Module: Introduction

Page: Introduction

0.1
Introduction
Please give a general description and introduction to your organization

Established in 1946, Garanti Bank is Turkey's second largest private bank with consolidated assets exceeding TRY 179.8 billion as of year-end 2012. Garanti operates in every segment of the banking sector including corporate, commercial, SME, retail, private and investment banking. Garanti is an integrated financial services group together with its eight financial subsidiaries providing services in pension and life insurance, leasing, factoring, brokerage and asset management besides the international subsidiaries in the Netherlands, Russia and Romania.

Garanti provides a wide range of financial services with its 17,285 employees to its 11.7 million customers through an extensive distribution network that reached 926 domestic branches; 5 foreign branches in Cyprus, one in Luxembourg and one in Malta; 3 international representative offices in London, Düsseldorf and Shanghai; more than 3,500 ATMs; an award-winning Call Center, and the state-of-the-art internet and mobile banking platforms built on cutting-edge technological infrastructure as of year-end 2012.

Following the best practices in corporate governance, Garanti is jointly controlled by two powerful entities, Doğuş Holding Co. and Banco Cilbao Vizcaya Argentaria S.A. (BBVA), under the principle of equal partnership. Having shares publicly traded in Turkey, the UK and the USA, Garanti has an actual free float of 49.97%.

With its strategy defined as "achieving long-term sustainable growth by continuously creating value", Garanti Bank aims to continue to take part in building a sustainable future both at national and international scales, to pioneer its sector in the area of sustainability and to contribute to the future of the whole of humankind.

Garanti Bank deals with the environmental ad social impacts of activities for which it has provided financing, under a seperate topic called "indirect impacts". The Bank initially set up the Environmental and Social Loan Policies (ESLP) in order to minimize the indirect impacts of loans granted by the Bank and put them into practice in 2011, following approval by the Bank's Board of Directors.

Environmental and Social Loan Policies constitute the environmental and social principles governing the extension of loans at Garanti Bank. Within the framework of these policies, the Bank runs the "Environmental and Social Impact Assessment Process" (ESIAP) that was designed within two years with the support of an independent consulting firm. As part of the ESIAP, Garanti also applies an "Environmental and Social Impact Assessment Model" (ESIAM).

This is Garanti's fourth submission to the Carbon Disclosure Project. By the end of 2012, Garanti has been ahead of its first greenhouse gas emissions reduction goal to reduce total emissions by 7% per total assets under management by 2012 against our 2010 baseline. Garanti sees this goal as the first of many that will drive an on-going commitment to reducing direct emissions and influencing emissions reductions in the broader community in which the company operates. Accordingly, Garanti has set a new short-term target to reduce total emissions by %1.5 per total assets under management by 2013 against 2012 emissions.

During the reporting period, Garanti has established an Environmental Policy and developed an Environmental Management System which covers both its direct and indirect impact on the environment and which was certified to ISO14001 following audits performed in October 2012 by TÜV-SÜD. With its 23 facilities including certain branches and regional offices, in addition to its Headquarters in Zincirlikuyu, the Guneşli Blocks and the Dikilitaş Training Center certified to ISO14001, Garanti has been recognized as the first bank that operates an Environmental Management System in such a large area and context in Turkey. Garanti will continue to effectively apply its Environmental Management System, expand its scope and set new targets in the coming years.

0.2
Reporting Year
Please state the start and end date of the year for which you are reporting data.
The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first. We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year.
Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

Enter Periods that will be disclosed
Sun 01 Jan 2012 - Mon 31 Dec 2012

0.3
Country list configuration

Please select the countries for which you will be supplying data. This selection will be carried forward to assist you in completing your response

Select country
Turkey

0.4
Currency selection

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

TRY

0.6
Modules
As part of the request for information on behalf of investors, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sectors, companies in the oil and gas industry and companies in the information technology and telecommunications sectors should complete supplementary questions in addition to the main questionnaire.
If you are in these sectors (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will not appear below but will automatically appear in the navigation bar when you save this page. If you want to query your classification, please email respond@cdproject.net.
If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below. If you wish to view the questions first, please see https://www.cdproject.net/en-US/Programmes/Pages/More-questionnaires.aspx.

Module: Management [Investor]

Page: 1. Governance

1.1
Where is the highest level of direct responsibility for climate change within your company?

Individual/Sub-set of the Board or other committee appointed by the Board

1.1a
Please identify the position of the individual or name of the committee with this responsibility

Garanti's climate change efforts are coordinated by its Sustainability Committee. Formed in 2010, the Committee is chaired by a non-executive Board Member.

Committee Members represent all major lines of business including following members: the Executive Vice Presidents of Support Services, Loans and Project and Acquisition Finance; the Corporate and Commercial Loans Coordinator; the Senior Vice Presidents of Project and Acquisition Finance, Investor Relations, the Internal Control Unit, Corporate Brand Management and Marketing Communications, Construction, Compliance, Financial Institutions; and the Manager of the Strategic Planning Department.

The Sustainability Committee meets a minimum of two times a year in order to monitor the progress on and to provide input to all sustainability efforts, including climate change. The Committee is deliberately structured to integrate climate change and other environmental concerns and opportunities into all operations, products and services. In addition, this structure ensures that all efforts are consistent with internal policies and related regulations. The Sustainability Committee's role is to agree on strategic direction and action plans for the Bank. The Committee has met a total of 12 times since its inception in 2010.

In 2012, Garanti Bank established a full-time Sustainability Team which resides in the Project and Acquisition Finance Department. This Team was formed in order to enhance the efficiency of its organizational structure for sustainability.

Consisting of four members in total including the Senior Vice President of Project and Acquisition Finance Department, the Team counts two environmental engineers amongst its members.

The Sustainability Team is responsible for the coordination of all sustainability-related activities at Garanti Bank on a day-to-day basis. The Team, which reports to the Sustainability Committee on a regular basis, works in cooperation with the Bank's other units during the implementation of the decisions taken by the Committee.

Monitoring the Bank's sustainability targets and performance within 2-week periods, 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. The Team is also responsible for the coordination of the process of collecting information from other units.

In 2012, Garanti Bank took yet another step in its process of structuring for sustainability. Sustainability Representatives began to be elected in departments, regional directorates and branches. The duty of these representatives is conceived as working in coordination with the Sustainability Team to collect date and support the implementation of the decisions taken by the Sustainability Committee within their own departments. By the end of 2012, Garanti Bank had 90 Sustainability Representatives from headquarters, regional directorates and branches.

