in the finance of renewable energy and energy efficiency projects,	To maintain our leadership position in green market opportunities, Garanti Bank provided more than US\$ 4.8 billion to renewable energy

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	on 'Monitoring GHGs Emissions' was published by the Ministry of Environment and Urbanization in the official gazette on 17 May 2014. The regulation will require companies from energy intensive sectors to monitor, report and verify their CO2 emissions. While ETS would not apply direct to Garanti, it could indirectly drive opportunities for the company in at least one						renewable energy and energyefficiency projects, which the company could finance (considering the current renewable portfolio, this opportunity could create new financing opportunities amounting to as high as US\$ 0.2 billion per year)	ranging from large infrastructure style projects to facility-specific investments for small and medium enterprises. Additionally, Garanti Bank now monitors carbon trading opportunities which would represent TRY hundreds of millions.	investments by the end of 2016. To date, our primary cost have been (1) training of key staff for existing green lending opportunities (The cost of all trainings –both in-class and distant learning per employee is approx. TRY 601 per annum. As these roles have been built into existing responsibilities, there is no additional cost compared to BaU), and (2) the cost of consultancy services associated to the development of such products, which represent less than TRY 100k per year.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	way: accelerating the demand for renewable energy and energy efficiency projects, which the company could finance (considering the current renewable portfolio, this opportunity could create new financing opportunities amounting to as high as US\$ 0.2 billion per year)								

CC6.1b

Please describe your inherent opportunities that are driven by changes in physical climate parameters

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Other physical climate opportunities	Physical impacts on existing settlements could accelerate the demand for the financing of new infrastructure projects, which Garanti could finance (considering the current infrastructure portfolio, this opportunity could create new financing opportunities amounting to as high as US\$ 50 million per year).	Increased demand for existing products/services	>6 years	Indirect (Client)	More likely than not	High	Many experts believe climate change is likely to severely impact existing human settlement and commercial establishments over the next half-century and beyond. The flip side to this threat will be a growing need for new infrastructure projects to support the resettlement of existing populations and new commerce. Considering our current infrastructure portfolio, this opportunity could create new financing opportunities amounting to as high as US\$ 50 million per year.	Garanti Bank has long been a key lender to infrastructure projects in Turkey and would expect to capitalize on any new market opportunities associated with the physical impacts of climate change. To do so, we would expect to leverage our existing experience with such projects and relevant relationships with financial and governmental institutions.	To date, our primary cost has been training of key staff for such lending opportunities (the cost of all trainings – both in-class and distant learningper employee is approx. TRY 601 per annum). As these roles have been built into existing responsibilities, there is no additional cost compared to BaU.
Induced changes in natural	In order to offer permanent	New products/business services	1 to 3 years	Indirect (Client)	Very likely	High	By the end of 2016, the amount of loans	Through these initiatives, the Bank continues	To date, our primary cost has been training of

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
resources	financing to the agricultural sector, Garanti Bank offers financing with appropriate grace periods on harvest schedules. In addition to providing credit to agricultural facilities, the Bank's intention is to become a solution partner that provides for the needs, advice and consulting services in the sector.						provided to customers with the agriculture and husbandry sector codes had reached TL 5.2 billion, and the number of customers had reached 30,000, while 21,000 of these customers were SMEs.	to stand with the agricultural establishments with its "Supporter of Agriculture, Guarantee of Producer" motto. Garanti offered an "Agricultural Irrigation Systems Loans" in the first quarter of 2015. By offering these loans, Garanti aims to promote sustainable irrigation systems and the automation of these systems where water taken from the source into field is distributed by drip, sprinkler, and micro sprinkler irrigation. Payments of the loans which are mortgage-secured and have a grace period of up to 120 months can	key staff for such lending opportunities (the cost of all trainings – both in-class and distant learningper employee is approx. TRY 601 per annum). As these roles have been built into existing responsibilities, there is no additional cost compared to BaU.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								be planned in 3 or 6 months depending on the harvest periods or yearly. By the end of 2016 approximately TL 108 million lending have been provided under this loan. Garanti is also the first bank to give loans via electronic warehouse receipt. With the new regulation, electronic warehouse receipt will be created on behalf of the farmer or any institution that delivers products to a warehouse licensed by the Ministry of Customs and Trade.	

Please describe your inherent opportunities that are driven by changes in other climate-related developments

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Reputation	By proactively addressing climate change and other social and environmental concerns, we can exceed stakeholder expectations and enhance our reputation. Ability to meet these expectations could enhance reputation resulting in an increased level of investor support and customer loyalty.	Increased demand for existing products/services	3 to 6 years	Direct	Very likely	High	By meeting and exceeding stakeholder concerns for performance, Garanti Bank can differentiate itself with investors, financial institutions and customers. For instance, our strong support to wind power projects which enable transition to a low carbon economy, as well as our expertise in the management of environmental and social impact of projects resulted in a growth of our wind portfolio (~US\$ 215 million during the reporting year) and ability to collaborate with international	Driven in large part to ensure that Garanti Bank retains a reputation for excellence and leadership in the Turkish market, the Bank has and will continue to institute comprehensive efforts to address climate change. These include establishment of a Sustainability Committee and Sustainability Team to manage climate change issues, development of a comprehensive Environmental Management System which is certified to ISO 14001, communication of climate change activites (most recently in Garanti's Sustainability	Investments related to the efforts described include TRY 4.7 million focused on operational energy efficiency, four full-time employees devoted to sustainability, exceeded US\$ 4.8 billion in loans for renewable energy projects by the end of 2016.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							financial institutions which provide favored lending for low carbon projects. For instance, Garanti has secured financing worth EUR 100 million in 2016, for energy efficiency and renewable energy projects from Proparco.	Report and the sustainability section of Garanti's web page), participation in CDP, striving to exceed the company-wide carbon reduction goal, strengthening environmental criteria in our project finance activities, the financing of renewable energy projects and the launch of numerous specific projects under the above structures. In addition, Garanti decided to support CDP Water program in Turkey. Besides, we shared our Climate Change Position Statement and Action Plan and shared our dedication with our stakeholders.	

