

## C0. Introduction

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### C0.1

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

Established in 1946, Garanti BBVA is Turkey's second largest private bank with consolidated assets of more than TL 423 bn (USD 75.4 bn) as of March 31, 2019.

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

As of March 31, 2019, Garanti BBVA provides a wide range of financial services to its close to 16.7 million customers with 18,295 employees through an extensive distribution network of 922 domestic branches, 7 foreign branches in Cyprus and one in Malta, and 3 international representative offices in Düsseldorf and Shanghai. Garanti BBVA offers an omni-channel convenience with seamless experience across all channels with 5,197 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 for all its stakeholders, Garanti BBVA builds its strategy on the principles of always approaching its customers in a "transparent", "clear" and "responsible" manner, improving customer experience continuously by offering products and services that are tailored to their needs. Its competent and dynamic human resources, uninterrupted investments in technology, innovative products and services offered with strict adherence to quality and customer satisfaction carry Garanti BBVA to a leading position in the Turkish banking sector.

Implementing an advanced corporate governance model that promotes the Bank's core values, Garanti BBVA has Banco Bilbao Vizcaya Argentaria S.A. (BBVA) as its majority shareholder with 49.85% share. Its shares publicly traded in Turkey, and its depositary receipts in the UK and the USA, Garanti BBVA has an actual free float of 50.07% in Borsa Istanbul as of March 31, 2019.

Garanti BBVA's constantly improving business model is driven by its strategic priorities focused on responsible and sustainable development, customer experience, employee happiness, digitalization, optimal capital utilization and efficiency. Its custom-tailored solutions and wide product variety play a key role in reaching TL 323.2 bn (USD 57.6 bn) loans and non-cash loans. Garanti BBVA's capital generative, disciplined and sustainable growth strategy that strictly adheres to solid asset quality enables the Bank to move forward strongly. Its effective risk management through world-class integrated management of financial and non-financial risks and organizational agility in capturing new opportunities result in sustainable value creation for all its stakeholders.

Since 2014, the Bank 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 (2018) marks the fourth 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.

The Bank 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 BBVA has become a Core Group member of UNEP FI Principles on Responsible Banking in 2018. The Bank also acts as the Chair of the Turkish Business Council for Sustainable Development (BCSD Turkey).

By the end of 2018, 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 2019.

## C0.2

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**(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 2018	December 31 2018	No	<Not Applicable>

## C0.3

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

Turkey

## C0.4

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

TRY

## C0.5

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**(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

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### C1.1

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

Yes

### C1.1a

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**(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.**

Position of individual(s)	Please explain
Director on board	The Chair of 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. 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 Sustainability Team and Representatives, whereas RBC meets to oversee the progress on the implementation of the Bank'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 2018 Integrated Annual Report, p142-145( <a href="https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18_eng-integrated-annual-report.pdf">https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18_eng-integrated-annual-report.pdf</a> )
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 Sustainability Team and Representatives, whereas RBC meets to oversee the progress on the implementation of the Bank'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 2018 Integrated Annual Report, p142-145 ( <a href="https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18_eng-integrated-annual-report.pdf">https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18_eng-integrated-annual-report.pdf</a> ).
Other, please specify (Responsible Business Committee)	The Responsible Business Committee (RBC) was established in 2017. The RBC has met 3 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 BBVA, 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 BBVA's Responsible Business Plan; covering sustainability-ESG efforts, community investment programs, reputation, TCR (transparent, clear, responsible) principles in customer experience, etc. Garanti BBVA's 2018 Integrated Annual Report, (pages 142 and 145), presents more information about the committees and their roles and responsibilities: <a href="https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18_eng-integrated-annual-report.pdf">https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18_eng-integrated-annual-report.pdf</a> .
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 env. performance and risk assessment) and meets to review and takes decisions on recommendations raised by the Sustainability Team and Representatives. SC has met a total of 25 times since its inception in 2010. In 2018, the RBC convened with the attendance of the members of the SC and discussed the related topics. In addition, the SC ensures the integration of all material aspects and E&S factors, to products and services as well as decision-making mechanisms. Our 2018 Integrated Annual Report, p142-145, presents more information: <a href="https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18_eng-integrated-annual-report.pdf">https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18_eng-integrated-annual-report.pdf</a> .

**C1.1b**

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	<p>Reviewing and guiding strategy</p> <p>Reviewing and guiding major plans of action</p> <p>Reviewing and guiding risk management policies</p> <p>Reviewing and guiding annual budgets</p> <p>Reviewing and guiding business plans</p> <p>Setting performance objectives</p> <p>Monitoring implementation and performance of objectives</p> <p>Monitoring and overseeing progress against goals and targets for addressing climate-related issues</p>	<p>Garanti BBVA 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 Garanti BBVA, 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 Representatives, whereas the RBC meets to oversee the progress on the implementation of Garanti BBVA’s Responsible Business Plan; covering sustainability-ESG efforts, community investment programs, reputation, TCR (transparent, clear, responsible) principles in customer experience, etc. Our Sustainability web site presents more information: <a href="https://surdurulebilirlik.garantibbva.com.tr/en">https://surdurulebilirlik.garantibbva.com.tr/en</a> The current memberships of the SC and the RC are as stated 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 3 times since its inception in 2017. In 2018, the RBC convened with the attendance of the members of the SC and discussed the related topics. By the end of 2018, Garanti BBVA has around 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 SC within their own departments, from headquarters, regional directorates and branches. Our 2018 Integrated Annual Report, pages 142 and 145, presents more information about the committees and their roles and responsibilities (<a href="https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18_eng-integrated-annual-report.pdf">https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18_eng-integrated-annual-report.pdf</a>).</p>

**C1.2**

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

Name of the position(s) and/or committee(s)	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**

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

Garanti BBVA 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 a Responsible Business Committee(RBC) with Committee Members representing relevant lines of business and departments throughout its organization and with BoD/CEO level ownership. SC meets to review and take decisions on recommendations raised by the Sustainability Team and Representatives, whereas RBC meets to oversee the progress on the implementation of the Bank'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. SC has met a total of 25 times since its inception in 2010. In 2018, RBC convened with the attendance of the members of SC and discussed the related topics.

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.

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. 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 the Bank's RB Plan; covering sustainability-ESG efforts, community investment programs, reputation, TCR (transparent,clear,responsible) principles in customer experience, etc.

2018 Integrated Annual Report, p142-145, presents more information about the committees' roles and responsibilities ([https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18\\_eng-integrated-annual-report.pdf](https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18_eng-integrated-annual-report.pdf)).

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

ST is responsible for the coordination of all sustainability-related activities at the Bank on a day-to-day basis. The Team reporting to 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.garantibbva.com.tr/garanti-bbva-sustainability-approach/garanti-bbva-and-sustainability/corporate-sustainability-governance/>). By the end of 2018, the Bank has around 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 BBVA established its Env.and Social (E/S) Loan Policies (ESLP) in 2011 and its E/S Impact Assessment Process (ESIAP) in 2012. 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' final risk grades are identified and regularly reported to the SC. ST coordinates with BBVA Sustainable Finance and Reputational Risk Unit in its review of operations. For more information: <https://surdurulebilirlik.garantibbva.com.tr/garanti-bbva-sustainability-approach/material-issues/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

## C1.3a

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**(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).**

**Who is entitled to benefit from these incentives?**

Other C-Suite Officer

**Types of incentives**

Monetary reward

**Activity incentivized**

Efficiency 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 BBVA publicly discloses its emission reduction targets and performance in its 2018 Integrated annual Report (For more detail: <https://surdurulebilirlik.garantibbva.com.tr/garanti-bbva-sustainability-approach/garanti-bbva-and-sustainability/environmental-impact-of-our-operations/climate-change-management/>). In 2016 after COP21 and Garanti BBVA'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. In line with the global best practices, since 2016 Garanti BBVA committed to Science-Based Target Initiative with a long-term emission reduction target instead of setting a short-term target. Within the framework of our long-term objectives, we set a 50% reduction target for our Scope 1 and 2 emissions per total assets against 2012, which is the year when ISO14001 EMS became operational, by the end of 2020. Currently, we have already achieved this target with 66% reduction. As Garanti BBVA, we are working on a new long term target aligned with SBTi. Additionally, The KPIs given below affect corporate executive team as well as all employees who are entitled to benefit from incentives: Digital sales, mobile target, cost/income ratio. These indicators are linked to resource efficiency and achieved through efficiency measures (e.g. reducing the need for courier services, print-outs) that result in reduction of Scope 1, 2 & 3 emissions. For instance, digitalization decreases the work load of resource-intensive delivery channels i.e. conventional branches.

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**Who is entitled to benefit from these incentives?**

Business unit 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 business unit managers who is entitled to benefit from incentives: Development of sustainable products and services, playing an advisory role to customers/clients to improve their sustainability performance, undertaking internal ISO14001 audits, improvement of ESG risk management frameworks, etc: All these indicators are related to increasing our sustainability/environmental performance both within the Bank and on downstream operations, i.e. customer side. The number of environmental reporting made to international initiatives and indices such as CDP and DJSI. This indicator result in better management of climate change related risks since the reporting systems require the Bank to be more transparent about its climate change performance.

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**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 business unit managers who is entitled to benefit from incentives: Development of sustainable products and services,

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playing an advisory role to customers/ clients to improve their sustainability performance, undertaking internal ISO14001 audits, improvement of ESG risk management frameworks, etc: All these indicators are related to increasing our sustainability/environmental performance both within the Bank and on downstream operations, i.e. customer side. The number of environmental reporting made to international initiatives and indices such as CDP and DJSI. This indicator result in better management of climate change related risks since the reporting systems require the Bank to be more transparent about its climate change performance.

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**Who is entitled to benefit from these incentives?**

Other, please specify (Sustainability Supervisor and Associates)

**Types of incentives**

Monetary reward

**Activity incentivized**

Emissions reduction target

**Comment**

Expanding the scope of E&S Risk Management System (Scope 3 emissions), Launching new credit lines to support environmental investments (Scope 3 emissions), number of environmental reporting, supporting customers to increase their awareness on environmental issues including new developments on climate change (i.e. TCFD work, etc.), organizing awareness raising events to support real& financial sectors' knowledge on climate-related issues (e.g. organizing CDP CC report launching event with CDP Turkey), receiving third party assurance on both the implementation and data quality related to environmental factors, improvements in environmental data management, which result in the management of Scope 1&2 emissions.

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**Who is entitled to benefit from these incentives?**

Other, please specify (Energy Efficiency and Environmental 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.

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**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**

As of 2016, The bank recognizes the branches that undergo ISO14001 audit by the certification body, TÜVSÜD and gives SPOT Awards (an internal award system at Garanti for outstanding employees) as a recognition to the Sustainability Representative of those branches. In 2018, 28 people received the award, which comes together with monetary 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.

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**Who is entitled to benefit from these incentives?**

All employees

**Types of incentives**

Monetary reward

**Activity incentivized**

Efficiency target

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### Comment

The KPIs given below affect corporate executive team as well as all employees who are entitled to benefit from incentives: Digital sales, mobile target, cost/income ratio. These indicators are linked to resource efficiency and achieved through efficiency measures (e.g. reducing the need for courier services, print-outs) that result in reduction of Scope 1, 2 & 3 emissions. For instance, digitalization decreases the work load of resource-intensive delivery channels i.e. conventional branches.

## 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 BBVA 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 BBVA 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 the Bank'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.**

	Frequency of monitoring	How far into the future are risks considered?	Comment
Row 1	Six-monthly or more frequently	>6 years	Garanti BBVA's efforts to manage climate change related risks and opportunities can be classified into two categories; transaction and portfolio levels. In both cases, systems and procedures cover the Bank's operations in Turkey. 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. 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**

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## **(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/opp. on both transaction and portfolio level is the materiality analysis explained on p42 of our 2018 Integrated Annual Report.

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

Climate-related substantial risks/opp. 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/opp. The market and reputation risks/opp. are usually portfolio level, whereas the rest can be both on transaction and portfolio level. Informing the customers on environmental and social trends will stay as an important topic in the Bank's agenda especially with respect to corp. and commercial customers.

(2)Efforts under Digital Transformation enable effective management of technology, acute and chronic physical risks, downstream, upstream and market risks/opp. Technology and market risks/opp. 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/opp. 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/opp. identification and assessment:

Garanti BBVA identifies and manage 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 2018, drought led to a revenue loss of USD 17 mn (TRY 82 mn) in cash flows of our HEPP portfolio (Please also see CDP Water response). Financing climate-resilient sectors (e.g. to date, we provided USD 5.1 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 impact the borrowings entailing ESG criteria (In 2018, the Bank secured a total of USD 162 mn (TRY 798 mn) of funds with ESG criteria).

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. Such efforts resulted in a market share of 28.1% in wind energy sector. Garanti BBVA's track record on the management of E/S issues, as well as its 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 1.4 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/opp. identification and assessment:

Garanti BBVA identifies and assesses transaction level risks/opp. through its E/S risk assessment system, carbon pricing and green loan structure where the margin of the loan is linked to borrowers' ESG performance.

