Welcome to your CDP Climate Change Questionnaire 2021

C0. Introduction

C0.1

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

Incorporated on September 1, 2001, Shinhan Financial Group(SFG) was the first privately established financial holding company in Korea. Since inception SFG has developed and introduced a wide range of financial products and services in Korea, and aims to deliver comprehensive financial solutions to clients through a convenient one-portal network. Shinhan Financial Group has 17 subsidiaries, providing customers with a full range of excellent financial services, including banking, credit cards, securities, insurance, and asset management. SFG currently serves approximately 19 million customers through approximately 30,530 employees at 1,368 networks. Since SFG recently acquired Orange Life, we exclude the carbon emissions from Orange Life.

C0.2

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

	Start date	End date	Indicate if you are providing emissions data for past reporting years
Reporting year	January 1, 2020	December 31, 2020	No

C0.3

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

Republic of Korea

C0.4

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

KRW

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C-FS0.7

(C-FS0.7) Which organizational activities does your organization undertake?

Bank lending (Bank)
Investing (Asset manager)
Investing (Asset owner)
Insurance underwriting (Insurance company)

C1. Governance

C1.1

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

Yes

C1.1a

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

Position of individual(s)	Please explain
Board-level committee	The final decision related to sustainability management including climate change is made by ESG Strategy Committee which consists of 5 members of the Board including Chairman of Shinhan Financial Group. In order to effectively respond to the accelerating climate change, the ESG Strategy Committee was established in 2015 as the highest-level decision-making body in relation to sustainability under the Board so as to establish environmental management system. Through the Committee, the Group's ESG strategies for creating environmental value have been continuously carried out, and the company-wide efforts to implement environmental management have been intensified at the Group level. In addition, risks related to climate change are managed through Risk Management Committee, a committee within the Board for group-level risk management. With the purpose of effectively responding to climate change at the group level, Shinhan Financial Group established and proclaimed its Principles for Responding to Climate Change in December 2019 for the first time in the domestic financial industry. Shinhan Financial Group have thus laid a strong foundation for our

	systematic response to all potential environmental and social risks involved in the industry. In December 2020, Zero Carbon Drive which is the Group's carbon neutral strategy was resolved in the board. Along with this, SFG set the target to reduce the asset portfolio's carbon emissions to zero by 2050 and the Group's carbon emissions reduction are quarterly reported to the ESG Strategy Committee.

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	Scope of board-level oversight	Please explain
Scheduled – all meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives Monitoring and overseeing progress against goals and targets for addressing climate-related issues	Climate-related risks and opportunities to our own operations Climate-related risks and opportunities to our bank lending activities Climate-related risks and opportunities to our investment activities Climate-related risks and opportunities to our other products and services we provide to our clients The impact of our own operations on the climate The impact of our bank lending activities on the climate	The ESG Strategy Committee under the Board of Directors is held regularly four times a year to review strategies and policies for responding to climate change, action plans, and business plans. In addition, it sets greenhouse gas emission target to respond to climate change and checks the level of achievement of target qualitatively and quantitatively. Risk Management Committee establishes polices for managing climate change risks by being reported on related issues through the Group Risk Council and checking them.

		The impact of our investing activities on the climate The impact of other products and services on the climate	

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)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	Reports to the board directly	Both assessing and managing climate-related risks and opportunities	Risks and opportunities related to our bank lending activities Risks and opportunities related to our investing activities Risks and opportunities related to our other products and services Risks and opportunities related to our own operations	Quarterly