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Other drivers	By formalizing our approach to GHG emissions management, we enhance our ability to strategically reduce energy costs.	Reduced operational costs	Up to 1 year	Direct	Virtually certain	Medium	Developing projects to reduce its emissions by carefully evaluating its greenhouse gas profile, Garanti Bank has focused on energy-efficiency projects that will also help reducing its operating costs. For instance if Garanti Bank had not invested in energy efficiency projects during the reporting year, its costs associated to energy would have been approximately TRY 3 million higher than today.	Garanti Bank has undertaken numerous efforts aimed at reducing energy use at new and existing facilities. For existing facilities, these include changes in lighting, mechanical systems, airconditioning, information technology and more. For new facilities, Garanti Bank intends to build to industryleading standards for energy efficiency. For example, Garanti's new Pendik Technology Campus is being built to meet LEED certification.	Garanti Bank has invested roughly TRY 4.7 million in energy efficiency efforts. For its new LEED certified facility, we are assuming a total price premium of roughly 2%.

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC6.1e

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC6.1f

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

Further Information

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Page: CC7. Emissions Methodology

CC7.1

Please provide your base year and base year emissions (Scopes 1 and 2)

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 1	Sun 01 Jan 2012 - Mon 31 Dec 2012	15568
Scope 2 (location-based)	Sun 01 Jan 2012 - Mon 31 Dec 2012	73994
Scope 2 (market-based)	Sun 01 Jan 2012 - Mon 31 Dec 2012	73994

CC7.2

Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

Please select the published methodologies that you use

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

CC7.2a

If you have selected "Other" in CC7.2 please provide details of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

CC7.3

Please give the source for the global warming potentials you have used

Gas	Reference
CO2	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	IPCC Fourth Assessment Report (AR4 - 100 year)
Other: R-407A	IPCC Fourth Assessment Report (AR4 - 100 year)
Other: R-410A	IPCC Fourth Assessment Report (AR4 - 100 year)
Other: R-134A	IPCC Fourth Assessment Report (AR4 - 100 year)

CC7.4

Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data at the bottom of this page

Fuel/Material/Energy	Emission Factor	Unit	Reference
Diesel/Gas oil	0.00267	metric tonnes CO2e per liter	Density and NCV used in the EF calculations are in compliance with EIE regulations (no data is available from gas distribution company). IPCC data is from Table 2.4 Default Emission Factors For Stationary Combustion in the Commercial/Institutional Category. Calculated from combustion without CO
Diesel/Gas oil	0.00267	metric tonnes CO2e per liter	Density and NCV used in the EF calculations are in compliance with EIE regulations. IPCC data is from Table 3.2.1 Road Transport Default CO2 Emission Factors and Table 3.2.2 Road Transport Default N2O and CH4 and GWP values.
Natural gas	0.00194	metric tonnes CO2e per m3	NCV used in the EF calculations are in compliance with EIE regulations (no data is available from gas distribution company.) IPCC data is from Table 2.4 Default Emission Factors For

Fuel/Material/Energy	Emission Factor	Unit	Reference
			Stationary Combustion in the Commercial/Institutional Category. Calculated from combustion without CO.
Lignite	1.27650	metric tonnes CO2e per m3	NCV 3000 kcal/kg used in the EF calculations are in compliance with EIE regulations (no data is available from gas distribution company.) IPCC data is from Table 2.4 Default Emission Factors For Stationary Combustion in the Commercial/Institutional Category. Calculated from combustion without CO.
Electricity	0.4915	metric tonnes CO2e per MWh	In Turkey, there is no official EF calculated for electricity grid; international sources (such as DEFRA, IEA) are not updated therefore electricity grid emission factor is calculated using most recent data from TEIAS 2015.
Distillate fuel oil No 2	3.1261	metric tonnes CO2e per metric tonne	EIE
Other: R410A	2087.5	metric tonnes CO2 per metric tonne	IPCC
Other: R407A	2107.0	metric tonnes CO2 per metric tonne	IPCC
Other: Business Air Travel: Long-haul	0.00010	Other: metric tonnes CO2e per passenger km	DEFRA, 2016
Other: Business Air Travel: Medium-haul	0.00009	Other: metric tonnes CO2e per passenger km	DEFRA, 2016
Other: Business Air Travel: Short-haul	0.00015	Other: metric tonnes CO2e per passenger km	DEFRA, 2016
Other: R134A	1430.0	metric tonnes CO2 per metric tonne	IPCC

Further Information

Page: CC8. Emissions Data - (1 Jan 2016 - 31 Dec 2016)

Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Operational control

CC8.2

Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e

10924

CC8.3

Please describe your approach to reporting Scope 2 emissions

Scope 2, location-based	Scope 2, market-based	Comment
We are reporting a Scope 2, location-based figure	We have no operations where we are able to access electricity supplier emissions factors or residual emissions factors and are unable to report a Scope 2, market-based figure	Supplier-specific data for Garanti Bank's electricity consumption is not available.

