T.GARANTİ BANKASI A.Ş. - Climate Change 2018



CO. Introduction				
C0.1				

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(C0.1) 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 USD 84.3 Billion (TL 384.9 Billion) as of June 30, 2018.

Garanti operates in every segment of the banking sector including corporate, commercial, SME, retail, private and investment banking as an integrated financial services group together with its 8 financial subsidiaries providing services in pension and life insurance, leasing, factoring, securities, mortgage and asset management as well as international subsidiaries in the Netherlands and Romania.

As of June 30, 2018, Garanti provides a wide range of financial services to its more than 15.8 million customers with more than 18 thousand employees through an extensive distribution network of 922 domestic branches, 7 foreign branches in Cyprus and one in Malta; 3 international representative offices in London, Düsseldorf and Shanghai; 5,055 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 and advises its customers to grow their businesses in a "sustainable" 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 50.06% in Borsa Istanbul as of June 30, 2018.

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 TL 319.2 billion (USD 70.0 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 defines "Sustainability" as a commitment to build a strong and successful business for the future, while minimizing negative environmental and social (E&S) 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.

Since 2014, Garanti has been qualified for BIST Sustainability Index and BIST Corporate Governance Index and continues to be the only bank from Turkey listed in the Dow Jones Sustainability TM Emerging Markets Index, after being qualified in 2015. This year (2017) marks the third consecutive year of index inclusion with valuation on topics such as ethics, governance, financing activities, E&S performance throughout the value chain, risk management, climate change mitigation, transparency, supply chain, human and employee rights.

Garanti has been participating in local and international organizations, which allowed for widespread, high-leverage engagement of the business community with numerous national and international organizations, including governments and policymaking bodies. In addition to its long-lasting active participation in several platforms, Garanti was recently selected to become a member of the Core Group to define UNEP FI Banking Principles. Garanti also became the Chair of the Turkish Business Council for Sustainable Development (BCSD Turkey), and joined the Steering Committee of Carbon Pricing Leadership Coalition (CPLC). By focusing on the responsible and sustainable development, Garanti is actively contributing to 14 of 17 Sustainable Development Goals.

By the end of 2017, Garanti maintained its 100% coverage for ISO14001 certification at all service points in Turkey, following the audits conducted by an independent consultant. As a result, Garanti is still the first and only bank that operates an EMS in such a large area and context in Turkey. Being the first Bank with such a comprehensive EMS in Turkey, Garanti has reached a certain level of maturity about its knowledge and capabilities on GHG monitoring and data management. This was verified through a limited assurance from a third party that Garanti has received in 2017.

C0.2

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

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Row 1	January 1 2017	December 31 2017	No	<not applicable=""></not>
Row 2	<not Applicable></not 	<not Applicable></not 	<not applicable=""></not>	<not applicable=""></not>
	<not Applicable></not 	<not Applicable></not 	<not applicable=""></not>	<not applicable=""></not>
	<not Applicable></not 	<not Applicable></not 	<not applicable=""></not>	<not applicable=""></not>

	0	2
u	U	

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

C_{0.4}

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

TRY

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your consolidation approach to your Scope 1 and Scope 2 greenhouse gas inventory.

Operational control

C1. Governance

C1.1

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

C1.1a

(C1.1a) Identify the position(s) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Director on board	The Chair of The Sustainability Committee(SC) and a member of Responsible Business Committee(RBC). The SC and RBC formally review and approve the activities related to sustainable and responsible banking and meet regularly to monitor the progress to provide input to all sustainability efforts. The SC and RBC are deliberately structured to integrate sustainability concerns (i.e. climate change) and opportunities into all operations, products and services. SC meets to review and take decisions on recommendations raised by the Team and Representatives, whereas RBC meets to oversee the progress on the implementation of Garanti's Responsible Business Plan; covering sustainability-ESG efforts, community investment programs, reputation, TCR (transparent, clear, responsible) principles in customer experience, etc. For more information, please see our 2017 Integrated Annual Report, pages 121-122 (https://surdurulebilirlik.garanti.com.tr/media/1232/garanti-bank-2017-integrated-annual-report.pdf)
Chief Executive Officer (CEO)	The President and CEO, who is also a Board Member, is the member of the Sustainability Committee (SC) and the Responsible Business Committee (RBC). SC and RBC formally review and approve the activities related to sustainable and responsible banking and meet regularly to monitor the progress to provide input to all sust. efforts. SC and RBC are deliberately structured to integrate sust. concerns (i.e. climate change) and opp. into all operations, products and services. SC meets to review and take decisions on recommendations raised by the Team and Representatives, whereas RBC meets to oversee the progress on the implementation of Garanti's RB Plan; covering sustainability-ESG efforts, community investment programs, reputation, TCR (transparent, clear, responsible) principles in customer experience, etc. For more information, please see our 2017 Integrated Annual Report, pages 121-122 (https://surdurulebilirlik.garanti.com.tr/media/1232/garanti-bank-2017-integrated-annual-report.pdf).
Other, please specify (Responsible Business Committee)	The Responsible Business Committee (RBC) was established in 2017. The RBC has met 2 times since inception in 2017. There are two Board Members in the RBC one of them is a Director on the Board and the other is the CEO. The RBC ensures that responsible business is integrated into the banking functions and into the strategic priorities of Garanti, also systematically ensures that stakeholders are at the center of the decision-making. The RBC meets to oversee the progress on the implementation of Garanti's Responsible Business Plan; covering sustainability-ESG efforts, community investment programs, reputation, TCR (transparent, clear, responsible) principles in customer experience, etc. Garanti's 2017 Integrated Annual Report, (p121-122), presents more information about the committees and their roles and responsibilities: https://surdurulebilirlik.garanti.com.tr/media/1232/garanti-bank-2017-integrated-annual-report.pdf.
Other, please specify (Sustainability Committee)	The Sustainability Committee (SC) chaired by a Board Member was established in 2010 and its composition was amended in 2015. The CEO, who is also Board Member is a permanent member of the SC and Responsible Business Committee (RBC) as well. The SC formally reviews and approves the Bank's activities related to sustainability (including its environmental performance and risk assessment) and meets to review and take decisions on recommendations raised by the Sustainability Team and Sustainability Representatives. The SC has met a total of 25 times since its inception in 2010. Our Sustainability web site presents more information: https://surdurulebilirlik.garanti.com.tr/garanti-sustainability-approach/garanti-bank-and-sustainability/sustainability-management/ . Garanti's 2017 Integrated Annual Report, p121-122, presents more information about the committees and their responsibilities (https://surdurulebilirlik.garanti.com.tr/media/1232/garanti-bank-2017-integrated-annual-report.pdf).

C1.1b

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

Frequency with mechanis which into which climate-related issues are a scheduled agenda item	Please explain
Scheduled – some guiding strategy Reviewing guiding m plans of a Reviewing guiding ris manager policies Reviewing guiding at budgets Reviewing guiding a budgets Reviewing guiding business Setting performar objectives Monitoring implemen and performar objectives Monitoring overseein progress against go and targe addressin climate-re issues	Caranti believes that the concept of sustainability must be embedded throughout its decision mechanisms and business processes to create value for its stakeholders. The Sustainability committee (SC), established for this purpose in 2010, which formally reviews and approves the Bank's activities related to sustainability and is chaired by a Board Member and meets regularly in order to monitor the progress of and to provide input to all sustainability efforts. The SC's composition was amended in 2015. The CEO, who is also Board Member is a permanent member of the SC and the Responsible Business Committee (RBC) as well. The RBC ensures that responsible business is integrated into the banking functions and into the strategic priorities of Branti, also systematically ensures that stakeholders are at the center of the decision-making. The committees are deliberately structured to integrate sustainability concerns (i.e. climate change) and opportunities into all operations, products and services. Committees' role is to agree on strategic direction and action plans. The SC meets to review and take decisions on recommendations raised by the Sustainability Team and Sustainability Representatives, whereas the RBC meets to oversee the progress on the implementation of Garanti's Responsible Business Plan; covering sustainability-ESG efforts, community investment programs, reputation, TCR (transparent, clear, responsible Business Plan; covering sustainability-ESG efforts, community investment programs, reputation, TCR (transparent, clear, responsible Business Plan; covering sustainability-ESG efforts, community investment programs, reputation, TCR (transparent, clear, responsible Business Plan; covering sustainability are satisfated in Section "C1.2a". The SC has met a total of 25 times since its inception in 2010 and the RBC has met a total of 2 times since its inception in 2017. By the end of 2017, Garanti has more than 1,000 Sustainability Representatives, who are responsible for working in coordination with the Sustainab

C1.2

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

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Sustainability committee	Both assessing and managing climate-related risks and opportunities	Quarterly
Other C-Suite Officer, please specify (EVP of Corporate and Investment Banking)	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly
Environment/ Sustainability manager	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly
Facility manager	Both assessing and managing climate-related risks and opportunities	Quarterly
Other, please specify (Sustainability Representatives)	Managing climate-related risks and opportunities	Not reported to the board

C1.2a

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(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored.

Garanti believes that the concept of sustainability must be embedded throughout its decision mechanisms and business processes to create value for its stakeholders and, as a consequence, has integrated a Sustainability Committee (SC) structure and very recently a Responsible Business Committee (RBC) with Committee Members representing relevant lines of business and departments throughout its organization. SC meets to review and take decisions on recommendations raised by the Team and Representatives, whereas RBC meets to oversee the progress on the implementation of Garanti's RB Plan; covering sustainability-ESG efforts, community investment programs, reputation, TCR (transparent, clear, responsible) principles in customer experience, etc.

The SC, established in 2010, is chaired by a Board member. Its composition was amended in 2015 and the current membership of the SC is as follows: a Board Member who is the Chair of the SC, the CEO, Executive Vice President (EVP) of Corporate and Investment Banking (CIB), Chief Credit Risk Officer, EVP of Human Resources (HR) and Support Services, EVP of Finance and General Accounting and EVP of SME Banking. The SC has met a total of 25 times since its inception in 2010.

The RBC, established in 2017 and current membership of the Committee is as follows: a Board Member, the CEO, EVP of CIB, EVP of Digital Banking, Customer Solutions and Experience, EVP of SME Banking, EVP of HR and Support Services, EVP of Finance and General Accounting, EVP of Legal Services and Collection and Directors of Project Finance (PF), Strategic Planning and Resp. Banking, Corporate Brand Management and Marketing Communication, Customer Experience and Satisfaction, Small Enterprise Banking Marketing, Investor Relations and Manager of Resp. Banking Coordination.

The Committees are deliberately structured to integrate sustainability concerns (i.e. climate change) and opportunities into all operations, products and services. This structure ensures all efforts are consistent with internal policies and regulations. The SC meets to review and take decisions on recommendations raised by the Team and Representatives, whereas the RBC meets to oversee the progress on the implementation of Garanti's Responsible Business Plan; covering sustainability-ESG efforts, community investment programs, reputation, TCR (transparent, clear, responsible) principles in customer experience, etc.

Garanti's 2017 Integrated Annual Report, p121-122, presents more information about the committees' roles and responsibilities (https://surdurulebilirlik.garanti.com.tr/media/1232/garanti-bank-2017-integrated-annual-report.pdf).

In 2012, Garanti established a full-time Sustainability Team (ST) which resides in the Project Finance Department in order to enhance the efficiency of its organizational structure for sustainability. Consisting of 5 members including the Sustainability Manager, the team included environmental engineers.

The ST is responsible for the coordination of all sustainability-related activities at Garanti on a day-to-day basis. The team reporting to the SC on a regular basis, works in cooperation with the Bank's other units during the implementation of the decisions taken by the SC. Monitoring the Bank's sust. 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. Sustainability web site presents more information about Sustainability Management (https://surdurulebilirlik.garanti.com.tr/garanti-sustainability-approach/garanti-bank-and-sustainability/sustainability-management/). By the end of 2017, Garanti has more than 1,000 Sustainability Representatives, who are responsible for working in coordination with the ST to collect data and support the implementation of the decisions taken by the SC within their own departments, from headquarters, regional directorates and branches.

Additionally, Garanti established its Env. and Social (E/S) Loan Policies (ESLP) in 2011 and its E/S Impact Assessment Process (ESIAP) in 2012. The ESIAP allows the Bank to determine and mitigate the potential E/S impacts of its customers. The Bank subjects all loans to its ESLP. Projects' risk rating scores are identified and regularly reported to the risk committee. The ST coordinates with BBVA Sustainable Finance and Reputational Risk Unit in its review of operations. For more information:

https://surdurulebilirlik.garanti.com.tr/garanti-sustainability-approach/material-issues/responsible-and-impact-oriented-finance/environmental-and-social-risk-management/

Coordination among the Branches, Regional Offices and Departments for the Environmental Management System(EMS) is achieved via the Efficiency Team (ET) of Construction Department. The ET is comprised of 6 members and responsible for the application of the EMS in the bank and ensuring the environmental sustainability of the Bank's internal activities.

C1.3

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

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

Who is entitled to benefit from these incentives?

Other C-Suite Officer

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction target

Comment

The KPI given below is an example to environmental KPIs and result in better management of the Bank's environmental footprint and affects Corporate C-Suite Officer (Executive Vice President) who is entitled to benefit from incentives: - Continuity of sustainability efforts and ranking in indices. These indices including leadership index of CDP CC and Water are linked to overall sustainability performance including GHG emissions. Garanti publicly discloses its emission reduction targets and performance in its 2017 Integrated annual Report (For more detail: 2017 Integrated Annual Report, page 436 (https://surdurulebilirlik.garanti.com.tr/media/1232/garanti-bank-2017-integrated-annual-report.pdf). In 2016 after COP21 and Garanti's commitment to Paris-Pledge, the Bank decided to take action and determine a long term target emission intensity

Garanti's commitment to Paris-Pledge, the Bank decided to take action and determine a long term target emission intensity reduction target that covers its yearly-basis targets. The base year of the target was selected as 2012 since the Bank's Environmental Management System was implemented. The target is 50% reduction in Garanti's total Scope 1 and 2 emissions per its total assets from 2012 to 2020. The Bank has managed to decrease its emission intensity by 60,2% since 2012.

Who is entitled to benefit from these incentives?

Business unit manager

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction target

Comment

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. These indicators 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 and therefore encourage to make progress each year.

Who is entitled to benefit from these incentives?

Environment/Sustainability manager

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction target

Comment

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: - Management of reputational risk with effective and transparent sustainability reporting, - The number of site visits on environmental and social issues to customers and - Reporting and expanding the scope of Environmental and Social Risk Management System, launching new credit lines to support environmental investments. These KPIs help for supporting customers to increase their awareness on environmental issues including new developments on climate change (i.e. carbon pricing, TCFD work, etc.), organizing awareness raising events to support private and 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, 2 and 3 emissions.

Who is entitled to benefit from these incentives?

Other, please specify (Sustainability Supervisor & Associates)

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction target

Comment

The KPIs given below are examples to environmental KPIs and result in better management of the Bank's sustainability strategy, environmental footprint and affects Sustainability Supervisors who is entitled to benefit from incentives: - Management of reputational risk with effective and transparent sustainability reporting, - The number of site visits on environmental and social issues to customers and - Reporting and expanding the scope of Environmental and Social Risk Management System, launching new credit lines to support environmental investments. These KPIs help for supporting customers to increase their awareness on environmental issues including new developments on climate change (i.e. carbon pricing, TCFD work, etc.), organizing awareness raising events to support private and 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, 2 and 3 emissions.

Who is entitled to benefit from these incentives?

Other, please specify (Energy Efficiency & Env. Management)

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction project

Comment

The KPIs given below are examples to environmental KPIs and result in better management of the Bank's environmental footprint and affects energy efficiency and the Efficiency Team who is entitled to benefit from incentives: - Implementation and coordination of ISO14001 Environmental Management System at the Bank in order to provide improvements of environmental sustainability of the Bank's activities - Monitoring and reporting of energy consumption data related to environmental factors in all locations (buildings, offices, branches, ATMs etc.) in order to calculate GHG emissions.

Who is entitled to benefit from these incentives?

Other, please specify (Sustainability Representatives)

Types of incentives

Monetary reward

Activity incentivized

Other, please specify (Spot Award)

Comment

In 2016 Garanti added ISO14001 criteria into its SPOT Awards, which is an internal awards program to recognize and celebrate successful employees and comes with a monetary reward. Therefore, successful Sustainability Representatives who manage their location's environmental impacts successfully will be rewarded under SPOT Awards. In 2017, 22 people received the award. Spot Award is granted to those who undertake the relevant work associated to the following KPIs: - Implementation and monitoring of ISO14001 Environmental Management System, - Improvement and monitoring of environmental performance of the location (branches and buildings), where representative is based and - Data quality related to environmental factors, which result in the management of Scope 1 and 2 emissions.