C1.2a

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

In order to manage climate change risks and opportunities, Shinhan Financial Group is operating the Group ESG Implementation Committee, chaired by the group CEO, who is the highest decision maker, in which all group CEOs participate. The Group ESG Implementation Committee is a consultative body that discusses policy and strategic issues related to the group's sustainability management, including climate change. The Group ESG Implementation Committee inspects and monitors the performance and management status of climate change and environmental/social risk management. In addition, it is operated as a meeting to discuss the Group's major ESG-related core businesses, policies and regulations before being

presented to the ESG Strategy Committee, and also reported and discussed Zero Carbon Drive, the group's carbon neutral policy in 2020. And also the group CEO monitors, evaluates, and manages the group's internal carbon emissions and exposure to significant areas of group assets through data from The Group ESG Implementation Committee. The Group CEO communicates with the ESG Strategy committee members based on this data and can effectively help the climate change-related committee make the final decision.
Before CEOs of subsidiaries discussing key issues on climate change, there are operating two separate meetings to review climate change-related opportunities and risk factors.
Firstly, there is the Group ESG CSSO Council, which discusses opportunity factors, major business and financial performance related to climate change. In 2020, the CSSO (Chief Strategy and Sustainability Officers) of all group companies jointly established the Group ESG CSSO Council to monitor sustainability management performance and establish strategies. This is an organization where CSSOs in charge of climate change-related issues for each group company discuss in advance the progress and issues related to climate change and sustainability management before reporting the group's core monitoring agenda to the Group ESG Implementation committee. In addition, before the Group ESG CSSO Council, as a sub-group, the Group ESG Working Group was established in which working-level officials in charge of climate change and sustainability management of each group company jointly discover and implement related tasks. The Group ESG working Group is held once a month, and in the case of the Group ESG CSSO council, once a quarter, the group's activities on climate change issues are checked and related tasks are identified.
Secondly, there is Group Risk Council, which discusses risk factors related climate change. Group Risk Council, which consists of CRO from each group affiliate, is held quarterly as an association that manages risks at the company level. Group Risk Council shares, reviews, and discuss countermeasures for each affiliate’s major risks of climate change and the environment. In particular, each affiliate has a dedicated risk management organization to handle corporate risks including climate change, and reports the current status of risk management to the Group Risk Council quarterly. In the case of major climate change risks reported to the Group Risk Council, they are reported to CEO of each affiliate within the group and the Risk Management Committee to discuss the future direction.

C1.3

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

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

C1.3a

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

Entitled to incentive	Type of incentive	Activity inventivized	Comment

Chief Executive Officer (CEO)	Monetary reward	Emissions reduction target	The sustainable management to create value is one of the yearly management goals and strategic tasks for the group CEO, who is the chairman of Shinhan Financial Group. The strategic tasks include 'Analyzing Climate Change Impact on Portfolio', 'Enhancing Environmental Financial Performance', 'Responding to Climate Change Initiatives' to expand sustainable finance. To accomplish them, TCFD roadmap establishment, response to the CDP, differentiation in climate risk management, and so on are selected as the key performance indicators which directly affects whether he receives incentives at the end of the fiscal year.

C-FS1.4

(C-FS1.4) Does your organization offer its employees an employment-based retirement scheme that incorporates ESG principles, including climate change?

	We offer an employment-based retirement scheme that incorporates ESG principles, including climate change.	Comment
Row 1	No	

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	1	One-year unit is set for short-term to check the annual change situation.
Medium-term	1	5	The year of 2025, interim inspection period for the implementation of Zero Carbon Drive which is Shinhan Financial Group's green management vision, is set as medium term.

Long-term	5		The target year(2030, 2040, 2050) of Zero Carbon Drive is set as long-term.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Taking into account in a comprehensive way business size, carbon cost, area of interest, corporate reputation, operational cost, operating loss etc, Sinhan Financial Group assesses whether the project or customer company has a substantive impact on its business financially or strategically. the details of the factors are as follows.
- Business size: the total cost of the project or the total asset of customer company with more than 10 billion KRW
- Carbon cost: additional greenhouse gas reduction cost which results in the facility investment for greenhouse gas reduction or the purchase of carbon credit by the 2 degree scenarios or government's carbon regulations
- Area of interest: 12 areas with environmental and social issues like global warming, find dust, biodiversity, industrial safety etc such as large-scale agriculture and growing of cereal crops, forestry, manufacture of chemicals, mining of oil and gas, large-scale infrastructure construction, electric power generation, wastewater and waste disposal, manufacture of weapons, marine and freshwater fishing, manufacture of tobacco products, manufacture of coke and briquettes
- Coporate reputation: negative public opinion arising from financial services with environmental issues(ex. Coal-fired power generation) which can cause corporate image decline and financial losses
- Operational cost: the cost to improve the offices or buildings with more than 5 billion KRW
- Operating loss: the financial loss by external impact with more than 5 billion KRW