For instance, we helped one of our clients to understand the E/S 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. These two would result in ~15% decrease in the river flow and 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.

## **C2.2c**

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	The Regulatory Framework on 'Monitoring GHGs 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 BBVA, 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 11.5 mn). In anticipation of such climate-related regulations, Garanti BBVA 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 BBVA's Pendik Tech Campus. As the Bank 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 through supply from other local manufacturers, depending on the case. As an opportunity, RERA will help to development the market of the manufacturing of local products and will motivate the investors as RERA is the priority of the government. The projected RERA pipeline (~%10-15 market share) will create an opportunity over the next 3-4 years.
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 emissions trading scheme (ETS). In preparation for this, the regulatory framework on 'Monitoring GHGs Emissions' was published by the Ministry of Environment and Urbanization in the official gazette on 17.05.2014. 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 BBVA includes potential future carbon taxes in financial modeling and projections of projects financed to ensure that they would still fulfill their financial obligations. Garanti BBVA 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: <a href="https://cbey.yale.edu/events/integrating-an-internal-price-on-carbon-lessons-from-garanti-bank">https://cbey.yale.edu/events/integrating-an-internal-price-on-carbon-lessons-from-garanti-bank</a> .
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 BBVA 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 BBVA 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 (ESIA) Process and requests an E&S Action Plan 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 2018, Garanti BBVA assessed 69 projects within the scope of its ESIA Process and supported its customers to realize their investments in line with the legal framework on environmental 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. 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 206 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 nearly USD 5.1 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 BBVA 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.

	Relevance & inclusion	Please explain
Reputation	Relevant, always included	<p>Failure to meet stakeholder expectations on climate issues 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 disruption of the borrowings entailing ESG criteria (In 2018, the Bank secured a total of USD 162 mn (TRY 798 mn) of funds with ESG criteria). Garanti BBVA implements an E/S Impact Assessment Process as stated in the 'Legal' Section to help drive improvement across its loan portfolio. In order to respond stakeholder demand on climate change action, Garanti BBVA published its Climate Change Action Plan Statement in 2015. The Bank focuses its activities on combating climate change on four main areas: carbon pricing and prioritization of renewable energy, reducing deforestation, management of water risks, and establishing green office standards. Besides the company level efforts, Garanti BBVA 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 BBVA 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. In 2018 we expanded the scope of Declaration to include a larger portion of the Banks' portfolios and some provisions to ensure better control of Banks on the impact of projects financed. Please also see: <a href="https://surdurulebilirlik.garantibbva.com.tr/sustainability-blog/global-compact-turkey-s-declaration-on-sustainable-finance-has-been-updated/">https://surdurulebilirlik.garantibbva.com.tr/sustainability-blog/global-compact-turkey-s-declaration-on-sustainable-finance-has-been-updated/</a> In 2018, we became the only founding member from Turkey of UNEP FI Principles on Responsible Banking Core Group. The Principles will provide substantial contribution to SDGs along with the Paris Agreement through setting the roadmap for the banking sector. For more information: <a href="http://www.unepfi.org/news/industries/banking/principles-coregroupannouncement/">http://www.unepfi.org/news/industries/banking/principles-coregroupannouncement/</a> . Garanti BBVA 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.</p>
Acute physical	Relevant, always included	<p>As predicted in the World Economic Forum Global Risk Report 2018, major global risks arose from climate-related events and natural disasters in 2017 and 2018 estimated to cost USD 653 bn. Natural disasters that claimed lives and destroyed property globally dominated the news throughout the year. Devastating hurricanes in the U.S. resulted in many deaths and estimated to cost USD 290 bn in damages in 2017 and Frederike Storm in Europe estimated to cost USD 1.906 bn in damages in early 2018. Wildfires in California were among the largest and most destructive disasters in modern history causing many deaths, damaging thousands of buildings and leaving thousands of people homeless, along with typhoons in Japan, Philippines, Hong-Kong and China, floods in Japan, India and Europe affecting thousands of people. Turkey also had its share in extreme weather events in 2018. A total of 840 extreme weather events were recorded in Turkey in 2018. The record breaking hail in July 2017 which only lasted 20 minutes was estimated to cost TRY 1.2 bn in damages. The extraordinary tornado in November 2017 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 2018, Garanti BBVA assessed 69 projects within the scope of its Env. 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 and international standards. 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 BBVA 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.</p>
Chronic physical	Relevant, always included	<p>The main chronic physical risks can be considered as changing precipitation regime, drought and change in mean temperature. According to the 2018 Annual Climate Report of General Directorate of Meteorology (GDM), mean seasonal temperatures were 3oC higher in spring; 1.2oC higher in summer; 1.4oC higher in autumn and 2.8oC higher in winter when compared to the mean temperature of 1981-2010. An increase in average temperature during the summer could meaningfully increase our cooling 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 BBVA invested TRY 50.4 mn(incl. TRY 31.5 mn for AC replacements) in energy efficiency efforts, which could insulate the company from energy costs. For new facilities, Garanti BBVA intends to build to industry leading standards. For example, we invested in three rooftop solar power plants with the operational installed capacity of 6 to 50 kW for our service points in three cities and our Pendik Tech Campus was built to meet LEED-certification. According to World Resource Institute, Turkey is among the countries that will be extremely water-stressed by 2040. Water scarcity and drought caused by climate change have a direct impact on hydro-electric power plant (HEPP) projects financed by Garanti BBVA in terms of operation and financial return. For instance, drought in 2018 led to a revenue loss of USD 17mn (TRY 82 mn) in cash flows of our HEPP portfolio (More details can be found in our CDP Water response). Within this scope, we applied Env. and Social (E&amp;S) Impact Assessment Model to these projects in order to manage E&amp;S risks including those that are water-related and we expect from our customers to examine impacts of CC 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, and alternative water supply sources. It is also important to highlight that we favor 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.</p>
Upstream	Relevant, always included	<p>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 0.1077 would result in as high as TRY 11.5 mn of additional operating costs per year. In order to mitigate this risk, the Bank has invested TRY 50.4 mn in energy efficiency measures. As stated in Chronic Physical section, we invested in solar panels in three of our branches. In addition, Garanti BBVA's track record on the management of E&amp;S risks, as well as its capability to tailor existing products according to SDGs and having qualified for seven different sustainability indices including DJSI play an important role in benefiting from accessing low cost funding. For instance, Garanti BBVA 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 and signed Green Mortgage agreement for EUR 75 mn equivalent to TRY 313 mn with EBRD. Garanti BBVA issued the first residential mortgage covered bond ever, which is IFC has invested the first time in Turkey as well. These funds have been used 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.</p>

	Relevance & inclusion	Please explain
Downstream	Relevant, always included	<p>Garanti BBVA believes that the main CC related risks lie with the downstream impacts arising from financing activities. Downstream risks are mostly associated to the vulnerability of the loan portfolio to CC in terms of both legal, market, sector specific (e.g. tourism, energy, infrastructure, agriculture, real estate, etc.) and physical led impacts. The Bank has been investing in internal capacity building on E/S risk management over the past 8-9 years. The Bank's E/S Impact Assessment Process, Sector Norms, Climate Change Action Plan (incl. carbon pricing) allow extensive management of climate-related risks on both transaction and portfolio level. Garanti BBVA was also among the first one hundred companies to support TCFD report worldwide. We published our first status report in terms of alignment with TCFD guidelines in our 2018 Integrated Annual Report. This new challenge of improving our environmental disclosure added on our existing track record under the IIRC framework. The Bank also plays an active role in building capacity among its 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 opp. For instance we have provided USD 5.1 bn of financing to renewable energy so far thanks to our internal capacity building efforts on this sector. In 2018, we signed the first green loan agreement and involved in the first green project finance agreement as green loan coordinator. We are promoting and motivating the improvement of ESG performance of our customers by linking the margin of the loan to their ESG performance. Also, capacity building efforts enabled us to secure funding from IFIs 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 BBVA 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.</p> <p>1: <a href="https://surdurulebilirlik.garantibbva.com.tr/garanti-bbva-sustainability-approach/material-issues/environmental-and-social-risk-management/">https://surdurulebilirlik.garantibbva.com.tr/garanti-bbva-sustainability-approach/material-issues/environmental-and-social-risk-management/</a> 2: <a href="https://shareholdersandinvestors.bbva.com/wp-content/uploads/2018/02/Sector-norms_Final_Feb18.pdf">https://shareholdersandinvestors.bbva.com/wp-content/uploads/2018/02/Sector-norms_Final_Feb18.pdf</a></p>

## C2.2d

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

Garanti BBVA has been managing its climate-related risks and opp. 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 CC risks in our loan portfolio through ESIAP, carbon pricing and sector norms. Advising our customers to make their business more resilient to CC is an integral part of our risk mngmnt strategy. If not managed, such risks can result in substantial financial losses. For instance, drought in 2018 led to a revenue loss of USD 17 mn (TRY 82 mn) in cash flows of our HEPP portfolio. From an opp. management perspective, we focus on financing climate-resilient sectors and roll out new financing tools to support green companies (e.g. green loans). 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: Worldwide, it is estimated that 200 million people will be displaced due to CC by 2050. Turkey will get a major share from such consequences given its vulnerable geography to CC impacts such as floods. This would ultimately affect our branch distribution and delivery channel strategy. To insulate from such risks, we constantly invest in digital platforms and increase the share of digital channels in our sales. Our digital penetration ratio among active customers is 67%. 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 BBVA 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 BBVA proactively invested in its human capital on renewable energy in mid-2000s and therefore gained a market share of 28.1% in wind energy sector. Garanti BBVA's investment in human capital on env. issues through trainings also resulted in better mngmnt of loan portfolio-related CC risks or developing innovative products (e.g. Garanti BBVA provided nearly USD 5.1 bn of financing to renewable investments so far thanks to its internal capacity building efforts on this sector). Also, such efforts enabled to secure funding from international FIs for supporting low-carbon investments. Garanti BBVA 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 mngmnt through world-class integrated mngmnt 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 disruption of the borrowings entailing ESG criteria (In 2018, the Bank secured a total of USD 162 mn (TRY 798 mn) of funds with ESG criteria).

In terms of governance, please see pages Sustainability Committee (p142), Responsible Business Committee (p145) and E/S Risk Management (p154) sections of our 2018 Integrated Annual Report

([https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18\\_eng-integrated-annual-report.pdf](https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18_eng-integrated-annual-report.pdf) ).

## **C2.3**

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### **(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**

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

**Identifier**

Risk 1

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

Direct operations

**Risk type**

Transition risk

**Primary climate-related risk driver**

Policy and legal: Increased pricing of GHG emissions

**Type of financial impact**

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 PMR project, which is a collective global project called Partnership for Market Readiness (PMR) led by the World Bank Group (WBG). PMR is a multi-stakeholder project where numerous players in the carbon pricing field is brought together to support the preparation and implementation of climate change mitigation policies in order to scale up GHG mitigation such as carbon pricing instruments conducted in collaboration with the WBG. In preparation for this, the regulatory framework on 'Monitoring GHGs Emissions' was published by the Ministry of Environment and Urbanization in the official gazette on 17.05.2014. The regulation requires companies from energy-intensive sectors to monitor, report and verify their CO2 emissions. While ETS would not apply directly to our Bank, it could indirectly impact us 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 11.5 mn).

**Time horizon**

Short-term

**Likelihood**

About as likely as not

**Magnitude of impact**

Medium-high

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

11546759

**Potential financial impact figure – minimum (currency)**

&lt;Not Applicable&gt;

**Potential financial impact figure – maximum (currency)**

&lt;Not Applicable&gt;

**Explanation of financial impact figure**

Such regulation could result in an additional cost of TRY 11.5 mn per year, based on our current energy consumption (107,182,390 kWh) and an assumption of carbon tax as TRY 0.1077 per kWh based on the Germany renewable energy surcharge rate (21%) example in 2018. Calculation detail is as follows: 21% of electricity unit price (TRY 0.5130) per kWh=0.1077 and Estimated additional cost of electricity based on the possible carbon tax: TRY 0.1077 x 107,182,390 kWh = TRY 11,546,759 .

**Management method**

To insulate from price increases, Garanti BBVA has invested roughly TRY 50.4 mn in energy efficiency across its operations in 2018. To date the total amount of investments for energy efficiency is roughly TRY 62.5 mn. These investments are; (1)LED and (2)AC replacements, installations of (3)roof type solar panels with the operational installed capacity of 6 to 50 kW for our service points at three locations and (4)trigeneration unit at our HQ (Zincirlikuyu Office).

**Cost of management**

50442651

**Comment**

This cost (TRY 50.4 mn) includes replacement of AC units in 480 branches with more efficient ones and installation of efficient LED lighting systems in 630 branches in 2018. In 2017, the total investment amount was TRY 7.1 mn for replacement of lighting systems in 151 branches and AC units in 75 branches. The number of branches, where replacements of lightning and AC units were completed, increased in 2018.



**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**

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 206 mn of revenue loss in case of a one-month (30 days) suspension of operations and would affect the borrower's repayment of loans.