CC8.3a

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
57259		Supplier-specific data for Garanti Bank's electricity consumption is not available.

CC8.4

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

No

CC8.4a

Please 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	Relevance of Scope 1 emissions from this source	Relevance of location-based Scope 2 emissions from this source	Relevance of market-based Scope 2 emissions from this source (if applicable)	Explain why the source is excluded
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CC8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	More than 2% but less than or equal to 5%	Data Gaps Assumptions Extrapolation Metering/ Measurement Constraints Data Management Other: Emission factor uncertainity and human error	The uncertainity of Scope 1 emissions is originating from assumptions made for consumption of branches with data gaps, emission factor uncertainity, potential human errors while entering fuel consumption manually at branches.
Scope 2 (location- based)	More than 2% but less than or equal to 5%	Data Gaps Assumptions Metering/ Measurement Constraints Data Management Other: Emission factor uncertainty and human error	The uncertainty of Scope 2 emissions is originating from metering uncertainties, assumptions made for electricity consumption of branches with data gaps and extrapolation made for standalone ATMs and emission factor uncertainity, potential human errors while entering heating electricity consumption manually at branches.
Scope 2 (market- based)			Supplier-specific data for Garanti Bank's electricity consumption is not available.

CC8.6

Please indicate the verification/assurance status that applies to your reported Scope 1 emissions

Third party verification or assurance process in place

Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements

Verificatio n or assurance cycle in place	Status in the current reportin g year	Type of verificatio n or assurance	Attach the statement Page/se n refere		Relevant standard	Proportio n of reported Scope 1 emissions verified (%)
Annual process	Complete	Limited assurance	https://www.cdp.net/sites/2017/29/21129/Climate Change 2017/Shared Documents/Attachments/CC8.6a/EY_Garanti_Assurance statement for 2017 CDP Response_Fin.pdf	All	ISAE300 0	100
Annual process	Complete	Limited assurance	https://www.cdp.net/sites/2017/29/21129/Climate Change 2017/Shared Documents/Attachments/CC8.6a/Garanti_srdr_2016_final_web_EN_7Haziran.pdf	184,185, 192, 193, 194, 195	ISAE300 0	100

CC8.6b

Please provide further details of the regulatory regime to which you are complying that specifies the use of Continuous Emission Monitoring Systems (CEMS)

	Regulation	% of emissions covered by the system	Compliance period	Evidence of submission
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CC8.7

Please indicate the verification/assurance status that applies to at least one of your reported Scope 2 emissions figures

Third party verification or assurance process in place

CC8.7a

Please provide further details of the verification/assurance undertaken for your location-based and/or market-based Scope 2 emissions, and attach the relevant statements

Locatio n-based or market- based figure?	Verificatio n or assurance cycle in place	Status in the current reportin g year	Type of verificatio n or assuranc e	Attach the statement	Page/Sectio n reference	Relevan t standar d	Proportio n of reported Scope 2 emission s verified (%)
Location -based	Annual process	Complet e	Limited assurance	https://www.cdp.net/sites/2017/29/21129/Climate Change 2017/Shared Documents/Attachments/CC8.7a/EY_Garanti_Assurance statement for 2017 CDP Response_Fin.pdf		ISAE300 0	100
Location -based	Annual process	Complet e	Limited assurance	https://www.cdp.net/sites/2017/29/21129/Climate Change 2017/Shared Documents/Attachments/CC8.7a/Garanti_srdr_2016_final_web_EN_7Haz iran.pdf	184,185, 192, 193, 194, 195	ISAE300 0	100

CC8.8

Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2

Additional data points verified	Comment
Year on year emissions intensity figure	Total Scope 1 and Scope 2 emissions divided by total assets of the Bank as of 31.12.2016 in billion TL terms compared to 31.12.2015. The total assets are based on the Bank's audited financial statements, therefore no additional financial audit took place for this indicator. Reported following the guidance in GRI G4-EN18 as reported in Appendix 4: Resource Consumption and GHG Data of 2016 Sustainability Report – page 200, 201.