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term

Medium-term
Long-term

Description of process

i) Company-level
As an effort to determine and respond to group-wide transition risk, physical risk of climate change, SFG operates a system that proactively reviews and checks possible environmental and social risks in business decisions. SFG selects and manages areas of interests where could have negative impact on environment and society. In case of providing large-scale financial services in areas of interests, environmental and social risks are assessed and risk mitigation measures are prepared if necessary. In addition, major policies related to environmental and social risk management are disclosed to the public in order to communicate with internal and external stakeholders.
ii) Asset-level
When selecting domestic/overseas business regions, SFG considers the physical effects of climate change on the region so as to protect the Group's human and physical assets and to secure operational activities. The Group has established and applies the 'Disaster/Calamity Crisis Management Guidelines' to prevent and quickly respond to damages from natural disasters such as typhoons, heavy rain, heavy snow, and earthquakes in advance. In preparation for such natural disasters, major affiliates individually operate emergency response centers in case of disasters and accidents. For stable management of financial assets, the group Environmental and Social Risk Management System(ESRMS) was established to assess and manage non-financial risks, namely environmental and social risks, in addition to the financial risks of financial support projects. Based on IFC(International Finance Corporation) guidelines for risk management and in consideration of the standards from global financial institutions, ESG evaluation agencies, and research institutions, 12 areas of interest with environmental and social issues such as global warming, fine dust, biodiversity and industrial safety are selected. Monitoring is carried out from a variety of perspectives regarding exposure in the area of interest, industry and technology changes by environmental and social issues, and regulatory trends to exclude financial support or to implement conditional financial support policies for some areas with significant environmental and social impact. Environmental and social risk management is applied to financial support projects with a substantive financial impact (total project capital costs of 10 billion KRW or more) and follows the procedures such as Pre-Screening, Risk Categorization, Environmental & Social Impact Assessment and Post-transaction monitoring. The Pre-screening investigates whether the project for investment complies with the group-oriented environmental and social risk management policy. The Risk Categorization classifies the risk ratings (A, B, C) of the project according to environmental and social impact. The Environmental & Social Impact Assessment specifically evaluates the impact of high-risk (risk rating A or B) projects on the environment and society and if mitigation or management of environmental and social risk factors is required, the risk mitigation or management measures should be included in the project financial contract. Post-transaction monitoring checks and monitors the implementation of mitigation or management measures to minimize environmental and social impact. In 2020, the carbon emissions of loan, bond, stock asset were measured.

And the climate risk is assessed and managed based on the absolute emission and carbon intensity using the management indicators for climate risk by asset. Furthermore, climate change researches are regularly carried out to determine risks and opportunities at both company- and asset-level

iii) Priority process

Shinhan Financial Group evaluates the impact of climate change issues on investment and lending activities and determines the risks, opportunities, and importance of those issues. In other words, the priority of climate change risks and opportunities are determined by comprehensively assessing whether investment targets are included in significant areas of interests such as power generation, chemical manufacturing, mining, etc., possibility of risks and opportunities due to climate change, and the financial impact of climate change on investment targets. In significant areas of interests, the investment targets with high carbon intensity compared to its sectoral average is recognized as a high risk.