1.2
Do you provide incentives for the management of climate change issues, including the attainment of targets?

Yes

1.2a
Please complete the table

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator
Other: Board Member: M. Cüneyt Sezgin (Head of Sustainability Committee)	Recognition (non-monetary)	Increase in the overall sustainability performance of the bank as driven by multiple indicators
Other: Executive Vice President, Support Services: Adnan Memiş (Member of Sustainability Committee)	Recognition (non-monetary)	Increase in the overall sustainability performance of the bank as driven by multiple indicators
Other: Executive Vice President, Project and Acquisition Finance: Ebru Dildar Edin (Member of Sustainability Committee)	Recognition (non-monetary)	Increase in the overall sustainability performance of the bank as driven by multiple indicators
Other: Executive Vice President, Loans: Erhan Adalı (Member of Sustainability Committee)	Recognition (non-monetary)	Increase in the overall sustainability performance of the bank as driven by multiple indicators
Other: Coordinator, Corporate and Commercial Loans: Mustafa Tiftikçioğlu (Member of Sustainability Committee)	Recognition (non-monetary)	Increase in the overall sustainability performance of the bank as driven by multiple indicators
Other: Senior Vice President, Financial Institutions: Batuhan Tufan (Member of Sustainability Committee)	Recognition (non-monetary)	Providing access to international funds for financing of renewable energy and energy efficiency projects
Other: Senior Vice President, Corporate Brand Management and Marketing Communications: Elif Güvenen (Member of Sustainability Committee)	Recognition (non-monetary)	Communication of climate change mitigation and sustainability efforts
Other: Senior Vice President, Project and Acquisition Finance: Emre Hatem (Member of Sustainability Committee)	Recognition (non-monetary)	Increase in the overall sustainability performance of the bank as driven by multiple indicators
Other: Senior Vice President, Internal Control: Emre Özbek (Member of Sustainability Committee)	Recognition (non-monetary)	Implementation of national laws and regulations related to climate change
Other: Senior Vice President, Investor Relations: Handan Saygın (Member of Sustainability Committee)	Recognition (non-monetary)	Communication of climate change mitigation and sustainability efforts
Other: Senior Vice President, Compliance: İnci Soysal (Member of Sustainability Committee)	Recognition (non-monetary)	Compliance to national laws and regulations related to climate change
Other: Senior Vice President, Construction: Sedef Figen Alpay (Member of Sustainability Committee)	Recognition (non-monetary)	Development and implementation of climate change mitigation measures
Other: Manager, Strategic Planning: Onur Uğur Özkan (Member of Sustainability Committee)	Recognition (non-monetary)	Increase in the overall sustainability performance of the bank as driven by multiple indicators
Other: Sustainability Supervisor: Derya Özet Yalgı (Sustainability Team)	Monetary reward	Increase in the overall sustainability performance of the bank as driven by multiple indicators
Other: Sustainability Supervisor: Bahar Yay (Sustainability Team)	Monetary reward	Increase in the overall sustainability performance of the bank as driven by multiple indicators
Other: Environmental and Social Impact Assessment Supervisor: Özlem Nadastepe (Sustainability Team)	Monetary reward	Increase in the overall sustainability performance of the bank as driven by multiple indicators

Page: 2. Strategy

2.1
Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities

Integrated into multi-disciplinary company wide risk management processes

2.1a
Please provide further details

i. Risk assessment at Garanti covers market risk, credit risk, interest rate risk, liquidity risk, operational risk and reputational risk.

The Departments of Internal Systems (namely Internal Audit, Risk Management, Internal Control, Compliance and Fraud) directly report to the board of directors. Of particular relevance to climate change impacts on own facilities and operations, Garanti's Business Continuity and Disaster Recovery efforts are coordinated by the Internal Control Department. To the extent that climate issues are not captured in these existing efforts, further assessment of climate change-related risks and opportunities is led by the Sustainability Committee and the Sustainability Team. In this structure, the Sustainable Committee agrees ambitions, sets targets and also keeps all relevant departments and efforts informed of emerging climate change related risks and opportunities.

Garanti approaches sustainability risks and opportunities which are direct and those which are indirect. Garanti has established a clear Environmental Policy which applies to its direct operations in managing greenhouse gas emissions and other environmental impacts. Garanti has also established the Environmental and Social Loan Policies that are applied to loans to identify and assess potential environmental issues and manage the credit risk and reputational risks related to financing these transactions.

To ensure that climate change risks and opportunities are fully integrated into business activities, the internal systems team together with sustainability experts and the Sustainability Committee monitor the situation. Furthermore, Garanti has made the decision to work with external consultants to enhance its current sustainability approach during the upcoming year.

ii. As described above (i) assessment of Company-level risks is primarily coordinated by the Departments of Internal Systems.

Environmental risks and opportunities including those associated to climate change are identified and monitored by the Sustainability Team. The Team raises priority topics to the Sustainability Committee, who is ultimately overseeing the sustainability activities, and as the topics usually pertain to reputation, to Investor Relations and Corporate Brand Management and Marketing Communications. Together, these departments/committees are responsible for identifying emerging risks and opportunities, making a determination on their materiality (see v. below), enrolling key personnel and recommending potential courses of action. Where necessary and feasible, this can involve quantification of required investments and potential cost savings or return.

iii. Asset level risks and opportunities are managed as follows: the Internal Control Department is responsible for weather/physical impacts of climate change and oversees the company's Business Continuity and Disaster Recovery Plan; the Construction Department is responsible for site-specific energy/carbon reduction opportunities; the various banking units (Project and Acquisition Finance, Commercial and Corporate Loans, and Retail Banking) are responsible for climate-related new market opportunities, such as for energy-efficiency and renewable energy; the Project and Acquisition Finance is responsible for environmental risks associated with large projects and maintains an on-going effort to strengthen its assessment of environmental impacts. As described above, these departments identify emerging issues, make initial determinations on materiality, enroll key personnel and recommend courses of action. This is frequently supported by performing analysis on required investments and payback/return. Garanti also has specific measures for critical, unique properties upon which all operations depend. For example, Garanti's data processing center has been designed with full back-up systems to avoid technical and mechanical hardware problems. In addition, garanti has established a secondary back-up center for vital operations in the case of physical disaster or sabotage.

iv. As risk and opportunity management are spread across a variety of departments and committees, the frequency of monitoring risks can vary depending on the specific aspect of climate change concerned. However, it can be said that monitoring for nearly all topics will typically range from weekly to monthly. Also, as mentioned, the Sustainability Committee provides a general level of risk and opportunity assessment to supplement all existing efforts. This Sustainability Team monitors its plans on a short term basis, and reviews its targets once per year. Furthermore, the Sustainability Committee meets at least 2 times per year to review and take decisions on recommendations raised by the Sustainability Team and functional representatives regarding climate change and other environment-related topics.

v. The process of estimating materiality will vary depending upon the nature of the risk or opportunity. In general, the following are frequently used criteria for assessing materiality at Garanti: potential financial gain/loss, contribution to the bank's carbon footprint, furtherance of customer satisfaction, reputational impacts and level of stakeholder interest. The company pays particular attention to a number of stakeholders (including employees, investors, customers, government entities, and non-profit organizations) when identifying risks and determining their magnitude. The most important part of the stakeholder participation process is to inform stakeholders of Garanti Bank's sustainability performance through a range of different channels, such as training sessions, announcements, publications and teleconferences. Garanti in turn receives the views of their stakeholders. The Bank uses stakeholder feedback to determine strategically important issues and focus on the sustainability topics that have most relevance.

vi. Reporting on management of climate change risks and opportunities will vary depending upon which of the above mentioned departments has primary responsibility. Nevertheless, management of all climate related issues involves direct reporting, at a minimum, to department heads and, in many cases, directly to the CEO and/or board of directors. This reporting regime reinforced via the Sustainability Committee, which receives detailed reports and, as appropriate, reviews risks and opportunities as part of its update meetings.

To ensure stakeholders remain informed of targets and progress, Garanti reports on sustainability performance including environment and climate change risks and opportunities via its 2011-06/2012 Sustainability Report that has received A level rating from Global Reporting Initiative in 2013.

2.2
Is climate change integrated into your business strategy?

Yes

2.2a
Please describe the process and outcomes

Garanti views climate change as a strategic issue deserving of full integration into the core business. This includes owned operations and the indirect impacts created by our customers and suppliers.

2.3
Do you engage in activities that could either directly or indirectly influence policy on climate change through any of the following? (tick all that apply)

Other

2.3g
Please provide details of the other engagement activities that you undertake

i. Garanti engages with policy makers through its participation with several leading global sustainability organizations. These include the United Nations Environment Program Finance Initiative (UNEP FI), the United Nations Global Compact (UNGC), the Turkish Business Council for Sustainable Development (TBCSD), and the Banks Association of Turkey (TBB), Role of the Financial Sector in Sustainable Growth Workgroup. These organizations allow for widespread, high-leverage engagement of the business community with numerious national and international organizations, including governments and policy-making bodies.