Additional data points verified	Comment
Product footprint verification	Avoided emissions due to operational renewable energy projects (HPP and WPP) under loan from Garanti. The projects that went operational in 2016 are in scope of assurance. Emissions are avoided by financing renewable energy projects by making sure no additional fossil fuels are burned for the electricity demand. Renewable Energy Financing, pages 167-171 of 2016 Sustainability Report
Renewable energy products	Renewable energy portfolio (Amount of investments in renewable energy projects by type (as of 31.12.16) Installed capacity of renewable energy projects by type (as of 31.12.16) Garanti's market share of operational installed wind capacity in Turkey (as of 31.12.16). The scope of assurance covers the loan amounts committed and the installed capacity of renewable energy projects that were signed by Garanti in 2016. The total installed capacity of renewable energy projects in Turkey are taken from the General Directorate of Energy Affairs website (http://www.eigm.gov.tr/tr-TR/Sayfalar/Enerji-Yatirimlari). Garanti's share in installed capacity in a project is calculated by multiplying Garanti's share in the committed loan amount with the total installed capacity of a project. This data was added to the cumulative data that has been assured previously. Financing Renewable Energy, Tables 14-17, 2016 Sustainability Report.
Other: Total Energy consumption by source in 2016	Includes energy consumption from fossil fuel sources for heating, generators, leased vehicle fleet and purchased electricity from Garanti Bank's operations (Headquarters, service buildings, branches and ATMs) in Turkey. IPCC energy conversion factors are used to convert source data in cubic meters, liters and tonnes to MWh and GJ. Total Energy consumption is reported following the guidance in GRI G4-EN3 Energy consumption within the organization as reported in Appendix 4: Resource Consumption and GHG Data of 2016 Sustainability Report. For the Bank's reporting purposes, data is usually reported in MWh. Following the guidance in GRI G4, total energy consumption in Gigajoules is: 564,174 GJs for the year-ending 31.12.2016.
Other: Total Water Withdrawal by source in 2016	Includes total water withdrawal and consumption from Garanti Bank's operations in Turkey (Municipality supplied water from headquarters, service buildings and branches). Reported following the guidance in GRI G4-EN8 Total water withdrawal by source as reported in the section on Climate Change Management on pages 174-183 of 2016 Sustainability Report.
Other: Environmental Impact Assessment Process (ESIAP) related to projects finance by Garanti Bank	Within the scope of ESIAP verification, number of assessed projects, number of rejected projects due to environmental/social nonconformities, risk rating results and number of site visits performed during 2016 are included. The assurance scope covers a review of the environmental and social rating assessment process. The Bank has an internal methodology based on international good practice for environmental and social risk assessment. Please see Environmental and Social Risk Management, Table 12 of 2016 Sustainability Report. Detailed information on the Environmental and Social Impact Assessment is available on the Bank's website.
Other: Stakeholder Engagement Process and Materiality Analysis	Garanti undertakes an annual materiality analysis for its GRI G4 Sustainability Report. For details, please see section on Material Issues on pages 38-42 of 2016 Sustainability Report. The information in scope of assurance is the following: • integrity of calculations in materiality analysis being supported by underlying analysis and evidence • analysis of material issues being consistent with the Bank's internal and external stakeholder evidence on a sample basis • analysis for issues material to the Bank being supported by underlying analysis and evidence.
Other: Sustainability Governance at Garanti	Sustainability Governance at Garanti is explained in detail in the Sustainability Governance Section on pages 64-75 of 2016 Sustainability Report. The information in scope of assurance is the following: • existence of Bank's sustainability committee and 7 sustainability working groups • number of sustainability committee meetings held during the reporting

Additional data points verified	Comment
	period • composition (i.e. membership) of sustainability committee • existence of Bank's network of sustainability representatives and their role in working with sustainability team to collect data for the sustainability report and implement decisions of the sustainability committee • communication between sustainability committee, team and network • evidence that the sustainability committee has discussed the Bank's material topics and critical concerns raised during the reporting period.
Other: Community Investments	Community Investments and Community Investments Materiality Analysis

CC8.9

Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No

CC8.9a

Please provide the emissions from biologically sequestered carbon relevant to your organization in metric tonnes CO2

Further Information

Page: CC9. Scope 1 Emissions Breakdown - (1 Jan 2016 - 31 Dec 2016)

CC9.1

Do you have Scope 1 emissions sources in more than one country?

No

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Please break down your total gross global Scope 1 emissions by country/region

Country/Region	Scope 1 metric tonnes CO2e

CC9.2

Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

By GHG type By activity

CC9.2a

Please break down your total gross global Scope 1 emissions by business division

Business division	Scope 1 emissions (metric tonnes CO2e)

Please break down your total gross global Scope 1 emissions by facility

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
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CC9.2c

Please break down your total gross global Scope 1 emissions by GHG type

GHG type	Scope 1 emissions (metric tonnes CO2e)
CO2	9430.79
CH4	19.38
N2O	78.37
Other: R-407A	337.12
Other: R-410A	617.9
Other: R-134A	440.44

CC9.2d

Please break down your total gross global Scope 1 emissions by activity

Activity	Scope 1 emissions (metric tonnes CO2e)

Activity	Scope 1 emissions (metric tonnes CO2e)
Facility Heating Fuel	6530.06
Fleet (mobile sources)	2998.48
Refrigerants	1395.46

Further Information

Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2016 - 31 Dec 2016)

CC10.1

Do you have Scope 2 emissions sources in more than one country?

No

CC10.1a

Please break down your total gross global Scope 2 emissions and energy consumption by country/region

Country/Region	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
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By activity			
2a			
Please break down your to	tal gross global Scope 2 emissions	by business division	
	Coope 2 leastion based		
Business division	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)	
2b			
Please break down your to	tal gross global Scope 2 emissions	by facility	
E		000.)	
Facility	Scope 2, location-based (metric to	nnes CO2e)	Scope 2, market-based (metric tonnes CO2e)

CC10.2c

Please break down your total gross global Scope 2 emissions by activity

Activity	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
Facilities	50394.44	
Stand-alone ATMs	6866.65	

Further Information

Page: CC11. Energy

CC11.1

What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

CC11.2

Please state how much heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year

Energy type	MWh
Heat	0
Steam	0
Cooling	0

Please state how much fuel in MWh your organization has consumed (for energy purposes) during the reporting year

41741.57

CC11.3a

Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

Fuels	MWh
Diesel/Gas oil	14305.40
Natural gas	26945.05
Lignite	409.47
Distillate fuel oil No 2	81.65

CC11.4

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor in the market-based Scope 2 figure reported in CC8.3a

Basis for applying a low carbon emission factor	MWh consumed associated with low carbon electricity, heat, steam or cooling	Emissions factor (in units of metric tonnes CO2e per MWh)	Comment
No purchases or generation of low carbon electricity, heat, steam or cooling accounted with a low carbon emissions factor	0		