C2. Risks and opportunities

C2.1

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

	From (years)	To (years)	Comment
Short- term	0	2	The main short term risks and opportunities associated to climate change are (1) the current and (2) emerging regulations and (3) compliance to legal framework (GHG Monitoring and Reporting, Emission Trading Scheme (ETS), carbon and fuel/energy taxes), (4) acute physical (extreme weather events) threats and (5) reputation. The potential regulatory changes may require additional costs (e.g. taxes, new investment requirements to undertake mitigation measures) or failure to comply with legal framework may result in environmental fines, whereas the physical threats would impact the borrowers' operating conditions (e.g. drought) and infrastructure. Both changes may influence the borrowers' EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization) and ultimately impact their repayment capacity to lenders. Reputation management is also relevant for short term and would increase over the medium and long term as the level of awareness and expectations on climate change from Banks among material stakeholders such as international financial institutions, retail customers and investors would increase. Details on how Garanti Bank manages short term risks and opportunities are explained in Section "C2.2".
Medium- term	2	5	The main medium term risks and opportunities associated to climate change are (1) emerging regulations (both local and international) which further increase the pressure on fossil fuel-dependent industry and change the competition landscape for those who export products to developed markets, (2) the impact of market transition and the need for keeping up with the latest developments to capture the emerging trends including (3) disruptive technologies, (4) downstream risks associated to the vulnerability of the loan portfolio to climate change in terms of both legal, market, sector specific (e.g. tourism, energy, agriculture, real estate, etc.) and physical led impacts and opportunities, which are grasped when the right products and services are offered in the right time, (5) chronic physical threats such as severe drought risk on hydro-power and agriculture industry or increased frequency of extreme weather events damaging city infrastructure, (6) reputation risks arising from increasing stakeholder expectations and (7) upstream risks associated to supply chain (e.g. interruption of banking service due to electricity cuts, increasing electricity and natural gas costs due to carbon tax or other regulatory liabilities which ultimately increase the Bank's OPEX). Details on how Garanti Bank manages medium term risks and opportunities are explained in Section "C2.2".
Long- term	5	30	The main long-term risks and opportunities would be the same with medium term (7 trends in total), with increased severity. In addition, there might be new risks associated to (8) regional migration (e.g. from southern and northern cities to western cities), which might be a result of deterioration in people's livelihood due to climate effects. This would ultimately affect Garanti's branch distribution and delivery channel strategy. The overall aggregate impact of climate change on economic growth would also be negative in the long run and impact every company operating in Turkey with varying levels. For instance increased food prices and the cost of energy would increase the inflation and interest rates, therefore decreasing the Banking sector's profitability.

C2.2

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

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

C2.2a

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

	of monitoring	How far into the future are risks considered?	
Row 1	Six-monthly or more frequently	>6 years	Garanti's efforts to manage climate change related risks and opportunities can be classified into two categories; transaction and portfolio levels. In both cases, the systems and procedures cover Garanti's operations in Turkey. The Sustainability and Responsible Business Committees meet regularly to monitor the progress on and provide input to all sustainability efforts. They are deliberately structured to integrate sustainability concerns and opportunities into all operations, products and services. This structure ensures that all efforts are consistent with internal policies and regulations. The Committees' role is to agree on strategic direction and action plans. Besides, major changes are presented to the Board of Directors. The risks and opportunities are identified and assessed mostly in periods varying from six-months to once every two years in portfolio level and in every loan request, which is in the scope of risk management system (e.g. every two weeks), in transaction level.

C2.2b

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

The basis of identifying and assessing climate-related risks/opportunities on both transaction and portfolio level is the materiality analysis explained on page 36 of our 2017 Integrated Annual Rep.

In the assessment, Garanti ranked each risk/opportunity according to the magnitude of impact, likelihood of impact and time frame (short, middle, long) in terms of; (i)direct financial impact and risk, (ii)legal, regulatory and policy drivers, (iii)opportunities for innovation, (iv)industry norms, best practices and competitive advantage. This ranking constitutes the basis for what Garanti assumes as "substantial".

Climate-related substantial risks/opportunities are grouped under 4 (out of 6 in total) different clusters of material issues; i.e. (1)customer experience, (2)digital transformation, (3)investing in human capital, and our strategy on (4)responsible and sustainable development. These clusters also represent the 4 pillars of our strategy. The mapping of those clusters are provided below:

- (1) Efforts under Customer Experience enable effective management of current and emerging regulation, legal, market, reputation, downstream, acute and chronic physical risks/opportunities. The market and reputation risks/opportunities are usually portfolio level, whereas the rest can be both on transaction and portfolio level.
- (2) Efforts under Digital Transformation enable effective management of technology, acute and chronic physical risks, downstream, upstream and market risks/opportunities. Technology and market risks/opportunities are usually portfolio level, whereas the others can be both transaction and portfolio level.
- (3) Efforts under Investing in Human Capital enable effective management of current/emerging regulation, technology, market, reputation, acute and chronic physical, upstream and downstream risks/opportunities. The market, technology, reputation risks/opp. are usually portfolio level, whereas the rest can be both on transaction and portfolio level.
- (4) Efforts under Responsible and Sustainable Development enable effective management of current/emerging regulation, market, reputation, acute/chronic physical, downstream risks/opp.. The market and reputation risks/opp. are usually portfolio level, whereas the rest can be both on transaction and portfolio level.

Examples to portfolio level risk/opportunity identification and assessment:

Garanti identifies and manage environmental and social(E/S) risks/opp. including those associated to CC on loan portfolio level through the Climate Change Action Plan, ESIAP and sector norms. For instance, the norms are defined based on a heat map, i.e. an intersection of most climate-vulnerable sectors and sectors where the Bank has the largest exposure. An example of portfolio level risks can be drought. In 2017, drought led to a revenue loss of USD 37 mn in cash flows of our HEPP portfolio (More details can be found in our CDP Water response). Financing climate-resilient sectors (e.g. to date, we provided over USD 4.9 bn in loans to renewables) is an example to portfolio level opportunities.

Another portfolio level example to risks is reputational damage due to controversial issues which could result in early withdrawal of time deposits worth TRY 150 mn.

Our investment in human capital on environmental issues through training also resulted in better management of loan portfolio level climate risks or develop innovative products/services such as the green loan structure launched in 2018. These efforts resulted in a market share of 30.2% in wind energy sector. Garanti's track record on the management of E/S issues, as well as it's capability to tailor existing products according to SDGs play an important role in benefiting from IFI funding.

Lastly, a mean increase in temperature may result in an increase in annual energy costs as high as TRY 3.4 mn. However, our portfolio level opp. management strategy on increasing the sales through digital channels and therefore reducing our resource consumption result in better management of such operating costs.

Examples to transaction level risk/opportunity identification and assessment:

Garanti identifies and assesses transaction level risks/opportunities through its environmental and social risk assessment system, carbon pricing strategy and green loan agreement structure where the margin of the loan is linked to borrowers' ESG performance.

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. During our E/S risk assessment, we identified 8% decrease in expected precipitation, 1 degree increase in temperature 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.

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

	l	Please explain
	& inclusion	
Current regulation	Relevant, always included	The Regulatory Framework on 'Monitoring GHG Emissions' was published by the Ministry of Environment and Urbanization in the official gazette on 17.05.2014. A revision was released on 31.05.2017. The regulation required companies from energy-intensive sectors to monitor, report and verify their CO2 emissions until 31.10.2017. While this regulation wouldn't apply directly to Garanti, it could indirectly impact the company in at least two ways: (1) by imposing new demands on borrowers, especially for project finance, which could impact project performance and ability to repay; (2) by leading to an increase in the cost of energy or energy intensive materials (estimated cost could be as high as TRY 3.4 mn). In anticipation of such climate-related regulations, Garanti already includes potential future carbon taxes in financial modeling and projections of power plant projects to ensure that they would still fulfill their financial obligations. Regulation on Energy Performance in Buildings came into force in 2008. As of Jan 2011, all qualifying new buildings must meet minimum design requirements for energy efficiency. This regulation was expected to apply to new office buildings, for example Garanti's Pendik Technology Campus. As Garanti already builds new facilities to achieve energy savings, it would expect this regulation to impose negligible additional costs. Energy efficiency requirements typically impose a maximum 2% increase in traditional building costs. In 2017, the Ministry of Energy and Natural Resources (MENR) and its General Directorate for Renewable Energy implemented a unique procedure for the solar and wind energy resource areas with the Regulation for Renewable Energy Resource Areas (RERA). It requires that locally manufactured products will be used in the generation facility to be built in the RERA; either through manufacture by the applicant itself or though supply from other local manufacturers, depending on the case. As an opportunity, RERA will help to development the market of the manufacturing
Emerging regulation	Relevant, always included	The main emerging regulatory risk associated to climate change is a possible future carbon tax scheme, or an Emission Trading System (ETS). Turkey seeks to form its own ETS. In preparation for this, the regulatory framework on 'Monitoring GHG Emissions' was published by the Ministry of Environment and Urbanization in the official gazette on 17.05.2014. The regulation requires companies from energy intensive sectors to monitor, report and verify their CO2 emissions. Recent researches point out the necessity of improving the existing regulatory framework through the utilization of a mixture of different market tools such as carbon tax or an ETS moving forward. In line with such researches, a study called "Analytical Report of Preparation for Carbon Markets Partnership in Turkey" was prepared by Ministry of Environment and Urbanization under Partnership for Market Readiness (PMR) Program and published in May 2017. According to the report, the "Regulation on Increasing the Efficiency of Energy Sources and Energy Use" defined the rules of support mechanisms, certification and precautionary measures to improve energy efficiency and energy management. The report also aims to reduce energy costs and prevent energy losses. It is stated that the a potential carbon tax implementation will support the objectives of the this regulation and promote more efficient use of energy. In order to mitigate these risks on the projects financed, Garanti includes potential future carbon taxes in financial modeling and projections of projects financed to ensure that they would still fulfill their financial obligations. Garanti also joined Carbon Pricing Leadership Coalition (CPLC) Steering Committee and was presented as a case study for its practices on carbon pricing through a webinar organized in collaboration with Yale University, World Economic Forum and Carbon Pricing Leadership Coalition. For details please refer to: https://cbey.yale.edu/events/integrating-an-internal-price-on-carbon-lessons-from-garanti-bank.
Technology	Relevant, always included	Lack of investment in energy efficient technologies might result in increased vulnerability to physical climate impacts such as a mean increase in temperature, resulting in increased operational costs. Such an increase can be as high as TRY 1.4 mn per year, assuming an increase in average temperature during summer. We also have an Emergency Action Plan in order to secure uninterrupted service in emergency cases including extreme weather events and electricity cuts (i.e. in the event of physical damage on transmission lines due to extreme weather conditions). Finally, Garanti is developing internal capacity to integrate technological risks in our environmental and social risk management system, especially for electricity transmission lines.
Legal	Relevant, always included	The legal risks associated to climate change vary from environmental sanctions to the uncertainty in the legal framework. Garanti has developed a comprehensive approach to analyze each project against specific Environmental and Social (E/S) criteria. The Bank runs its E/S Impact Assessment Process (ESIAP) and requests an E/S Action Plan (ESAP) in order to assess and monitor the customer's legal liabilities due to environmental regulations. This plan is also included in the loan agreement. By the end of 2017, Garanti assessed 47 projects within the scope of its ESIAP and supported its customers to realize their investments in line with the legal framework on E/S issues and even beyond, i.e. international guidelines/standards. In order to mitigate the non-compliance risk in the projects financed, loan agreements are reviewed by Sustainability Team and the Legal Department. Our requirement on compliance to international best standards also makes the Bank's borrowers to get prepared for stricter legal framework and eliminates the future non-compliance risks. The financial impact of non-compliance to environmental permits may lead to suspension of operations. Such an event would cost to a large scale power plant (7,500 GWh annual production) as high as TRY 109.4 mn of revenue loss in case of a one-month suspension of operations.
Market	Relevant, always included	Climate impacts increasingly confront companies with unplanned and abrupt changes or disruptions to businesses or assets. In addition, companies face transition risk to a low-carbon economy. All these factors are changing the competition landscape and turn out to be a survival issue for the private sector. Such market conditions force companies to be flexible and proactive enough to gain the ability to transform their businesses according to emerging trends. For instance we have provided over USD 4.9 bn of financing to renewable investments so far thanks to our internal capacity building efforts on this sector. Also, capacity building efforts enabled us to secure favored lending from international Financial institutions for supporting low-carbon investments. For instance, Garanti issued the first residential mortgage covered bond ever, which is IFC has invested the first time in Turkey as well. Garanti is expected to have ~%10-15 market share from future renewable pipeline over the next 3-4 years. The cost of not proactively investing on capacity building might result in a loss of market share worth to as high as USD 0.2 bn.

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	1	Please explain
	& inclusion	
Reputation	Relevant, always included	Stakeholders increasingly expect companies, especially banks, to proactively address climate change issues. Failure to meet these expectations could damage reputation resulting in a loss of investor support and customer loyalty, among other challenges. The scale of financial impact related to reputational damage due to controversial issues could result in early withdrawal of time deposits worth TRY 150 mn. Garanti implements an ESIAP as stated in the 'Legal' Section in line with international best practices to help drive improvement across its loan portfolio. In order to respond stakeholder demand on climate change action, Garanti published its Climate Change Action Plan Statement in 2015. Garanti focuses its activities on combating climate change on four main areas: putting a price on carbon and prioritization of renewable energy investments, reducing deforestation, management of water risks related to climate change, and establishing green office standards. Besides the company level efforts, Garanti works with peers to enhance the business practices on sustainable banking. As the Chair of Sustainable Banking and Finance Working Group of UNGC Network Turkey, Garanti led the efforts to develop the Declaration on Sustainable Finance. The signatory banks commit to a set of criteria for E&S risk management in their lending activities. The Declaration was launched in 2017 during the V. Sustainable Finance Forum organized by BCSD Turkey, of which Garanti is also is one of the main sponsors. For further details on this declaration please refer to: https://www.unglobalcompact.org/news/4281-10-23-2017 Garanti became the first Turkish bank to sign the UNGC's Business Leadership Criterion Carbon Pricing in 2015 as well as becoming the first bank in Turkey to ratify the Caring for Climate statement, an initiative aimed at advancing the role of business in addressing climate change. In March 2018, Garanti became a member of UNEP FI Banking Principles Core Group. The core group will develop the principles and framework tha
Acute physical	Relevant, always included	As predicted in the World Economic Forum Global Risk Report 2017, major global risks arose from climate-related events. Natural disasters that claimed lives and destroyed property globally dominated the news throughout the year. Devastating storms in the Atlantic during the summer months resulted in many deaths and estimated to cost USD 290 bn in damages. Wildfires in California and Portugal were among the largest and most destructive disasters in modern history causing many deaths and leaving thousands of people homeless, along with severe mudslides in Africa killing more than 1,000 people. Turkey also had its share in extreme weather events in 2017. The record breaking hail in July which only lasted 20 minutes is estimated to cost TRY 1.2 bn in damages. The extraordinary tornado in last November in Antalya damaged 1.8 million square meters of greenhouse area, which will cause a major blow in the region's agriculture sector and ultimately our country's annual food supply. By the end of 2017, Garanti assessed 47 projects within the scope of its Environmental and Social Impact Assessment Process and supported its customers to make their business more resilient to impacts of climate change including acute physical impacts. For instance, we assess whether the borrowers include natural disaster risk in their emergency response plan in line with the regulations. We also provide trainings to our customers in collaboration with other stakeholders to raise the awareness on such risks. For instance enhance the climate-related risk management of our corporate customers through trainings organized with CDP. Garanti also has an Emergency Action Plan to mitigate such risks in its own operations as described under "Technology" section. This Plan allows us to ensure business continuity in case of an emergency situation.
Chronic physical	Relevant, always included	The main chronic physical risks can be considered as changing precipitation regime, drought and change in mean temperature. According to the 2017 Annual Climate Report of General Directorate of Meteorology (GDM), mean seasonal temperatures were 0.6oC higher in spring; 1.1oC higher in summer; 1.0oC higher in autumn and 1.5oC lower in winter when compared to the mean temperature of 1998-2010. An increase in average temperature during the summer and/or a decrease during the winter could meaningfully increase our cooling and heating costs, especially AC need for our IT equipment, compared to the previous years. This would result in an additional annual cost of TRY 1.4 mn. Garanti invested TRY 7.2 mn in energy efficiency efforts to avoid such energy costs. For new facilities, Garanti intends to build to industry leading standards. For example, our new Pendik Technology Campus, was built to meet LEED-certification. Water scarcity and drought caused by climate change has a direct impact on hydro-electric power plant (HEPP) projects financed by Garanti in terms of operation and financial return. For instance, drought in 2017 led to a revenue loss of USD 37mn in cash flows of our HEPP portfolio (More details can be found in our CDP Water response). Within this scope, Garanti expects from its customers to examine impacts of Climate Change on HEPP projects thoroughly. Water-related criteria in the assessment process includes; selection of project area, current characteristics of water prior to the project, impact on groundwater and surface water, water quality and quantity after the project, alternative water supply sources. It is also important to highlight that Garanti favors wind and solar projects since HEPP projects are more vulnerable to such risks and have more negative impact on the environment and also they have higher construction risks compared to wind and solar projects.
Upstream	Relevant, always included	Upstream risks associated to supply chain can threaten business continuity and increase the Bank's OPEX. Business continuity risks due to interruptions in electricity supply, increasing electricity and natural gas costs due to carbon tax or other regulatory liabilities are among the major supply chain risks. An electricity price increase of TRY 0.03 would result in as high as TRY 3.4 mn of additional operating costs per year. In order to mitigate this risk, Garanti has invested TRY 7.2 mn in energy efficiency measures. Garanti also started to construct solar panels in some of its branches. In addition, Garanti's track record on the management of Environmental and Social issues, as well as it's capability to tailor existing products according to SDGs play an important role in benefiting from accessing low cost funding. For instance, Garanti Bank signed a residential mortgage covered bond agreement with IFC (International Finance Corporation), a member of the World Bank Group, with 5-year term maturity worth at USD 150 mn equivalent to TRY 540 mn. Garanti issued the first residential mortgage covered bond ever, which is IFC has invested the first time in Turkey as well. Garanti will use the fund to provide green mortgages for the purchases of energy efficient housing, helping to boost the development of green buildings in the country's housing sector.