Topics typically include best practice-sharing, integration of sustainability and governance into operations and high-level advocacy for policy, including specific measures focused on climate change. Garanti has been actively involving in the working groups of these organizations from which it aims to play a role in raising overall stakeholder awareness, actively contributing to policy efforts and helping to disseminate and assimilate best practices, particularly as it relates to finance of the a low-carbon economy.

ii. The organizations we have joined frequently advocate for climate chnage policy o behalf of members. For example, UNEP FI released a position paper for the Rio+20 Conference aimed at world governments. It calls for greater engagement to enable and incentivize financial sector participation in realizing a more sustainable, low-carbon future. Specifically, it seeks stronger incentives for financial institutions to incorporate sustainability issues into their risk management policies, a commitment to work closely with the financial sector in building the markets for long-term, sustainable lending, investment and insurance products and services, and promotion of the availability and accessibility of relevant and comparable sustainability information, as key elements in enabling financial sector decision-making.

2.3h

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 keeps abreast of the needs and expectations of different stakeholder groups through a number of channels including the online feedback platform for employees or the working groups of a number of initiatives such as Turkish Business Council for Sustainable Development (TBCSD). Garanti Bank structures the determination of top priority issues and its general strategic roadmap as a continuous, participatory and multidimensional process in the light of the feedback that it receives from its stakeholders through those channels.

For instance, as a result of the feedback received from its stakeholders, Garanti pays special attention to the environmental and social risk management at financing acitivites. Therefore, by the end of 2012, Garanti Bank had completed the testing phase of the Environmental and Social Impact Assessment Process (ESIAP), which was launched ahead of the 2012 UN Sustainable Development Conference (Rio+20). The Bank promised that it would officially bring the ESIAP into practice from 2013. With this commitment made before the conference, Garanti Bank has demonstrated the financial sector's determination to support sustainable development.

Also, in compliance with its activities to improve energy efficiency, Garanti Bank has joined to the energy working group of TBCSD, and contributed to the forming of a new initiative called the Manifesto for Energy Efficiency in Buildings. By signing this Manifesto, Garanti committed itself to taking measures to ensure energy efficiency in its office buildings, setting targets to reduce greenhouse gas emissions, and reporting to the public the progress made toward these targets. The signature ceremony took place in January, 2013 at the 4th National Energy Efficiency Forum and Fair with the Minister of Energy and Natural Resources Taner Yıldız in attendance.

Finally, the Sustainability Committee, consisting of 13 members from various departments, plays a vital role in establishing the link between the priorities of the Bank, the initiatives participated and the actions taken in the light of an overarching and evolving sustainability approach.

Page: 3. Targets and Initiatives

3.1

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

Intensity target

3.1b

Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions	Target year	Comment
Tar -1	Scope 1+2+3	100%	7%	metric tonnes CO2e per billion (currency) funds under management	2010	84394.5	2012	Garanti Bank achieved a decrease in emissions per total assets of 16.5% after two years. Garanti has set a new short-term target to reduce total emissions (Scope 1+2+3) by 1.5% per total assets under management by the end of 2013 against 2012 emissions.

3.1c

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

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comment
Tar -1	Increase	9.6	Increase	12.3	As we are a rapidly growing company, we were expecting absolute growth in emissions. However, total assets has increased more than expected, increasing the expected groth in absolute emissions from exactly meeting our target. Therefore, we achieved a decrease in emissions per total assets of 16.5% after two years.

3.1d

Please provide details on your progress against this target made in the reporting year

ID	% complete (time)	% complete (emissions)	Comment
Tar -1	100%	100%	In 2012, Garanti reduced total emissions per billion TRY of total assets by 16.5% compared to our baseline of 2010 emissions. As stated above, our goal was to achieve a 7% reduction using this measure by 2012. Thus, we are currently ahead of our target. As part of our climate change and sustainability efforts, we plan to continually upgrade our targets to ensure continuous performance improvement. In line with this commitment, we have set a new short-term target to reduce total emissions (Scope 1+2+3) by 1.5% per total assets under management by 2013 against 2012 emissions.

3.2
Does the use of your goods and/or services directly enable GHG emissions to be avoided by a third party?

Yes

3.2a
Please provide details (see guidance)

Garanti provides capital to its clients for financing large-scale projects in renewable energy. In this way, Garanti enables greenhouse gas emissions to be avoided or reduced by third parties. By the end of 2012, Garanti Bank had allocated (a) US$ 1.5 billion to wind farm projects which will have a total installed capacity of 1,216 MW when completed, (b) A total of US$ 1.5 billion to hydroelectric power plant projects which will have a total installed capacity of 2,141 MW once all of them are commissioned. As the biggest supportter of wind power investments in Turkey, Garanti provided the financing of UN$ 191 million to Geycek WPP, the largest wind power plant in Turkey, with an installed capacity of 168 MW. Garanti has conservatively estimated that these wind farms and hydroelectic power plants will, collectively, reduce carbon emissions by 6.13 million metric tons of CO2e per year, based on the current average grid factor for Turkey. Wind turbines and dams have atypical life span of about 25 and 50 years, respectively. As use of renewable energy becomes more widespread in Turkey, it is expected that the average grid factor will decrease, reducing year-on-year carbon emissions savings from these projects. (scroll to the end of this answer to see how estimated reduction in emissions was calculated)

Garanti also views energy-efficiency and the use of renewable sources in industrial and manufacturing operations as well as in buildings a significant opportunity to cut Turkey's GHG emissions. Garanti therefore provides favored lending to small and medium-sized energy efficiency and renewable energy projects through the Turkey Sustainable Energy Financing Facility (Tur-SEFF) and Mid-Sized Sustainable Energy Financing Facility (Mid-SEFF), both of which are supported by the European Bank for Reconstruction and Development (EBRD) and the European Investment Bank (EIB). TurSEFF, for example, covers projects in residences, small and medium enterprises, factories, and commercial buildings. Typical projects include on-site renewable energy, efficienct heating and cooling systems, insulation, and use of environmentally-friendly materials. In 2012, Garanti approved 25 new Tur-SEFF projects totaling over US$ 36.4 million in loans. Mid-SEFF covers mid-size investments in renewable energy, waste-to-energy and industrial energy-efficiency. As of 2012, Garanti approved 10 projects for a total of approximately US$ 195 million in loans.

In December 2011, Garanti Bank has also secured financing from Proparco, a subsidiary of French Development Agency, or AFD, which provides funds for private investments in developing countries, in the amount of EUR 50 million with a tenor of 12 years. Garanti Bank will continue to collaborate with international financial institutions in such topics as renewable energy, energy efficiency and financial needs of SMEs that are the backbone of the national economy.

Due to the wide variety of projects covered by these funds, Garanti has not attempted to calculate total potential emissions reductions. Nevertheless, the company believes these efforts will be significant by directly reducing emissions and by helping to launch a variety of new markets and technologies.