Please report how much electricity you produce in MWh, and how much electricity you consume in MWh

Total electricity consumed (MWh)	Consumed electricity that is purchased (MWh)	Total electricity produced (MWh)	Total renewable electricity produced (MWh)	Consumed renewable electricity that is produced by company (MWh)	Comment
116501.74	116501.74	0	0	0	

Further Information

Page: CC12. Emissions Performance

CC12.1

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

Decreased

CC12.1a

Please 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

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
Emissions reduction activities	4.67	Decrease	Due to emissions reduction activities such as energy efficiency implementations (LED installation, AC renewal, armature renewal, server visualization) 7100630 kWh was saved in terms of electricity consumption, which resulted with 3493 tCO2e. 3493/74762.46=4.67%

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
Divestment			
Acquisitions			
Mergers			
Change in output	0.91	Increase	The increase in the number of ATMs caused an increase of electricity consumption of 1234269 kWh due to ATM utilization, which corresponds to 681 tCO2e. 681/74762.46*100=0.91%.
Change in methodology			
Change in boundary			
Change in physical operating conditions	9.12	Decrease	There has been a decrease in Turkey's grid emission factor by ~11%. For 2016 Scope 2 emissions calculation, the grid emission factor based on 2015 TEİAŞ data - the most recent available official data- was used. The reason for ~11% decrease in Turkey's 2015 grid emission factor compared to 2014 is the increased amount of hydroelectric power production due to higher precipitation rate in 2015. ((0.491-0.552)/0.552))*100=-11%. 11% (7062 tCO2e) decrease in scope 2 caused a decrease of 9.44% (7062/74762.46*100) in total scope 1 and 2 emissions. Secondly, the decrease in heating day degrees caused less fuel consumption for heating purposes. This resulted with a decrease of 613 tCO2e613/74762.46*100=-0.82% Finally the increase in cooling day degrees caused increase in emission of refrigerants (856 tCO2). 856.94/74762.46*100= 1.14% Total change due to change in physical conditions: -9.44-0.82+1.14=-9.02%
Unidentified			
Other	4.08	Increase	When we compare 2016 Scope 1&2 emissions to those emitted in 2015, we see a decrease of 8.80%. However, the sum of the calculations above gives us a higher decrease, i.e. 12.88%. The difference between two values, which is 4.08%, can be attributed to the growing business operations which would result in increased business travels by company cars, increased use of fuel and electricity, as well as refrigerants in ATMs.

CC12.1b

Is your emissions performance calculations in CC12.1 and CC12.1a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

CC12.2

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator: Unit total revenue	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.0000042	metric tonnes CO2e	16368390000	Location- based	23.26	Decrease	Our total scope 1 and 2 decreased at rate of 9.86% due to our emission reduction activities and decrease in grid emission factor based on 2015 TEIAŞ data (the most recent available official data) was used. Secondly there has been an increase in our revenue at a rate of 18.84%. Besides, due to emissions reduction activities such as energy efficiency implementations (LED installation, armature renewal, server visualization, raising awareness) electricity consumption in facilities decreased in 2016 by 7100630 kWh which resulted with a decrease of 4.67% in Scope 1+2 GHG emissions.

CC12.3

Please provide any additional intensity (normalized) metrics that are appropriate to your business operations

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
218.5	metric tonnes CO2e	billion (currency) funds under management	312.1	Location- based	18.30	Decrease	Our total scope 1 and 2 decreased at rate of 9.86% due to our emission reduction activities and decrease in grid emission factor based on 2015 TEİAŞ data (the most recent available official data) was used. Secondly there has been an increase in our total assets at a rate of 11.62%. Besides, due to emissions reduction activities such as energy efficiency implementations (LED installation, armature renewal, server visualization, raising awareness) electricity consumption in facilities decreased in 2016 by 7100630 kWh which resulted with a decrease of 4.67% in Scope 1+2 GHG emissions.

Further Information

In CDP 2016 Report, total Scope 1 value for 01.01.2015-31.12.2015 period was stated as 11762.91 tCO2e, therefore Scope 1+2 was stated as 75637.44 tCO2e. However, the values were restated (also in our 2016 Sustainability Report page 201). Restated total Scope 1+2 for 2015 is 74762.46 tCO2e.

Page: CC13. Emissions Trading

CC13.1

Do you participate in any emissions trading schemes?

No, but we anticipate doing so in the next 2 years

Please complete the following table for each of the emission trading schemes in which you participate

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tonnes CO2e	Details of ownership

CC13.1b

What is your strategy for complying with the schemes in which you participate or anticipate participating?

Turkey seeks to establish its own emissions trading scheme (ETS) as per the PMR project conducted in collaboration with the WBG. In preparation for this, the regulatory framework on 'Monitoring GHGs Emissions' was published by the Ministry of Environment and Urbanization in the official gazette on 17 May 2014. The regulation will require companies from energy-intensive sectors to

monitor, report and verify their CO2 emissions. While ETS would not apply direct to Garanti, it could indirectly drive opportunities for the company in at least two ways: (1) accelerating the demand for renewable energy and energy-efficiency projects, which the company could finance (considering the current renewable portfolio, this opportunity could create new financing opportunities amounting to as high as US\$ 0.2 billion per year) and (2) present new opportunities for the bank to act as a broker of carbon and provide related services (considering the total CO2e reduction of the existing portfolio, CO2 brokerage revenues could create an extra revenue amounting to as high as 3.2 million US\$).