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	Relevance &	Please explain
	inclusion	
Downstream	Relevant, always included	Garanti believes that the main climate change related risks lie with the downstream impacts arising from financing activities. Downstream risks are mostly associated to the vulnerability of the loan portfolio to climate change in terms of both legal, market, sector specific (e.g. tourism, energy, agriculture, real estate, etc.) and physical led impacts. Garanti has been investing in internal capacity building on environmental and social risk management over the past 7-8 years. The Bank's Environmental and Social Impact Assessment Process (ESIAP)[1], Sector Norms[2], Climate Change Action Plan (including the consideration of a carbon price) allow extensive management of climate-related risks on both transaction and portfolio level. Additionally, Garanti was among the first one hundred companies to support TCFD report worldwide. The Bank is aiming to initiate the process to align its operations and disclosures accordingly in the coming years. This new challenge of improving our environmental disclosure will add on our existing track record under the IIRC framework. We also play an active role in building capacity among our stakeholders through a variety of sustainable business platforms such as UNEP FI, UNGC and BCSD Turkey. Moreover, we adopt a proactive approach to grasp market opportunities. For instance we have provided over USD 4.9 bn of financing to renewable investments so far thanks to our internal capacity building efforts on this sector. Also, capacity building efforts enabled us to secure favored lending from international Financial institutions for supporting low-carbon investments (in 2017 the Bank signed the first-ever residential mortgage covered bond agreement with IFC in Turkey to support Green Mortgages). Garanti is expected to have ~%10-15 market share from future renewable pipeline over the next 3-4 years. The cost of not proactively investing on capacity building might result in a loss of market share worth to as high as USD 0.2 bn in volume. [1]:For more information about ESIAP, please visit

C2.2d

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(C2.2d) Describe your process(es) for managing climate-related risks and opportunities.

Garanti bank has been managing its climate-related risks and opportunities under four main clusters:

- (1) Customer Experience: We offer innovative solutions and advise our customers to grow their businesses in a sustainable manner. For instance, we identify and manage Climate Change (CC) risks in our loan portfolio through our Environmental and Social Impact Assessment Process (ESIAP), carbon pricing strategy and sector norms. Advising our customers to make their business more resilient to CC related risks is an integral part of our risk management strategy. If not managed, such risks can result in substantial financial losses. For instance, drought in 2017 led to a revenue loss of USD 37 mn in cash flows of our hydro-electric power plant (HEPP) portfolio. From an opportunity management perspective, we focus on financing climate-resilient sectors and roll out new financing tools to support green investments/companies (e.g. In 2018, Garanti Bank executed Turkey's first Green Loan agreement by linking the margin of the loan to borrower's ESG performance). Such efforts allow us to effectively manage the following risks; current and emerging regulation, legal, market (incl. transition), reputation, downstream, acute and chronic physical risks.
- (2) Digital Transformation: We constantly invest in digital platforms and increase the share of digital channels in our sales. We take precautions against all risks and secure uninterrupted service. This strategy allows us to manage especially the medium and long term risks associated to; technology, acute and chronic physical risks, downstream and market risks (e.g. adaptation of channel distribution strategy to changing market conditions due to migration), upstream risks (increased efficiency in resource consumption would help the Bank better manage the risks associated to increasing electricity and fossil fuel prices, etc.). For instance a mean increase in temperature may result in TRY 1.4 mn in terms of additional operating expenses. However, our strategy on digital channels and reducing our resource consumption result in better management of such operating costs.
- (3) Investing in Human Capital: Garanti invests in employees focusing on their development and form teams acting with social responsibility. This helps the Bank to build internal capacity on: current and emerging regulation, technology, market, reputation, acute and chronic physical, upstream and downstream risks and opportunities. For instance, Garanti proactively invested in its human capital on renewable energy in mid-2000s and therefore gained a market share of 30.2% in wind energy sector. Garanti's investment in human capital on environmental issues through trainings also resulted in better management of loan portfolio-related climate risks or developing innovative products/services (e.g. Garanti provided over USD 4.9 bn of financing to renewable investments so far thanks to its internal capacity building efforts on this sector). Also, such efforts enabled to secure favored lending from international financial institutions for supporting low-carbon investments. Garanti is expected to have ~%10-15 market share from future renewable pipeline over the next 3-4 years. The cost of not proactively investing on capacity building might result in a loss of market share worth to as high as USD 0.2 bn.
- (4) Responsible and Sustainable Development: We implement an advanced corporate governance model that promoted our core values (incl. the hard and soft controls to better embed sustainability into operations). We also act with the principle of accountability and transparency which ultimately leads to better management of reputation. We implement an effective risk management through world-class integrated management of financial and non-financial risks. We create shared value through lending based on impact investment principles (e.g. our renewable focused energy investment strategy through carbon pricing). We drive positive change through strategic partnerships (e.g. our partnership with CDP to enhance the climate-related risk management of our corporate customers through trainings). We also focus on community investment programs which deliver impactful outcomes on material issues. All these efforts are helping us the following risks: current & emerging regulation, market, reputation, acute&chronic physical, downstream risks. The scale of financial impact related to reputational damage due to controversial issues could result in early withdrawal of time deposits worth TRY 150 mn.

In terms of governance, please see pages Sustainability Committee (pg.121), Responsible Business Committee (pg.122) and Environmental And Social Risk (pg.134) sections of our 2017 Integrated Annual Report (https://surdurulebilirlik.garanti.com.tr/media/1232/garanti-bank-2017-integrated-annual-report.pdf).

C2.3

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

Yes

C2.3a

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

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Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Increased pricing of GHG emissions

Type of financial impact driver

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

Company- specific description

Emerging Regulatory: Turkey seeks to establish its own Emissions Trading Scheme (ETS) as per the Partnership for Market Readiness (PMR) Project conducted in collaboration with the World Bank Group (WBG). In preparation for this, the regulatory framework on 'Monitoring GHG Emissions' was published by the Ministry of Environment and Urbanization in the official gazette on 17.05.2014. The regulation requires 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 borrowers, 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 3.4 mn).

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

Medium-low

Potential financial impact

3400000

Explanation of financial impact

We do believe that such regulation could result in an additional cost of TRY 3.4 mn, based on our current energy consumption and an assumption of TRY 0.03 / kWh carbon tax.

Management method

To shield from price increases, Garanti Bank has invested roughly TRY 7.2 mn in energy efficiency across its operations in 2017.

Cost of management

7193270

Comment

This cost includes replacement of AC units with more efficient ones and installation of efficient lighting systems.

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Customer

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Exposure to litigation

Type of financial impact driver

Other, please specify (Environmental fines and sanctions)

Company- specific description

The legal risks associated to climate change vary from environmental sanctions to the uncertainty in the legal framework. The financial impact of non-compliance to environmental permits may lead to suspension of operations. Such an event would cost to a large scale power plant (7,500 GWh annual production) as high as TRY 109.4 mn of revenue loss in case of a one-month suspension of operations. Such an event would affect the borrower's repayment of loans.

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

High

Potential financial impact

109400000

Explanation of financial impact

Potential non-compliance risks associated to our loan portfolio might lead to a growth in NPL. It is not possible to estimate the direct financial impact on Garanti, however we are able to estimate the revenue loss of a single borrower (i.e. TRY 109,4 mn).

Management method

Garanti has developed a comprehensive approach to analyze each project against specific Environmental and Social (E/S) criteria. The Bank runs its E/S Impact Assessment Process (ESIAP) and requests an E/S Action Plan (ESAP) in order to assess and monitor the customer's legal liabilities due to E/S regulations. This plan is also included in the loan agreement. By the end of 2017, Garanti assessed 47 projects within the scope of its ESIAP and supported its customers to realize their investments in line with the legal framework on E/S issues and even beyond, i.e. international standards. In order to mitigate the non-compliance risk in the projects financed, loan agreements are reviewed by Sustainability Team and the Legal Department. Our requirement on compliance to international best standards also makes the Bank's borrowers to get prepared for stricter legal framework and eliminates the future non-compliance risks.

Cost of management

300000

Comment

Garanti Bank has invested roughly TRY 285 thousand on formation and implementation of Environmental and Social Impact Assessment Model by cooperating with consultants. Besides, Garanti organized the Sustainability and Risk Management Workshop, where corporate customers from energy and infrastructure industries were informed on cutting edge sustainable business topics. Approximate cost of the workshop was TRY 15 thousand in 2017. Therefore the total cost of management was TRY 300 thousand. These two efforts are mitigating significantly the risk of financing controversial projects.

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Physical risk

Primary climate-related risk driver

Chronic: Rising mean temperatures

Type of financial impact driver

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

Company- specific description

Lack of investment in energy efficient technologies might result in increased vulnerability to physical climate impacts such as a mean increase in temperature, resulting in increased operational costs. Such fluctuations in temperature could meaningfully increase (as high as 3%) the yearly electricity consumption. This would result in an additional cost of TRY 1.4 mn at Garanti, taking into consideration the electricity consumption in 2017.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Medium-low

Potential financial impact

1400000

Explanation of financial impact

It is not possible to establish a direct link between higher temperatures during summer time and electricity consumption due to lack of researches done in Turkey. Our estimation only assumes a temperature increase in summer time and a %3 increase in electricity consumption.

Management method

To shield from price increases, Garanti Bank has invested roughly TRY 7.2 mn in energy efficiency across its operations in 2017.

Cost of management

7193270

Comment

This cost includes replacement of AC units with more efficient ones and installation of efficient lighting systems.

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Customer

Risk type

Transition risk

Primary climate-related risk driver

Market: Other

Type of financial impact driver

Other, please specify (Inability to meet customer demand)

Company- specific description

Garanti proactively invested in its human capital on renewable energy in mid-2000s and therefore gained a market share of 30.2% in wind energy sector. Garanti's investment in human capital on environmental issues through trainings also resulted in better management of loan portfolio-related climate risks or developing innovative products/services (e.g. Garanti provided over USD 4.9 bn of financing to renewable investments so far thanks to its internal capacity building efforts on this sector). Also, such efforts enabled to secure favored lending from international financial institutions for supporting low-carbon investments. Garanti is expected to have ~%10-15 market share from future renewable pipeline over the next 3-4 years.

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

High

Potential financial impact

729540000

Explanation of financial impact

The cost of not proactively investing on capacity building might result in a loss of market share worth to as high as USD 0.2 bn (TRY 729,5 mn based on the average USD/TRY exchance rate in 2017).

Management method

Garanti invests in employees focusing on their development and form teams acting with social responsibility. This helps the Bank to build internal capacity on low-carbon technologies and better assist customers in their investments. Garanti has a team of 7 people specialized in energy sector, especially renewables. The Bank's investment in human capital on renewable technologies started in mid-2000s.

Cost of management

34615.38

Comment

There are no additional costs associated to the investment in human capital in terms of capacity building on infrastructure, since the current team has already a certain level of expertise on such issues. However, Garanti's Energy Desk attended workshops and conferences, where corporate customers from energy and infrastructure industries were informed on Turkey's renewable energy pipeline and investment risks and opportunities. The amount of TRY 35 thousand resulting from at least two weeks effort of the energy desk.

Identifier

Risk 5

Where in the value chain does the risk driver occur?

Customer

Risk type

Physical risk

Primary climate-related risk driver

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

Type of financial impact driver

Other, please specify (Inability to do business)

Company- specific description

Water scarcity and drought caused by climate change has a direct impact on hydro-electric power plant (HEPP) projects financed by Garanti in terms of operation and financial return. This might affect the borrower's ability to repay the loan.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

High

Potential financial impact

134900000

Explanation of financial impact

For instance, drought in 2017 led to a revenue loss of TRY 134.9 mn in cash flows of our HEPP portfolio (More details can be found in our CDP Water response).

Management method

Garanti expects from its customers to examine impacts of Climate Change on HEPP projects thoroughly. Water-related criteria in the assessment process includes; selection of project area, current characteristics of water prior to the project, impact on ground and surface water, water quality and quantity after the project, alternative water supply sources. 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. During our Environmental and Social Risk Assessment, we identified 8% decrease in expected precipitation, 1 degree increase in temperature 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. It is also important to highlight that Garanti favors wind and solar projects since HEPP projects are more vulnerable to such risks and have more negative impact on the environment and also they have higher construction risks compared to wind and solar projects.

Cost of management

300000

Comment

Garanti Bank has invested roughly TRY 285 thousand on formation and implementation of Environmental and Social Impact Assessment Model by cooperating with consultants. Besides, Garanti organizes workshops to make sure customers are informed about the possible measures. Approximate cost of the workshop was TRY 15 thousand in 2017. Therefore the total cost of management is TRY 300 thousand. These two efforts are mitigating significantly the risk of financing controversial projects.

Identifier

Risk 6

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

Reputation: Other

Type of financial impact driver

Reputation: Reduced revenue from decreased demand for goods/services

Company- specific description

Stakeholders increasingly expect companies, especially banks, to proactively address climate change issues. Failure to meet these expectations could damage reputation resulting in a loss of investor support and customer loyalty, among other challenges. Garanti implements an Environmental and Social Impact Assessment Process (ESIAP) in line with international best practices to help drive improvement across its loan portfolio. In order to respond stakeholder demand on climate change action, Garanti published its Climate Change Action Plan Statement in 2015. Garanti focuses its activities on combating climate change on four main areas: (1) putting a price on carbon and prioritization of renewable energy investments; (2) reducing deforestation; (3) management of water risks related to climate change, and (4) establishing green office standards. Additionally, Garanti's majority shareholder BBVA released its Pledge 2025 for climate change and sustainable development. According to this pledge BBVA will mobilize EUR 100 billion by 2025 to fight climate change and drive sustainable development. BBVA also released stricter sector norms for energy, mining, agriculture, and infrastructure sectors with this pledge.

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

High

Potential financial impact

150000000

Explanation of financial impact

Reputational damage due to controversial issues could result in early withdrawal of time deposits worth TRY 150 mn.

Management method

Besides the company level efforts mentioned in the description, Garanti works with peers to enhance the business practices on sustainable banking. As the Chair of Sustainable Banking and Finance Working Group of UNGC Network Turkey, Garanti led the efforts to develop the Declaration on Sustainable Finance. The signatory banks commit to a set of criteria for Environmental and Social Risk Management in their lending activities. The Declaration was launched in 2017 during the V. Sustainable Finance Forum organized by BCSD Turkey, of which Garanti is also is one of the main sponsors. For further details on this declaration please refer to: https://www.unglobalcompact.org/news/4281-10-23-2017 . Garanti became the first Turkish bank to sign the UNGC's Business Leadership Criterion Carbon Pricing in 2015 as well as becoming the first bank in Turkey to ratify the Caring for Climate statement, an initiative aimed at advancing the role of business in addressing climate change. In March 2018, Garanti became a member of UNEP FI Banking Principles Core Group. The core group will develop the principles and framework that will define and affirm the banking industry's role and responsibilities in shaping and financing a sustainable future, in alignment with internationally agreed targets detailed in the Paris Agreement and the Sustainable Development Goals.

http://www.unepfi.org/news/industries/banking/principles-coregroupannouncement/ .

Cost of management

605168

Comment

The additional costs associated to Environmental and Social Risk Management systems are negligible considering that they are already embedded in current roles and responsibilities. Therefore, the cost for management only includes the total cost of memberships to sustainable business platforms, sponsorship to sustainability-related events or studies. In 2017, Garanti contributed TRY 605 thousand to the efforts aimed at raising awareness and know-how transfer to a variety of stakeholders including public bodies, policy makers, private companies, universities and NGOs for sustainable development.

Identifier

Risk 7

Where in the value chain does the risk driver occur?

Customer

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Increased pricing of GHG emissions

Type of financial impact driver

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

Company- specific description

Emerging Regulatory: Turkey seeks to establish its own Emissions Trading Scheme (ETS) as per the Partnership for Market Readiness (PMR) Project conducted in collaboration with the World Bank Group (WBG). In preparation for this, the regulatory framework on 'Monitoring GHG Emissions' was published by the Ministry of Environment and Urbanization in the Official Gazette on 17.05.2014. The regulation requires 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 borrowers, 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.

Time horizon

Medium-term

Likelihood

About as likely as not

Magnitude of impact

High

Potential financial impact

100301878.58

Explanation of financial impact

We do believe that such regulation could result in an additional cost of TRY 100,3 mn for a thermal power plant of 600 MWe assuming a carbon tax/price of USD 5 per tonne of CO2e.

Management method

To shield from price increases, Garanti Bank shifted towards a low-carbon portfolio through implementing a shadow price on carbon in cash flow projections of thermal power plants. Since 2014, 100% of the project finance loans the Bank provided for greenfield power plants have been allocated to renewable energy projects.

Cost of management

56000

Comment

This cost includes Garanti's support to V. Sustainable Finance Forum in which the Declaration on Sustainable Finance including criteria on carbon pricing was launched and a workshop for Garanti's customers related to latest sustainability trends including CPLC work.

C2.4

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

Yes

C2.4a

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

Identifier

Opp1

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of new products or services through R&D and innovation

Type of financial impact driver

Increased revenue through demand for lower emissions products and services

Company- specific description

Turkey seeks to form its own Emissions Trading Scheme (ETS). In preparation for this, the regulatory framework on 'Monitoring GHG Emissions' was published by the Ministry of Environment and Urbanization in the official gazette on 17 May 2014. The regulation requires 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 way: accelerating the demand for renewable energy and energy efficiency projects, which the company could finance.

Time horizon

Medium-term

Likelihood

About as likely as not

Magnitude of impact

High

Potential financial impact

729540000

Explanation of financial impact

Considering the current renewable portfolio, this opportunity could create new financing opportunities amounting to as high as USD 0.2 bn per year (TRY 0.73 bn) in volume.