Calculation for estimated reductions from wind farms and hydro plants:
Annual Energy Generated [MW/year] = Capacity [MW] x Capacity Factor [Dimensionless] x Total hours in a year [hrs/year]
Annual CO2e Emissions Avoided [metric tons/year] = Annual Energy Generated [MWh/year] x CO2e Grid Emission Factor [metric tons/MWh]
MWh Capacity Factor for Wind: 25% (conservative estimate)
MWh Capacity Factor for Hydro: 40% (conservative estimate)
Time: 365 [days/year] x 24 [hrs/day] = 8,760 hrs/year
Turkish Emission Factor: 0.6013 metric tons/MWh (Emission Factor Source: WWF-Turkey, 2012)

3.3
Did you have emissions reduction initiatives that were active within the reporting year (this can include those in the planning and implementation phases)

Yes

3.3a
Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	
To be implemented*	1	287
Implementation commenced*	3	3923
Implemented*	3	211

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Not to be implemented	0	

3.3b
For those initiatives implemented in the reporting year, please provide details in the table below

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Annual monetary savings (unit currency - as specified in Q0.4)	Investment required (unit currency - as specified in Q0.4)	Payback period
Behavioral change	The environmental advantage of increased use of training technology is to reduce travel: Garanti has significantly increased the level of information sharing and training using different training technologies: webex, web-based trainings, live broadcast portal and video portal. In 2012, e-learning increased to 28% as a percent of total education. This is a voluntary reduction of Scope 3 emissions, compared to 2010 figures, considering that the educational technologies were not used commonly among the Bank in 2010. Garanti Bank conservatively calculated the total CO2e reduction resulting from the flight savings taking the following factors and assumptions into account: a) the yearly change in the composition of the class-trainings b) the yearly change in the number of employees who receive training, c) an average flight distace of 366 km (The Bank estimates a margin of error at plus or minus 30% in the total CO2 savings calculated, due to the assumptions used).	76		0	<1 year
Transportation: fleet	In order to choose the shortest routes for shuttles used by employee commuting to its major Istanbul locations, Garanti has performed route optimization using an online service. This optimization is expected to reduce total annual travel distance for shuttle usage by 603,000 km, when the new routes are started, they will be used by all shuttles in Zincirlikuyu and Güneşli offices. The implementation of the project partially began in December, 2012. This is a voluntary reduction of Scope 3 emissions.	287	364000	0	<1 year
Energy efficiency: Processes	In 2007, Garanti began to consolidate and "virtualize" 300 servers in its data centers. This effort elevates real time computing power per server, reducing total server needs (and associated electricity use) as well as the tremendous cooling demand that servers require. Per square meter of property, data centers emit the greatest total amount of carbon across all bank properties. the average annual electricity savings compared to physical servers were 6,403,153 kWh over the past 5 years, and the savings are expected to increase by 20% each year henceforth. This is a voluntary reduction of Scope 2 emissions.	3850	1949952		<1 year
Energy efficiency: Building services	Garanti has completed/launched several lighting initiatives in the home office. These include use of efficienct bulbs and fixtures. This is a voluntary reduction of Scope 2 emissions.	10	16873		1-3 years
Energy efficiency: Building services	Garanti is designing its new facility, the Pendik Technology Campus, to meet LEED Glod certification. Construction started in August 2011 with completion expected by mid-2014. This will result in a voluntary reduction of both Scope 1 and Scope 2 emissions. As this facility will not be a one-to-one replacement for an existing building, and because operations have yet to begun, we are not able to accurately calculate expected annual emissions reduction. Further, as LEED-focused design elements cannot be entirely seperated from other building design elements, we have not attempted to calculate associated cost savings/investment/payback. However, according to the US Green Building Council, LEED buildings typically cost 2% more than comparable busildings and save 18-39% of total energy use. For LEED Gold, typical payback is 2.7 years and we have therefore taken this estimate as our working assumption.				1-3 years
Energy efficiency:	Garanti has a refurbishment program for existing branches intended to give them a 'greener' profile: replacing air-conditioning units with systems that are	73	32692	1146600	>25 years

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Annual monetary savings (unit currency - as specified in Q0.4)	Investment required (unit currency - as specified in Q0.4)	Payback period
Building services	up to 40% more efficient and reducing the overall electiricty consumption of a typical branch by 10%. This is a key role for the Construction Department, working closely with Garanti Technology and with the Procurement staff. In 2012, an additional 882 air-conditioning units were installed in existing Garanti Facilities. The energy savings in 2012 were calculated roughly using the following equation with an assumption of 13.4% electricity savings per air-conditioner during summer time: 1.56 kWh/hour [hourly average electricity consumption of a B class air-conditioner with a COP of 3.1] x 10 hours per day x 22 working days per month x 4 months per year x 10% electricity savings per a B class air-conditioner x 882 air-conditioners = 121,081 kWh savings per year. Altough it is conservative, 121,081 kWh/year may not reflect the actual savings as the number would vary due to several reasons, i.e. human factor, change of climate among different regions, change in working hours, etc. This will result in a voluntary reduction of primarily Scope 2 emissions. These savings do not include new branches, which typically demonstrate greater energy efficiency than existing branches.				
Energy efficiency: Building services	In our branches, we have launched 2 projects to replace lighting of advertising boards with LEDs. This is a voluntary reduction of Scope 2 emissions.	125	55964		<1 year

3.3c
What methods do you use to drive investment in emissions reduction activities?

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	Over the past year, employee engagement has included widespread involvement and outreach via our Sustainability Committee and Sustainability Team to increase company-wide communication and engagement on CO2 emssions and reduction efforts. To support these growing efforts, Garanti has expanded its sustainability team, and continually is raising the bar for its strategic ambitions. All employees are now required to receive training on sustainability; for new employees this is part of their orientation. In addition to a full-time Sustainability Team, Garanti has identified and selected 90 'sustainability representatives' from all bank departments and some of the regional directorates and branches to support all sustainability efforts as needed. Lastly, Garanti has also created an internal communications strategy for sustainability, which includes climate change.

Page: 4. Communication

4.1 Have you published information about your company'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	Page/Section reference
In mainstream financial reports (complete)	Annual Report, 2012 (English), page 29
In mainstream financial reports (complete)	Annual Report, 2012 (English), page 112
In mainstream financial reports (complete)	Annual Report, 2012 (English), page 113
In mainstream financial reports (complete)	Annual Report 2012 (English), page 117
In voluntary communications (complete)	Sustainability Report, 2011-06/2012 (Turkish), page 12, 13, 20, 62, 64, 65, 66, 67

Publication	Page/Section reference
In mainstream financial reports (complete)	Garanti 2012 Q4 Stockwatch (English), Page 1
In mainstream financial reports (complete)	Garanti 2012 Corporate Profile, Sustainability Section (English), Page 7
In voluntary communications (complete)	http://www.garanti.com.tr/en/our_company/sustainability/sustainability_approach/environment/environmental_manageme
In voluntary communications (complete)	http://www.garanti.com.tr/en/our_company/sustainability/developments/awards_and_certificates.page?
In voluntary communications (complete)	http://www.garanti.com.tr/en/our_company/sustainability/sustainability_approach/environment/renewable_energy.page?

Module: Risks and Opportunities [Investor]

Page: 5. Climate Change Risks

5.1
Have you identified any climate change risks (current or future) that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

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

5.1a
Please describe your risks driven by changes in regulation

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
CAPTS	Cap and trade schemes	Turkey seeks to join the European emissions trading scheme (ETS) by 2019. In preparation for this, in April 2012, Turkey passed a new regulation that will require companies from energy-intensive sectors to monitor, report and verify their CO2 emissions. While ETS would not apply directly to Garanti, it could indirectly impact the company in at least two ways: (1) by imposing new demands on loan recipients, especially for project finance, which could impact project performance and ability to repay and (2) by leading to an increase in the cost of energy or energy-intensive materials.	Increased operational cost	6-10 years	Indirect (Client)		Medium-high
CARBO	Carbon taxes	Use of a carbon tax could be used to support any emissions reduction target resulting from Turkey's ratification of the Kyoto Protocol, especially if Turkey later decides to abandon the attempt to join the ETS. It is expected that such a development would also impact the company in the same two ways as a cap and trade scheme: (1) by imposing new demands on loan recipients, especially for project finance, which could impact project performance and ability to repay and (2) by leading to an increase in the cost of energy or energy-intensive materials.	Increased operational cost	6-10 years	Indirect (Client)	Unlikely	Medium-high
BUILD	Fuel/energy taxes and regulations	Turkey's Regulation on Energy Performance in Buildings came into force in December of 2009. As of January 2011, all qualifying new buildings must meet minimum	Increased operational cost	Current	Direct	Virtually certain	Low-medium