Garanti Bank has already begun to position as a leader in the finance of renewable energy and energy-efficiency projects, ranging from large infrastructure-style projects to facility-specific investments for small and medium enterprises. Additionally, Garanti Bank monitors carbon trading opportunities which would represent TRY hundreds of millions.

Moreover, Garanti became the first Turkish company to sign the UNGC's Business Leadership Criteria on Carbon Pricing. The Plan represented the business world's support for carbon pricing prior to the Paris COP 21 Meeting. After signing the criteria, Garanti also declared its Climate Change Position Statement & Action Plan.

CC13.2

Has your organization originated any project-based carbon credits or purchased any within the reporting period?

No

Please provide details on the project-based carbon credits originated or purchased by your organization in the reporting period

Credit origination Project or credit type purchase	Project identification	Verified to which standard	Number of credits (metric tonnes CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits canceled	Purpose, e.g. compliance
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Further Information

Page: CC14. Scope 3 Emissions

CC14.1

Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services	Relevant, calculated	1451.72	The calculation was made using EPA one night hotel stay emission factors and room day numbers provided by Garanti Bank. The emission factor for upscale hotels with restaurants, meal services, meeting space is used for both domestic and international hotel stays 26,60 kg CO2e/room day (last year it was 33,38 kg CO2e/room day - 20%	50.00%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			decrease). The emission factor is quite similar to other studies carried out within Europe and Turkey. (June 2017)		
Capital goods	Not relevant, explanation provided				The GHG emissions originating from capital goods such as buildings are covered by either Scope 1 or Scope 2 emissions and exclusions are indicated in relevant sections.
Fuel-and-energy- related activities (not included in Scope 1 or 2)	Relevant, calculated	6580.41	The calculation was made by using the consumption (It) of diesel and gasoline of personal cars used for business. The EFs are the same used for calculating Scope 1 company car fleet of Garanti.	100.00%	
Upstream transportation and distribution	Not relevant, explanation provided				All emissions associated to transportation and distribution (both upstream and downstream) are covered by the figure provided at "Downstream transportation and distribution" section.
Waste generated in operations	Relevant, calculated	892	Garanti Bank's Environmental Management System envisages the reuse of waste where possible and, wherever not, recycling or, where this is not appropriate, its disposal by an authorized disposal company. Currently, the Environmental Management System covers %100 of the Bank's employees in Turkey. The data collected by Garanti is 2.368 tons. The content of the waste is 44% recycled paper/plastics/metal and 56% domestic (kitchen waste). First Order Decay Model is used to calculate the CO2eq emissions of domestic waste with the assumption that all the wastes are sent to unmanaged solid	100.00%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			waste disposal sites. It is estimated that the waste of 2016 will be disposed within 30 years.		
Business travel	Relevant, calculated	3551.95	The calculation was made by multiplying total passenger.km for Garanti Bankası with related EF of DEFRA. The flight km's are calculated by using latitude and longtitute of the airports. The EF of a long haul (>1600 km) used for calculations is 0,10131 kg CO2e; EF for medium haul is (500 km <flight (500="" 0,08905="" co2e,="" dist.<1600="" ef="" for="" haul="" kg="" km="" km)="" short="">) is 0,14735 kg CO2e.</flight>	100.00%	
Employee commuting	Relevant, calculated	1939.51	The calculation was made by using total km captured from companies providing the services for employee commuting. The emission factors of vehicle km of DEFRA is multiplied by total km of relevant vehicle type. For 16+1 vehicles the average CO2e emission factor of vans is used (0,26578kg CO2e/vehicle km), For 27+1 vehicles the CO2e emission factor for 50% laden rigid (>3,5-7,5 tonnes) is used (0,56309 kg CO2e/vehicle km for 50%laden and 0,60783 kg CO2e/vehicle km for 100% laden) -(June 2017)	100.00%	
Upstream leased assets	Not relevant, explanation provided				Garanti Bank already covers the fuel purchased for leased cars in Scope 1 emissions and in Scope 3 emissions as explained in the section named "Fuel-and-energy-related activities (not included in Scope 1 or 2)".
Downstream transportation and distribution	Relevant, calculated	557.46	The calculation was made by multiplying total ton.km for Garanti Bank with related EF of DEFRA. The informaton is provided by Cargo	82.14%	The assumptions vary among the courier companies due to quality of data received from them. The calculation was made by

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			companies.		multiplying total ton.km for Garanti Bank with related EF of DEFRA for 3 companies out of 4. For the other, the calculation was made by using total fuel usage of the company vehicles.
Processing of sold products	Not relevant, explanation provided				Emissions originating from downstream transportation and distribution is already covered by "Downstream transportation and distribution" section.
Use of sold products	Not relevant, explanation provided				Financial services that we provide result in GHG emissions, however this is already covered by "investment activities".
End of life treatment of sold products	Not relevant, explanation provided				Financial services that we provide result in GHG emissions, however this is already covered by "investment activities".
Downstream leased assets	Not relevant, explanation provided				Garanti Bank already covers the fuel purchased for leased cars in Scope 1 emissions and in Scope 3 emissions as explained in the section named "Fuel-and-energy-related activities (not included in Scope 1 or 2)".
Franchises	Not relevant, explanation provided				Garanti Bank doesn't have any franchises.
Investments	Relevant, calculated	0	GHG Protocol, Corporate Value Chain (Scope 3) Accounting and Reporting Standard was used to estimate total emissions. Garanti has included its downstream Scope 3 emissions originating from sectors that are both CO2 intensive and makes up	100.00%	Garanti's reporting includes emissions from project financings of new capacity only, including expansions of existing plants, but not re-financing of existing plants. During the reporting year, Garanti Bank has disbursed