iv) Case Study

(Transition Risk) As consumers' interest in climate change and the environment increases, investing in companies or businesses that have a negative impact on climate change can damage the company's image and cause business losses. In addition to economic analysis, non-financial risks such as environmental and social impacts need to be assessed and managed when making decisions on corporate and project investment. According to the ESRMS, SFG has assessed the environmental and social impact such as the natural environment and ecosystem in the neighboring areas, the infringement of living rights, health, etc. for 16 large project financing projects with total project capital costs of 10 billion KRW or more and included in areas of interests in 2020. In result, 3 of 16 PF projects were evaluated as a high-risk ones on the environment and the measures such as air filtering, wastewater treatment, eco-friendly resouce circulation etc to mitigate the environmental impact were included in the project financing contracts. For your information, with the purpose of effectively responding to climate change at the group level, Shinhan Financial Group established and proclaimed its Principles for Responding to Climate Change in December 2019 for the first time in the domestic financial industry. We have thus laid a strong foundation for our systematic response to all potential environmental and social risks involved in the industry.

(Physical Risk) According to the Korea Meteorological Administration (KMA), the average temperature of the entire summer season (June to August) from 1978 to 2020 rose by about 2.5 to 5.8 degrees. Rising temperature in the summer months have increased power consumption (a rise of about 100 million kW in Korea when the temperature rises) and increased tap water usage (an average 2.1% increase in water usage per day on a hot day). Shinhan Financial Group's electricity usage is approximately 0.03% of the national electricity usage in 2020, and assuming a 2-degree increase in the summer lasts during 30 days, Shinhan Financial Group's electricity cost will increase by approximately 6.4 billion KRW. Shinhan Bank saved power by switching the cooling-off valve of the main branch and the branch office to a digital system. By using the power stored during the late night Shinhan Bank saved electricity costs. To reduce water usage, the company replaced in-house toilet and washstand with a water-saving type and also promoted in-house campaign by using stickers and brochures.

C2.2a

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	SFG assesses the financial impact by the climate related regulations which additional carbon cost influence on the profit and determines the direction. As of 2015, Controlled Entities of the 'GHG & Energy Target Management System' with an average GHG emissions of the 3 most recent years greater than 125,000tCO2eq are subject to participate in the Emission Trading System; they are allocated the emissions allowance based on the past GHG record and must carry out operation activities and emissions reduction activities within the given range. If the emissions allowance is not enough, a company must purchase permits from other liable companies to meet the balance between the GHG emissions and the allowance. As a result, some regulated companies would have negative profits considering the long-term effects of climate change which increases operating costs due to equipment investments, purchasing carbon credits etc. As of 2020, the amount of asset, bond, loan products are totally 58.6 trillion KRW for which is included in the area of interest. Therefore some companies with negative profit margins by climate change which are related to these products could give SFG a loss of financial asset or profit margin due to the difficulty in repayment.
Emerging regulation	Relevant, always included	Basically recognizing the regulation related to climate change will influence on it directly or indirectly, SFG assesses the financial impact by the regulation and determines the direction As of 2015, Controlled Entities of the 'GHG & Energy Target Management System' with an average GHG emissions of the 3 most recent years greater than 125,000tCO2eq are subject to participate in the Emission Trading System; they are allocated the emissions cap based on the past GHG record and must carry out production and emissions reduction activities within the given range. If the emissions cap is not enough, a company must purchase permits from other liable companies to meet the balance between the GHG emissions and the allowance. Considering the current regulatory trend that is becoming more stringent, Shinhan Bank may participate in the Emission Trading System. In such case, Shinhan Bank expects operational costs to increase overall as results of various GHG reduction and energy saving activities and purchasing permits.