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
EELAW	Fuel/energy taxes and regulations	design requirements for energy efficiency. This law is expected to apply to new Garanti office buildings, for example our Pendik Campus. In 2007, Turkey passed the "Energy Efficiency Law," requiring new measures for the generation, transmission, distribution and consumption of energy. For buildings of a certain size or energy consumption level, this law will require designation of a building energy manager and submission of an annual report on energy consumption to the Directorate General of Electricity Works.	Increased operational cost	Current	Direct	Virtually certain	Low

5.1b

Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk and (iii) the costs associated with these actions

CAPTS (CAP AND TRADE) AND CARBO (CARBON TAX)

i. Due to significant uncertainities and complexities involved, Garanti has not attempted to estimate the potential impact of a cap and trade scheme or carbon tax on loan performance. However, we do believe that such regulation could increase energy prices by as much as 5%, on top of any market-based price escalation.

ii. In anticipation of such climate-related regulations, Garanti already includes potential future carbon taxes in financial modelling and projections of thermal power plant projects to ensure that they would still fulfill their financial obligations. Additionally, Garanti has developed a more comprehensive approach to analyze each project against specific environmental and social criteria. The Bank initially set up the Environmental and Social Loan Policies (ESLP) in order to minimize the indirect impacts of loans granted by the Bank and put them into practice in 2011, following approval by the Banks's Board of Directors. Environmental and Social Loan Policies constitute the environmental and social principles governing the extension of loans at Garanti Bank. Within the framework of these policies, the Bank runs the Environmental and Social Impact Assessment Process (ESIAP) that was designed within two years with the support of an independent consulting firm, as well as the Environmental and Social Impact Assessment Model (ESIAM) which is part of the ESIAP. Further, to insulate from price increases, Garanti has numerious energy efficiency projects underway across its operations.

iii. Inclusion of carbon tax into project performance evaluations has been built into existing procedures. As such, there is no increase in cost associated with this action. To upgrade our project risk assessment procedures, we have worked with an outside consultant for over one year. To increase energy efficiency, over the past year, we have invested roughly TRY 1,200,000. Further, for our new company campus, we expect to pay a roughly 2% increase to meet LEED-certification, which is expected to drive significant carbon reductions.

BUILD (REGULATION ON ENERGY PERFORMANCE IN BUILDINGS)

i. As we already build new facilities to achieve energy-efficiency savings, we would expect this law to impose negligible additional costs. Energy-efficiency requirements typically impose a maximum 2% increase in traditional building costs.

ii. Garanti expects to exceed the design requirements of this law for new buildings based solely on ability to generate attractive costs savings. It is expected that this will include virtually all aspects of building design, structural orientation and thermal envelope, selection of building materials and systems for heating, cooling, lighting and ventilation. For example, the bank expects to achieve certification under the Leadership in Energy Efficiency and Design (LEED) program for its planned Pendik Campus.

iii. Building to LEED-certification or similar energy-efficiency performance imposes a roughly 2% increase over traditional building. However, as suggested previously, these investments typically pay for themselves in less than 3 years.

EELAW (ENERGY EFFICIENCY LAW)

i. The specific mechanisms for enforcement of this regulation are still being considered. However, we anticipate that failure to comply could bring administrative action. Garanti has not attempted to estimate the size of any such corrective action. In any event the Bank intends to be in full compliance with this and any other applicable regulation.

ii. Garanti is in the process of identifying those facilities to which this regulation will apply and created a training program to create certified energy managers where necessary.

iii. To date, these efforts have been built into existing functions. Thus, we have experienced no additional cost beyond a small percent of existing employee time. Further, Garanti does not anticipate needing to hire additional employees for this effort. This, we perceive no real cost associated with meeting this risk.

5.1c

Please describe your risks that are driven by change in physical climate parameters

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
WEATR	Change in precipitation extremes and droughts	Extreme weather events resulting from climate change likely to have the biggest impact on Garanti's operations include flooding (both from localized storms and rising sea-levels), severe storms, severe heat and drought. Flooding, in particular, can pose a threat to	Increased operational cost	Current	Direct	More likely than not	Low-medium

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		operation of individual branches. Severe storm events could also threaten the ability of employees to get to and from key facilities or cause critical damage to key facilities, such as headquarters and Garanti's data management centers. Further, extreme heat/cold or changing temperature patterns could raise cooling/heating costs.					
HEATR	Change in mean (average) temperature	A mean increase in heat (during summer) and/or cold (during winter) could meaningfully increase cooling and/or heating costs.	Increased operational cost	Current	Direct	More likely than not	Low-medium
PRECR	Change in precipitation pattern	Many regions in Turkey are already prone to drought. Any increase in these events could further exacerbate challenges related to water scarcity for communities and key sectors, such as agriculture. This could affect Garanti indirectly by threatening the livelihoods of current and prospective customers, potentially reducing total transaction volume and interest. It could also affect Garanti in the event of civil unrest related to water scarcity. With its broad reach of retail banks, in particular, Garanti is a part of communities throughout Turkey. Unrest could threaten the operation of individual branches and pose a safety hazard for employees and customers.	Reduced demand for goods/services	Unknown	Direct	About as likely as not	Medium

5.1d

Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; and (iii) the costs associated with these actions

WEATR (EXTREME WEATHER AND DROUGHTS)

i. Inability to provide timely service, such as completion of banking transactions, could result in both immediate loss of revenue and damage to company reputation, which could lead to longer-term loss of revenues. Due to the significant uncertainity involved, Garanti has not attempted to quantify the risk associated with interruption of service but considers it significant and is taking numerous steps to decrease the likelihood and severity of occurance.

ii. To minimize potential disruption, Garanti offers a variety of customer service options, including online banking and banking with mobile devices. In addition, Garanti has established back-up plans for critical operations, such as data security. For example, Garanti's data processing center has been designed with full back-up systems to avoid technical and mechanical hardware problems. In addition, garanti has established a secondary back-up center for vital operations in the case of physical disaster and sabotage. All bank offices and branches carry standard insurance policies that typically cover weather-related incidents/disaster, including flooding.

iii. Garanti considers the efforts described here as strategic in nature and, therefore, does not wish to reveal associated investment expenditures.

HEATR (CHANGE IN MEAN TEMPERATURE)

i. Due to inherent uncertainity, Garanti has not estimated the potential increases in heating and cooling costs, but believes they could be as high as 5% of existing costs if no energy efficiency measures are taken.

ii. As part of a wider campaign to reduce operational expenses, Garanti has undertaken numerious 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 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.

iii. Garanti has invested roughly TRY 1,200,000 in energy efficiency efforts, which could insulate the company from energy costs associated with increased heating and cooling needs. For the Pendik Technology Campus, and future new buildings, Garanti expects to pay a premium of about 2% for increased heating and cooling needs. For the Pendik Technology Campus, and future new buildings, Garanti expects to pay a premium of about 2% for increased energy and environmental performance.

PRECR (CHANGE IN PRECIPITATION PATTERN)

i. Due to the high degree of associated uncertainity, Garanti has not attempted to quantify the size of such risks.

ii. Nevertheless, the Bank believes management of these risks could be important for future operations. As such, Garanti's Sustainability Committee will be considering what, if any actions, to take.

iii. For now, Garanti will simply be strategizing potential actions to take. As such, there are no additional costs imposed beyond existing measures to assemble and operate the Sustainability Committee and fees for advisory services.