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			the majority of its new commitments in project finance activities during the reporting year. In 2016, project finance loans disbursed to greenfield power production facilities (incl. capacity extensions) made up %40 of total new commitments, hence Garanti included greenfield power production facilities in its CO2 calculations for investments.		US\$ 0.9 billion in loans to greenfield renewable power plant investments and no fossil fuel investments were financed. Therefore the total GHG emissions of project financings of greenfield power plant investments were calculated as zero.
Other (upstream)	Not relevant, explanation provided				We have included both the upstream and downstream emissions of paper consumption in "Other (downstream)" section.
Other (downstream)	Relevant, calculated	4503.19	The calculation was made by multiplying total paper used with emission factors. The data is collected according to paper type. Copy paper used ~1020 tons, bank statements for customers nearly 294 tons, for recipts ~363 tons. Environmental Paper Network's emission factors are used for each type of paper. For 1 tons of copy paper EF used is 2,5406 tons CO2e, for bank statements the EF used is 2,8567 tons CO2e, for ATM slips EF used is 2,5406 tons CO2e -(June 2017)	100.00%	This emission value regarding paper consumption includes both upstream and downstream emissions.

CC14.2

Please indicate the verification/assurance status that applies to your reported Scope 3 emissions

Third party verification or assurance process in place

CC14.2a

Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Verificatio n or assurance cycle in place	Status in the current reportin g year	Type of verificatio n or assurance	Attach the statement	Page/Sectio n reference	Relevant standard	Proportion of reported Scop e 3 emissions verified (%)
Annual process	Complet e	Limited assurance	https://www.cdp.net/sites/2017/29/21129/Climate Change 2017/Shared Documents/Attachments/CC14.2a/EY_Garanti_Assurance statement for 2017 CDP Response_Fin.pdf	All	ISAE300 0	18
Annual process	Complet e	Limited assurance	https://www.cdp.net/sites/2017/29/21129/Climate Change 2017/Shared Documents/Attachments/CC14.2a/Garanti_srdr_2016_final_web_EN_7Hazira n.pdf	184,185, 192, 193, 194, 195	ISAE300 0	18

CC14.3

Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?

Yes

CC14.3a

Please identify the reasons for any change in your Scope 3 emissions and for each of them specify how your emissions compare to the previous year

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Purchased goods & services	Emissions reduction activities	17.23	Decrease	We reflect our innovative approach on training methods. Our employees can access various platforms including live broadcasts, simulations, videos, e-library and mobile learning under "Garanti Learning Technologies" through mobile devices anytime, anywhere. The trainings are given by certified, Professional trainers, coaches and prestigious instructors from universities, locally and internationally. In 2016, we gave 113,000 hours of training using technological methods. The ratio of technology-based trainings to total training hours is 17%.
Fuel- and energy- related activities (not included in Scopes 1 or 2)	Change in methodology	0.4	Increase	In 2015, during the calculation of the emissions due to fleet fuel consumption has increased due to a methodology change. The cars whose leasing contracts were terminated in 2015 could not be tracked if they are used for corporate of business purposes as they have been excluded from the database. The worst-case scenario was taken into consideration and all emissions from these particular cars were considered as Scope 1 emissions. This also affected the fleet based Scope 3 emission output. Therefore recalculation and restatement was made for both Scope 1 and Scope 3 GHG emissions due to the change in calculation of emissions from Garanti fleet. During 2016 CDP report this item was stated as 5,680 tCO2e. However after it is restated as 6554 tCO2e. Therefore the change is (6580-6554)/6554*100=0.4%
Business travel	Change in methodology	0.53	Decrease	For our previous calculations different haul thresholds were used. For the previous calculations The EF of a long haul (>1127 km) used for calculations is 0,10477 kg CO2e; EF for medium haul is (483km <flight (483="" 0,08974="" co2e,="" dist.<1127="" ef="" for="" haul="" kg="" km="" km)="" short="">) is 0,15757 kg CO2e. For the current calculations The EF of a long haul (>1600 km) used for calculations is 0,10131 kg CO2e; EF for medium haul is (500 km<flight (500="" 0,08905="" co2e,="" dist.<1600="" ef="" for="" haul="" kg="" km="" km)="" short="">) is 0,14735 kg CO2e.</flight></flight>
Employee commuting	Emissions reduction activities	22.87	Decrease	
Downstream transportation and distribution	Emissions reduction activities	29.49	Decrease	
Other (downstream)	Emissions reduction activities	11.45	Decrease	By enhancing digital channels and informing our customers about branchless banking practices, we increase the rate of transactions performed through digital channels. Therefore, as we increase the efficiency in the branches, we reduce our paper use, and help our customers use less fossil fuel, as they travel less often to our branches.

CC14.4

Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (Tick all that apply)

Yes, our suppliers Yes, our customers

CC14.4a

Please give details of methods of engagement, your strategy for prioritizing engagements and measures of success

Suppliers:

In 2016 Garanti listed all material and major suppliers and shared its Code of Conduct* which includes Garanti's environmental and sustainability policies with a letter stating that full compliance to the Code is expected. The Code includes the following environmental expectations. Garanti's major suppliers make up 52% of its all suppliers. Garanti is currently working on a new Supply Chain policy and framework that also includes a training program for suppliers in addition to the abovementioned Code of Conduct.