**Time horizon**

Short-term

**Likelihood**

About as likely as not

**Magnitude of impact**

High

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

206250000

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

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 the Bank, however we are able to estimate the revenue loss of a single borrower (i.e. TRY 206 mn).

**Management method**

Garanti BBVA 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 2018, Garanti BBVA assessed 69 projects within the scope of its ESIAP and supported its customers to realize their investments in line with the legal framework on environmental 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**

304516

**Comment**

The Bank has invested roughly TRY 285,000 on formation and implementation of ESIA Model by cooperating with consultants. Additionally, our E&S experts have conducted regular site visits to monitor the implementation of the ESAP items. In 2018, 4 power plants were visited by our experts and it costed around TRY 4,516. Besides, the Bank organized fifth workshop within the scope of Sust.&Risk Management, where stakeholders including customers and non-governmental organizations were informed on the most current topics related to sustainable business models, such as innovative ESG practices in Turkey, green financing options, risks stemming from digitalization, new trends in relation to transparency and non-financial reporting and environmental risk perception in the insurance industry in 2018. Cost of the workshop was TRY 15,000 in 2018. Therefore the total cost of management was TRY 304, 516. These 2 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**

Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

**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 2.7% based on the Annual Report of Turkish State Meteorological Service in 2018) the yearly electricity consumption. This would result in an additional cost of TRY 1.4 mn at Garanti BBVA, taking into consideration the electricity consumption in 2018.

**Time horizon**

Short-term

**Likelihood**

Virtually certain

**Magnitude of impact**

Medium-low

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

1461128

**Potential financial impact figure – minimum (currency)**

&lt;Not Applicable&gt;

**Potential financial impact figure – maximum (currency)**

&lt;Not Applicable&gt;

**Explanation of financial impact figure**

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 an average global temperature increase stated in the 2018 Annual Report of Turkish State Meteorological Service and a %2.7 increase in electricity consumption. This would result in an additional cost of TRY 1.4 mn, taking into consideration the electricity consumption (kWh) in 2018.

**Management method**

To insulate from price increases, Garanti BBVA has invested TRY 50.4 mn in energy efficiency across its operations in 2018. The investments were started in 2017 and the total amount of investment was 7.1 mn by the end of 2017.

**Cost of management**

50442651

**Comment**

This management cost (TRY 50.4 mn) includes replacement of AC units in 480 branches with more efficient ones and installation of efficient LED lighting systems in 630 branches. In 2017, the total investment amount was TRY 7.1 mn for replacement of lighting systems in 151 branches and AC in 75 branches. The number of branches where replacements of lightning and AC units were completed increased in 2018. The life-time of the LED and AC devices is assumed to be more than 20 years. Regarding the increase in the electricity unit price for the last 10 years, the annual increase rate is around 14.9%. Furthermore, as mentioned above, the approximate annual temperature increase is 2.7% in 2018. When we consider all these variables and the estimated life-time of LED and AC devices (20 years), the potential financial impact calculated for the next 20 years is around TRY 171.2 mn.

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**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**

Other, please specify (Inability to meet customer demand)

**Company- specific description**

Garanti BBVA proactively invested in its human capital on renewable energy in mid-2000s and therefore hold the market leader position for wind power projects with 28.1% market share. The Bank'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. As of 31.12.2018, Garanti BBVA provided USD 5.1 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 BBVA 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

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

966880000

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

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 966.8 mn based on average USD/TRY in 2018) in volume.

**Management method**

Garanti BBVA 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. The Bank has a team of 4 people specialized in energy sector, especially renewables by the end of 2018. The Bank's investment in human capital on renewable technologies started in mid-2000s.

**Cost of management**

40171

**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 BBVA'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 40 thousand resulting from at least two weeks effort of the energy desk.

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**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**

Other, please specify (Inability to do business)

**Company- specific description**

Water scarcity and drought caused by climate change has a direct impact on Hydro-Electrical Power Plant projects financed by Garanti BBVA 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

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

82000000

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

For instance, drought in 2017 led to a revenue loss of TRY 82 mn in cash flows of our HEPP portfolio (More details can be found in our CDP Water response).

**Management method**

Garanti BBVA expects from its customers to examine impacts of CC 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&surface water, water quality&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 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. It is also important to highlight that the Bank favors wind&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&solar projects.

**Cost of management**

306258

**Comment**

Garanti BBVA has invested roughly TRY 285 thousand on formation and implementation of ESIA Model by cooperating with consultants. Additionally, our E&S experts have conducted regular site visits to monitor the implementation of the ESAP items including water management risks. In 2018, four hydro-electrical power plants were visited by our experts and it costed around TRY 6,258. Besides, we organized 5 workshops within the scope of Sust.&Risk Mngmnt, where stakeholders including customers and non-governmental organizations were informed on most current topics related to sust.business models, such as innovative ESG practices, green financing options, risks stemming from digitalization, new trends in relation to transparency and non-financial reporting and env. risk perception in the insurance industry. Cost of workshop was TRY 15,000. Therefore total cost of management was TRY 306 thousand. These three efforts are mitigating significantly the risk of financing controversial projects.

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**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

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 BBVA implements an E&S Impact Assessment Process in line with international best practices to help drive improvement across its loan portfolio. In order to respond stakeholder demand on climate change action, the Bank published its Climate Change Action Plan Statement in 2015. The Bank 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. Additionally, Garanti BBVA'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

### Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

### Potential financial impact figure (currency)

798000000

### Potential financial impact figure – minimum (currency)

<Not Applicable>

### Potential financial impact figure – maximum (currency)

<Not Applicable>

### Explanation of financial impact figure

Reputational damage due to controversial issues could result in disruption of the borrowings and security products entailing ESG criteria. In 2018, the Bank secured funds worth USD 162 mn (TRY 798 mn based on the currency exchange rate in 2018).

### Management method

Besides the company level efforts mentioned in the description, Garanti BBVA 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 BBVA 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 the Bank is also one of the main sponsors. In 2018, the scope of the Declaration was updated by decreasing the limit of investment amount from USD 50mn to USD 20mn. For further details on the Declaration please refer to: <https://www.unglobalcompact.org> We 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, the Bank became a member of UNEP FI Banking Principles Core Group. The core group is being developed the principles and framework that will define and affirm the banking industry's role and responsibilities in shaping and financing a sust. future, in alignment with internationally agreed targets detailed in the Paris Agr. and the SDGs. <http://www.unepfi.org/news/industries/banking/principles-coregroupannouncement/>

### Cost of management

561727

### Comment

The additional costs associated to E&S 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, sponsorships to sustainability-related events or studies. In 2018, Garanti BBVA contributed TRY 561.7 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. For further details on the Declaration please refer to: <https://www.unglobalcompact.org/news/4281-10-23-2017> and <http://www.unepfi.org/news/industries/banking/principles-coregroupannouncement/>

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**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**

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 PMR project conducted in collaboration with the WBG. In preparation for this, the regulatory framework on 'Monitoring GHGs Emissions' was published by the Ministry of Environment and Urbanization in the official gazette on 17.05.2014. The regulation requires companies from energy-intensive sectors to monitor, report and verify their CO2 emissions. While ETS would not apply directly to Garanti BBVA, 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

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

110204409

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

We do believe that such regulation could result in an additional cost of TRY 110.2 mn for a thermal power plant of 600 MWe assuming a carbon tax/price of USD 5 (equivalent TRY 24) per tonne of CO2e (The price was converted to TL based on the annual average USD/TRY exchange rate mentioned by TCMB).

**Management method**

To insulate from price increases, Garanti BBVA 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 as we publicly disclose in our Integrated Annual Reports.

**Cost of management**

56000

**Comment**

This cost includes Garanti BBVA'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 the Bank's customers related to latest sustainability trends including CPLC work..

**(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

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**(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**

Other, please specify (Return on investment in low-emission technology)

**Company-specific description**

Turkey seeks to form its own emissions trading scheme (ETS). In preparation for this, the regulatory framework on 'Monitoring GHGs Emissions' was published by the Ministry of Environment and Urbanization in the official gazette on 17 May 2014. The regulation requires companies from energy intensive sectors to monitor, report and verify their CO2 emissions. While ETS would not apply direct to Garanti BBVA, 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

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

966880000

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

Considering the current renewable portfolio, this opportunity could create new financing opportunities amounting to as high as USD 0.2 bn per year (TRY 966.8 mn based on average USD/TRY in 2018) in volume.

**Strategy to realize opportunity**

Garanti BBVA 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 structures signed with two clients, launched in 2018. These efforts resulted in a market share of 28.1% in wind energy sector. Garanti BBVA is expected to have ~%10-15 market share from future renewable pipeline over the next 3-4 years.

**Cost to realize opportunity**

40171

**Comment**

here 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 BBVA'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 40 thousand resulting from at least two weeks effort of the energy desk.

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**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**

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 BBVA could finance. Considering the current infrastructure portfolio, this opportunity could create new financing opportunities amounting to as high as USD 50 mn (TRY 241.7 mn according to the average USD/TRY exchange rate in 2018) per year.

**Time horizon**

Long-term

**Likelihood**

More likely than not

**Magnitude of impact**

High

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

241722500

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

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 BBVA 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 BBVA organized five workshops within the scope of Sustainability and Risk Management, where stakeholders including customers and non-governmental organizations were informed on the most current topics related to sustainable business models, such as innovative environmental, social and governance practices in Turkey, green financing options, risks stemming from digitalization, new trends in relation to transparency and non-financial reporting and environmental risk perception in the insurance industry. The cost of the workshop was TRY 15 thousand in 2018.

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**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**

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

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

860155000

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

Garanti BBVA 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 BBVA issued the first residential mortgage covered bond ever, which is IFC has invested the first time in Turkey as well. In addition, a Green Mortgage agreement for EUR 75 mn equivalent TRY 313 mn was executed with the EBRD in 2017. These funds (A total of TRY 860 mn) have been used 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 BBVA's track record on the management of environmental and social issues, as well as its capability to tailor existing products according to SDGs play an important role in benefiting from IFI funding.

**Strategy to realize opportunity**

Driven in large part to ensure that Garanti BBVA 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 (in the Bank's Annual Integrated Reports and in the sustainability website <https://surdurulebilirlik.garanti.com.tr/en>) launched in 2018, 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 training resulting in better management of loan portfolio-related climate risks, developing innovative products/services and leadership in financing of renewable energy projects. In addition, the Bank supports CDP Water program in Turkey and has a Climate Change Position Statement and Action Plan to demonstrate its dedication.

**Cost to realize opportunity**

605603

**Comment**

In 2018, Garanti BBVA's primary costs have been (1) ISO14001 certification, (2) environmental and social workshop organized and



(3) membership fees for initiatives. The total cost was TRY 605,603 in order to realize this opportunity.

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**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**

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

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

5948226

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

Due to emissions reduction activities such as energy efficiency implementations (LED installation and AC renewal), the installation of Trigenation Unit and the installation of roof type solar panels in three of our branches, 11,594,984.02 kWh was saved in terms of electricity consumption in 2018, corresponding to TRY 5.9 mn of additional operating cost savings in 2018. In 2019, savings will be 15,698,022 kWh corresponding to TRY 7.9 mn. Based on the estimated life-time of LED and AC devices, these investments will be provide at least TRY 145.020.638 mn savings for the next 20 years.

**Strategy to realize opportunity**

Garanti BBVA published its Climate Change Action Plan Statement in 2015. The Bank 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 BBVA 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, we invested in three rooftop solar power plants with the operational installed capacity of 6 to 50 kW for our service points in three cities and our Pendik Tech Campus was built to meet LEED-certification.

**Cost to realize opportunity**

50442651

**Comment**

Garanti BBVA has invested roughly TRY 50.4 mn in energy efficiency efforts. The calculations include AC and LED renewals in our existing buildings in 2018.