5.1e

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

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
REPUT	Reputation	Stakeholders increasingly expect companies, especially banks, to proactively address climate change issues. Garanti believes that these expectations demand that a company have a comprehensive climate change program. While such programs necessarily focus on emissions from owned and operated sources, they should also include key value chain issues. Banks, in particular, face risks associated with loans that could be associated with high greenhouse gas emissions or flashpoint issues capable of generating significant negative publicity, such as an oil spill. Failure to meet these expectations could damage reputation resulting in a loss of investor support and customer loyalty, among other challenges.	Reduced demand for goods/services	1-5 years	Direct	About as likely as not	Medium-high
SOCIO	Fluctuating socio-economic conditions	The physical impacts of climate change and the regulatory, business-led or customer efforts to prevent or minimize these impacts are likely to bring significant changes to the economy and, by extension, the marketplace for banking and financial services. For example, individual regions (e.g., those prone to flooding or that experience climate change-led severe weather) and entire sectors of the economy (those unable to transition to a low-carbon business model or dependent on stable weather patterns, such as agriculture) could suffer significant loss of income. This could translate to inability to repay loans for banking customers or decreased demand for banking services.	Reduced demand for goods/services	Unknown	Indirect (Client)	About as likely as not	High

5.1f

Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; (iii) the costs associated with these actions

REPUT (REPUTATION-BASED RISK)

i. Due to the inherent uncertainity involved, Garanti has not attempted to quantify economic implications of reputation-based risk. Nevertheless, the Bank considers this a critical issue to manage. Reputation-based concerns are a key driver behind all current and emerging climate change and other environmental activities.

ii. Driven in large part to ensure that Garanti retains a reputation for excellence and leadership in the Turkish market, the Bank has and will continue to institute comprehensive efforts to address climate change. These include establishment of a Sustainability Committee and Sustainability Team to manage climate change issues, development of a comprehensive Environmental Management System which is certified to ISO 14001, communication of climate change acitivites (most recently in Garanti's Sustainability Report and the sustainability section of Garanti's web page), participation in CDP, striving to exceed the company-wide carbon reduction goal, strengthening environmental criteria in out project finance activities and the launch of numerious specific projects under the above structures. Individual carbon reduction projects are discussed throughout this employee commuting and travel, and the financing of renewable energy and energy efficiency projects.

iii. Investments related to the efforts described above include TRY 1,200,000 focused on operational energy efficiency, three full-time employees devoted to sustainability, roughly US$ 255 million in loans for small and medium size energy-efficiency and renewable energy projects and US$ 3 billion in loans for wind farms and hydroelectric power plants by the end of 2012.

SOCIO (FLUCTUATING SOCIO-ECONOMIC CONDITIONS)

i. Due to the inherent uncertainity involved, Garanti has not attempted to quantify potential lost revenue from climate-driven loan defaults or reduced demand. Nevertheless, the Bank considers such concerns critical to future business.

ii. There is nothing Garanti (or any other company acting in isolation) can do to reduce the likelihood of the physical impacts of climate change or associated regulation and their impact on community or sector viability. Garanti is, however, diversifying its products and services to prepare for transition to a low-carbon economy, something that could potentially ease the burden on heavily impacted sectors and help the bank gain new revenue that could compensate for climate-related losses.

iii. By the end of 2012, Garanti made roughly US$ 255 million in loans for small and medium-sized energy efficiency and renewable energy projects and US$ 3 billion in loans for wind farms and hydroelectric power plants.

Page: 6. Climate Change Opportunities

6.1
Have you identified any climate change opportunities (current or future) that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

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

6.1a
Please describe your opportunities that are driven by changes in regulation

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
CAPOP	Cap and trade schemes	Turkey seeks to join the European emissions trading scheme (ETS) by 2019. In preparation for this, in April 2012, Turkey passed a new regulation that will require companies from energy-intensive sectors to monitor, report and verify their CO2 emissions. While ETS would not apply direct to Garanti, it could indirectly drive opportunities for the company in at least two ways: (1) accelerating the demand for renewable energy and energy-efficiency projects, which the company could finance and (2) present new opportunities for the bank to act as a broker of carbon and provide related services.	New products/business services	6-10 years	Indirect (Client)	About as likely as not	Medium-high
TAXOP	Carbon taxes	Use of a carbon tax could be used to support any emissions reduction target resulting from Turkey's ratification of the Kyoto Protocol, especially if Turkey later abandons efforts to join ETS. As with a cap and trade scheme, this could indirectly impact the bank by accelerating the demand for renewable energy and energy efficiency projects, which the bank could finance.	New products/business services	6-10 years	Indirect (Client)	About as likely as not	Medium-high
ENROP	Fuel/energy taxes and regulations	Turkey's Regulation on Energy Performance in Buildings came into force in December of 2009. As of January 2011, all qualifying new buildings must meet minimum design requirements for energy efficiency. This will likely spur increased investment in energy-efficiency	New products/business services	Current	Indirect (Client)	Virtually certain	Medium-high

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
		projects, which should present new opportunities for financing.					

6.1b

Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity and (iii) the costs associated with these actions

CAPOP (CAP AND TRADE SCHEMES) AND TAXOP (CARBON TAXES)

i. Due to the inherent uncertainity involved, we have not attemted to formally estimate associated financial implications of opportunities presented by future participation in ETS or a carbon tax. However, we would expect resulting finance opportunities plus carbon trading opportunities would represent TRY hundreds of millions.

ii. 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 small and medium enterprises. Additionally, Garanti now monitors legal developments related to climate change that could pave the way for a role in emissions trading.

iii. To date, our primary cost has been training of key staff for existing green lending opportunities and participation of key individuals in our Sustainability Committee. As these roles have been built into existing responsibilities, we have not estimated associated costs. To maintain our leadership position in green market opportunities, Garanti provided roughly US$ 255 million to small and medium sized energy-efficiency and renewable energy projects and US$ 3 billion for wind farms and hydroelectric power plants.

ENROP (FUEL/ENERGY TAXES AND REGULATIONS)

i. Given remaining uncertainities about application and enforcement of the law as well as any resulting market, we have not attempted to formally estimate associated new business opportunities. However, we believe these opportunities could represent hundreds of millions of Turkish lira.

ii. As described above, Garanti has already begun to position as a leader in meeting the needs of a market increasingly interested in finance for energy-efficiency and renewable energy projects. For example, through Tur-SEFF and Mid-SEFF programs (described in more detail for Question 3.2.a), we have now supported a wide collection of small and medium-sized energy-efficiency and renewable energy projects. These projects can include rooftop solar heating systems, building insulation, double-glazing, rehabilitation of heating and power systems, and use of energy-efficiency materials.

iii. To date, the primary cost associated with participation in the Tur-SEFF and Mid-SEFF programs has been training of loan officers and other staff. As these efforts are built into existing roles, we have not attempted to put an amount to this cost. As of 2012, we approved roughly US$ 60 million in Tur-SEFF loans and US$ 195 million in Mid-SEFF loans.

6.1c

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

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
PHYOP	Other physical climate opportunities	Physical impacts on existing settlements could necessitate new infrastructure projects, creating finance opportunities. However, there is meaningful uncertainty on timing of this development.	Increased demand for existing products/services	Unknown	Indirect (Client)	Unknown	High

6.1d

Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity and (iii) the costs associated with these actions

PHYOP (PHYSICAL CLIMATE OPPORTUNITIES)

Many experts believe climate change is likely to severely impact existing human settlement and commercial establishments over the next half-century and beyond, especially in low-lying coastal regions. While this is a significant threat, 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. Garanti 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. Given the high degree of uncertainity and what would likely be a relatively long timeframe surrounding this occurance, we have not attempted to estimate associated financial implications not have we begun to take specific action beyond our efforts to stay abreast of climate change issues.