Strategy to realize opportunity

Garanti Bank has already begun to position as a leader in the finance of renewable energy. Our investment in human capital on environmental issues through trainings also resulted in better management of loan portfolio level climate risks or develop innovative products/services such as the green loan structure launched in 2018. These efforts resulted in a market share of 30.2% in wind energy sector. Garanti is expected to have ~%10-15 market share from future renewable pipeline over the next 3-4 years.

Cost to realize opportunity

34615.38

Comment

There are no additional costs associated to the investment in human capital in terms of capacity building on infrastructure, since the current team has already a certain level of expertise on such issues. However, Garanti's Energy Desk attended workshops and conferences, where corporate customers from energy and infrastructure industries were informed on Turkey's renewable energy pipeline and investment risks and opportunities. The amount of TRY 35 thousand resulting from at least two weeks effort of the energy desk.

Identifier

Opp2

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Products and services

Primary climate-related opportunity driver

Other

Type of financial impact driver

Other, please specify (Other physical climate opportunities)

Company- specific description

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 USD 50 mn (TRY 182.4 mn according to the average USD/TRY exchange rate in 2017) per year.

Time horizon

Long-term

Likelihood

More likely than not

Magnitude of impact

High

Potential financial impact

182385000

Explanation of financial impact

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.

Strategy to realize opportunity

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.

Cost to realize opportunity

15000

Comment

There are no additional costs associated to the investment in human capital in terms of capacity building on infrastructure, since the current team has already a certain level of expertise on such issues. However, Garanti organized the Sustainability and Risk Management Workshop, where corporate customers from energy and infrastructure industries were informed on cutting edge sustainable business topics. The cost of the workshop was TRY 15 thousand.

Identifier

Opp3

Where in the value chain does the opportunity occur?

Supply Chain

Opportunity type

Markets

Primary climate-related opportunity driver

Other

Type of financial impact driver

Other, please specify (Ability to secure low cost funding)

Company- specific description

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 result in an increased level of collaboration with international financial institutions as well as increased investor support and customer loyalty.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

High

Potential financial impact

547155000

Explanation of financial impact

Garanti Bank signed a residential mortgage covered bond agreement with IFC (International Finance Corporation), a member of the World Bank Group, with 5-year term maturity worth at USD 150 mn, equivalent to TRY 547,1 mn according to the average USD/TRY exchange rate in 2017. Garanti issued the first residential mortgage covered bond ever, which is IFC has invested the first time in Turkey as well. Garanti will use the fund to provide green mortgages for the purchases of energy efficient housing, helping to boost the development of green buildings in the country's housing sector. Garanti's track record on the management of environmental and social issues, as well as it's capability to tailor existing products according to Sustainable Development Goals play an important role in benefiting from IFI funding.

Strategy to realize opportunity

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 under the following 4 clusters: (1) Customer Experience, (2) Digital Transformation, (3) Investing in Human Capital, (4) Responsible and Sustainable Development. The Bank's activities in these areas 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 ISO14001, communication of climate change activities (most recently in Garanti's 2017 IAR and in Garanti's newly launched sustainability website https://surdurulebilirlik.garanti.com.tr/en), participation in CDP, strengthening environmental criteria in our loan portfolio through introducing new standards such as our sector norms, investment in human capital on environmental issues through trainings resulting in better management of loan portfolio-related climate risks, developing innovative products/services and leadership in financing of renewable energy projects. In addition, Garanti supports CDP Water program in Turkey and has a Climate Change Position Statement and Action Plan to demonstrate our dedication.

Cost to realize opportunity

640346

Comment

In 2017, Garanti's primary costs were (1) ISO14001 certification, (2) environmental and social workshop organized and (3) membership fees for initiatives. The total cost was TRY 640,346 in order to realize this opportunity.

Identifier

Opp4

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Move to more efficient buildings

Type of financial impact driver

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

Company- specific description

By formalizing our approach to GHG emissions management, we enhance our ability to strategically reduce energy costs.

Time horizon

Current

Likelihood

Virtually certain

Magnitude of impact

Medium-low

Potential financial impact

1392721

Explanation of financial impact

Due to emissions reduction activities such as energy efficiency implementations (LED installation, AC renewal) 2.187.361 kWh was saved in terms of electricity consumption, corresponding to TRY 1.4 mn of additional operating cost savings.

Strategy to realize opportunity

Garanti published its Climate Change Action Plan Statement in 2015. Garanti focuses its activities on combating climate change on four main areas: (1) putting a price on carbon and prioritization of renewable energy investments, (2) reducing deforestation, (3) management of water risks related to climate change, and (4) establishing green office standards. Under the 4th pillar, 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, air conditioning, information technology and more. For new facilities, Garanti Bank intends to build to industry leading standards for energy efficiency. For example, Garanti's new Pendik Technology Campus is being built to meet LEED certification.

Cost to realize opportunity

7193270

Comment

Garanti Bank has invested roughly TRY 7.2 mn in energy efficiency efforts. The calculations include AC and LED renewals in existing buildings.

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

	Impact	Description
Products and services	Impacted	The codes of risks (Risk 1 to 7) and opportunities (Opp 1 to 4) used below are the same with Sections" C2.3a" and "C2.4a". The Risk 2 and Risk 4 have not impacted Garanti, since the Bank has mitigated them in the past. Therefore the risk drivers are stated as customers. The Risk 5 has impacted some part of our loans, since we strove to avoid hydro electric power plant (HEPP) projects. Risk 7 has not impacted the Bank's operations as well, since an Emission Trading Scheme (ETS) or carbon tax mechanism is not established yet. The Opp 1 and Opp 2 have not impacted the Bank yet, since they are related to a future pipeline of financing opportunities. #Risk 2: The financial impact of non-compliance to environmental permits may even lead to suspension of operations. Such an event would cost to a large scale power plant as high as TRY 109.4 mn of revenue loss in case of a one-month suspension of operations and would affect the borrower's repayment of loans. #Risk4 / Opp1 / Opp 2: Garanti's investment in human capital on environmental issues through training also resulted in better management of loan portfolio-related climate risks or developing innovative products/services. Also, such efforts enabled to secure favored lending from international financial institutions for supporting low-carbon investments. Garanti is expected to have ~%10-15 market share from future renewable pipeline over the next 3-4 years moving forward. The cost of not proactively investing on capacity building might result in a loss of market share. In addition, there will be a growing need for new infrastructure projects to support the resettlement caused by climate change impacts. Considering the current infrastructure portfolio, this opportunity could create new financing opportunities. #Risk 5: Water scarcity and drought caused by the climate change has a direct impact on HEPP projects financed by Garanti in terms of operation and financial return. This might affect the borrower's ability to repay the loan. For instance, drought in 2017 led to
Supply chain and/or value chain	Impacted	The codes of risks and opportunities used below are the same with Sections "C2.3a" and "C2.4a". The Risk 1 have not impacted the Bank's operations as well, since an ETS or carbon tax mechanism is not established yet. The Risk 2 has not impacted Garanti, since the Bank has mitigated them in the past. The Risk 5 has impacted some part of our loans, since we strived to avoid sector and project specific climate change risks. The Risk 3 has impacted the Bank, since we started to experience such mean temperature fluctuations. The Opp 3 has impacted the Bank, since we are already taking the advantage of low cost IFI funding. The Risk 6 has not impacted the Bank, since we are managing our reputation risk. The Opp 4 has already impacted our Bank, since we have already been executing efficiency projects. #Risk 1 / Risk 2 / Risk 5: Garanti believes that the main climate change related risks lie with the downstream impacts arising from financing activities. Downstream risks are mostly associated to the vulnerability of the loan portfolio to climate change in terms of both legal, market, sector specific (e.g. tourism, energy, agriculture, real estate, etc.) and physical led impacts. Garanti has been investing in internal capacity building on environmental and social risk management over the past 7-8 years. The Bank's Environmental and Social Impact Assessment Process, Sector Norms, Climate Change Action Plan (including the consideration of a carbon price) allow extensive management of climate-related risks on both transaction and portfolio level. #Risk 3 / Opp 4: Upstream risks associated to supply chain can threaten business continuity and increase the Bank's OPEX. Business continuity risks due to interruptions in electricity supply, increasing electricity and natural gas costs due to carbon tax or other regulatory liabilities are among the major supply chain risks. Garanti also started to construct solar panels in some of its branches to insulate from price increases. #Risk 6 / Opp 3: Stakeholders increasingly expect comp
Adaptation and mitigation activities	Impacted	The codes used below are the same with C2.3a and C2.4a. The Risk 4 have not impacted Garanti, since the Bank has mitigated them in the past. Opp 1 and Opp 2 have not impacted the Bank yet, since they are related to a future pipeline of financing opportunities. Risk 5 has impacted some part of our loans, since we strived to avoid HEPP projects. Risk 6 has not impacted the Bank, since we are managing our reputation risk. Risk 7 has not impacted the Bank's operations as well, since an ETS or carbon tax mechanism is not established yet. #Risk 4 / Opp 1 / Opp 2: Garanti's investment in human capital on environmental issues through trainings also resulted in better management of loan portfolio-related climate risks or developing innovative products/services. In addition, 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 and create an additional financing pipeline. #Risk 5 / Risk 6: Within the scope of its Environmental and Social Impact Assessment Process, Garanti supported its customers to make their business more resilient to impacts of climate change including acute physical impacts. For instance, the Bank assesses whether the borrowers include natural disaster risk in their emergency response plan in line with the regulations. We also provide trainings to our customers in collaboration with other stakeholders to raise the awareness on such risks. For instance enhance the climate-related risk management of our corporate customers through trainings organized with CDP. #Risk 4 / Risk 7 / Opp 1 / Opp 2: Climate impacts increasingly confront companies with unplanned and abrupt changes or disruptions to businesses or assets. In addition, companies face transition risk to a low-carbon economy. All these factors are changing the competition landscape and turn out to be a survival issue for the private s
Investment in R&D	Impacted	The codes of risks and opportunities used below are the same with Sections "C2.3a" and "C2.4a". Opp 3 has impacted the Bank, since we are already taking the advantage of benefiting from low cost IFI funding. Risk 6 has not impacted the Bank, since we are managing our reputation risk. #Risk 6 / Opp3: Besides the company level efforts, Garanti works with peers to enhance the business practices on sustainable banking. As the Chair of Sustainable Banking and Finance Working Group of UNGC Network Turkey, Garanti led the efforts to develop the Declaration on Sustainable Finance. The signatory banks commit to a set of criteria for Environmental and Social Risk Management in their lending activities. The Declaration was launched in 2017 during the V. Sustainable Finance Forum organized by BCSD Turkey, of which Garanti is also is one of the main sponsors. For further details on this declaration please refer to: https://www.unglobalcompact.org/news/4281-10-23-2017 Garanti became the first Turkish bank to sign the UNGC's Business Leadership Criterion Carbon Pricing in 2015 as well as becoming the first bank in Turkey to ratify the Caring for Climate statement, an initiative aimed at advancing the role of business in addressing climate change. In March 2018, Garanti became a member of UNEP FI Banking Principles Core Group. The core group will develop the principles and framework that will define and affirm the banking industry's role and responsibilities in shaping and financing a sustainable future, in alignment with internationally agreed targets detailed in the Paris Agreement and the Sustainable Development Goals. http://www.unepfi.org/news/industries/banking/principles-coregroupannouncement/ .

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	Impact	Description
Operations	'	The codes of risks and opportunities used below are the same with Sections "C2.3a" and "C2.4a". Opp 3 has impacted the Bank, since we are already taking the advantage of benefiting from low cost IFI funding. Opp 4 has already impacted our Bank, since we have been already executing efficiency projects. Risk 1 have not impacted the Bank's operations as well, since an ETS or carbon tax mechanism is not established yet. Risk 3 has impacted the Bank, since we started to experience such fluctuations. #Risk 3 /Opp 4: Lack of investment in energy efficient technologies might result in increased vulnerability to physical climate impacts such as a mean increase in temperature, resulting in increased operational costs. Such fluctuations in temperature could meaningfully increase (as high as 3%) the yearly electricity consumption. We also have an Emergency Action Plan in order to secure uninterrupted service in emergency cases including extreme weather events and electricity cuts (i.e. in the event of physical damage on transmission lines due to extreme weather conditions). #Risk 1 / Risk 3 / Opp 4: A future ETS or carbon tax mechanism could indirectly impact the company in at least two ways:(1) by imposing new demands on borrowers, especially for project finance, which could impact project performance and ability to repay; (2) by leading to an increase in the cost of energy or energy intensive materials (estimated cost could be as high as TRY 3.4 mn).
Other, please specify	Please select	

C2.6

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

	Relevance	Description
Revenues	Impacted	The codes used below are the same with Sections "C2.3a" and "C2.4a". Risk 2 and Risk 4 have not impacted Garanti, since the Bank has mitigated them in the past. Risk 5 has impacted some part of our loans, since we strived to avoid HEPP projects. Risk 7 has not impacted the Bank's operations as well, since an ETS or carbon tax mechanism is not established yet. Opp 1 and Opp 2 have not impacted the Bank yet, since they are related to a future pipeline of financing opportunities. #Risk 2: The financial impact of non-compliance to environmental permits may even lead to suspension of operations. Such an event would cost to a large scale power plant as high as TRY 109.4 mn of revenue loss in case of a one-month suspension of operations and would affect the borrower's repayment of loans. #Risk4 / Opp1 / Opp 2: Garanti's investment in human capital on environmental issues through trainings also resulted in better management of loan portfolio-related climate risks or developing innovative products/services. Also, such efforts enabled to secure favored lending from international financial institutions for supporting low-carbon investments. Garanti is expected to have ~%10-15 market share from future renewable pipeline over the next 3-4 years moving forward. The cost of not proactively investing on capacity building might result in a loss of market share as high as TRY 729.5 mn in volume. In addition, there will be a growing need for new infrastructure projects to support the resettlement caused by climate change impacts. Considering the current infrastructure portfolio, this opportunity could create new financing opportunities as high as TRY 182.4 mn per year. #Risk 5: Water scarcity and drought caused by climate change has a direct impact on HEPP financed by Garanti in terms of operation and financial return. This might affect the borrower's ability to repay the loan. For instance, drought in 2017 led to a revenue loss of TRY 134.9 mn in cash flows of our HEPP portfolio. #Risk 7: A future ETS or carbon tax mechanism cou
Operating costs	Impacted	The codes of risks and opportunities used below are the same with Section "C2.3a" and "C2.4a". Opp 4 has already impacted our Bank, since we have been already executing efficiency projects. Risk 1 have not impacted the Bank's operations as well, since an ETS or carbon tax mechanism is not established yet. Risk 3 has impacted the Bank, since we started to experience such fluctuations. # Risk 1 / Risk 3 / Opp 4: Upstream risks associated to supply chain can threaten business continuity and increase the Bank's OPEX. Business continuity risks due to interruptions in electricity supply, increasing electricity and natural gas costs due to carbon tax or other regulatory liabilities are among the major supply chain risks. Also a future ETS or carbon tax mechanism could indirectly impact the company in at least two ways: (1) by imposing new demands on borrowers, especially for project finance, which could impact project performance and ability to repay; (2) by leading to an increase in the cost of energy or energy intensive materials (estimated cost could be as high as TRY 3.4 mn).
Capital expenditures / capital allocation	Impacted	The codes of risks and opportunities used below are the same with Sections "C2.3a" and "C2.4a". # Risk 1 / Risk 2 / Risk 4 / Risk 5 / Risk 6 / Risk 7 / Opp 1 / Opp 2: Garanti's investment in human capital on environmental issues through training resulted in better management of loan portfolio-related climate risks or developing innovative products/services. Within the scope of its Environmental and Social Impact Assessment Process (ESIAP), Garanti supported its customers to make their business more resilient to impacts of climate change including acute physical impacts. We also provide training to our customers in collaboration with other stakeholders to raise the awareness on such risks. In doing so, Garanti used intellectual, human and financial capital. To give an example, the financial capital utilized for ESIAP is TRY 300.000. #Risk 3 / Opp 4: Upstream risks associated to supply chain can threaten business continuity and increase the Bank's OPEX. Business continuity risks due to interruptions in electricity supply, increasing electricity and natural gas costs due to carbon tax or other regulatory liabilities are among the major supply chain risks. Garanti also started to construct solar panels in some of its branches to insulate from price increases and reduce the usage of natural capital. Garanti uses financial and intellectual capital to manage such risks/opportunities. For instance the financial capital that Garanti utilized to insulate from price increases is roughly TRY 7.2 mn in 2017 (in energy efficiency across its operations). #Risk 6 / Opp3: Besides the company level efforts, Garanti works with peers to enhance the business practices on sustainable banking. Garanti uses intellectual, human and financial capital in its country-wide capacity building efforts. The financial capital that Garanti utilize for capacity building events on carbon pricing had been TRY 605.168 in 2017 (includes the total cost of memberships to sustainable business platforms, sponsorship to sustainability-related events or st

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	Relevance	Description
Acquisitions and divestments	Impacted	Garanti favors wind and solar projects since HEPP projects are more vulnerable to such risks and have more negative impact on the environment and also they have higher construction risks compared to wind and solar projects. To shield from price increases due to a possible future carbon tax/ETS, Garanti Bank shifted towards a low-carbon portfolio through implementing a shadow price on carbon in cash flow projections of thermal power plants. Since 2014, 100% of the project finance loans the Bank provided for greenfield power plants have been allocated to renewable energy projects. So far, Garanti provided over USD 4.9 bn of financing to renewable investments.
Access to capital	Impacted	By proactively addressing climate change and other environmental and social concerns, we can exceed stakeholder expectations and enhance our reputation. Ability to meet these expectations could result in an increased level of collaboration with international financial institutions as well as increased investor support and customer loyalty. For instance, Garanti Bank signed a residential mortgage covered bond agreement with IFC (International Finance Corporation), a member of the World Bank Group, with 5-year term maturity worth at USD 150 mn equivalent to TRY 547 mn (according to the average USD/TRY exchange rate in 2017). Garanti issued the first residential mortgage covered bond ever, which is IFC has invested the first time in Turkey as well. Garanti's track record on the management of environmental and social issues, as well as it's capability to tailor existing products according to Sustainable Development Goals play an important role in benefiting from IFI funding.
Assets	Impacted	All the risks and opportunities mentioned in Sections "C2.3a" and "C2.4a" would have a direct or indirect impact on the Bank's assets. Advising our customers to make their business more resilient to climate-change related risks is an integral part of our risk management strategy for downstream assets. If not managed, such risks can result in substantial financial losses. For instance, drought in 2017 led the HEPP investors in our loan portfolio to lose revenue as high as USD 37 mn in cash flows (More details can be found in our CDP Water response). Also, the financial impact of non-compliance to environmental permits may lead to suspension of operations. Such an event would cost to a large scale power plant (7,500 GWh annual production) as high as TRY 109.4 mn of revenue loss in case of a one-month suspension of operations and would affect the borrower's repayment of loans.
Liabilities	Impacted	For instance Banks face risks associated with high GHG emissions or flash-point issues capable of generating significant negative publicity. Failure to meet these expectations could damage reputation resulting in a loss of investor support and customer loyalty, among other challenges. The scale of financial impact related to reputational damage due to controversial issues could result in early withdrawal of time deposits worth TRY 150 mn.
Other	Please select	

C3. Business Strategy

C3.1

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

Yes

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform your business strategy? Yes, qualitative

C3.1c

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

Garanti bank is managing its climate-related risks and opportunities under four main clusters given below. These pillars represent both: (1) the material issues identified as a result of our materiality analysis, and (2) pillars of our corporate 'integrated' strategy (which also indicates our objectives as a sustainable and responsible bank). It is important to highlight that Garanti had a separate sustainability strategy until 2017, but the Bank integrated all these non-financial factors into its corporate strategy during the reporting year. The material issues on climate change and how we respond to these issues with our corporate strategy are perfectly matching with each other, as explained below.