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**(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 BBVA, 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 206 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 BBVA'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 BBVA 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 BBVA in terms of operation and financial return. This might affect the borrower's ability to repay the loan. For instance, drought in 2018 led to a revenue loss of USD 17 mn in cash flows of our HEPP portfolio. #Risk 7: A future ETS or carbon tax mechanism could indirectly impact the company by imposing new demands on borrowers, especially for project finance, which could impact project performance and ability to repay.
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 BBVA, since the Bank has mitigated them in the past. The Risk 5 has impacted some part of our loans, since we strive 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 BBVA 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 BBVA 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 BBVA also started to construct solar panels in some of its branches to insulate from price increases. #Risk 6 / Opp 3: 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, low cost funding support and customer loyalty, among other challenges.
Adaptation and mitigation activities	Impacted	The Codes used below are the same with C2.3a/C2.4a. Risk4 has not impacted Garanti BBVA, since the Bank has mitigated them in the past. Opp1/Opp 2 have not impacted the Bank yet, since they are related to a future pipeline of financing opportunities. Risk5 has impacted some part of our loans, since we strive to avoid HEPP projects. Risk6 has not impacted the Bank, since we are managing our reputation risk. Risk7 has not impacted the Bank's operations as well, since an ETS or carbon tax mechanism is not established yet. #Risk4/Opp1/Opp2: Garanti BBVA'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. 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. #Risk5/Risk6: Within the scope of its Environmental and Social Impact Assessment Process, Garanti BBVA 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 training 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 training organized with CDP. #Risk4/Risk7/Opp1/ Opp2: 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. The cost of not proactively investing on capacity building might result in a loss of market share (TRY 966.8 mn). Proactive management of such risks would enable the Bank's portfolio to be more resilient.
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, we works with our peers to enhance the business practices on sustainable banking. As the Chair of Sustainable Banking and Finance Working Group of UNGC Network Turkey, we 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 we are also one of the main sponsors. In 2018 we expanded the scope of Declaration to include a decrease in investment amount limit and some provisions to ensure better control of Banks on the impact of projects financed by them. For further details on this declaration please refer to: <a href="https://surdurulebilirlik.garantibbva.com.tr/sustainability-blog/global-compact-turkey-s-declaration-on-sustainable-finance-has-been-updated/">https://surdurulebilirlik.garantibbva.com.tr/sustainability-blog/global-compact-turkey-s-declaration-on-sustainable-finance-has-been-updated/</a> In March 2018, we became a member of UNEP FI Banking Principles Core Group. We are the only founding member bank from Turkey. The Principles, aimed at aligning the banking sector with UN Sustainable Development Goals (SDGs), will provide substantial contribution to these goals along with the Paris Agreement through setting the roadmap for the banking sector. For more information: <a href="http://www.unepfi.org/news/industries/banking/principles-coregroupannouncement/">http://www.unepfi.org/news/industries/banking/principles-coregroupannouncement/</a> . Besides, Garanti BBVA 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.

	Impact	Description
Operations	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. 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 2.7%) 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 11.5 mn).
Other, please specify	Please select	

## C2.6

### (C2.6) Describe where and how the identified risks and opportunities have been 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 BBVA, since the Bank has mitigated them in the past. Risk 5 has impacted some part of our loans, since we strive to avoid HEPP projects. Risk7 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. #Risk2: 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 206 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 BBVA'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. We are 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 966.8 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 241.7 mn per year. #Risk5: 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 2018 led to a revenue loss of TRY 82 mn in cash flows of our HEPP portfolio. #Risk7: A future ETS or carbon tax mechanism could indirectly impact the company by imposing new demands on borrowers, especially for project finance, which could impact project performance and ability to repay. We believe that such regulation could result in an additional cost of TRY 110 mn for a thermal power plant of 600 MWe assuming a carbon tax/price of USD 5 (equivalent TRY 24) per tonnes of CO2e.
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 additional cost of possible carbon tax could be as high as TRY 11.5 mn based on our 2018 electricity consumption).
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 BBVA'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), we supported our 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 BBVA 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 BBVA also started to construct solar panels in some of its branches to insulate from price increases and reduce the usage of natural capital. The Bank uses financial and intellectual capital to manage such risks/opportunities. For instance the financial capital that Garanti BBVA utilized to insulate from price increases is roughly TRY 50.4 mn in 2018 (in energy efficiency across its operations). #Risk 6 / Opp3: Besides the company level efforts, Garanti BBVA works with peers to enhance the business practices on sustainable banking. The Bank uses intellectual, human and financial capital in its country-wide capacity building efforts. The financial capital that Garanti BBVA utilize for capacity building events on carbon pricing had been TRY 561,727 in 2018 (includes the total cost of memberships to sustainable business platforms, sponsorship to sustainability-related events or studies).

	Relevance	Description
Acquisitions and divestments	Impacted	Garanti BBVA 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, the 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. By the end of 2018, we provided over USD 5.1 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. In 2018, the Bank secured funds entailing ESG/sustainability criteria worth USD 162 mn (TRY 798 mn based on the currency exchange rate in 2018). Besides, Garanti BBVA 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 BBVA issued the first residential mortgage covered bond ever, which is IFC has invested the first time in Turkey as well. Garanti BBVA's track record on the management of environmental and social issues, as well as its capability to tailor existing products according to Sustainable Development Goals play an important role in benefiting from IFI funding. Reputational damage due to controversial issues could result in disruption of the sustainability funds utilized from IFIs.
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 2018 led the HEPP investors in our loan portfolio to lose revenue as high as USD 17 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 206 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 disruption of the borrowings and security products entailing ESG/sustainability criteria. In 2018, the Bank secured funds worth USD 162 mn (TRY 798 mn based on the currency exchange rate in 2018).
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

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

Garanti BBVA 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 BBVA had a separate sustainability strategy until 2017, but the Bank integrated all these non-financial factors into its corporate strategy in 2017. 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 2018 led to a revenue loss of roughly USD 17 mn (TRY 82 mn based on the currency exchange rate in 2018) 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 based on the average global temperature increase stated in the 2018 Annual Report of Turkish State Meteorological Service. 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 BBVA 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 BBVA proactively invested in its human capital on renewable energy in mid-2000s and therefore gained a market share of 28.1% in wind energy sector. Garanti BBVA'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 BBVA provided over USD 5.1 bn of financing to renewable investments so far thanks to its internal capacity building efforts on this sector). In 2018, the total avoided emissions of operational solar power plants, wind power plants and hydro power plants projects that Garanti BBVA has participated in financing was 5.4 million tCO<sub>2</sub> e based on the current average grid emission factor for Turkey. Also, such efforts enabled to secure favored lending from international financial institutions for supporting low-carbon investments. Garanti BBVA 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 TRY 0.96 bn (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 training programs). 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 disruption of the borrowings and security products entailing ESG criteria. In 2018, the Bank secured funds worth USD 162 mn (TRY 798 mn based on the currency exchange rate in 2018).

In terms of governance, please see sections Sustainability Committee (p142), Responsible Business Committee (p145) and Environmental and Social Risk Management (p154) of our 2018 Integrated Annual Report ([https://surdurulebilirlik.garantiobbva.com.tr/media/1379/gb18\\_eng-integrated-annual-report.pdf](https://surdurulebilirlik.garantiobbva.com.tr/media/1379/gb18_eng-integrated-annual-report.pdf) ).

### C3.1d

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

Climate-related scenarios	Details
IEA Sustainable development scenario Other, please specify (The Oliver Wyman)	<p>The Oliver Wyman(OW) tool proposes scenario analysis for use in sectors that are of particular relevance to BBVA's portfolio and that are associated with possible climate-related transition risks. This methodology (from TCFD pilot) aims to narrow down the almost infinite number of variables that can arise around climate change (CC) using an analysis based on predictions from different models and provides different changes in the markets used for each scenario. As a reference, BBVA used the outcomes given in the IEA's SDS, which is the closest to 1.5°C target. Difficulty lies in objectively converting those changes to financial indicators. Use of risk pathways is therefore recommended as a way to study how these changes would affect specific indicators that are reliable to businesses. The 4 pathways used are: Increase in cost of direct emissions, Increase in cost of indirect emissions, Increase in capital costs associated with a transition to low-carbon economy and variations in revenues. For stress-testing, BBVA chose to further define which events might cause changes to stress situations and to analyze different possibilities offered by scenarios. A matrix was created for this to separately analyze different events. It analyzes their impact on different stressors, and this is weighted by the probability of these events occurring in the medium term. The result of this analysis is the average impact in each stress situation that has been transferred to the model used within the framework of the UNEPFI pilot. Events analyzed are the following: Fall in demand for fossil fuels&amp;rise in price of fuel, increased cost of CO2 emissions, increase in diesel tax, change in market preferences and replacement of obsolete technology. To simulate this outcome, the model is calibrated by studying a range of customers. Calibration can be performed by estimating how the customer's rating will vary depending on its env.performance or, alternatively, by evaluating how probability of default(PD) will be modified. BBVA opted to use rating variations basing its predictions on those provided by CDP. Customers selected for this calibration are those with the highest turnover in each sector. OW model analyzes changes in PDs for each sub-sector based on env.models for the coming years. Selected sectors in 1st phase were oil&amp;gas, utilities, transportation, as they are considered the most relevant both for BBVA and for CC. In this sense, and as part of our public commitment to mitigate impacts derived from CC, BBVA joined pilot group supervised by UNEPFI, works for implementation of recomm.of TCFD. Once ended this pilot group, BBVA has joined an initiative to develop methodologies to evaluate portfolios in sectors with highest impact and gradually align them with goals set in Paris on CC. Methodology that is going to be used is PACTA, developed by 2° Investing Initiative think tank. Methodology consists of gaining a better understanding of CC strategy used by customers in these sectors, tech.changes required and plans to reduce their CO2 emissions. These simulations can be used to make a 5-year projection of customer's tech.transition in a given industry and provide a comparison, in line with scenarios offered by IEA. This methodology is due to be piloted in 2019 in selected sectors. As a preliminary step and following TCFD, BBVA is one of the first banks to have published its exposure to sectors associated with fossil fuels. The PACTA methodology offers a more in-depth analysis: by offering a more rounded assessment of BBVA's exposure to key sectors and their alignment with the Paris; and, as a basis for subsequently establishing a target path for each of those sectors which may be consistent with SBT. Relevant metrics are: Oil&amp;Gas: product mix; Utilities:product mix and intensity of CO2 emissions/kWh; Transport: CO2 emissions of fleet per km (standardized by NEDC std) BBVA reports on product mix and intensity of CO2 emissions/kWh in utilities sector.</p>

**C4. Targets and performance**

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**C4.1**

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

Intensity target

**C4.1b**

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**(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

**Targeted % reduction from base year**

50

**Metric**

Other, please specify (tCO<sub>2</sub>e / billion (currency) AuM)

**Base year**

2012

**Start year**

2016

**Normalized base year emissions covered by target (metric tons CO<sub>2</sub>e)**

89562

**Target year**

2020

**Is this a science-based target?**

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

**% of target achieved**

66

**Target status**

Achieved

**Please explain**

As Garanti BBVA, 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 66% (It was 56% in 2016 and 60.2 in 2017). Total yearly GHG emissions in tCO<sub>2</sub>e reported under Scope 1 and 2 of the GHG Includes GHG emissions (CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O and F-gases) from energy consumption from fossil fuel sources for heating, generators, leased vehicle fleet in commercial use and refrigerants for Scope 1, and purchased electricity by Garanti BBVA'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 TEİAŞ. GHG emissions are reported following the guidance in GRI 305-1 Direct greenhouse gas (GHG) emissions (Scope 1), GRI 305-2 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 2018 Integrated Annual Report (For more detail: <https://surdurulebilirlik.garantibbva.com.tr/garanti-bbva-sustainability-approach/garanti-bbva-and-sustainability/environmental-impact-of-our-operations/climate-change-management/>) and our web site (<https://surdurulebilirlik.garantibbva.com.tr/garanti-bbva-sustainability-approach/garanti-bbva-and-sustainability/environmental-impact-of-our-operations/climate-change-management/>). Additionally, Garanti BBVA is also a signatory to the Science-Based Target Initiative since 2016 and committed to set a long-term emissions reduction target in line with SBTi. We aim to establish the new target in the next 1 year.

**% change anticipated in absolute Scope 1+2 emissions**

-24.9

**% change anticipated in absolute Scope 3 emissions**

0

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**C4.2**

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

**Target**

Other, please specify (Share (%) of renewables in total funds allocated to greenfield energy production facilities in PF new commitments)

**KPI – Metric numerator**

Total funds allocated to greenfield RENEWABLE energy production facilities in PF new commitments

**KPI – Metric denominator (intensity targets only)**

Total funds allocated to ALL greenfield energy production facilities in PF new commitments

**Base year**

2014

**Start year**

2016

**Target year**

2020

**KPI in baseline year**

50

**KPI in target year**

70

**% achieved in reporting year**

100

**Target Status**

Achieved

**Please explain**

With the Climate Change Action Plan launched in 2015, Garanti BBVA pledged that a minimum of 60% of the total funds allocated to greenfield energy production facilities will be directed to renewable investments. In 2016, Garanti Bank took its pledge one 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. In 2018, this ratio was far exceeded as it reached 100% similar to previous years.

**Part of emissions target**

This target applies to Scope 3 emissions originating from total funds allocated to greenfield energy production facilities in PF new commitments.

**Is this target part of an overarching initiative?**

Other, please specify (Climate Change Action Plan)

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**C4.3**

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**(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**

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

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	1	2420
To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	4	7638.8
Not to be implemented	0	0

## C4.3b

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

**Initiative type**

Energy efficiency: Building services

**Description of initiative**

Other, please specify (New equipment)

**Estimated annual CO2e savings (metric tonnes CO2e)**

233

**Scope**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

554094

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

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 started to gain by January 2018. The total investment cost (TRY 4.3 mn) including machine and installation. The values of annual CO2 and monetary savings are roughly estimated based on the difference between 2 scenarios:(1) Before trigeneration: The amount of grid electricity consumption corresponding to trigeneration unit's production capacity is 3,642,177 kWh. This equals to a cost of TRY 1,868,437 based on 2018 electricity unit price and resulted in 1,845 tCO2e based on grid mix. The total natural gas (NG) consumption for our HQs' heating purposes was estimated as 257,835 m3 and this resulted in 503 tCO2e. Based on 2018 NG unit price, the total cost of NG consumption for heating purposes is TRY 409,958. (2) After trigeneration: The total NG consumption of trigeneration is 1,084,466 m3 and this resulted in 2,115 tCO2e. Based on the 2018 NG unit price, the total cost of operating trigeneration is TRY 1,724,031. Therefore, the annual total savings in TRY is: (1,868,437+409,958)-1,724,301 = TRY 554,064; and the annual total savings in tCO2 is: (1845+503)-2115 = 233 tCO2 in 2018.