6.1e

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

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
REPOP	Reputation	By proactively addressing climate change and other social and environmental concerns, we can exceed stakeholder expectations and enhance our reputation. This could	Increased demand for existing products/services	Current	Direct	Very likely	High

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		produce numerous benefits to our business.					
SAVOP	Other drivers	By formalizing our approach to carbon emissions management, we enhance our ability to strategically reduce energy costs.	Reduced operational costs	Current	Direct	Virtually certain	Medium

6.1f
Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity; (iii) the costs associated with these actions

REPOP (REPUTATION-BASED OPPORTUNITIES)
i. By meeting and exceeding stakeholder concerns for performance, Garanti can differentiate itself with investors and customers who increasingly care about this topic. Additionally, the company believes that by becoming a proactive on sustainability topics (especially climate change), it becomes a more desirable place to work. This can meaningfully impact our ability to retain and attract talent. Due to the inherent uncertainties involved, there has been no attempt to quantify reputation-based opportunities.
ii. Driven in large part to ensure that Garanti retains a reputation for excellence and leadership in the Turkish market, the Bank has and will continue to institute comprehensive efforts to address climate chnage. These include establishment of a Sustainability Committee and Sustainability Team to manage climate change issues, development of a comprehensive environmental management plan, communication of climate change acitivites (most recently in Garanti's Annual Report, Sustainability Report and web-page), participation in CDP, striving to exceed the company-wide carbon reduction goal, strenthening environmental criteria in our project finance activities and the launch of numerious specific projects under above structures. Individual carbon reduction projects reduce customer footprint, efforts to reduce employee commuting and travel, and the financing of renewable energy projects.
iii. Investments related to the efforts described above include over TRY 1,200,000 focused on operational energy-efficiency, three full-time employees devoted to sustainability, more than US$ 255 million in loans for small and medium energy-efficiency and renewable energy projects and US$ 3 billion in loans for wind farms and hydroelectric power plants.

SAVOP (INCREASED ENERGY EFFICIENCY OF OPERATIONS)
i. Developing projects to reduce its emissions by carefully evaluating its greenhouse gas profile, Garanti Bank has focused on energy-efficiency projects that will also help reducing its operating costs.
ii. Garanti has undertaken numerious 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 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.
iii. In 2012, Garanti invested more than TRY 1,200,000 in energy-efficiency projects across its operations. For its new LEED-certified facility, we are assuming a total price premium of roughly 2%.

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading [Investor]

Page: 7. Emissions Methodology

7.1
Please provide your base year and base year emissions (Scopes 1 and 2)

Base year	Scope 1 Base year emissions (metric tonnes CO2e)	Scope 2 Base year emissions (metric tonnes CO2e)
Fri 01 Jan 2010 - Fri 31 Dec 2010	14108.97	67599.65

7.2
Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

Please select the published methodologies that you use
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

7.2a
If you have selected "Other", please provide details below

7.3
Please give the source for the global warming potentials you have used

Gas	Reference
CO2	IPCC Second Assessment Report (SAR - 100 year)
CH4	IPCC Second Assessment Report (SAR - 100 year)
N2O	IPCC Second Assessment Report (SAR - 100 year)
Other: HFC-134a	IPCC Second Assessment Report (SAR - 100 year)
Other: R404a	Other: ASHRAE Standard 34
Other: R410a	Other: ASHRAE Standard 34

7.4

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

Fuel/Material/Energy	Emission Factor	Unit	Reference
Diesel/Gas oil	2.68	kg CO2e per litre	World Resources Institute: Emission Factors Compilation from Cross-Sector Tools. Version 1.0. July 2009
Motor gasoline	2.34	kg CO2e per litre	World Resources Institute: Emission Factors Compilation from Cross-Sector Tools. Version 1.0. July 2009
Natural gas	1.89	Other: kg CO2e per m3	World Resources Institute: Emission Factors Compilation from Cross-Sector Tools. Version 1.0. July 2009
Lignite	1.21	metric tonnes CO2e per metric tonne	World Resources Institute: Emission Factors Compilation from Cross-Sector Tools. Version 1.0. July 2009
Distillate fuel oil No 2	2.69	metric tonnes CO2e per m3	World Resources Institute: Emission Factors Compilation from Cross-Sector Tools. Version 1.0. July 2009
Electricity	601.3	kg CO2e per MWh	WWF-Turkey 2012/Gold Standard Validation Report
Other: Business Air Travel: Long-haul	0.12	Other: kg CO2e per passenger km	EPA Climate Leaders: Optional Emissions from Employee Commuting, Business Travel and Product Transport. May 2008.
Other: Business Air Travel: Medium-haul	0.14	Other: kg CO2e per passenger km	EPA Climate Leaders: Optional Emissions from Employee Commuting, Business Travel and Product Transport. May 2008.
Other: Business Air Travel: Short-haul	0.17	Other: kg CO2e per passenger km	EPA Climate Leaders: Optional Emissions from Employee Commuting, Business Travel and Product Transport. May 2008.

Page: 8. Emissions Data - (1 Jan 2012 - 31 Dec 2012)

8.1
Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Operational control

8.2
Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e

15567.78

8.3
Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e

73993.85

8.4
Are there are any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions which are not included in your disclosure?

Yes

8.4a
Please complete the table

Source	Scope	Explain why the source is excluded
Diesel fuel used in generators	Scope 1	We are not able to track the actual consumption in diesel generators, due to difficulty collecting reliable data. Therefore, we have excluded the fuel used in generators considering that it has limited impact (less than %0,4) on our overall carbon footprint.

8.5
Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

Scope 1 emissions: Uncertainty range	Scope 1 emissions: Main sources of uncertainty	Scope 1 emissions: Please expand on the uncertainty in your data	Scope 2 emissions: Uncertainty range	Scope 2 emissions: Main sources of uncertainty	Scope 2 emissions: Please expand on the uncertainty in your data
Less than or equal to 2%	Data Gaps Assumptions Data Management Other: Human error	Uncertainty for scope 1 emissions comes from the use of estimation techniques to fill data gaps. For on-site use of natural gas at facilities (27% of scope 1 emissions), estimates were used to fill data gaps for roughly 20% of branches which consume natural gas for heating purposes (estimated consumption is 1.2% of all scope 1 emissions). For on-site use of diesel fuel (5.4% of scope 1 emissions),	More than 5% but less than or equal to 10%	Data Management Other: Human error	Because of human error while entering the electricity consumption data and the assumptions made for ATM consumption, we estimate a margin of error at 3%. Using a root sum of the squares method,

Scope 1 emissions: Uncertainty range	Scope 1 emissions: Main sources of uncertainty	Scope 1 emissions: Please expand on the uncertainty in your data	Scope 2 emissions: Uncertainty range	Scope 2 emissions: Main sources of uncertainty	Scope 2 emissions: Please expand on the uncertainty in your data
		estimates were used to fill data gaps for roughly 34% of branches which use diesel fuel for heating purposes (estimated consumption is <1% of scope 1 emissions). For all other sources, we estimate a margin of error at %3 due to human error while entering consumption data. Using a root sum of the squares method, Garanti estimates total uncertainty for scope 1 emissions at under 2%.			Garanti estimates level of uncertainty at 10%.