- (1) Customer Experience: We offer innovative solutions and advise our customers to grow their businesses in a sustainable manner. For instance, we identify and manage Climate Change (CC) risks in our loan portfolio through Environmental and Social Impact Assessment Process (ESIAP), carbon pricing strategy and sector norms. Advising our customers to make their business more resilient to CC related risks is an integral part of our risk management strategy. If not managed, such risks can result in substantial financial losses. For instance, drought in 2017 led to a revenue loss of USD 37 mn in cash flows of our HEPP portfolio. From an opportunity management perspective, we focus on financing climate-resilient sectors and roll out new financing tools to support green investments/companies (e.g. In 2018, Garanti Bank executed Turkey's first Green Loan agreement by linking the margin of the loan to borrower's ESG performance). Such efforts allow us to effectively manage the following risks; current and emerging regulation, legal, market (incl. transition), reputation, downstream, acute and chronic physical risks.
- (2) Digital Transformation: We constantly invest in digital platforms and increase the share of digital channels in our sales. We take precautions against all risks and secure uninterrupted service. This strategy allows us to manage especially the medium and long term risks associated to; technology, acute and chronic physical risks, downstream and market risks (e.g. adaptation of channel distribution strategy to changing market conditions due to migration), upstream risks (increased efficiency in resource consumption would help the Bank better manage the risks associated to increasing electricity and fossil fuel prices, etc.). For instance a mean increase in temperature may result in TRY 1.4 mn in terms of additional operating expenses. However, our strategy on digital channels and reducing our resource consumption result in better management of such operating costs.
- (3) Investing in Human Capital: Garanti invests in employees focusing on their development and form teams acting with social responsibility. This helps the Bank to build internal capacity on: current & emerging regulation, technology, market, reputation, acute and chronic physical, upstream and downstream risks/opp. For instance, Garanti proactively invested in its human capital on renewable energy in mid-2000s and therefore gained a market share of 30.2% in wind energy sector. Garanti's investment in human capital on environmental issues through trainings also resulted in better management of loan portfolio-related climate risks or developing innovative products/services (e.g. Garanti provided over USD 4.9 bn of financing to renewable investments so far thanks to its internal capacity building efforts on this sector). Also, such efforts enabled to secure favored lending from international financial institutions for supporting low-carbon investments. Garanti is expected to have ~%10-15 market share from future renewable pipeline over the next 3-4 years. The cost of not proactively investing on capacity building might result in a loss of market share worth to as high as USD 0.2 bn.
- (4) Responsible and Sustainable Development: We implement an advanced corporate governance model that promoted our core values (incl. the hard and soft controls to better embed sustainability into operations). We also act with the principle of accountability and transparency which ultimately leads to better management of reputation. We implement an effective risk management through world-class integrated management of financial and non-financial risks. We create shared value through lending based on impact investment principles (e.g. our renewable focused energy investment strategy through carbon pricing). We drive positive change through strategic partnerships (e.g. our partnership with CDP to enhance the climate-related risk management of our corporate customers through trainings). We also focus on community investment programs which deliver impactful outcomes on material issues. All these efforts are helping us the following risks: current and emerging regulation, market, reputation, acute and chronic physical and downstream risks. The scale of financial impact related to reputational damage due to controversial issues could result in early withdrawal of time deposits worth TRY 150 mn.

In terms of governance, please see pages Sustainability Committee (pg.121), Responsible Business Committee (pg.122) and Environmental And Social Risk Management (pg.134) sections of our 2017 Integrated Annual Report (https://surdurulebilirlik.garanti.com.tr/media/1232/garanti-bank-2017-integrated-annual-report.pdf).

Also, please see Customer Experience, Digital Transformation, Investing in Human Capital; and Responsible and Sustainable Development Sections of our 2017 Integrated Annual Report for information on targets.

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(C3.1d) Provide details of your organization's use of climate-related scenario analysis.

Climate- related	Details
scenarios	
Other, please specify (IEA WEO New Policies Scenario)	Garanti's majority shareholder BBVA is a member of UNEP FI's Pilot Project for TCFD Recommendations Implementation. BBVA will use the IEA WEO New Policies scenario. This scenario takes into account the policies and implementing measures regarding energy markets that have been already implemented, as well as the relevant policy proposals. The WEO report provides updated analysis to show what the latest data, technology trends and policy announcements might mean for the energy sector to 2040. More precisely, BBVA is developing models associated to the energy and transportation sectors, which are the most relevant sectors within BBVA's portfolio at the moment. As part of BBVA Group, Garanti will also implement the IEA WEO New Policies scenario. The Bank will also look into other relevant scenario alternatives to better reflect the regional and local issues.

C4. Targets and performance

C4.1

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

C4.1b

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

Target reference number

Int 1

Scope

Scope 1+2 (location-based)

% emissions in Scope

100

% reduction from baseline year

50

Metric

Other, please specify (tCO2e / billion (currency) AuM)

Base year

2012

Start year

2016

Normalized baseline year emissions covered by target (metric tons CO2e)

4982

Target year

2020

Is this a science-based target?

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

% achieved (emissions)

100

Target status

Underway

Please explain

As Garanti Bank, we have been submitting yearly basis emissions intensity reduction targets. 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 and 2 emissions per our total assets from 2012 to 2020. The base is selected as 2012 since our Environmental Management System was implemented. 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 60,2% (56% in 2016). Total yearly GHG emissions in tCO2e reported under Scope 1 and 2 of the GHG Protocol includes GHG emissions (CO2, CH4 and N2O and f-gases) from energy consumption to fossil fuel sources for heating, generators, leased vehicle fleet in commercial use, refrigerants for Scope 1, and purchased electricity by Garanti Bank's operations in Turkey (Headquarters, service buildings, branches and ATMs) for Scope 2. Scope 3 emissions are not included within the scope of our intensity target. IPCC Fifth Assessment Report factors are used for global warming potentials and emission factors. Grid Emission Factor is calculated based on the most recent data available by Turkish Electricity Transmission Company (TEİAŞ). GHG emissions are reported following the guidance in GRI G4-EN15 Direct greenhouse gas (GHG) emissions (Scope 1), GRI G4-EN16 Energy indirect greenhouse gas (GHG) emissions (Scope 2) and the GHG Protocol – Location-based. We publicly disclose our emission reduction targets and performance in our 2017 Integrated Annual Report (For more detail: 2017 Integrated Annual Report, page 436 (https://surdurulebilirlik.garanti.com.tr/media/1232/garanti-bank-2017-integrated-annual-report.pdf). Additionally, Garanti is a signatory to the Science Based Target Initiative (SBTi) since 2016 and follows the developments closely in that area. SBTi is still working on developing a methodology to verify science-based targets for financial sector. Garanti will then review its emission targets accordingly, once the methodology is out there.

% change anticipated in absolute Scope 1+2 emissions

-21.3

% change anticipated in absolute Scope 3 emissions

0

C4.2

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

C4.3

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

Yes

C4.3a

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

	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	1	
To be implemented*	2	3560.92
Implementation commenced*	1	900.86
Implemented*	2	1052.34
Not to be implemented	0	

C4.3b

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

Activity type

Energy efficiency: Building services

Description of activity

Other, please specify (New equipment)

Estimated annual CO2e savings (metric tonnes CO2e)

900.86

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

730000

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

4343855

Payback period

4 - 10 years

Estimated lifetime of the initiative

16-20 years

Comment

Implementation completed in 2017: Trigeneration system in the head-quarter was completed and government approval was received in December, 2017. However savings will be gained by 2018. The total investment cost (TRY 4.3 mn) including machine and installation. The values of annual CO2 and monetary savings are estimated roughly, since the performance of the unit has been monitored since January, 2018 and the calculated monetary and CO2 savings will be presented in 2019.

Activity type

Energy efficiency: Building services

Description of activity

Lighting

Estimated annual CO2e savings (metric tonnes CO2e)

766.64

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

621235

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

3440833

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Lighting was switched to LED in 151 branches. Modification has been planned for 630 branches in the year 2018 budget.

Activity type

Energy efficiency: Processes

Description of activity

Cooling technology

Estimated annual CO2e savings (metric tonnes CO2e)

285.7

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

231514

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

3752437

Payback period

4 - 10 years

Estimated lifetime of the initiative

11-15 years

Comment

Switch to invertor A/C at 75 branches as part of modification. Modification has been planned for 480 branches in the year 2018 budget.

C4.3c

Method	Comment				
Financial optimization calculations	All energy-efficiency projects are screened for payback period and investment amount to ensure that we are finding ways to reduce carbon emissions while optimizing cost efficiency.				
Employee engagement	All employees are 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 over 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. The environmental data collected either by Representatives or other relevant Bank personnel is consolidated and assessed the Sustainability Team on an annual basis. Garanti also has a dedicated team in the Construction Department that is responsible to apply for the Bank's environmental performance and ISO14001 compliance of all branches, buildings and personnel. In order to improve its data collection system, Garanti currently developing an online monitoring system for its environmental performance. The test implementation for this online database has been completed successfully and the system will be implemented in 2018. Additionally, the balanced scorecard of teams under relevant departments such as Project Finance (for indirect environmental risks), Construction Department (for direct environmental risks) and Training and Development Center (i.e. to increase the % of online trainings which save from resources) include KPIs related to environmental performance. The scorecard ultimately affects the annual bonus package.				
Internal price on carbon	ETS is currently not applicable in Turkey. However, as per the Climate Change Action Plan, Garanti applies its own shadow carbon price to loan requests related to carbon-intensive projects in project finance (PF) operations. The bank also includes a positive price in the cash flow of renewable energy investments. This way, the Bank favors renewable investments in its PF energy loan portfolio.				
Dedicated budget for energy efficiency	As one of our focus areas stated in our Climate Change Action Plan, Garanti several practices to establish green office standards. To achieve this goal, Garanti Bank's Construction Department has a dedicated budget and a team. Currently, 4 buildings of Garanti have green office certificates. Garanti's Pendik Technology Campus holds LEED Gold certificate. Kızılay Service Building has LEED Platinum certificate and Karşıyaka Service Building has LEED Gold. Also there is an ongoing process for HQ (Zincirlikuyu 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. Additionally, investments in building services and process which are stated in the Section "4.3b" have been implemented by using dedicated budget.				
Internal incentives/recognition programs	In 2015 Garanti expanded the scope of its ISO14001 Environmental Management System to 1,013 locations covering 100% of its employees and buildings in Turkey. In 2016 and 2017, coverage of 100% has been sustained. In 2017, Garanti updated its Environmental Management System in accordance with ISO14001:2015, the latest version of the standard and received relevant certification per TÜVSÜD's audit. Garanti collects environmental footprint data such as energy consumption and water consumption from each and every location through more than 1000 Sustainability Representatives. In 2016 Garanti added ISO14001 criteria into its SPOT awards, which is an internal awards program to recognize and celebrate successful employees and comes with a monetary reward. Therefore, successful Sustainability Representatives who manage their location's environmental impacts successfully will be rewarded under SPOT Awards. In 2017, 22 people received the award.				

C4.5

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

Yes

C4.5a

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

Level of aggregation

Group of products

Description of product/Group of products

Garanti finances renewable energy projects and enables greenhouse gas emissions to be avoided or reduced by third parties. The Bank gives utmost importance to financing wind and solar energy projects because of their minimal environmental and social effects and the positive contribution they make to the current account deficit of Turkey. As of 31 December 2017, Garanti Bank had allocated: USD 2.35 bn to wind power plant projects, which will have a total installed capacity of 2,109 MW once fully operational; USD 2.10 bn to hydroelectric power plant projects, which will have a total installed capacity of 3,295 MW once fully operational; USD 204 mn to geothermal power plant projects, which will have a total installed capacity of 202 MW once fully operational; USD 201 mn to solar power plant projects, which will have a total installed capacity of 250 MW once fully operational; and USD 15 mn to biomass energy projects, which will have a total installed capacity of 24 MW once fully operational. In 2017, all of the project finance loans the Bank provided for greenfield power plants have been allocated to renewable energy projects. Garanti Bank's share in Turkey's total operational installed capacity of wind power is 30.2%. To date, Garanti provided over USD 4.9 bn financing to renewable energy. The share of renewable investments makes up for 6.63% of the total commercial and corporate loans

outstanding.

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

Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions Other, please specify (Bank's own taxonomy)

% revenue from low carbon product(s) in the reporting year 6.63

Comment

As of 31 December 2017, the total avoided emissions of operational wind, solar and hydroelectric power plants that were financed by Garanti Bank was 5.4 million tCO2e based on the latest available TEİAŞ 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, the 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, solar and hydro power plant projects: 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: 30% (conservative estimate); MWh Capacity Factor for Hydro: 25% (conservative estimate); MWh Capacity Factor for Solar: 15%; Time: 365 [days/year]x24 [hrs/day]=8,760 hrs/year Turkish Grid Emission Factor: 0.512 metric t/MWh (2017) as calculated by Garanti GWPs based on IPCC, AR4, 2007 (100 year lifetime) CO2: 1 CH4: 25 N2O: 298. All the renew. energy investment amounts and the indirect emission reduction due to wind, solar and hydro power plants have verified by KPMG within the scope of 2017 Integrated Annual Report.

Level of aggregation

Group of products

Description of product/Group of products

Garanti launched its Green Auto Loan in 2016 for the financing of hybrid and electric automobiles that provide fuel efficiency and stand out with their environmental features. In 2017, Garanti continued to diversify its financial instruments to contribute Sustainable Development Goals and cooperated with IFIs on this area. In June 2017, Garanti released its first Green Mortgage product in collaboration with IFC. It is also Turkey's first mortgage covered bond in local currency. USD 150 mn in the equivalent of Turkish Lira (TRY) in covered bonds issued by Garanti, half of which to be used to provide Green Mortgages. In July 2017 Garanti signed another agreement with EBRD for EUR 75 mn in the equivalent of TRY solely to be used for Green Mortgage. As of 31 December 2017, TRY 323 mn provided under Green Mortgage which makes up for 3.16% of the current mortgage portfolio. In line with these developments, Garanti published its Climate Change Action Plan in October 2015, which focuses on carbon pricing, reducing deforestation, managing climate-related water risks and implementing green office standards and made Garanti the first bank in Turkey to commit to UN Global Compact's Business Leadership Criteria on Carbon Pricing. With this Action Plan, Garanti also pledged that a minimum of 60% of the total funds allocated to greenfield energy production facilities will be directed to renewable investments through internal carbon pricing. In 2016, Garanti Bank took its pledge a step further and committed to a renewable energy share at a minimum of 70% of the greenfield power sector financing to be provided by 2020 in new project finance transactions. Garanti far exceeded its goal of prioritizing renewables in project finance as 100% of the total resources allocated to greenfield energy investments has been allocated to renewable investments since 2014.

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

Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions Other, please specify (Bank's own taxonomy.)

% revenue from low carbon product(s) in the reporting year 3.16

Comment

The percentage of assets incorporating Environmental and Social Governance and low-carbon criteria divided by the total assets in the respective product category was presented in the data box of "% revenue from low-carbon products in the reporting year" above.