**Initiative type**

Energy efficiency: Building services

**Description of initiative**

Lighting

**Estimated annual CO2e savings (metric tonnes CO2e)**

4781

**Scope**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

4841575

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

18883361

**Payback period**

4 - 10 years

**Estimated lifetime of the initiative**

16-20 years

**Comment**

Lighting modification was planned for 881 branches and started in 2017. The replacements were completed in 151 branches in 2017 and in 630 branches in 2018. Annual CO2e and monetary savings provided here are calculated based on the electricity unit price per kWh of 2018. These savings are expected to be higher for the next year since we will see the impact of modified lighting in 881 branches next year. Since the 'investment required' presents the amount of investment provided in the reporting year (2018), the payback period has been estimated accordingly. With the next year's figures, the payback period will be 4 to 6 years based on the total investment amount.

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**Initiative type**

Energy efficiency: Processes

**Description of initiative**

Cooling technology

**Estimated annual CO2e savings (metric tonnes CO2e)**

2548

**Scope**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

2580417

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

31559289

**Payback period**

4 - 10 years

**Estimated lifetime of the initiative**

16-20 years

**Comment**

Switching to inverter A/C was planned for 525 branches and started in 2017. at 480 branches in 2018 and 75 branches in 2017 were modified in total. Annual CO2e and monetary savings provided here are calculated based on the electricity unit price per kWh of 2018. Since the 'investment required' presents the amount of investment provided in the reporting year (2018), the payback period has been estimated accordingly. With the next year's figures, the payback period will be 4-10 years based on the total installed capacity of the initiative in 525 branches and the total investment amount.

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**Initiative type**

Energy efficiency: Processes

**Description of initiative**

Other, please specify (Roof Type Solar Panels)

**Estimated annual CO2e savings (metric tonnes CO2e)**

76.04

**Scope**

Scope 2 (location-based)

### Voluntary/Mandatory

Voluntary

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

77000

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

530916

### Payback period

4 - 10 years

### Estimated lifetime of the initiative

16-20 years

### Comment

Garanti BBVA completed solar power plant investments in its branches in 3 cities with the total investment amount of TRY 530 thousand. With these investments in rooftop solar power plants, our Bodrum Branch (55 kW) and Sivas Call Centre (30 kW) have begun producing renewable power. More recently, a rooftop solar power plant has been installed at Antalya Akdeniz Branch (8 kW). The CO2e and monetary savings were calculated based on the electricity unit price per kWh of 2018.

## C4.3c

### (C4.3c) 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	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 BBVA has around 1,000 Sustainability Representatives, who are responsible for working in coordination with the Efficiency and 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. The Bank 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, the Bank developed an online monitoring system for its environmental performance. The pilot period of the online database was completed successfully and the system was implemented in 2019. Additionally, the balanced scorecard of teams under relevant departments such as Project Finance (for indirect environmental risks) and Construction Department (for direct environmental risks) include KPIs related to environmental performance. The scorecard ultimately affects the annual compensation.
Internal price on carbon	Emission Trading System (ETS) is currently not applicable in Turkey. However, as per the Climate Change Action Plan, Garanti BBVA applies its own shadow carbon price to loan requests related to carbon-intensive projects in its 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 greenfield PF energy loan portfolio.
Dedicated budget for energy efficiency	As one of our focus areas stated in our Climate Change Action Plan, Garanti BBVA several practices to establish green office standards. To achieve this goal, the Bank's Construction Department has a dedicated budget and a team. Currently, 4 buildings of Garanti BBVA have green office certificates and 1 has reached the standards (certification process is on-going). Our Pendik Technology Campus holds LEED Gold; Kızılay Service Building has LEED Platinum; İzmir Karşıyaka Service Building has LEED Gold; and our head quarter (Zincirlikuyu Office), which already has WWF Green Office Diploma, holds LEED Platinum. As mentioned above, there is an ongoing process for our Sivas Call Center Building to get LEED Gold certificate. Garanti BBVA will increase the number of its green offices as stated in its Climate Change Action Plan. The 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 BBVA expanded the scope of its ISO14001 Environmental Management System to 1,013 locations covering nearly 100% of its employees and buildings in Turkey. Since 2016, a coverage ratio of roughly 100% has been sustained. In 2017, the Bank 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 BBVA monitors environmental footprint data such as energy consumption and water consumption from each and every location through approx. 1000 Sustainability Representatives. In 2016 the Bank 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 2018, 28 people received the spot award in terms of sustainability criteria.

## 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**

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**(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 BBVA 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 2018, Garanti BBVA had allocated: USD 2.48 bn to wind power plant projects, which will have a total installed capacity of 2,421 MW once fully operational; USD 2.42 bn to hydroelectric power plant projects, which will have a total installed capacity of 3,607 MW once fully operational; USD 263 mn to geothermal power plant projects, which will have a total installed capacity of 337 MW once fully operational; USD 210 mn to solar power plant projects, which will have a total installed capacity of 260 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 2018, all of the project finance loans the Bank provided for greenfield power plants have been allocated to renewable energy projects. Garanti BBVA's share in Turkey's total operational installed capacity of wind power is 28.1%. To date, the Bank provided over USD 5.1 bn financing to renewable energy. The share of renewable investments makes up for 7.23% of the total commercial and corporate loans outstanding. Through the green project finance loan and green corporate loan introduced in the reporting period, we encourage borrowing companies to improve their sustainability performance throughout the term of the loan. We signed the first Green Corporate Loan with Zorlu Energy in June 2018 for a USD10 mn corporate loan which is the first of its kind in Turkey and fifth in the world. In August 2018, we initiated the efforts for Turkey's first ever Green Project Finance Loan which was signed with 4 local and 2 international banks.

**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**

7.23

**Comment**

7.23% is calculated as the share of renewable financing as part of total corporate and commercial loans outstanding and not revenues. As of 31 December 2018, the total avoided emissions of operational wind, solar and hydroelectric power plants that were financed by Garanti BBVA was 5.4 million tCO<sub>2</sub>e 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 [MWh/year] = Capacity [MW] x Capacity Factor [Dimensionless] x Total hours in a year [hrs/year]"; "Annual CO<sub>2</sub>e Emissions Avoided [metric tons/year] = Annual Energy Generated [MWh/year] x CO<sub>2</sub>e Grid Emission Factor [metric tons/MWh]"; "MWh Capacity Factor for Wind: 30% (conservative estimate)"; "MWh Capacity Factor for Hydro: 30% (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)" "CO<sub>2</sub>: 1; CH<sub>4</sub>: 25; N<sub>2</sub>O: 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 2018 Integrated Annual Report.

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**Level of aggregation**

Group of products

**Description of product/Group of products**

In May 2017, Garanti BBVA introduced its Eco-Friendly Vehicle Loan aimed at financing hybrid and electric automobiles that are energy efficient and environmentally friendly. The total amount of loans disbursed has reached TRY 4.8 mn by the end of 2018. Given international commitments and developments in this area, Garanti believes there is significant potential in this segment. Garanti also launched its Green Mortgage product in 2017 to promote energy efficient and environmentally friendly buildings. Since

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it was introduced in 2017 with the aim to encourage eco-friendly efficient buildings, financing provided by the Bank through the Green Mortgage product has reached TRY 368 mn by the end of 2018. Green Mortgage product corresponds to 2.14% of the total mortgage loans disbursed in 2018.

**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**

2.14

**Comment**

"% revenue from low carbon product(s) in the reporting year (2.14%)" is calculated as the share of green mortgage as part of total mortgage loans disbursed (not revenues) in 2018.

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**Level of aggregation**

Product

**Description of product/Group of products**

Garanti BBVA continued to play an advisory role for its customers whose projects our Environmental and Social Impact Assessment Process (ESIAP) were applied. In 2018, 8 projects were assessed under ESIAP. These 8 projects make up for 64% of the total project finance loans provided in 2018. The Bank also continued to increasing knowledge and awareness, building capacity of its customers in 2018 and hosted the Sustainability and Risk Management Workshop, where corporate customers from energy and infrastructure industries, consultants and NGOs were informed on cutting edge sustainable business topics such as UNEP FI Banking Principles, E&S and Digital Risks and disruptive technologies. The workshop invitation was sent to 100% of our corporate customers and consultants.

**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 (Advisory related to Environmental and Social Risks)

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

64

**Comment**

The percentage in the total Project Finance loans provided in 2018 was presented in the data box of "% revenue from low-carbon products in the reporting year" above.

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**Level of aggregation**

Group of products

**Description of product/Group of products**

In 2018, Garanti BBVA secured funds worth USD 162 mn in the scope of borrowings and security products entailing Environmental and Social Governance (ESG) criteria from international finance institutions. This amount accounts for 5.81% of the total financing the Bank secured in 2018. Additionally, Garanti BBVA'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. Garanti Pension's sustainability stock pension investment fund was worth TL 111.3 million as at end-2018 and makes up 22.72% of Garanti Pension Investment 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**

5.81

**Comment**

The percentage in the total wholesale funding Garanti BBVA received in 2018 was presented in the data box of "% revenue from low-carbon products in the reporting year" above.

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## C5. Emissions methodology

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### C5.1

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#### (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 66,2% reduction. We will continue our efforts to maintain this success and maximize greenhouse gas reductions. Garanti BBVA is also a signatory to the Science-Based Target Initiative since 2016 and committed to set a long-term emissions reduction target in line with Science-Based Target Initiative (SBTI). We aim to establish the new target in the next 1 year.

##### 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 66,2% reduction. We will continue our efforts to maintain this success and maximize greenhouse gas reductions. Garanti BBVA is also a signatory to the Science-Based Target Initiative since 2016 and committed to set a long-term emissions reduction target in line with Science-Based Target Initiative (SBTI). We aim to establish the new target in the next 1 year.

##### 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 BBVA'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

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**(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)

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**C6. Emissions data**

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**C6.1**

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

**Reporting year**

**Gross global Scope 1 emissions (metric tons CO2e)**

12933

**Start date**

January 1 2018

**End date**

December 31 2018

**Comment**

GHG emissions (CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O 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. The 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 the Turkish Electricity Generation and Transmission Corporation (TEİAŞ). GHG emissions are reported following the guidance in GRI 305-1 Direct greenhouse gas (GHG) emissions (Scope 1), GRI 305-2 Energy indirect greenhouse gas (GHG) emissions (Scope 2) and the GHG Protocol - Location-based for the reporting period.

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**C6.2**

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**(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 BBVA's electricity consumption is not available. As mentioned in "Section C5.1", Garanti BBVA'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 (2018) is stated below.

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**C6.3**

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

**Reporting year**

**Scope 2, location-based**

54300

**Scope 2, market-based (if applicable)**

<Not Applicable>

**Start date**

January 1 2018

**End date**

December 31 2018

**Comment**

The Scope 2 emission includes purchased electricity by Garanti BBVA's operations in Turkey (Headquarters, service buildings, branches and ATMs). The 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 the Turkish Electricity Generation and Transmission Corporation (TEİAŞ). GHG emissions are reported following the guidance in GRI 305-1 Direct greenhouse gas (GHG) emissions (Scope 1), GRI 305-2 Energy indirect greenhouse gas (GHG) emissions (Scope 2) and the GHG Protocol - Location-based for the reporting period. Supplier-specific data for the Bank's electricity consumption is not available.

**C6.4**

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**(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**

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**(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**

1760.71

**Emissions calculation methodology**

The calculation was made using EPA one night hotel stay emission factors and room day numbers. 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 942,31 tCO2e. In 2018, there is an increase in domestic accommodations and a decrease in international accommodations when compared to 2017. Since the modification of branches have been carried out mostly in 2018 within the scope of energy efficiency, the number of domestic accommodations has increased accordingly. The Emission Factor didn't change in 2018.



## Capital goods

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO2e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### 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

6415.88

### 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 BBVA.

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

100

### Explanation

Last year emissions were 6.455,76 tCO2e. In 2018, there is a decrease of 0.6% when compared to previous year. There is an increase in gasoline consumptions while diesel reduces by 72% in 2018.

## Upstream transportation and distribution

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO2e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### 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

355

### Emissions calculation methodology

The total amount of the wastes recorded by Garanti BBVA was 471.95 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 the Bank. It is estimated that the waste of 2018 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, 33% less domestic waste was generated in 2018 when compared to the previous year. It should be noted that the Global Warming Potential of Methane have increased from 25 to 28 in 2018.

## Business travel

### Evaluation status

Relevant, calculated

### Metric tonnes CO2e

3110.8

### Emissions calculation methodology

The Scope 3 emissions related to business air travel by Garanti BBVA employees is reported following the guidance in GRI 305-3 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 the Bank in 2018 is 27,829,517 km.