Technology	Relevant, always included	Surveying and analyzing the technology development trends, market trends, demands of customers, etc. due to climate change periodically, SFG identifies the risk or opportunity factors and determines the direction. The transition to a low-carbon economy has led to the development and expansion of the supply of electric vehicles, ESS(Energy Storage System), renewable energy(solar power, wind power, hydropower etc.), and in order to achieve the greenhouse gas reduction target in 2030, the government is also pushing to implement the step-by-step mandate of zero energy buildings, support the supply of high-efficiency facilities, support the supply of renewable energy, and provide electric vehicles. Shinhan Financial Group operates building energy-related products such as green energy factoring, green remodeling Secondary for loans and renewable energy fund, such as Shinhan Private Equity Green Energy Special Asset Investment Trust, Shinhan Japanese Solar Power Special Asset Investment Trust, but it is expected to reduce sales if the related financial products are not expanded or developed in accordance with the technology development sector and speed.
Legal	Relevant, sometimes included	Assessing the financial impact on investment company or project through the Environmental and Social Risk Management System, SFG determines whether to invest and if necessary, provides the conditional financial assistance which make it mandatory to reflect countermeasures to lessen the environmental impacts. Given the nature of the financial services industry, it is unlikely that litigation will arise due to direct GHG emissions. But if litigation arises due to climate change issues in companies or projects which Shinhan Financial Group invested and the employer is punished legally, SFG's financial quality could get damaged due to decline in image and reputation of investment business or project. Interbrand's 2019-20 Brand Value Survey showed that Shinhan Bank's brand value increased by 0.4% in 2020 compared to 2019 and its operating profit decreased by 10.7%. If Shinhan Financial Group's brand value would decline because of customers' climate change litigation, it may also affect operating profit.
Market	Relevant, always included	Surveying and analyzing the technology development trends, market trends, demands of customers, etc. due to climate change periodically, SFG identifies the risk or opportunity factors and determines the direction. In accordance with the National Renewable Energy 3020 policy, it aims to achieve up to 20% of total renewable energy generation by 2030. As a result, demands for renewable energy projects is expected to increase, and Shinhan Bank's GIB business unit makes a loan agreement on renewable energy PF of 805.7 billion KRW. If SFG fails to strengthen the participation ability of existing deals and to engage

		and respond competitively to new deals as demands increase, profits are expected to decline.
Reputation	Relevant, always included	Surveying and analyzing the technology development trends, market trends, demands of customers, etc. due to climate change periodically, SFG identifies the risk or opportunity factors and determines the direction. As consumers' awareness on climate change and the environment grows, company's sustainability activities with regard to climate change and the environment is affecting consumers' purchase decisions. According to a survey conducted by the Korea Insurance Research Institute, 73% of the respondents said that they have decided not to purchase goods and services from a company with negative CSR reputation. Interbrand's 2019-20 Brand Value Survey showed that Shinhan Bank's brand value increased by 0.4% in 2020 compared to 2019 and its operating profit decreased by 10.7%. If Shinhan Financial Group fails to fulfill our social responsibility related to climate change and the environment, its brand value would decline and it may also affect operating profit.
Acute physical	Relevant, always included	Since weather change due to climate change could damage the assets owned by SFG directly, SFG identify the buildings, branches which are vulnerable to weather change and determines the direction. According to the Korea Meteorological Administration, between the years 2001 and 2010, Korea saw 2.6 days per year on average, during which daily precipitation exceeded 80mn; such heavy rain effects not only agricultural and mountainous regions but also urban areas, which would bring upon physical damages to the business branches of Shinhan Financial Group. Particularly, the 18 branches of Shinhan Bank located in Gangwon Province are considered more geographically vulnerable to physical damages from heavy rainfall, which may cause operational loss from temporary business shut-down.
Chronic physical	Relevant, always included	Since weather change due to climate change could damage the assets owned by SFG directly, SFG identify the buildings, branches which are vulnerable to weather change and determines the direction. According to the Korea Meteorological Administration (KMA), the average temperature in the summer (from June to August) has risen by approximately 2.5~5.8 degrees between 1978 and 2020. Rising temperatures in the summer can not only increase power consumption and tap water usage but also reduce labor productivity. According to the Korea Electric Power Corporation (KEPCO), the nation's power consumption increases by about 1 million kW when the temperature rises by 1 degree, and assuming 2 degree rise in 30 days an additional 64 billion KRW will be incurred. Shinhan Financial Group expects the rising summer temperatures to increase operating costs due to increased cooling energy and tap water usage for room temperature management at its stores.