*Scope of the Code of Conduct: The policies and procedures outlined in this Code may extend its scope of application to include other people or businesses with commercial or professional links to Garanti when, by the nature of the said links, their professional behaviour may in any way affect Garanti's reputation and good name or generate any type of liability for Garanti.

Environmental Provisions:

- Protection of the environment, sustainability and the aspiration to "eco-efficiency" are priorities for Garanti, which has developed an Environment Policy and has subscribed to the principal international commitments on this issue: the United Nations Global Compact, UNEP-FI and the Carbon Disclosure Project.
- In your professional activities, behave responsibly in regard to the conservation of the environment. Follow the recommendations and procedures to reduce the environmental impact of your activity and to achieve Garanti's sustainability objectives.
- If, through your work for Garanti, you are involved in projects relating to urbanisation, construction or change of land use, ensure that you respect the cultural, historical, artistic or environmental values which might be affected. In all circumstances ensure that the essential or specific elements of protected environmental spaces are adequately conserved

Customers:

Our Environmental and Social Impact Assessment Assessment Process allows us to determine and mitigate the environmental impact of our customers. Firstly, we subject all loans to our Environmental and Social Loan Policies ("ESLP"), which set the minimum environmental and social standards governing the extension of loans at Garanti Bank. Projects that comply with ESLP principles are first evaluated for their compliance with "Sectoral Principles," which are individually defined for each sector. Projects with a total investment value of more than US\$ 10 million which comply with ESLP and Sectoral Principles are first categorized (A, B, C) based on the extent of their environmental impact. These projects are then rated under the Environmental and Social Impact Assessment Model ("ESIAM"). Under the ESIAM, their risk classes are identified based on this evaluation. Garanti Bank demands specific actions to be taken according to the risk class determined by the application of the ESIAM. If the final risk group is 1, the Bank asks an independent consultant firm to prepare a comprehensive report regarding the project's

environmental and social impacts and also to prepare, apply and regularly report an Environmental and Social Monitoring Plan ("ESMP"). If the risk group is 2, the Bank requests that the project owner(s) prepare, apply and regularly report an ESMP. The Bank expects the ESMP to be prepared in detail and with content appropriate to the project's scale and risk level, as well as the Bank's evaluation system. If the risk group is 3, actions are dependent on decision of the Bank's credit committee. If a project fails to meet the environmental and social criteria within the scope of ESIAM, the Bank may reject the project or ask the debtor to take additional measures, monitor identified impacts and report these impacts in detail on a regular basis.

For instance, we helped one of our strategic clients to understand the environmental and social risks in their hydro power project during the planning stage, which resulted with not moving forward. The project was located in the southwest of Turkey and we conducted environmental and social due diligence process. There was a particular risk that would have affected their financial performance significantly. It was the adverse impact of climate change on the river flow. After the initial due diligence, we decided to cooperate with two universities to identify the exact impact of climate change on this project. As a results, we identified 8% decrease in expected precipitation, 1 degree increase in tempareature as well as ~15% flow decrease in the dam basin. Finally, we identified that this means nearly 15% decrease in the electricity production, which was a major shift in the initial cash flow calculation of our client.

At the end, the client decided to move on with a geothermal investment rather than the hydro project. We were able to prove the financial impact of environmental risks that changed their investment decision.

CC14.4b

To give a sense of scale of this engagement, please give the number of suppliers with whom you are engaging and the proportion of your total spend that they represent

Type of engagement	Number of suppliers	% of total spend (direct and indirect)	Impact of engagement
Compliance	731	52%	In 2016 Garanti listed all material and major suppliers and shared its Code of Conduct with a letter stating that full compliance to the Code is expected. Garanti's major suppliers make up 52% of its all suppliers. Garanti is currently working on a new Supply Chain policy and framework that also includes a training program for suppliers. Scope of the Code: The policies and procedures outlined in this Code may extend its scope of application to include other people or businesses with commercial or professional links to Garanti when, by the nature of the said links, their professional behaviour may in any way affect Garanti's reputation and good name or generate any type of liability for Garanti. Environmental Provisions: • Protection of the environment, sustainability and the aspiration to "eco-efficiency" are priorities for Garanti, which has developed an Environment Policy and has subscribed to the principal international commitments on this issue: the United Nations Global Compact, UNEP-FI and the Carbon Disclosure Project. • In your professional activities, behave responsibly in regard to the conservation of the environment. Follow the recommendations and procedures to reduce the environmental impact of your activity and to achieve Garanti's sustainability objectives. • If, through your work for Garanti, you are involved in projects relating to urbanisation, construction or change of land use, ensure that you respect the cultural, historical, artistic or environmental values which might be affected. In all circumstances ensure that the essential or specific elements of protected environmental spaces are adequately

Type of engagement	Number of suppliers	% of total spend (direct and indirect)	Impact of engagement
			conserved.

CC14.4c

Please explain why you do not engage with any elements of your value chain on GHG emissions and climate change strategies, and any plans you have to develop an engagement strategy in the future

Further Information

Module: Sign Off

Page: CC15. Sign Off

CC15.1

Please provide the following information for the person that has signed off (approved) your CDP climate change response

Name	Job title	Corresponding job category
Ali Fuat Erbil	President & CEO	Chief Executive Officer (CEO)

Further Information

CDP