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

100

### Explanation

In 2018, approximately 18% less passenger kilometers were recorded. Although there is a 37% decrease in the long haul flights in 2018, the emission has raised around 17.5% . The main reasons of this increase are increase in emission factors by more than 5% in average and 18% increase in passenger kilometers. The total flight distance was recorded as 27,829,517 kilometers in 2018. The Scope 3 emissions due to the business flights were also presented in our 2018 Integrated Annual Report and our website (<https://surdurulebilirlik.garantibbva.com.tr/garanti-bbva-sustainability-approach/garanti-bbva-and-sustainability/environmental-impact-of-our-operations/climate-change-management/>). This data was also verified within the scope of the limited assurance.

## Employee commuting

### Evaluation status

Relevant, calculated

### Metric tonnes CO2e

1935.94

### Emissions calculation methodology

The raw data included kilometers collected from three companies. 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 (0.25679 kg CO2e/vehicle km), For 27+1 vehicles the CO2e emission factor for 50% laden rigid (3,5-7,5 tonnes) is used (0.49,759 kg CO2e/vehicle km for 50% laden and 0.53,683 kg CO2e/vehicle km for 100% laden).

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

100

### Explanation

The previous year's emissions were calculated as 1,993.24 tCO2e. This value is almost the same with a small decrease (around 0.03%) in 2018.

## Upstream leased assets

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO2e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### Explanation

Garanti BBVA 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)".

## Downstream transportation and distribution

### Evaluation status

Relevant, calculated

### Metric tonnes CO2e

400.98

### Emissions calculation methodology

The calculations were made by using the information provided by the courier suppliers which are named as Courier 1, Courier 2, Courier 3 and Courier 4 for domestic and international freights. This information includes distances (km), number of items, type of transportation (air, road etc.), type of vehicle, type of fuel used and the lot of Garanti BBVA's freights in all operations for the courier company in the reporting period. The calculation was made by multiplying total 'ton.km' for Garanti BBVA with the related Emission Factor of DEFRA. For Courier 1 operations: 16% of the Bank's consignments are domestic, 17% of consignments are short haul and 66% consignments are long haul. The EF 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 estimated as 12 kilometers and the EF used is 0.3153 kg CO2e for rigid HGV vehicles (3.5-7.5 tonnes) % 100 Laden. For Courier 2 services: The EF of a rigid HGV vehicle for 'ton.km' for 50% laden is 0.4910 kg CO2e (EF used is for the year 2017). For Courier 3 services: The EF of a rigid HGV vehicle for 'ton.km' for 50% laden is 0,5686 kg CO2e/ton.km. The EF used for the year 2018 increased around 16% compared to last year. Based on the information provided, the weight of the total cargo services also increased around 33% in 2018. For Courier 4 services: The calculation was made by using data including the total fuel usage of the company and sub-contractors and Garanti BBVA's share in operations of the company in the reporting year. The EFs used are the same with the Bank's EF and the total CO2e emissions is multiplied by the Bank's share in 2018 operations of the courier company.

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

75

### Explanation

The 100% of the total data obtained from Courier 3 and Courier 4; and 50% of the total data obtained from Courier 1 and Courier 2 were used in the calculations. The total of 400.98 tCO2e comprises of 39.74 tCO2e (Courier 1), 48.43 tCO2e (Courier 2), 203.76 tCO2e (Courier 3) and 109.06 tCO2e (Courier 4) . The following findings were noted for each service: (1)Courier 1: 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. --Courier 2: The amount of the file and package sent by using cargo services was shared by Courier 2. The number of cargo sent in 2018 was decreased by 5.5% when compared to previous year. The main reason of the decrease is the drop of the total weight of heavy packages (dropped to 1/3rd of previous year). --Courier 3: The number of deliveries were decreased around 4%. Courier 4: Diesel consumption were decreased due to the decrease in the operations of Courier 4.

## Processing of sold products

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO2e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### 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

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### 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

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### 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

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### Explanation

Garanti BBVA 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

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### Explanation

Garanti BBVA 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 BBVA has included its downstream Scope 3 emissions from energy production sector in its new commitments in the 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 greenfield energy production portfolio is 0 in new Project Finance commitments. Garanti BBVA'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, the Bank has disbursed USD 0.1 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

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### 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

10095.8

### 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 ~562.03 tons, the weight of bank statements for customers is 216.95 tons and the weight of receipts is ~328.69 tons. Environmental Paper Network's emission factors are used for each type of paper. For copy paper, the Emission Factor is 8,981.1 tons CO2e; for bank statements, the Emission Factor is 9,661.5 tons CO2e; and for ATM slips, the Emission Factor is 8,981.1 tons CO2e. It should be noted that the emission factors increased 3.5 times compared to previous year.

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

100

### Explanation

The calculated tCO2 was increased in 2018. Although decrease in consumption amount (around 26%) has been noted since the last year, the total emission has increased due to sharp increase (around 3.5 times) in emission factors in 2018. Besides Garanti BBVA has been the first bank in Turkey to create "paperless banking" operating environment and first bank in the world with ID scanning facilities in branches. Since April 2015, tablet computers have been used by employees. Avoidance in paper consumption through digital banking (usage of tablets by employees instead of print-outs) has been provided within the scope of paperless banking.

## C6.7

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

No

## C6.10

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**(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**

0.00000237

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

67233

**Metric denominator**

unit total revenue

**Metric denominator: Unit total**

28358989000

**Scope 2 figure used**

Location-based

**% change from previous year**

36

**Direction of change**

Decreased

**Reason for change**

The intensity figure decreased at a rate of 36.11% (From 0.0000036 to 0.0000023) and the GHG emissions intensity decreased at rate of 15.15% in 2018 when compared to 2017. There has been an increase in our revenue at a rate of 44.89%. The reasons of this remarkable increase are as follows: (1)In 2019, the yield of the CPI-indexed treasury bills was almost double compared to the previous year; (2)Strong growth in fees and commissions and (3)Except for CPI-indexed paper, the bank maintains its interest margin throughout the year. Besides, due to emissions reduction activities such as energy efficiency implementations (LED installation, AC renewal, installation of roof type solar panels and implementation of trigeneration unit) completed, electricity consumption in facilities decreased by 8.429.162 kWh in 2018.

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**Intensity figure**

168

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

67233

**Metric denominator**

Other, please specify (Billion currency assets under management)

**Metric denominator: Unit total**

400

**Scope 2 figure used**

Location-based

**% change from previous year**

15

**Direction of change**

Decreased

**Reason for change**

The GHG emissions intensity decreased at rate of 15,15% in 2018 when compared to 2017. Garanti BBVA's consolidated total assets increased by 12% on an annual basis and reached TRY 400 bn (As of 31 December 2018). Besides, due to emissions reduction activities such as energy efficiency implementations (LED installation, AC replacements, implementation of Trigeneration unit and installation of the roof type solar panels, armature renewal, server visualization, raising awareness) electricity consumption in facilities decreased by 8.429.162 kWh in 2018.

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## C7. Emissions breakdowns

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## C7.1

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**(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?**

Yes

### C7.1a

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**(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	11349.12	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	26.18	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	73.87	IPCC Fifth Assessment Report (AR5 – 100 year)
Other, please specify (R-134A)	211.9	IPCC Fifth Assessment Report (AR5 – 100 year)
Other, please specify (R-407A)	239.57	IPCC Fifth Assessment Report (AR5 – 100 year)
Other, please specify (R-410)	1031.95	IPCC Fifth Assessment Report (AR5 – 100 year)
Please select		Please select
Please select		Please select
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## C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
Turkey	12933

## C7.3

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

By activity

### C7.3c

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

Activity	Scope 1 emissions (metric tons CO2e)
Facility heating fuel	8427.63
Fleet (mobile sources)	3021.55
Refrigerants	1483.43

**C7.5**

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

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Turkey	54299.62		107182	

**C7.6**

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

By activity

**C7.6c**

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

Activity	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Facilities	47339.44	
Stand-alone ATMs	6960.18	

**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?**

Decreased

**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 >		There had been no renewable energy purchase in 2018. But Garanti BBVA invested in three rooftop solar power plants with the operational installed capacity of 6 to 50 kW for its service points in three cities and the Pendik Technology Campus was built according to LEED-certification. In addition to Pendik, 3 of other buildings including HQs have LEED certificate. One of our call centers located in Sivas has reached the standards and certification process is on-going. The solar panels saved a total of 150,097 kWh corresponding to TRY 77 thousands annual savings.
Other emissions reduction activities	4262	Decreased	6.05	As stated in the Section "C4.3b", due to emission reduction activities such as energy efficiency projects (LED installations, AC renewals and installation of roof type solar panels in branches and implementation of Trigenation unit), 11,594,984 kWh saved in terms of electricity consumption, which resulted in 4,262 tCO2e savings. Therefore, we would normally expect our total Scope 1+2 emissions to be 4262 tCO2e higher compared to previous year. $(4262/70463=6.05\%)$ .
Divestment		<Not Applicable >		There is no divestment, acquisition or merge in 2018.
Acquisitions		<Not Applicable >		There is no divestment, acquisition or merge in 2018.
Mergers		<Not Applicable >		There is no divestment, acquisition or merge in 2018.
Change in output	504	Increased	0.72	In 2018, the number of stand-alone ATMs reached to 3,384. It was 3,123 in 2017. There is an increase in stand-alone ATM electricity consumption amounting to 1,132,600 kWh in 2018. This increase is assumed to be due to changes in number of stand-alone ATMs and annual average temperature increase. The change (%) in total Scope 1+2 emission was calculated as follows: $504/70,463*100=0.72\%$ . However, our total Scope 1+2 emission decreased compared to last year.
Change in methodology	535.91	Increased	0.76	The grid emission factor based on 2017 TEİAŞ data, which is most recent available official data, was used for the calculation of scope 2 emissions in 2018. In 2018, there has been a slight decrease in Turkey's grid emission factor by 1% when compared to 2017 value (from 0.512 to 0.507 ). The total Scope 2 emissions in 2018 would be 535.91 tCO2e higher if we used the previous year's emission factor (i.e. 0.512). This resulted in a total artificial decrease of 0.76% in 2018 total Scope 1+2 emission $(535.91/70,463=0.76\%)$ . However our total Scope 1+2 emission decreased around 4.58% corresponding to 3,230 tCO2e. We tie this decrease to our energy efficiency investments alongside with other variables.
Change in boundary		<Not Applicable >		There is no change in boundary.
Change in physical operating conditions		<Not Applicable >		There had been no major change identified that can be directly associated with weather conditions.
Unidentified		<Not Applicable >		There is no unidentified reason.
Other	8	Decreased	0.01	There had been a decrease of 3,230 t CO2e in total Scope 1+2 emissions compared to previous year. This decrease corresponds to 4.58%. However, the sum of the changes compared to previous year stated above is 4.57%. The minor difference (0.01%) might be due to a variety of reasons including temperature fluctuations, volume of business in branches and ATMs.

**C7.9b**

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

Location-based

**C8. Energy**

## C8.1

### (C8.1) What percentage of your total operational spend in the reporting year was on energy?

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

## C8.2

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

	Indicate whether your organization 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	Yes

## 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)			51576
Consumption of purchased or acquired electricity	<Not Applicable>			107182
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>		<Not Applicable>	
Total energy consumption	<Not Applicable>			158758

## 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 heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	Yes

**(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**

37574

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

37574

**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**

8461

**Comment**

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**Fuels (excluding feedstocks)**

Diesel

**Heating value**

LHV (lower heating value)

**Total fuel MWh consumed by the organization**

2527

**MWh fuel consumed for self-generation of electricity**

1354

**MWh fuel consumed for self-generation of heat**

1173

**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**

**Comment**

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**Fuels (excluding feedstocks)**

Coal

**Heating value**

LHV (lower heating value)

**Total fuel MWh consumed by the organization**

307

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

307

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**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**

**Comment**

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**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**

**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**

**C8.2e**

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**(C8.2e) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.**

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	3792	3792	150	150
Heat				
Steam				
Cooling				

## 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**

Off-grid energy consumption from an on-site installation or through a direct line to an off-site generator owned by another company

**Low-carbon technology type**

Solar PV

Other low-carbon technology, please specify

**Region of consumption of low-carbon electricity, heat, steam or cooling**

Please select

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

**Emission factor (in units of metric tons CO<sub>2</sub>e per MWh)**

**Comment**

Garanti BBVA's electricity is purchased from the country 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**

284000

**Metric numerator**

Cubic meters

**Metric denominator (intensity metric only)**

**% change from previous year**

1

**Direction of change**

Decreased

**Please explain**

The water consumed by Garanti BBVA 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 BBVA has extended the scope of its support and became the main sponsor of the CDP Turkey Program. The Bank was also entitled to receive the "CDP Turkey Climate Leadership Award" in 2017 and 2018 and became the only financial institution worldwide to be listed in the CDP 2017 Water A List. Our Annual Integrated Report includes total water consumption mainly coming from municipality by Garanti BBVA's operations in Turkey. This figure has been reported following the guidance in GRI 303-3. The Bank's total water withdrawal by source can be seen in the Appendix A.4: Environmental Performance Data (p608) of our Annual Integrated Report.