Level of aggregation

Product

Description of product/Group of products

Garanti continued to play an advisory role for its customers whose projects our Environmental and Social Impact Assessment Process (ESIAP) were applied. In 2017, 3 projects were assessed under ESIAP. These 3 projects make up for 54.62% of the total

PF loans provided in 2017. Garanti also continued to increasing knowledge and awareness, building capacity of its customers in 2017 and hosted the 3rd Sustainability and Risk Management Workshop, where corporate customers from energy and infrastructure industries were informed on cutting edge sustainable business topics such as TCFD (Financial Stability Board's Task Force on Climate-related Financial Disclosures) recommendations, carbon pricing and disruptive technologies. The workshop invitation was sent to 100% of our corporate customers.

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

Low-carbon product and avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions Other, please specify (Advisory related to Env. and Soc. risks)

% revenue from low carbon product(s) in the reporting year 54.62

Comment

The percentage in the total PF loans provided in 2017 was presented in the data box of "% revenue from low-carbon products in the reporting year" above.

Level of aggregation

Group of products

Description of product/Group of products

In 2017, Garanti received a total of TRY 1.97 bn of funds with a specific Environmental and Social Governance (ESG) eligibility criteria from IFIs. This amount makes up for 9.36% of the total wholesale funding Garanti received in 2017. Out of TRY 1.97 bn, 38.81% has been disbursed to Garanti's customers so far. Additionally, Garanti's integrated subsidiary Garanti Pension has a Sustainability Equity Fund, which has to invest at least 80% of its portfolio in the shares that are listed in the BIST Sustainability Index (BIST: Istanbul Exchange). It has high return potential while economy is doing well. However, it is negatively affected by economic and political uncertainties in the country. The aim of this fund is to invest in companies of a certain scale and to achieve capital appreciation. Currently, Sustainability Equity Fund accounts for 1% of the total portfolio of Garanti Pension funds.

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

Low-carbon product and avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions Other, please specify (Equity products that integrate to ESG)

% revenue from low carbon product(s) in the reporting year 9.36

Comment

The percentage in the total wholesale funding Garanti received in 2017 was presented in the data box of "% revenue from low-carbon products in the reporting year" above.

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C5.1

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

Scope 1

Base year start

January 1 2012

Base year end

December 31 2012

Base year emissions (metric tons CO2e)

15568

Comment

Within the framework of our long-term objectives, we set a 50% reduction target for our total Scope 1 and Scope 2 emissions per total assets against 2012, which is the year when ISO14001 Environmental Management System became operational, by the end of 2020. Currently, we have already achieved this target with 60% reduction. We will continue our efforts to maintain this success and maximize greenhouse gas reductions. Garanti is also a signatory to the Science-Based Target Initiative since 2016 and committed to set a long-term emissions reduction target. Emissions of the base line year (2012) in absolute tons of CO2e was presented as base year emissions (metric tons CO2e).

Scope 2 (location-based)

Base year start

January 1 2012

Base year end

December 31 2012

Base year emissions (metric tons CO2e)

73994

Comment

Within the framework of our long-term objectives, we set a 50% reduction target for our total Scope 1 and Scope 2 emissions per total assets against 2012, which is the year when ISO14001 Environmental Management System became operational, by the end of 2020. Currently, we have already achieved this target with 60% reduction. We will continue our efforts to maintain this success and maximize greenhouse gas reductions. Garanti is also a signatory to the Science-Based Target Initiative since 2016 and committed to set a long-term emissions reduction target. Emissions of the base line year (2012) in absolute tons of CO2e was presented as base year emissions (metric tons CO2e).

Scope 2 (market-based)

Base year start

January 1 2012

Base year end

December 31 2012

Base year emissions (metric tons CO2e)

73994

Comment

Garanti Bank's electricity is purchased from the main grid, where the following specific attributes are not available: - RECs certification, - direct contracts (low-carbon, renewable etc.) - residual mix totals. Therefore the Scope 2 (location-based) figure of the base year (2012) is stated here.

C5.2

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

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

C6. Emissions data

C6.1

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

Row 1

Gross global Scope 1 emissions (metric tons CO2e)

11835.09

End-year of reporting period

<Not Applicable>

Comment

GHG emissions (CO2, CH4 and N2O and f-gases) from energy consumption from fossil fuel sources for heating, generators, leased vehicle fleet in commercial use and refrigerants are included in the Scope 1.

C6.2

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

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We have no operations where we are able to access electricity supplier emission factors or residual emissions factors and are unable to report a Scope 2, market-based figure

Comment

Supplier-specific data for Garanti Bank's electricity consumption is not available. As mentioned in "Section C5.1", Garanti Bank's electricity is purchased from the main grid, where the following specific attributes are not available: - RECs certification, - direct contracts (low-carbon, renewable etc.) - residual mix totals. Therefore the Scope 2 (location-based) figure of the reporting year (2017) is stated below.

C6.3

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

Row 1

Scope 2, location-based

58628.37

Scope 2, market-based (if applicable)

<Not Applicable>

End-year of reporting period

<Not Applicable>

Comment

Supplier-specific data for Garanti Bank's electricity consumption is not available.

C6.4

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

No

C6.5

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

Purchased goods and services

Evaluation status

Relevant, calculated

Metric tonnes CO2e

942.31

Emissions calculation methodology

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. The emission factor is quite similar to other studies carried out within Europe and Turkey. (April 2018)

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

50

Explanation

Last year emissions calculated were 1,451.7 tCO2e. In 2017, there is a decrease of 35% in domestic accommodations when compared to 2016. The Emission Factor didn't change in 2017.

Capital goods

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

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)

Evaluation status

Relevant, calculated

Metric tonnes CO2e

6455.76

Emissions calculation methodology

The calculation was made by using the consumption (liter) of diesel and gasoline of personal cars used for business. The Emission Factors are the same used for calculating Scope 1 company car fleet of Garanti.

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

100

Explanation

Last year emissions were 6,580.41 tCO2e. In 2017, there is a decrease of 1.9% when compared to previous year. In diesel consumption, an increase of 16% was noted in 2017.

Upstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

All emissions associated to transportation and distribution (both upstream and downstream) are covered by the figure provided at the "Downstream transportation and distribution" Section.

Waste generated in operations

Evaluation status

Relevant, calculated

Metric tonnes CO2e

473

Emissions calculation methodology

The total amount of the wastes recorded by Garanti was 703.6 tons. This total weight is related to all domestic (kitchen) wastes. 'The First Order Decay Model' is used to calculate the CO2e emissions of domestic wastes with the assumption that all the wastes are sent to the solid waste disposal sites, which are not managed by Garanti. It is estimated that the waste of 2017 will be disposed within 30 years.

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

100

Explanation

According to the data, 47% less domestic waste was generated in 2017 when compared to previous year.

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO2e

2493.82

Emissions calculation methodology

The Scope 3 emissions related to business air travel by Garanti Bank employees is reported following the guidance in GRI G4-EN17 and the GHG Protocol. Average passenger DEFRA emission factors (without RF) are used for air travel emissions calculations. Flights are classified as Short Haul (less than 500 km), Medium Haul (between 500 km and 1,600 km), and Long Haul (over 1,600). The total flight distance of business travel of Garanti Bank in 2017 is 23,681,881 km.

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

100

Explanation

In 2017, approximately 12% less passenger kilometers were recorded. In 2017, the Short haul travel is half of the previous year. The total flight distance in 2017 was recorded as 23,681,881 kilometers. The Scope 3 emissions due to the business flights were also presented in our 2017 Integrated Annual Report, p437 (https://surdurulebilirlik.garanti.com.tr/media/1232/garanti-bank-2017-integrated-annual-report.pdf). This data was also verified under scope of limited assurance.

Employee commuting

Evaluation status

Relevant, calculated

Metric tonnes CO2e

1993.24

Emissions calculation methodology

The raw data included kilometers collected from Aytur Turizm, Kösemtur and Altur Turizm. 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 (0,25749 kg CO2e/vehicle km), For 27+1 vehicles the CO2e emission factor for 50% laden rigid (3,5-7,5 tonnes) is used (0,53867 kg CO2e/vehicle km for 50% laden and 0,58118 kg CO2e/vehicle km for 100% laden) -(April 2018).

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

Explanation

In 2016, emissions were calculated as 1,939.51 tCO2e. This value is almost the same in 2017. The emission factors used to calculate tCO2e were decreased around 3-4 % in 2017.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

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 Scope 2)".

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Downstream transportation and distribution

Evaluation status

Relevant, calculated

Metric tonnes CO2e

383.13

Emissions calculation methodology

The calculation was made by multiplying total ton.km for Garanti Bankası with related Emission Factor of DEFRA. The information is provided by DHL. When calculating the distances for the freights are estimated. 16% of Garanti consignments are domestic, 17% short haul and 66% long haul. The Emission Factor of a domestic flight is 2.7049 kg CO2e per ton.km, short haul flight is 1.0565 kg CO2e per ton.km and long haul flight is 0.77 kg CO2e per ton.km. The delivery to the airport is 12 kilometers and the Emission Factor used is 0.3153 kg CO2e for rigid HGV vehicles (3.5-7.5 tonnes) % 100 Laden. There is an increase in Emission Factor except short haul flights. The information is provided by Aras Kargo. The Emission Factor of a rigid HGV vehicle for ton.km for 50% laden is 0.4910 kg CO2e - (Emission Factor used is for the year 2017). The calculation was made by using total fuel usage of the company and sub contractors. Electricity and natural gas consumptions are not provided by Kurye Net. The Emission Factors used are the same with Garanti EF. Total CO2e emissions is multiplied by Garanti's share in activities of Kurye Net. The information is provided by Yurtiçi Kargo. The EF of a rigid HGV vehicle for ton.km for 50% laden is 0.4910 kg CO2e - (EF used is for the year 2016).

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

75

Explanation

100% of the total data obtained from Kurye Net and Yurtiçi Kargo and 50% of the total data obtained from DHL and Aras Kargo were used in the calculations. The total of 383.13 tCO2e comprises of 44.26 tCO2e (DHL), 64.58 tCO2e (Aras Kargo), 120.90 tCO2e (Kurye Net) and 153.40 tCO2e (Yurtiçi Kargo). The following findings were noted for each service: -DHL: The reason of the increase is the change of the distribution of the destination despite the decrease in number. The majority (61% of the cargo is aimed for far east in 2017. It was 30% in the previous year). There are slight increases in Emission Factors (EF) in 2017. -Aras Kargo: The amount of the file and package sent by using cargo services was collected by Aras Kargo in 2017. The number of cargo sent in 2017 was decreased by 5.5% when compared to 2016. The main reason of the decrease is decrease (around 30%) on the total weight of the heavy packages. -Kurye Net: Diesel consumptions were decreased due to the decrease in the operations of Kurye Net. -Yurtiçi Kargo: The number of deliveries were decreased around 4%.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

Emissions originating from downstream transportation and distribution is already covered by "Downstream transportation and distribution" section.

Use of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

Financial services that we provide result in GHG emissions, however this is already covered by "investment activities".

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

Financial services that we provide result in GHG emissions, however this is already covered by "investment activities".

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

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

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

Garanti Bank doesn't have any franchise.

Investments

Evaluation status

Relevant, calculated

Metric tonnes CO2e

0

Emissions calculation methodology

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 from energy production sector in its new commitments in project finance activities during the reporting year.

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

100

Explanation

The Scope 3 footprint of our energy production portfolio is 0 in new PF commitments. Garanti's reporting includes emissions from project financing of new capacity only, including expansions of existing plants, but not re-financing of existing plants. During the reporting year, Garanti Bank has disbursed USD 0.9 bn in loans to greenfield renewable power plant investments and no fossil fuel investments were financed. Therefore the total GHG emissions of project financing of greenfield power plant investments were calculated as zero.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

We have included both the upstream and downstream emissions of paper consumption in "Other (downstream)" section.

Other (downstream)

Evaluation status

Relevant, calculated

Metric tonnes CO2e

3878.38

Emissions calculation methodology

The calculation was made by multiplying total paper used with emission factors. The data is collected according to paper type. The weight of copy papers used is ~937 tons, the weight of bank statements for customers is 275 tons and the weight of receipts is ~385 tons. Environmental Paper Network's emission factors are used for each type of paper. For 1 tons of copy paper, the Emission Factor is 2.5406 tons CO2e; for bank statements, the Emission Factor is 2.8567 tons CO2e; and for ATM slips, the Emission Factor is 2.5406 tons CO2e -(April 2018).

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

Explanation

The calculated tCO2 was decreased in 2017. The reason of the decrease on the total emission was due to the decrease in dekonts. The Emission Factor was not changed.

C6.7

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

C6.10

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

Intensity figure

0.0000036

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

70463

Metric denominator

unit total revenue

Metric denominator: Unit total

19573097000

Scope 2 figure used

Location-based

% change from previous year

14.28

Direction of change

Decreased

Reason for change

The GHG emissions intensity decreased at rate of 9% in 2017 when compared to 2016. There has been an increase in our revenue at a rate of 19.6%. Besides, due to emissions reduction activities such as energy efficiency implementations (LED installation, AC renewal) electricity consumption in facilities decreased by 657,756 kWh and in stand alone ATMs decreased by 1,365,030 kWh in 2017.

Intensity figure

197.8

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

70463

Metric denominator

Other, please specify (Billion currency assets under management)

Metric denominator: Unit total

356.3

Scope 2 figure used

Location-based

% change from previous year

9.47

Direction of change

Decreased

Reason for change

The GHG emissions intensity decreased at rate of 9% in 2017 when compared to 2016. Garanti's consolidated total assets increased by 14% on an annual basis and reached TRY 356 bn (As of 31 December 2017). Besides, due to emissions reduction activities such as energy efficiency implementations (LED installation, armature renewal, server visualization, raising awareness) electricity consumption in facilities decreased by 657,756 kWh in ATMs decrased by 1,365,030 kWh in 2017.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization have greenhouse gas emissions other than carbon dioxide?

Yes

C7.1a

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

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	10392.17	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	23.98	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	71.06	IPCC Fifth Assessment Report (AR5 – 100 year)
Other, please specify (R-134A)	105.3	IPCC Fifth Assessment Report (AR5 – 100 year)
Other, please specify (R-407A)	10.56	IPCC Fifth Assessment Report (AR5 – 100 year)
Other, please specify (R-410)	1143.52	IPCC Fifth Assessment Report (AR5 – 100 year)

C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
Turkey	11835.09

C7.3

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

By activity

C7.3c

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

Activity	Scope 1 emissions (metric tons CO2e)
Facility heating fuel	7616.97
Fleet (mobile sources)	2958.74
Refrigerants	1259.38

C7.5

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

		based (metric tons		Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Turkey	58628.37		114479	

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

C7.6c

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

Activity	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Facilities	52172.35	
Stand-alone ATMs	6456.02	

C7.9

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

Increased

C7.9a

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

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption		<not Applicable></not 		There had been no renewable energy purchase in 2017. But Garanti has solar panel investments for self-consumption. These panels will be active in 2018 and the generation information will be provided in next years report.
Other emissions reduction activities	1052.34	Decreased	1.54	As stated in the Section "C4.3b", due to emission reduction activities such as energy efficiency projects (LED installation and AC renewal) 2,054,819 kWh was saved in terms of electricity consumption, which resulted with 1,052.34 tCO2e. Therefore, we would normally expect our total Scope 1+2 emissions to be 1,052.34 tCO2e higher compared to previous year. (1,052.38/68,183=1.54%).
Divestment		<not Applicable></not 		There is no divesment, acquisition or merge in 2017.
Acquisitions		<not Applicable></not 		There is no divesment, acquisition or merge in 2017.
Mergers		<not Applicable></not 		There is no divesment, acquisition or merge in 2017.
Change in output	699	Decreased	1.03	In 2017, the number of stand-alone ATMs reached to 3,123. It was 2,954 in 2016. However, there is a decrease in stand-alone ATM electricity consumption amounting to 1,365,030 kWh. This decrease might be due to changes in weather conditions, ATM utilization and modifications completed in ATMs in 2017. Reduction in electricity consumption corresponds to 699 tCO2e. The change (%) in total Scope 1+2 emission was calculated as follows: 699/68,183*100=1.03%.
Change in methodology	2404.06	Increased	3.53	The grid emission factor based on 2016 TEİAŞ data, which is most recent available official data, was used for the calculation of scope 2 emissions in 2017. In 2016, there has been a slight increase in Turkey's grid emission factor by 4.2% when compared to 2015 value (from 0.491 to 0.512). Therefore, total Scope 2 emissions in 2017 would be 2,404 tCO2e lower if we used the previous year's emission factor (i.e. 0.491). This resulted in a total increase of 3.53% in 2017 emissions (2,404/68,183= %3.53).
Change in boundary		<not Applicable></not 		There is no change in boundary.
Change in physical operating conditions		<not Applicable></not 		There had been no major change identified that can be directly associated with weather conditions.
Unidentified		<not Applicable></not 		There is no unidentified reason.
Other	1627.32	Increased	2.39	There had been an increase of 2,280 t CO2e in total Scope 1+2 emissions compared to previous year. This increase corresponds to 3.344%. However, the sum of the changes compared to previous year stated above is 0.957%. The difference (2.387%) might be due to a variety of reasons including temperature fluctuations, volume of business in branches and ATMs and change in fleet consumption.