8.6
Please indicate the verification/assurance status that applies to your Scope 1 emissions

No third party verification or assurance

8.7
Please indicate the verification/assurance status that applies to your Scope 2 emissions

No third party verification or assurance

8.8
Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No

Page: 9. Scope 1 Emissions Breakdown - (1 Jan 2012 - 31 Dec 2012)

9.1
Do you have Scope 1 emissions sources in more than one country?

No

9.2
Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

By activity

9.2d
Please break down your total gross global Scope 1 emissions by activity

Activity	Scope 1 emissions (metric tonnes CO2e)
Facility Heating Fuel	5225.30
Mobile Sources (Fleet)	9514.17
Refrigerants	828.31

Page: 10. Scope 2 Emissions Breakdown - (1 Jan 2012 - 31 Dec 2012)

10.1
Do you have Scope 2 emissions sources in more than one country?

No

10.2
Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

By facility

10.2b
Please break down your total gross global Scope 2 emissions by facility

Facility	Scope 2 emissions (metric tonnes CO2e)
Facilities	67807.92
Stand-alone ATMs	6185.93

Page: 11. Energy

11.1

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

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

11.2
Please state how much fuel, electricity, heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year

Energy type	MWh
Fuel	64768
Electricity	123056
Heat	0
Steam	0
Cooling	0

11.3
Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

Fuels	MWh
Distillate fuel oil No 2	3340
Natural gas	23078
Lignite	515
Diesel/Gas oil	27316
Motor gasoline	10520

11.4
Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor

Basis for applying a low carbon emission factor	MWh associated with low carbon electricity, heat, steam or cooling	Comments
No purchases or generation of low carbon electricity, heat, steam or cooling		

Page: 12. Emissions Performance

12.1
How do your absolute emissions (Scope 1 and 2 combined) for the reporting year compare to the previous year?

Increased

12.1a
Please complete the table

Reason	Emissions value (percentage)	Direction of change	Comment
Emissions reduction activities	4.6	Decrease	Garanti's numerous energy efficiency and carbon reduction efforts described previously in this response are believed to have reduced Scope 1&2 absolute emissions by roughly 4,134 tons in 2012.
Divestment			
Acquisitions			
Mergers			
Change in output	2.6	Increase	The number of Garanti's bank branches, the predominant piece of the company's carbon footprint, grew by roughly 2.6% in 2012. Excluding carbon reduction efforts and any other factors, the bank would expect this to be a good predictor for total growth in Scope 1&2 emissions, i.e. 2.6%.
Change in methodology	12.7	Decrease	Garanti saw an artificial decrease in Scope 1 emissions related to refrigerants. The reason for the %12.7 decrease in refrigerant emissions is that R22 gas was excluded from the calculation for 2012 as it is covered by the Montreal Protocol but not covered by the Kyoto Protocol. Additionally, Garanti planned a “phase-out programme” for the replacement of all air-conditioning systems using R-22 with ozone-friendly systems. In this context, Garanti Bank began using air-conditioning units which work with R410 gas, which is not contributing to ozone depletion like R22, in its recently opened or renovated branches.
Change in boundary			
Change in physical operating conditions	25.1	Decrease	Garanti saw a significant decline in 2012 in use of heating fuel across its properties which is attributed to warmer winter weather compared to previous years. This resulted in 25% decrease in emissions resulting from heating fuel.
Unidentified			
Other			

12.2
Please describe your gross combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
0.0000092	metric tonnes CO2e	unit total revenue	9.42	Decrease	In 2012, revenue increased by 13.22%, more than our total physical footprint, which grew by roughly 2.6% for Scope 1&2.

12.3
Please describe your gross combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per full time equivalent (FTE) employee

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
5.18	metric tonnes CO2e	FTE employee	0.47	Decrease	Our Scope 1 and Scope 2 emissions grew 2.55% while the total number of employees increased 3% compared to 2011 figures. Therefore, this metric slightly decreased.

12.4
Please provide an additional intensity (normalized) metric that is appropriate to your business operations

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
498.2	metric tonnes CO2e	Other: billion (currency) total assets	6.73	Decrease	Garanti continues to meaningfully grow its total assets at a pace far greater than growth of its physical footprint. We attribute this to our emphasis of alternative delivery channels (internet banking, mobile banking, and next generation ATMs that provide full service) for which Garanti is the leader in Turkey. These delivery channels greatly reduce energy and other resources required to meet customers needs while greatly enhancing customer satisfaction.

Page: 13. Emissions Trading

13.1
Do you participate in any emissions trading schemes?

No, and we do not currently anticipate doing so in the next 2 years

13.2
Has your company originated any project-based carbon credits or purchased any within the reporting period?

No

Page: 14. Scope 3 Emissions

14.1
Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
Purchased goods and services	Relevant, not yet calculated				
Capital goods	Not evaluated				
Fuel-and-energy -related activities (not included in Scope 1 or 2)	Relevant, not yet calculated				

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
Upstream transportation and distribution	Relevant, not yet calculated				
Waste generated in operations	Relevant, not yet calculated				
Business travel	Relevant, calculated	3017	The calculation was made using EPA passenger emissions factors and flight data captured both from Garanti's travel agent. Each flight leg was assigned the appropriate emission factor based on the distance of the flight. The flight distance was multiplied by the following provided emission factors to arrive at the Scope 3 business air travel emissions. Short-Haul (<483 km)- 0.17 kg CO2e/ passenger-km; Medium-Haul (>=483 km and <1127 km)- 0.14 kg CO2e/ passenger-km; and Long-Haul (>1127 km)- 0.12 kg CO2e/ passenger-km from EPA Climate Leaders Optional Emissions from Employee Commuting, Business Travel and Product Transport (June 2008).		
Employee commuting	Relevant, not yet calculated				
Upstream leased assets	Not evaluated				
Investments	Not evaluated				
Downstream transportation and distribution	Relevant, not yet calculated				
Processing of sold products	Not evaluated				
Use of sold products	Relevant, not yet calculated				
End of life treatment of sold products	Not evaluated				
Downstream leased assets	Not evaluated				
Franchises	Not evaluated				
Other (upstream)					
Other (downstream)					

14.2
Please indicate the verification/assurance status that applies to your Scope 3 emissions

No third party verification or assurance

14.3
Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?

Yes

14.3a
Please complete the table

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Business travel	Change in output	14.65	Increase	We believe that the reason for the increase in flight emissions, especially in short hauls, might have occured due to the training need of increased number (%3) of employees and domestic business travels to visit more customers which have increased %9.6 compared to 2011.

14.4

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

Yes, our customers

14.4a
Please give details of methods of engagement, your strategy for prioritizing engagements and measures of success

Garanti Bank keeps abreast of the needs and expectations of different stakeholder groups through a number of research studies in order to maximize the added value that it provides to its stakeholders. The Bank also uses a variety of channels to receive feedback from different types of stakeholders. Regarding the customers, Garanti uses a number of engagement platforms including (but not limited to) seminars, conferences, sector-based information meetings and one-to-one meetings.

As part of its commitment to sustainable development, Garanti is positioning itself in Turkey as a leader in meeting the needs of the transition to a low-carbon economy. The Bank, therefore, increased the total financing provided to wind farms and hydroelectric power plants to more than US$ 3 billion in 2012. This is nearly half of the amount allocated to the energy projects by Garanti Bank.

In particular, Garanti Bank offers greatest support to wind farms projects, since they reduce Turkey's current account deficit, and have minimal impact on the environment and society. As a result of its efforts to support wind farm projects, Garanti Bank's share in Turkey's installed wind power capacity among Turkish banks reached 50%, by the end of 2012.

Garanti also views energy-efficiency a significant opportunity to reduce Turkey's greenhouse gas emissions. Accordingly, the Bank provides favored lending to small and medium-sized energy-efficiency projects. For instance, Garanti Bank provided roughly US$ 60 million in funds to SMEs for energy efficiency projects within the scope of the Tur-SEFF loan program, as per the end of 2012.

Module: Sign Off

Page: Sign Off

Please enter the name of the individual that has signed off (approved) the response and their job title

Derya Ozet Yalgi, Sustainability Supervisor