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#### Description

Other, please specify (Domestic Waste)

#### Metric value

472

#### Metric numerator

Tons

#### Metric denominator (intensity metric only)

#### % change from previous year

33

#### Direction of change

Decreased

#### Please explain

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 BBVA's waste management approach: -Re-use: The reuse of waste is the first priority. Computers that are broken or redundant are delivered to Garanti BBVA 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. As Garanti BBVA has been reached 100% coverage of ISO14001 certified Environmental Management System (EMS) in all locations, monitoring and tracking of recycle wastes have been performed in all locations. The Bank started to publicly disclose the waste indicators in 2017. Hazardous waste data was included within the limited assurance scope for 2018 integrated annual report. We are planning to improve our data collection method and get assurance for domestic waste as well in the coming years. Method to calculate domestic waste: We identified the branches from which we were able to collect consistent data in both the number of packages and kilograms. An average waste generation amount per employee is calculated for the selected sample. This figure was then multiplied with the total number of employees and this is how we reached the domestic waste figure for the reporting year.

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#### Description

Other, please specify (Recycle Waste)

#### Metric value

560

#### Metric numerator

Tons

#### Metric denominator (intensity metric only)

#### % change from previous year

21

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**Direction of change**

Decreased

**Please explain**

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. As Garanti BBVA, we have been reached approx. 100% coverage of ISO14001 certified Environmental Management System in all locations, monitoring and tracking of recycle wastes have been performed in all locations. The recycled waste amount has been assured and published since 2017 in our Integrated Annual Report. For more information, please visit: <https://surdurulebilirlik.garantibbva.com.tr/garanti-bbva-sustainability-approach/garanti-bbva-and-sustainability/environmental-impact-of-our-operations/waste-management/>

**Description**

Other, please specify (Hazardous Waste)

**Metric value**

7

**Metric numerator**

Tons

**Metric denominator (intensity metric only)****% change from previous year**

36

**Direction of change**

Decreased

**Please explain**

Hazardous waste that is produced by the Bank is collected in accordance with determined rules and delivered to authorized recycling and disposal facilities. The hazardous waste amount has been assured and published since 2017 in our Integrated Annual Report. Hazardous recycled waste data including cartridges and batteries which are collected centrally by TAP (Portable Battery Producers and Importers Association) and HP (Hewlett Packard Enterprise). The total weight of these disposals are calculated based on the data received from these two organizations. For more information, please visit: <https://surdurulebilirlik.garantibbva.com.tr/garanti-bbva-sustainability-approach/garanti-bbva-and-sustainability/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**



**(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**

GB2018\_Integrated-Annual-Report-Limited-Assurance.pdf

**Page/ section reference**

All Pages. Garanti BBVA also discloses its emissions in its web site: <https://surdurulebilirlik.garantibbva.com.tr/garanti-bbva-sustainability-approach/garanti-bbva-and-sustainability/environmental-impact-of-our-operations/climate-change-management/>

**Relevant standard**

ISAE3000

**Proportion of reported emissions verified (%)**

100

GB2018\_Integrated-Annual-Report-Limited-Assurance.pdf

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**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**

GB2018\_Integrated-Annual-Report-Limited-Assurance.pdf

**Page/ section reference**

All Pages. Garanti BBVA also discloses its emissions in its web site: <https://surdurulebilirlik.garantibbva.com.tr/garanti-bbva-sustainability-approach/garanti-bbva-and-sustainability/environmental-impact-of-our-operations/climate-change-management/>

**Relevant standard**

ISAE3000

**Proportion of reported emissions verified (%)**

100

GB2018\_Integrated-Annual-Report-Limited-Assurance.pdf

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**C10.1b**

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**(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**

GB2018\_Integrated-Annual-Report-Limited-Assurance.pdf

**Page/section reference**

All Pages. Garanti BBVA also discloses its emissions in its web site: <https://surdurulebilirlik.garantibbva.com.tr/garanti-bbva-sustainability-approach/garanti-bbva-and-sustainability/environmental-impact-of-our-operations/climate-change-management/>

**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**

**(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?**

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C1. Governance	Other, please specify (Sustainability Governance)	Third Party Assurance-Limited Assurance within the scope of ISAE 3000	Garanti BBVA'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 102-18, 102-19, 102-20. in the Corporate Governance and Risk Management Section on pages 130-158 of 2018 Integrated Annual Report. ( <a href="https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18_eng-integrated-annual-report.pdf">https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18_eng-integrated-annual-report.pdf</a> ). GB2018_Integrated-Annual-Report-Limited-Assurance.pdf GB18-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): Environmental & Social Impact Assessment Process related to projects financed by Garanti BBVA: (1)Number of assessed projects in 2018 (2)Number of rejected projects in 2018 (3)Risk rating of the assessed projects in 2018 (4)Number of project site visits conducted during 2018. The scope of Independent Limited Assurance is presented on page 199; the KPIs mentioned above and E&S Governance are reported on page 93 (3rd part of KPI&Performance Table); and E&S Impact Assessment Indicators are presented in the Appendix A.5 (p.609) in 2018 Integrated Annual Report ( <a href="https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18_eng-integrated-annual-report.pdf">https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18_eng-integrated-annual-report.pdf</a> ). GB2018_Integrated-Annual-Report-Limited-Assurance.pdf GB18-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". In the assessment, we ranked each topic according to the magnitude of impact, likelihood of impact and time frame (short, middle, long) in terms of: (1)Direct financial impact and risk, (2)Legal, regulatory and policy drivers, (3)Opportunities for innovation, (4)Industry norms, best practices and competitive advantage. For details, please see Our Material Matters section on p42-43 in 2018 Integrated Annual Report ( <a href="https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18_eng-integrated-annual-report.pdf">https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18_eng-integrated-annual-report.pdf</a> ). GB2018_Integrated-Annual-Report-Limited-Assurance.pdf GB18-Integrated-Annual-Report.pdf

Disclosure module verification relates to	Data verified	Verification standard	Please explain
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 calendar year end (31.12.2018) in TRY billion terms compared to the previous calendar year end (31.12.2017). The total assets are based on the Bank's audited financial statements, therefore no additional financial audit took place for this indicator. Additionally, GHG emissions intensity in the reporting year and annual change in GHG emission intensity have been verified within the scope of limited assurance. GHG emissions are reported following the guidance in GRI 305-1 Direct greenhouse gas (GHG) emissions (Scope 1), GRI 305-2 Energy indirect greenhouse gas (GHG) emissions (Scope 2) and the GHG Protocol - Location-based. The GHG emission intensity and annual percentage change are reported following the guidance in GRI 305-4 as disclosed in our Integrated Annual Report and in our web site ( <a href="https://surdurulebilirlik.garantibbva.com.tr/garanti-bbva-sustainability-approach/garanti-bbva-and-sustainability/environmental-impact-of-our-operations/climate-change-management/">https://surdurulebilirlik.garantibbva.com.tr/garanti-bbva-sustainability-approach/garanti-bbva-and-sustainability/environmental-impact-of-our-operations/climate-change-management/</a> ). GB2018_Integrated-Annual-Report-Limited-Assurance.pdf GB18-Integrated-Annual-Report.pdf
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	Scope 3 emissions related to business air travel by Garanti Bank employees is reported following the guidance in GRI 305-3 and the GHG Protocol. Average passenger DEFRA emission factors (without RF) are used for air travel emissions calculations. For annual change in Scope 3 emissions, please see our web site ( <a href="https://surdurulebilirlik.garantibbva.com.tr/garanti-bbva-sustainability-approach/garanti-bbva-and-sustainability/environmental-impact-of-our-operations/climate-change-management/">https://surdurulebilirlik.garantibbva.com.tr/garanti-bbva-sustainability-approach/garanti-bbva-and-sustainability/environmental-impact-of-our-operations/climate-change-management/</a> ). GB2018_Integrated-Annual-Report-Limited-Assurance.pdf GB18-Integrated-Annual-Report.pdf
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 Bank's operations (Headquarters, 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 302-1 Energy consumption within the organization and can be found in Appendix A.4: Environmental Performance Data of 2018 Integrated Annual Report, page 607 ( <a href="https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18_eng-integrated-annual-report.pdf">https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18_eng-integrated-annual-report.pdf</a> ). GB2018_Integrated-Annual-Report-Limited-Assurance.pdf GB18-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: (1)Amount of investments in renewable energy projects by type in the reporting period; (2)Installed capacity of renewable energy projects by type in the reporting period; (3)Garanti's market share of operational installed wind capacity in Turkey in the reporting period. The scope of Independent Limited Assurance is presented on page 199; and renewable energy portfolio is presented on page 125 in our 2018 Integrated Annual Report ( <a href="https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18_eng-integrated-annual-report.pdf">https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18_eng-integrated-annual-report.pdf</a> ). GB2018_Integrated-Annual-Report-Limited-Assurance.pdf GB18-Integrated-Annual-Report.pdf
C8. Energy	Other, please specify (Yearly avoided GHG due to renewable 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 BBVA 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 TEİAŞ. The scope of Independent Limited Assurance is presented on page 199. For more details, please see Responsible and Sustainable Development Section, p122-129 in 2018 Integrated Annual Report ( <a href="https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18_eng-integrated-annual-report.pdf">https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18_eng-integrated-annual-report.pdf</a> ). GB2018_Integrated-Annual-Report-Limited-Assurance.pdf GB18-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 303-3 Total water withdrawal by source in the Appendix A.4: Environmental Performance Data of 2018 Integrated Annual Report, p608 and in the water management page of our web site ( <a href="https://surdurulebilirlik.garantibbva.com.tr/garanti-bbva-sustainability-approach/garanti-bbva-and-sustainability/environmental-impact-of-our-operations/water-management/">https://surdurulebilirlik.garantibbva.com.tr/garanti-bbva-sustainability-approach/garanti-bbva-and-sustainability/environmental-impact-of-our-operations/water-management/</a> ). GB2018_Integrated-Annual-Report-Limited-Assurance.pdf GB18-Integrated-Annual-Report.pdf
C9. Additional metrics	Other, please specify (Yearly waste generated)	Third Party Assurance-Limited Assurance within the scope of ISAE 3000	Includes total hazardous and recycled waste generated. The scope of Independent Limited Assurance is presented on page 199 and in the waste management page of our web site ( <a href="https://surdurulebilirlik.garantibbva.com.tr/garanti-bbva-sustainability-approach/garanti-bbva-and-sustainability/environmental-impact-of-our-operations/waste-management/">https://surdurulebilirlik.garantibbva.com.tr/garanti-bbva-sustainability-approach/garanti-bbva-and-sustainability/environmental-impact-of-our-operations/waste-management/</a> ). GB2018_Integrated-Annual-Report-Limited-Assurance.pdf GB18-Integrated-Annual-Report.pdf

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GB18-Integrated-Annual-Report.pdf

## C11. Carbon pricing

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### C11.1

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**(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

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**(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 BBVA 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. Carbon price application will allow us to prioritize renewable energy investments even more. Turkey seeks to establish its own emissions trading scheme (ETS) as per the Partnership for Market Readiness (PMR) Project led by the World Bank Group (WBG). PMR is a multi-stakeholder project where numerous players in the carbon pricing field is brought together to support the preparation and implementation of climate change mitigation policies in order to scale up GHG mitigation such as carbon pricing instruments. Turkey is an active member of the project and among the 19 implementing countries. The Ministry of Environment and Urbanization is currently working on a structure to implement a national ETS. In preparation for this, the regulatory framework on 'Monitoring GHG Emissions' was published by the Ministry in the official gazette on 17 May 2014. The regulation requires companies from energy-intensive sectors to monitor, report and verify their CO<sub>2</sub> emissions. While ETS would not apply direct to Garanti BBVA, 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 CO<sub>2</sub>e reduction of the existing portfolio, CO<sub>2</sub> brokerage revenues could create an extra revenue amounting to as high as USD 11.5 mn). Garanti BBVA 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, the Bank 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, the Bank also declared its Climate Change Position Statement & Action Plan.

Additionally, Garanti BBVA 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 BBVA became a member of the Global Steering Committee of CPLC.

Garanti BBVA's stewardship on carbon pricing was also published as a case study by IFC. In 2018, Sustainability and Risk Management Workshop was organized once again, where stakeholders including customers, consultants and NGOs were informed on the most current topics related to sustainable business models, such as innovative ESG practices in Turkey, green financing options, risk stemming digitalization, new trends in relation to transparency & non-financial reporting and environmental risk perception of insurance sector. In 2018, 33 corporate and commercial customers and FIs were informed one-on-one about international best practices in E&S risk management. 29 different types of E&S topics were addressed in all these meetings and contacts and 37 visits were made to customers to drive them to improve their risk management systems in this respect. 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

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

No

## C11.3

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

Yes

## C11.3a

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### (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 BBVA 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 BBVA uses actual price for carbon. If not, it uses fixed price per tCO<sub>2</sub>e emitted. The price is determined taking into consideration the market dynamics and is reviewed and updated regularly.