C7.9b

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

Location-based

C8. Energy

C8.1

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

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

	Indicate whether your organization undertakes this energy-related activity
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	No

C8.2a

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

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)			47036
Consumption of purchased or acquired electricity	<not applicable=""></not>			114479
Consumption of purchased or acquired heat	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not Applicable></not
Consumption of purchased or acquired steam	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not Applicable></not
Consumption of purchased or acquired cooling	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not Applicable></not
Consumption of self-generated non-fuel renewable energy	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not Applicable></not
Total energy consumption	<not applicable=""></not>			161515

C8.2b

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

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

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

Fuels (excluding feedstocks)

Natural Gas

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

32563

MWh fuel consumed for the self-generation of electricity

0

MWh fuel consumed for self-generation of heat

32563

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Fuels (excluding feedstocks)

Diesel

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

2897

MWh fuel consumed for the self-generation of electricity

1405

MWh fuel consumed for self-generation of heat

1492

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Fuels (excluding feedstocks)

Coal

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

354

MWh fuel consumed for the self-generation of electricity

U

MWh fuel consumed for self-generation of heat

354

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Fuels (excluding feedstocks)

Fuel Oil Number 1

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

300

MWh fuel consumed for the self-generation of electricity

0

MWh fuel consumed for self-generation of heat

300

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

C8.2d

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

Coal

Emission factor

0.00128

Unit

kg CO2e per metric ton

Emission factor source

NCV 3000 kcal/kg used in the Emission Factor calculations are in compliance with EIE regulations (no data is available from gas distribution company). IPCC data is from the Table 2.4 Default Emission Factors For Stationary Combustion in the Commercial/Institutional Category. Calculated from combustion without CO.

Comment

Diesel

Emission factor

0.00267

Unit

metric tons CO2e per liter

Emission factor source

Density and NCV used in the Emission Factor 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.

Comment

Fuel Oil Number 1

Emission factor

0.00313

Unit

metric tons CO2e per liter

Emission factor source

The Emission Factor calculations are in compliance with EİE and IPCC.

Comment

Natural Gas

Emission factor

0.00195

Unit

metric tons CO2e per m3

Emission factor source

NCV used in the Emission Factor 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.

Comment

C8.2f

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

Basis for applying a low-carbon emission factor

No purchases or generation of low-carbon electricity, heat, steam or cooling accounted with a low-carbon emission factor

Low-carbon technology type

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

Comment

Garanti Bank's electricity is purchased from the main grid, where the following specific attributes are not available: - RECs certification, - direct contracts (low-carbon, renewable etc.) - residual mix totals.

C9. Additional metrics

C9.1

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

Description

Other, please specify (Water Consumption)

Metric value

287000

Metric numerator

Cubic meters

Metric denominator (intensity metric only)

% change from previous year

9

Direction of change

Increased

Please explain

The water consumed by Garanti is provided by municipalities, which in Turkey source their water mainly from open river and reservoirs. To manage our indirect water footprint, we also request, monitor and ensure that measures are taken to reduce consumption of water and other natural resources, decrease environmental impact, apply recycling and prevent negative effects on water quality. While financing new investments, we take into account the conditions such as ground water characteristics, and impact on underground and surface waters, quality, and sectoral criteria. In addition, based on the Environmental and Social Loan Policies (ESLP) and in line with the 15th Goal-Life on Land from the UN Global Goals, we do not finance projects and activities in the wetlands defined as threatened ecosystems and protected by the RAMSAR Convention. In addition to raising awareness on carbon footprint management, we supported the launch of the CDP Water Program in Turkey in 2015 as a main sponsor. We aim to increase awareness of our corporate customers about water risks. In this field, we partner with NGOs and public and private institutions to create awareness and share experiences. In April 21, 2016, we joined the WWF Water Panel with high-level participation. Detailed information on our approach on water risks can be found in our previous sustainability reports. Building on its efforts to support CDP Turkey's Water Program, Garanti Bank has extended the scope of its support and became the main sponsor of the CDP Turkey Program. Garanti was also entitled to receive the "CDP Turkey 2017 Climate Leadership Award" and became the only financial institution worldwide to be listed in the CDP 2017 Water A List.

Description

Other, please specify (Domestic Waste)

Metric value

Metric numerator

Tons

Metric denominator (intensity metric only)

% change from previous year

Direction of change

<Not Applicable>

Please explain

As Garanti has been reached 100% coverage of ISO14001 certified Environmental Management System in all locations, monitoring and tracking of recycle wastes have been performed in all locations. Garanti began to disclose the waste indicators in 2017. The Bank's Environmental Management System envisages the re-use of waste where possible and, wherever not, recycling or, where this is not appropriate, its disposal by an authorized disposal company. Garanti's waste management approach: -Re-use: The re-use of waste is the first priority. Computers that are broken or redundant are delivered to Garanti Technology which examines their potential scope for re-use. Repaired computers are then donated to schools in need if deemed to be usable. -Recycling: Beginning with buildings subject to the EMS, the Bank began to deliver recyclable waste to authorized recycling and disposal facilities. Recyclable paper, plastic, metal and glass are delivered to whichever municipality the service point is located in or to a licensed recycling firm, where they are recycled. -Management of Hazardous Waste: Hazardous waste that is produced by the Bank is collected in accordance with determined rules and delivered to authorized recycling and disposal facilities. -Excavation Waste Excavation: Waste and debris left over during branch openings or renewal is removed to disposal areas as designated by the municipality.

Description

Other, please specify (Recycle Waste)

Metric value

709

Metric numerator

Tons

Metric denominator (intensity metric only)

% change from previous year

Direction of change

<Not Applicable>

Please explain

As Garanti has been reached 100% coverage of ISO14001 certified Environmental Management System in all locations, monitoring and tracking of recycle wastes have been performed in all locations. For more information, please visit: https://surdurulebilirlik.garanti.com.tr/garanti-sustainability-approach/material-issues/environmental-impact-of-our-operations/waste-management/.

C10. Verification

C10.1

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

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

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

Scope

Scope 1

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Garanti Bank-2017 IAR-Assurance Report.pdf

Page/ section reference

All pages.

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

Scope

Scope 1

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

garanti-bank-2017-integrated-annual-report.pdf

Page/ section reference

2017 Integrated Annual Report: https://surdurulebilirlik.garanti.com.tr/media/1232/garanti-bank-2017-integrated-annual-report.pdf (Pages: 20-21) The audit and assurance statements have ghost pages in the report. They are located between Garanti Bank Share and Agenda of the Ordinary General Shareholder's Meeting sections.

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

Scope

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Garanti Bank-2017 IAR-Assurance Report.pdf

Page/ section reference

All pages.

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

Scope

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

garanti-bank-2017-integrated-annual-report.pdf

Page/ section reference

2017 Integrated Annual Report: https://surdurulebilirlik.garanti.com.tr/media/1232/garanti-bank-2017-integrated-annual-report.pdf (Pages: 20-21) The audit and assurance statements have ghost pages in the report. They are located between Garanti Bank Share and Agenda of the Ordinary General Shareholder's Meeting sections.

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

C10.1b

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

Scope

Scope 3- at least one applicable category

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Attach the statement

Garanti Bank-2017 IAR-Assurance Report.pdf

Page/section reference

All pages.

Relevant standard

ISAE3000

Scope

Scope 3- at least one applicable category

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Attach the statement

garanti-bank-2017-integrated-annual-report.pdf

Page/section reference

2017 Integrated Annual Report: https://surdurulebilirlik.garanti.com.tr/media/1232/garanti-bank-2017-integrated-annual-report.pdf (Pages: 20-21) The audit and assurance statements have ghost pages in the report. They are located between Garanti Bank Share and Agenda of the Ordinary General Shareholder's Meeting sections.

Relevant standard

ISAE3000

C10.2

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

Yes

C10.2a

Disclosure module verification	Data verified	Verification standard	Please explain
C1. Governance	Other, please specify (Sustainability Governance)	Third Party Assurance- Limited Assurance within the scope of ISAE 3000	Garanti's Sustainability Governance refers to the policies and mechanisms in place for decision-making on economic, environmental and social impacts. Sustainability Governance is reported following the guidance in GRI G4 – 34, 35, 36, 37 in the Risk Management section (p103-141) of 2017 Annual Integrated Report (https://surdurulebilirlik.garanti.com.tr/media/1232/garanti-bank-2017-integrated-annual-report.pdf).
C2. Risks and opportunities	Other, please specify (E&S Impact Assessment)	Third Party Assurance- Limited Assurance within the scope of ISAE 3000	The following KPIs have been verified within the scope of third party assurance (limited assurance): E&S Impact Assessment Process related to projects financed by Garanti: -Number of assessed projects in 2017; -Number of rejected projects in 2017; -Risk rating of the assessed projects in 2017; -Number of project site visits conducted during 2017. These KPIs and E&S Governance are reported in the 2017 Integrated Annual Report, p55 (3rd part of KPI&Performance Table), p96-102 and p435-437 (https://surdurulebilirlik.garanti.com.tr/media/1232/garanti-bank-2017-integrated-annual-report.pdf).
C3. Business strategy	Other, please specify (Materiality Analyses)	Third Party Assurance- Limited Assurance within the scope of ISAE 3000	Our Materiality Analysis is based on two key criteria. First one is desk studies to review the trends, sector reports, report of global banks, and advice by international professional organizations such as GRI and SASB; and the second one is a comprehensive stakeholder analysis by reaching all stakeholder groups via online questionnaires, focus group meetings and phone calls to get their opinions. AA1000SE Stakeholder Engagement Standard was used as a reference to conduct the stakeholder engagement process. Each relevant topic was evaluated through a four-step assessment called "Four Factor Impact Analysis". For details, please see Our Materiality Matters section on p36-39 in 2017 Integrated Annual Report (https://surdurulebilirlik.garanti.com.tr/media/1232/garanti-bank-2017-integrated-annual-report.pdf).
C6. Emissions data	Year on year emissions intensity figure	Third Party Assurance- Limited Assurance within the scope of ISAE 3000	Total Scope 1 and Scope 2 emissions divided by total assets of the Bank as of 31.12.2017 in TRY billion terms compared to 31.12.2016. The total assets are based on the Bank's audited financial statements, therefore no additional financial audit took place for this indicator. Additionally, GHG amissions intensity in the reporting year and annual change in GHG emission intensity have been verified within the scope of limited assurance. Reported following the guidance in GRI G4-EN18 as reported in Appendix A.4: Energy Consumptions and GHG Data of 2017 Integrated Annual Report p435-436.
C7. Emissions breakdown	Change in Scope 3 emissions against a base year (not target related)	Third Party Assurance- Limited Assurance within the scope of ISAE 3000	Total Yearly GHG emissions from business air travel – Scope 3 & Air Travel in Kilometer.
C7. Emissions breakdown	Other, please specify (Yearly energy consumption by source)	Third Party Assurance- Limited Assurance within the scope of ISAE 3000	Includes energy consumption from fossil fuel sources for heating, generators, leased vehicle fleet in commercial use, and purchased electricity by Garanti's operations (Headquarter, service buildings, branches and ATMs) in Turkey. IPCC energy conversion factors are used to convert source data in cubic meters, litres and tonnes to MWh. Total Energy consumption is reported following the guidance in GRI G4-EN3 Energy consumption within the organization and can be found in Appendix A.4: Environmental Performance Data of 2017 Integrated Annual Report, p435-437 (https://surdurulebilirlik.garanti.com.tr/media/1232/garanti-bank-2017-integrated-annual-report.pdf).
C8. Energy	Renewable energy products	Third Party Assurance- Limited Assurance within the scope of ISAE 3000	The following KPIs are reported within the scope of Renewable Energy Portfolio: -Amount of investments in renewable energy projects by type in the reporting period; -Installed capacity of renewable energy projects by type in the reporting period; -Garanti's market share of operational installed wind capacity in Turkey in the reporting period.
C8. Energy	Other, please specify (Yearly avoided GHG due to renew.projects)	Third Party Assurance- Limited Assurance within the scope of ISAE 3000	Emissions avoided by the electricity generation based on the operational capacity of solar, wind and hydropower plants during the reporting period are calculated. The projects Garanti has participated in financing, which were operational in the reporting period are taken into consideration for the calculations. Grid Emission Factor is calculated based on the most recent data available by TEIAŞ. Please see Responsible and Sustainable Development Section, p96-102 in 2017 Integrated Annual Report (https://surdurulebilirlik.garanti.com.tr/media/1232/garanti-bank-2017-integrated-annual-report.pdf).
C9. Additional metrics	Other, please specify (Yearly water consumption by source)	Third Party Assurance- Limited Assurance within the scope of ISAE 3000	Includes total water consumption mainly coming from municipality by Garanti's operations Turkey. Reported following the guidance in GRI G4-EN8 Total water withdrawal by source in the Appendix A.4: Environmental Performance Data of 2017 Integrated Annual Report, p435-437 (https://surdurulebilirlik.garanti.com.tr/media/1232/garanti-bank-2017-integrated-annual-report.pdf).

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C11.1

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

No, but we anticipate being regulated in the next three years

C11.1d

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

The Emission Trading Scheme (ETS) is currently not applicable in Turkey. However, Garanti applies a shadow carbon price to 100% of its greenfield electricity generation projects (Project Finance transactions). The bank also supports renewable energy investments with positive carbon pricing.

Turkey seeks to establish its own emissions trading scheme (ETS) as per the Partnership for Market Readiness (PMR) Project conducted in collaboration with the World Bank Group (WBG). In preparation for this, the regulatory framework on 'Monitoring GHG Emissions' was published by the Ministry of Environment and Urbanization in the official gazette on 17 May 2014. The regulation requires 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 USD 0.2 bn per year); (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 USD 3.2 mn). Garanti 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 SMEs. The Bank monitors carbon trading opportunities which would represent TRY hundreds of millions. Moreover, Garanti became the first Turkish company to sign the UN Global Compact'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.

Additionally, Garanti declared its support to Financial Stability Board (FSB) Task Force on Climate-related Financial Disclosures (TCFD) and its Recommendation Report for climate-related risk and opportunity management; also became a member of CPLC, an initiative led by IFC for carbon pricing. In 2018 Garanti became a member of the Global Steering Committee of CPLC.

Garanti's stewardship on carbon pricing was also published as a case study by IFC. Garanti also hosted the 3rd Sustainability and Risk Management Workshop, where corporate customers from energy and infrastructure industries were informed on cutting edge sustainable business topics such as TCFD recommendations, carbon pricing and disruptive technologies. The Bank attended the CPLC High Level Assembly held in Washington, D.C. and were included in the 2016-2017 Carbon Pricing Leadership Report. Garanti was also presented as a case study for its good practices in carbon pricing through a webinar organized in collaboration with Yale University, World Economic Forum and CPLC. For details please refer to:

https://cbey.yale.edu/events/integrating-an-internal-price-on-carbon-lessons-from-garanti-bank.

C11.2

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

C11.3

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C11.3a

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

Objective for implementing an internal carbon price

Navigate GHG regulations

Stakeholder expectations

Change internal behavior

Drive low-carbon investment

Stress test investments

Identify and seize low-carbon opportunities

GHG Scope

Scope 3

Application

Scope 3 means downstream operations, i.e. lending operations. In October 2015, Garanti published its Climate Change Action Plan to support Turkey's transition to a low-carbon economy. The plan focused on carbon pricing, reducing deforestation, managing climate-related water risks and implementing green office standards. Despite the difficulties in determining the cost of carbon in the absence of a regulation, the bank applies its own shadow carbon price in evaluating the economics of all greenfield/brownfield fossil fuel based and renewable energy investments in its Project Finance activities. If the host country already implements an ETS/tax, then Garanti uses actual price for carbon. If not, it uses fixed price per tCO2e emitted. The price is determined taking into consideration the market dynamics and is reviewed and updated regularly.

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

22

Variance of price(s) used

In October 2015, Garanti published its Climate Change Action Plan (CCAP) to support Turkey's transition to a low-carbon economy. Excerpt from our CCAP (https://www.garantiinvestorrelations.com/en/corporate-governance/detail/Climate-Change-Position-Statement-Action-Plan/854/3630/0): I. Putting a shadow price on carbon: The phrase "put a price on carbon" has become increasingly common as discussions of how to address climate change move from concern to action. As a pioneer in financing renewable energy projects and being by far the largest lender for wind projects in Turkey, setting a carbon pricing scheme will allow the Bank to further prioritize renewable investments. The price assumed between 2011-2020 varies between USD 5-10 per tCO2e. Taking into consideration our internal studies and international reports aimed at determining carbon corridors, we expect the pricing to be USD 22, USD 48 and USD 74 in 2020, 2025 and 2030 respectively. The price below represents USD 5 per tonne of CO2e (USD/TRY exchange rate in May 15th, 2018).

Type of internal carbon price

Shadow price

Impact & implication

Garanti is a strong supporter of voluntary tools such as carbon pricing to enable transition to a low carbon economy. Therefore the Bank became a member of Carbon Pricing Leadership Coalition (CPLC) Global Steering Committee. Garanti's efforts in this area was presented as a case study through a webinar organized by Yale University, World Economic forum, and CPLC. Please refer to the link to see the details: https://cbey.yale.edu/events/integrating-an-internal-price-on-carbon-lessons-from-garanti-bank. Garanti was also presented as a case study by CPLC in 2017 Carbon Pricing Leadership Report:

http://pubdocs.worldbank.org/en/183521492529539277/WBG-CPLC-2017-Leadership-Report-DIGITAL-Single-Pages.pdf . Garanti also supports the UN Global Compact's Business Leadership Criteria on Carbon Pricing, which comprises three distinct but overlapping dimensions: integrating carbon pricing into long-term strategies and investment decisions, responsible policy advocacy, and communication on progress. All three dimensions of the criteria are aligned with limiting the increase in global mean temperature to 2°C above pre-industrial levels.

C12. Engagement

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

Yes, our suppliers

Yes, our customers

Yes, other partners in the value chain

C12.1a

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

Type of engagement

Compliance & onboarding

Details of engagement

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

% of suppliers by number

100

% total procurement spend (direct and indirect)

52

% Scope 3 emissions as reported in C6.5

100

Rationale for the coverage of your engagement

Garanti released its Code of Conduct for Suppliers with the purpose of regulating supplier behavior and the professional relations of suppliers in parallel to the Bank's commitment to corporate governance principles and ethical values concerning. Garanti shared its Code of Conduct for Suppliers with a message stating that their full commitment and compliance is expected. Garanti Code of Conduct for Suppliers (https://assetsgaranti.com/assets/pdf/en/other/Garanti_Bank_Code_of_Conduct_for_Suppliers%20(2).pdf). The scope of the Code of Conduct includes 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 behavior may in any way affect Garanti's reputation and good name or generate any type of liability for Garanti.

Impact of engagement, including measures of success

The Code includes the following environmental expectations. Environmental Provisions stated in the Code of Conduct include: - 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 UNGC, UNEP-FI and the CDP; -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 urbanization, 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. Garanti shared its 'Code of Conduct for Suppliers' with major suppliers with a message stating that their full commitment and compliance is expected. Commitment to Sustainability Section of the code includes; Sustainability Policy, Environmental Policy, Exclusion List stated in Garanti's Environmental and Social Loan Policies and international initiatives and standards, such as UNGC, UNEP-FI, IFC Performance Standards, CDP Climate Change Program, CDP Water Program, ISO14001 EMS, LEED criteria, C4C, UNGC Business Leadership Criteria on Carbon Pricing. In the Code, it is also stated that Garanti's suppliers undertake not to engage in actions that breach not only the provisions of the applicable legislation but also the provisions of the aforementioned international agreements, initiatives and standards on environmental and social issues.

Comment

Garanti's Code of Conduct for Suppliers covers all suppliers of Garanti. All suppliers that work for Garanti should behave with due respect for the applicable laws and regulations, with integrity and transparency, and acting with the prudence and professionalism appropriate to the social impact of the financial industry, and to the confidence which our shareholders and customers have placed in us.

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

Type of engagement

Collaboration & innovation

Details of engagement

Other - please provide information in column 5

Size of engagement

100

% Scope 3 emissions as reported in C6.5

0

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

Garanti established its Env. and Social (E/S) Loan Policies (ESLP) in 2011 and its E/S Impact Assessment Process (ESIAP) in 2012. Our ESIAP allows us to determine and mitigate the E/S impact of our customers. Firstly, we subject all loans to our ESLP, which set the minimum E/S standards governing the extension of loans at Garanti. The Bank implements an ESG risk assessment rating for all corporate, commercial and SME customers. This assessment system is implemented via an online tool by all credit personnel. The assessment rating system includes the banned activities as defined in ESLP as well as some other ESG criteria. Projects with a total investment value of more than USD 10 mn that comply with ESLP principles are also evaluated for their compliance with "Sector Principles", which are individually defined for each sector. Projects 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 E/S Impact Assessment Model (ESIAM). Under the ESIAM, there are question sets that are prepared specific to each sector. Depending on the sector applicable to each project, these questions are answered by the Project and Acquisition Finance Department or the Corporate and Commercial Loans Department. Projects are classified according to their risk rating and category, by using a risk matrix created by the Bank itself, and finally their risk classes are identified based on this evaluation. The results of those assessments are regularly reported to the Credit Committee by either Project Finance or Corporate&Commercial Loans Departments. Later on, the Committee and relevant departments agree on specific actions to be taken according to the risk class of each project. The Sustainability Team also reports the number of projects in each risk class to the Sustainability Committee at least once a year. With this system in place, our Bank has achieved significant progress towards compliance with the Equator Principles, even though there were no other deposit banks announcing that they implement such a comprehensive assessment system within the country. For further details on indirect E/S Risk Management please refer to:

https://www.garantiinvestorrelations.com/en/sustainability/detail/Environmental-and-Social-Risk-Assessment/902/373

Impact of engagement, including measures of success

Garanti demands specific actions to be taken based on the ESIAM results. According to the final action score determined via ESIAM. If the final action score is 1, the Bank asks an independent consultant to prepare a comprehensive report regarding the project's potential environmental and social impacts and also to prepare, apply and regularly report an Environmental and Social Action Plan (ESAP). If the final action score is 2, the Bank requests that the project owner(s) prepare, apply and regularly report an ESAP. The Bank expects the ESAP 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 final action score 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 temperature 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.

Type of engagement

Education/information sharing

Details of engagement

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

Size of engagement

29

% Scope 3 emissions as reported in C6.5

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

Garanti contributes to raising awareness regarding non-financial risks in the finance and other sectors by explaining its ESLP to its external stakeholders via a variety of platforms. Some examples are as follows: -In 2013, Garanti has started a series of sustainability workshops aimed at building capacity among its customers and the Turkish banking sector. The first workshop was held on March, 2013 in which Garanti presented its environmental and social risk management process in detail to Turkish banks and real sector companies; -In May, 2015, Garanti organized the 2nd workshop together with Boğaziçi University on Environmental and Social Risk Management to its corporate customers and presented the bank's approach and best practices. In the workshop, besides Garanti, a specialist from the EBRD, a responsible investment specialist and two international independent advisor companies presented their knowledge and experiences; -In December 2016, Garanti hosted 3rd Sustainability and Risk Management Workshop during which the Ministry of Environment and Urbanization, CDP and international consultancy companies presented their experiences in E&S risk management systems; -In September -2017, Garanti hosted the 4th Sustainability and Risk Management Workshop, where corporate customers from energy and infrastructure industries were informed on cutting edge sustainable business topics such as TCFD (Financial Stability Board's Task Force on Climate-related Financial Disclosures) recommendations, carbon pricing and disruptive technologies; and -In April 2018, Garanti delivered a 'Sustainability in Finance' course within the curriculum of Corporate Sustainability Certificate Program by REC Turkey in collaboration with Boğaziçi University Lifelong Learning Center.

Impact of engagement, including measures of success

In 2015, EBRD selected Garanti Bank as one of the best practices for its trainings for financial institutions on strong sustainability policy and implementation on Environmental and Social Risk Assessment among the financial institutions. Garanti was also selected by the UN as one of the best cases for policies on mitigating water risks and financial sustainability. Garanti was the only company from Turkey and one of the two banks mentioned in the report called "The Business Case for Responsible Corporate Adaptation: Strengthening Private Sector and Community Resilience" published by UNGC, UNFCCC and UNEP on climate change adaptation.

C12.1c

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

Garanti's Value Creation Model is comprised of five capitals for creating value and positive impact for the economy, the community and all stakeholders while contributing to Sustainable Development Goals (SDGs). One of these five capitals is the "natural and social".

As a leading bank in sustainability Garanti aims to spread these practices across its customers, Turkish finance sector, public sector, and the society. To achieve this goal, the Bank actively engages and participates in numerous local and international organizations. In 2017, Garanti drove positive impact through 36 engagement platforms and 27 memberships. Garanti's engagement activities led to 8 policies/position papers that are issued to contribute SDGs.

Garanti is the Chair of Business Council for Sustainable Development (BCSD Turkey), and the Vice Chair of the UNGC Network Turkey, also the Vice Chair of the Environment and Climate Change Working Group of Turkish Business and Industry Association (TUSIAD). Additionally, Garanti was selected to be a member of the Core Group that will define the UNEP FI Banking Principles, and joined the Carbon Pricing Leadership Coalition (CPLC) Global Steering Committee. In 2017 Garanti continued to be the Vice Chair of Turkish Green Building Council & Head of Sustainable Finance Committee and association supporting sustainable development that work closely with policy-makers. Garanti also declared its support to Task Force on Climate-related Financial Disclosures (TCFD) and its Recommendation Report for climate-related risks & opportunities management. Garanti is also the main sponsor of CDP Turkey and launched CDP Water Program in Turkey in 2015 to raise awareness among private sector and motivate them to take action. Through these memberships, Garanti gets to work closely with the industry players and the policy-makers. For example, Garanti is one of the main sponsors of Sustainable Finance Forum organized each year since 2013 to build capacity among the Turkish finance sector.

As the Chair of Sustainable Banking and Finance WG of UNGC Network Turkey, Garanti led the efforts to develop the groundbreaking Declaration on Sustainable Finance as mentioned in the 'Section C3.1c'. The signatory banks commit to integrating environmental and social (E&S) risk management in their lending activities. The Declaration was launched on September 29, 2018 during the V. Sustainable Finance Forum organized by BCSD Turkey, of which Garanti is also is one of the main sponsors, and the Deputy Prime Minister (at that time) Mr. Mehmet Şimşek urged all Turkish banks to become a signatory at his keynote speech. For further details on this declaration please refer to: https://www.unglobalcompact.org/news/4281-10-23-2017.

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

Direct engagement with policy makers Trade associations Funding research organizations Other

C12.3a

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

Focus of legislation		Details of engagement	Proposed legislative solution
Climate finance	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. Garanti participated in the International Climate Negotiations Assessment Meeting, which was a 2-day meeting with participants from various stakeholder groups (such as private sector, finance sector, NGOs, business associations) and organized by the Ministry of Environment and Urbanization. The Moderator of these meetings were Dr. Mehmet Emin Birpinar, the Chief Negotiator to represent Turkey at UNFCCC meetings.	The discussion points during this meeting were: strengthening Turkey's position in the negotiations and assessing the Paris Agreement from Turkey's perspective. The results of the discussions were: (1) Turkey should strengthen its position in the negotiations (2) it would be beneficial for Turkey to be a party in the Agreement. (3) The concerns regarding Turkey's status should be cleared with UNFCCC.
Other, please specify	Support	Garanti Bank participated in the consultation meetings for Turkey's 11th Development Plan. The consultation meetings were organized by the Ministry of Development. Garanti shared its comments via the Environment and the Sustainability of Natural Resources Working Group.	Garanti shared its know-how and experience in Environmental and Social Risk Management and climate change finance at this working group. Some of the issues raised and included into the Plan by the bank were; energy efficiency incentives, carbon pricing, and mandatory ESG disclosure.

C12.3b

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

C12.3c

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

Trade association

Turkish Business and Industry Association (TUSIAD)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

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.

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

Garanti Bank is the Vice Chair of TUSIAD's Environment and Climate Change Working Group. This WG looks into ways to spread the best practices in environmental performance, risk management and low-carbon economy transition. Accordingly, climate change is one of the major discussion points for the WG's activities. In 2017, this WG published a Climate Change Position Paper stating that "TUSIAD unwaveringly supports the process through which Turkey steadfastly develops national policies on climate change mitigation and effectively pursues their implementation. In this process, we believe it is of utmost importance that initiatives regarding Turkey's status under the Paris Agreement be resolutely continued with the contribution of all stakeholders." For further details please refer to: http://www.globalbusinesscoalition.org/wp-content/uploads/2017/11/TUSIAD-Position-Paper-On-Addressing-Climate-Change.pdf As the WG Vice Chair, Garanti also contributed to the development of this paper. Following this, the WG established 3 sub-working groups and a task force: (1) Climate Change & Low-carbon Economy, (2) Finance Mechanisms & Incentives, (3) Zero Waste, and the Energy Efficiency Task Force. Garanti is the Chair of Finance Mechanisms & Incentives Sub-WG. Additionally, Garanti also supported and contributed to "Addressing Climate Change from Economic Policies Perspective Report" published by the WG published in December 2016 a report on the financial impacts of climate change in Turkey. 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. For further details: https://tusiad.org/en/press-releases/item/download/8453 c328d6f3bffb08c03d978f213a0a3774.

Trade association

Turkish Banking Association (TBA)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

TBA has working groups and many publications to mainstream sustainable banking approach and practices.

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

Garanti Bank is actively involved in the Role of the Financial Sector in Sustainable Growth Working Group of TBA which aims to play a role in raising overall stakeholder awareness and spread the use of best practices, particularly for the transition to 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 2017, As the Chair of Sustainable Banking and Finance WG of UNGC Network Turkey, Garanti's EVP, Ms. Ebru Dildar Edin presented the Sustainable Finance Declaration to the President of TBA prior to its launch. TBA shared the Declaration with the working group members and invited them to become signatories. 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).

C12.3d

(C12.3d) Do you publicly disclose a list of all research organizations that you fund?

Yes

C12.3e

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

Garanti Bank adopts various reporting initiatives and works in cooperation with a number of organizations with the aim of improving the reporting of the environmental and the social impacts of its activities, and to promote communication with other stakeholders.

Garanti participates in leading global and local sustainability organizations. These include UNEP FI, UNGC, UN Women, 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), as well as its Turkish network Integrated Reporting Türkiye Network (ERTA) and Turkish Green Building Council (CEDBİK). Garanti is also the Vice chair of TUSIAD (Turkish Industry and Business Association) Climate and Environment Working Group, which released Climate Change Position Statement in 2017 and presented it together with the Ministry of Environment & Urbanization at COP23. 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.

In March 2018, Garanti became a member of UNEP FI Banking Principles Core Group. This group will develop the accountability framework and the Principles that will define and affirm the banking industry's role and responsibilities in shaping and financing a sustainable future, in alignment with internationally agreed targets detailed in the Paris Agreement and the Sustainable Development Goals. Banking Principles will be launched in November 2018. 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 financial institutions in Turkey, Garanti Bank has been organizing Sustainable Finance Forum (SFF) together with UN Global Compact, UNEP-FI and BCSD Turkey since 2013. In 2017, SFF's theme was "The Role of Finance Sector in Combating Climate Change", Sustainable Finance Declaration was launched, which sets a ground-breaking milestone for Turkish finance sector. The Declaration, prepared under the leadership of the UNGC Network Turkey, aimed to integrate the environmental and social risks, including the consideration of the cost of carbon in emission-intensive projects, in lending processes. Garanti has been one of the leading contributors to the development of this Declaration undertaken by the Sustainable Finance Working Group of UNGC Network Turkey, as the Chair. For further details on this declaration please refer to: https://www.unglobalcompact.org/news/4281-10-23-2017 &

https://www.unglobalcompact.org/docs/news_events/Local%20Networks/Sustainable%20Finance%20CEO%20Letter.pdf

Moreover, Garanti Bank is the Chair of Sustainable Banking and finance working Group of UNGC Network Turkey and the Sustainable Finance working group of ÇEDBİK. Besides, Garanti became the main sponsor of CDP Turkey in 2017.

In 2017, Garanti contributed 635 thousand TL to the efforts aimed at raising awareness and know-how transfer to a variety of stakeholders including public bodies, policy makers, private companies, universities and NGOs for sustainable development. 63% of this amount was contributed to lobbying activities for climate change, 26% was contributed to lobbying activities for sustainable finance. For further details of our Memberships & Supported Initiatives please refer to:

https://www.garantiinvestorrelations.com/en/sustainability/detail/Supported-Initiatives/880/3744/0.

C12.3f

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

Garanti Bank's Sustainability Governance, including above all the Sustainability Committee and the Responsible Banking Committee (RBC), play 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.

C12.4

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

Publication

In mainstream reports

Status

Complete

Attach the document

garanti-bank-2017-integrated-annual-report.pdf

Content elements

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

C14. Signoff

C-FI

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

Green Loan:

Garanti Bank executed Turkey's first Green Loan agreement with Zorlu Energy by linking the margin of the loan to their ESG performance. Green Loan with total amount of USD 10 million is used for meeting the operational capital needs of Zorlu Energy. During the maturity of the loan, Garanti Bank will promote and motivate the improvement of the ESG performance of Zorlu Energy by applying a discount to their initial loan margin should they become more sustainable.

Within the scope of Green Loan, sustainability performance of Zorlu Energy in the area of environmental, social and governance will be scored on a yearly basis by an international sustainability rating agency, i.e. Vigeo-Eiris. According to the sustainability score attained, the pricing of the margin will be adjusted accordingly each year. While the margin will be increased if the company shows a lower performance than the base score, the margin will be reduced if it shows a better performance. With this approach, it is targeted for the companies using Green Loan to improve or at least retain their initial sustainability performance during the maturity.

For more information please visit: https://surdurulebilirlik.garanti.com.tr/media/1270/green-loan.pdf

2017 Integrated Annual Report:

Garanti Bank presented its first Integrated Annual Report in 2017. The report was prepared based on the Integrated Reporting Framework published by the International Integrated Reporting Council (IIRC) and in accordance with the Global Reporting Initiative G4 Sustainability Reporting Guidelines of core option, makes a holistic assessment of the financial and non-financial performance of Garanti Bank in 2017, as well as conveying its forward looking strategy.

Our outstanding accomplishments in sustainability are well recognized by international authorities. As we secured our place in the Dow Jones Sustainability Index with the third consecutive year, we were also listed in the FTSE4Good Emerging Index and BIST Sustainability Index.

We believe in the power of listening, participating, contributing and shared value. We will continue to grow by adding strength to our power and lead the sector with our sustainable governance model and innovative solutions in 2018.

Please visit the link below for our first Integrated Annual Report, where you will find all these developments which have taken place in line with our vision and more.

 $Garanti\ Bank\ 2017\ Integrated\ Annual\ Report: \underline{https://surdurulebilirlik.garanti.com.tr/media/1232/garanti-bank-2017-integrated-annual-report.pdf$

Sustainability Web Site:

Garanti Bank launched its "Sustainability Website" in May 2018. Our new website presents Garanti's sustainability approach and journey, latest global developments on sustainability and our practices.

For more information, please visit: https://surdurulebilirlik.garanti.com.tr/en

C14.1

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

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

Submit your response

In which language are you submitting your response? English

Please confirm how your response should be handled by CDP

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

Please confirm below

I have read and accept the applicable Terms

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