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

24

#### Variance of price(s) used

In October 2015, Garanti BBVA published its Climate Change Action Plan (CCAP) to support Turkey's transition to a low-carbon economy. Excerpt from our CCAP (<https://www.garantibbvainvestorrelations.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 tCO<sub>2</sub>e. 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 (equivalent TRY 24) per tonne of CO<sub>2</sub>e (The price was converted to TL based on the annual average USD/TRY exchange rate mentioned by TCMB).

#### Type of internal carbon price

Shadow price

#### Impact & implication

Garanti BBVA 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.

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## C12. Engagement

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### C12.1

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**(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

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

**Type of engagement**

Compliance & onboarding

**Details of engagement**

Please select

**% of suppliers by number**

100

**% total procurement spend (direct and indirect)**

**% Scope 3 emissions as reported in C6.5**

100

**Rationale for the coverage of your engagement**

Garanti BBVA 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. The Bank shared its Code of Conduct for Suppliers which includes provisions on ISO14001 with a message stating that their full commitment and compliance is expected. Garanti BBVA Code of Conduct for Suppliers ([https://assetsgaranti.com/assets/pdf/en/other/Garanti\\_Bank\\_Code\\_of\\_Conduct\\_for\\_Suppliers%20\(2\).pdf](https://assetsgaranti.com/assets/pdf/en/other/Garanti_Bank_Code_of_Conduct_for_Suppliers%20(2).pdf)).

**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 BBVA, 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 BBVA's sustainability objectives; -If, through your work for Garanti BBVA, 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 BBVA 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 the Bank'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. Besides the Bank's E&S Risk Mngmnt System including the ESIAP and Model aligned with international practices such as EPs, is intended to inform corporate and commercial customers on best practices in this area. This system requires to conduct assessments in terms of environment, social, health and safety and human rights issues in order to establish a risk management plan. Human rights issues for local communities are also assessed and managed by establishing E&S Management Plans in line with the international standards. In the Code, it is also stated that the Bank'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 BBVA's Code of Conduct for Suppliers covers all suppliers of the Bank. All suppliers that work for Garanti BBVA 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.

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**C12.1b**

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

**Type of engagement**

Other, please specify (Compliance requirement)

**Details of engagement**

<Not Applicable>

**% of customers by number**

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 BBVA established its E&S Loan Policies (ESLP) in 2011 and its E&S Impact Assessment Process (ESIAP) in 2012. ESIAP allows us to determine and mitigate the E&S impact of customers. Firstly, we subject all loans to our ESLP, which set the minimum E&S standards governing the extension of loans at the Bank. The Bank applies its ESLP to all loans.

**Impact of engagement, including measures of success**

Garanti BBVA aims to improve E&S performance of clients through requirements asked in loan agreements. Meanwhile, the Bank strives to build capacity of clients where feasible. For instance, we helped one of our strategic clients to understand the potential E&S 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 E&S DD 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. For more information please see p53 and p155 in our 2018 Integrated Annual Report.

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**Type of engagement**

Other, please specify (Capacity building and compliance requirement)

**Details of engagement**

<Not Applicable>

**% of customers by number**

64

**% Scope 3 emissions as reported in C6.5**

0

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

Garanti BBVA 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. For instance in April 2018, Garanti BBVA delivered a 'Sustainability in Finance' course within the curriculum of Corporate Sust. Certificate Program by REC Turkey in collaboration with BU Lifelong Learning Center. Additionally, 5th Sustainability and Risk Management Workshop was organized once again, where stakeholders including customers and NGOs were informed on the most current topics related to sustainable business models, such as innovative ESG practices in Turkey, green financing options, new trends in relation to transparency&non-financial reporting and environmental risk perception of insurance sector. Garanti BBVA financed 8 projects which were subjected to a detailed E&S risk assessment (power and infrastructure facilities) in 2018. The ratio of financing provided to these projects to total project finance commitment under the Garanti BBVA's project finance definition in 2018 is 64%.

**Impact of engagement, including measures of success**

29 different types of E&S topics were addressed in all such meetings and contacts in 2018. As of 31.12.2018, 69 projects were subjected to our E&S Impact Assessment Model. This means, by the end of 2018, Garanti BBVA achieved to improve E&S performance and awareness of 69 different investments. Please see our 2018 Integrated Annual Report, page 27 ([https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18\\_eng-integrated-annual-report.pdf](https://surdurulebilirlik.garantibbva.com.tr/media/1379/gb18_eng-integrated-annual-report.pdf)).

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**C12.1c**

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

Garanti BBVA'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 BBVA 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 2018, the Bank drove positive impact through 44 engagement platforms and 24 memberships. Garanti BBVA's engagement activities led to 14 policies/position papers that are issued to contribute SDGs. Garanti BBVA 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 BBVA is the only founding member bank from Turkey in UNEP FI's Principles for Responsible Banking Core Group. The Principles, aimed at aligning the banking sector with UN Sustainable Development Goals (SDGs), will provide substantial contribution to these goals along with the Paris Agreement through setting the roadmap for the banking sector. Defining the new role of the banking in the 21st century society and economy, they aim to maximize the impact of the banking sector on achieving a sustainable, equal and prosperous future. Besides the Bank is one of the private sector partners of the Carbon Pricing Leadership Coalition (CPLC). . Garanti BBVA also declared its support to Task Force on Climate-related Financial Disclosures (TCFD) and its Recommendation Report for climate-related risks & opportunities management. In its 2018 Integrated Annual Report, Garanti BBVA presents the TCFD Disclosure Table which is a linkage table between the Bank's disclosures and the TCFD recommendations. The Bank 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 BBVA gets to work closely with the industry players and the policy-makers. For example, the Bank is one of the main sponsors of Sustainable Finance Forum organized since 2013 to build capacity among the Turkish finance sector. As the Chair of Sustainable Banking and Finance WG of UNGC Network Turkey, the Bank led the efforts to develop the groundbreaking Declaration on Sustainable Finance as mentioned in the 'Section C2.5'. The signatory banks commit to integrating E&S risk management in their lending activities. The Declaration was launched on September 29, 2017 during the V. Sustainable Finance Forum organized by BCSD Turkey, of which Garanti is also 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. In 2018 the WG expanded the scope of Sustainable Finance Declaration to include a decrease in investment amount limit and some provisions to ensure better control of Banks on the impact of projects financed by them. For further details on this declaration please refer to: <https://www.unglobalcompact.org/news/4281-10-23-2017>.

**C12.3**

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**(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**

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

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Climate finance	Support	Garanti BBVA supported 2nd Voluntary National Review Report with its green loan agreement.	The Bank shared details and loan structure of its green loan products with the Department of Strategy Development of Presidency as a case study for the 2nd Voluntary National Review Report..
Climate finance	Support	Garanti BBVA attended the 24th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP24) as a presenter and a panel moderator.	During the conference, with the aim to share and promote the work carried out in our country to tackle climate change at an international level, Garanti BBVA informed about its pioneering practices and the contributions of the finance sector in Turkey. The Bank was among the organisations representing Turkey in the COP24 with its various distinctive and innovative practices in sustainability, including its products and solutions, such as the first social bond issue to developing countries, green mortgage and the first green loan in Turkey.
Energy efficiency	Support	Garanti BBVA presented its initiatives to combat climate change at the 10th Energy Efficiency Forum and Fair.	As it has increased both its portfolio of sustainable loan options and its financing of innovative projects aimed at supporting green and renewable investments, Garanti BBVA shared its efforts to fight climate change. The main tasks from the Bank's presentation are as follows: (1)The green mortgage loan for energy efficient buildings; (2)The Eco-Friendly Vehicle Loan aimed at financing electric and hybrid automobiles; (3)Green loans that tie interest and commission rates to sustainability performance; and (4)Leasing loans for resource efficiency and small scale renewable energy applications. For more details, please visit: <a href="https://surdurulebilirlik.garantibbva.com.tr/sustainability-blog/garanti-helps-to-fight-climate-change-with-its-growing-portfolio-of-green-and-renewable-investments/">https://surdurulebilirlik.garantibbva.com.tr/sustainability-blog/garanti-helps-to-fight-climate-change-with-its-growing-portfolio-of-green-and-renewable-investments/</a>
Other, please specify (Sharing Experience with Public Authority)	Support	Garanti BBVA participated in the consultation meetings for Turkey's 11th Development Plan. The consultation meetings were organized by the Ministry of Development. Garanti BBVA shared its comments via the Environment and the Sustainability of Natural Resources Working Group.	Garanti BBVA 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 influenced, or are you attempting to influence their position?**

Garanti BBVA 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 2018, we contributed a draft regulation for the Ministry of Environment and Urbanization, Turkey's 3rd OECD Performance Report, a position paper presented to the government and UNDP; and the case study report consolidated for Talanoa Dialogue through this WG. 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> 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 BBVA is the Chair of Finance Mechanisms & Incentives Sub-WG. Additionally, we 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](https://tusiad.org/en/press-releases/item/download/8453_c328d6f3bffb08c03d978f213a0a3774).

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**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 influenced, or are you attempting to influence their position?**

Garanti BBVA 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 BBVA 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 BBVA'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).

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**C12.3d**

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

Yes

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**C12.3e**

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

Garanti BBVA adopts various reporting initiatives and platforms 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. The Bank 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 BBVA is also the Vice chair of TUSIAD (Turkish Industry and Business Association) Climate and Environment Working Group.

In March 2018, Garanti became a member of UNEP FI Banking Principles Core Group. This group is developing 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 have been 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 BBVA gives importance to external capacity building activities. For instance, with an aim of spreading its approach to other financial institutions in Turkey, the 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 BBVA 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. In 2018, the WG expanded the scope of Sustainable Finance Declaration to include a decrease in investment amount limit and some provisions to ensure better control of Banks on the impact of projects financed by them. 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](https://www.unglobalcompact.org/docs/news_events/Local%20Networks/Sustainable%20Finance%20CEO%20Letter.pdf)

Moreover, Garanti BBVA is the Chair of Sustainable Banking and finance WG of UNGC Network Turkey. Besides, Garanti BBVA became the main sponsor of CDP Turkey in 2017.

In 2018, we contributed 601 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. 65% of this amount was contributed to lobbying activities for climate change, 22% was contributed to lobbying activities for sustainable finance. For further details of our Memberships & Supported Initiatives please refer to:

<https://www.garantibbvainvestorrelations.com/en/sustainability/detail/Supported-Initiatives/864/3771/0>.

## **C12.3f**

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### **(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 BBVA'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, the 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 BBVA's Sustainability Policy. As defined in its Sustainability Policy, some of Garanti BBVA's strategic priorities include minimizing the negative impact of lending and investment activities, educating customers on sustainability and developing products and services that help catalyse the transition towards a more sustainable economy. The 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 BBVA published its Climate Change Position Statement and Action Plan stating its 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 BBVA 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**

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**(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**

GB18-Integrated-Annual-Report.pdf

**Page/Section reference**

122-129

**Content elements**

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

Other metrics

**Comment**

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C14. Signoff

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C-FI

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**(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.garantibbva.com.tr/sustainability-blog/first-green-loan-of-turkey-from-garanti-bbva-to-zorlu-enerji/>

Additionally, Akfen Renewable Energy signed Turkey's first 'green project finance' agreement with four local and two international banks. Akfen Renewable Energy will install four wind power plants, with 242 MW installed capacity under the project agreement. The total investment cost of the project is 350 million USD, whereas the plants will be located in Çanakkale and Denizli provinces of Turkey. Garanti BBVA is the 'facility agent' and 'green loan coordinator'. For more information please visit:

<https://surdurulebilirlik.garantibbva.com.tr/sustainability-blog/turkey-s-first-green-project-finance-agreement-signed-with-akfen-renewable-energy/>

#### **Integrated Annual Report:**

Garanti BBVA presented its second Integrated Annual Report in 2018. 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 BBVA in 2018, 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 2019. Please visit the link below for our second Integrated Annual Report, where you will find all these developments which have taken place in line with our vision and more. Garanti BBVA 2018 Integrated Annual Report: [https://surdurulebilirlik.garantibbva.com.tr/media/1379/qb18\\_eng-integrated-annual-report.pdf](https://surdurulebilirlik.garantibbva.com.tr/media/1379/qb18_eng-integrated-annual-report.pdf)

#### **UNEP FI Responsible Banking Principles**

The 'Principles for Responsible Banking' were announced at the UN Environment Program Finance Initiative (UNEP FI) meeting in Paris on November, 26th. Out of 28 founding member banks, senior executives attended the meeting. Garanti BBVA is the only bank from Turkey among the founding members. For more information. <https://surdurulebilirlik.garantibbva.com.tr/sustainability-blog/garanti-bbva-was-the-only-founding-member-bank-of-principles-for-responsible-banking-from-turkey/>

#### **Sustainability Web Site:**

Garanti BBVA launched its "Sustainability Website" in May 2018. Our new website presents Garanti BBVA's sustainability approach and journey, latest global developments on sustainability and our practices. For more information, please visit: <https://surdurulebilirlik.garantibbva.com.tr/en>

## C14.1

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**(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

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**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