C-FS2.2b

(C-FS2.2b) Do you assess your portfolio's exposure to climate-related risks and opportunities?

	We assess the portfolio's exposure	Please explain
Bank lending (Bank)	Yes	In November 2020, Shinhan Financial Group declared Zero Carbon Drive for carbon neutral more focused on the environment and climate change as the next step of 2020 CSR strategy and established the carbon reduction targets of portfolio to transform its portfolio to low-carbon portfolio. To reduce the carbon emissions of the group's portfolio, SFG measures the carbon emissions emitted by loans/investments/bonds and analyzes the financial risks based on climate change scenarios. The climate risk of corporate clients is monitored based on the carbon emissions and intensity. In 2021 the climate risk will be considered in the loan/investment review process.
Investing (Asset manager)	Yes	In November 2020, Shinhan Financial Group declared Zero Carbon Drive for carbon neutral more focused on the environment and climate change as the next step of 2020 CSR strategy and established the carbon reduction targets of portfolio to transform its portfolio to low-carbon portfolio. In particular Shinhan Asset Management with declaring support for the TCFD in 2020 declared the internal climate action principles to protect the investors from climate risks by strengthening green finance and responsible investment and maximize the investor interests in the transition to a low-carbon economy. We support low-carbon transition of carbon heavy industries to protect the clients' assets safely by expecting economic loss and asset depreciation due to climate change and will reduce investment in coal-fired power plants which cause climate change and fine dust issues. In other words, we plan to establish a process to consider the financial impact of climate change across stocks, bonds and alternative investments by incorporating climate change issues into investment policy and procedure, product development, etc and provide various financial products based on the advanced investment strategy.
Investing (Asset owner)	Yes	In November 2020, Shinhan Financial Group declared Zero Carbon Drive for carbon neutral more focused on the environment and climate change as the next step of 2020 CSR strategy and established the carbon reduction targets of portfolio to transform its portfolio to low-carbon portfolio. To reduce the carbon emissions of the group's portfolio, SFG measures the carbon

		emissions emitted by loans/investments/bonds and analyzes the financial risks based on climate change scenarios. The climate risk of corporate clients is monitored based on the carbon emissions and intensity. In 2021 the climate risk will be considered in the loan/investment review process.
Insurance underwriting (Insurance company)	No, but we plan to do so in the next two years	In November 2020, Shinhan Financial Group declared Zero Carbon Drive for carbon neutral more focused on the environment and climate change as the next step of 2020 CSR strategy. Shinhan Life Insurance and Orange Life are subsidiaries in charge of the Group's insurance business. Shinhan Life Insurance is establishing insurance management policies to cope with climate change along with joining Principles for Sustainable Insurance(PSI). Recognizing the increase in claims for personal insurance and the loss rate for insurance company caused by physical climate risk, it is necessary to prepare for the climate risks by reflecting climate change issues in the insurance contract. Since Shinhan Life Insurance and Orange Life will be merged in 2021, the climate related action plans will be established.
Other products and services, please specify	Not applicable	There are no other products and services.

C-FS2.2c

(C-FS2.2c) Describe how you assess your portfolio's exposure to climate-related risks and opportunities.

	Portfolio coverage	Assessment type	Description
Bank lending (Bank)	Minority of the portfolio	Qualitative and quantitative	Shinhan Financial Group estimated the additional carbon cost for the companies in the Group's portfolio considering future carbon price scenario based on the IEA scenario. The power generation, utilities, energy, material sectors with high carbon emissions are would be exposed to transition climate risk due to the increase in future carbon price. For the transition of the Group's portfolio to low-carbon pathway the financial support to the renewable energy projects which can provide us carbon offsets would be the opportunities. Based on the national development plan goal we have established the goal to expand eco-friendly finance.
Investing (Asset manager)	Minority of the portfolio	Qualitative and quantitative	Shinhan Financial Group estimated the additional carbon cost for the companies in the Group's portfolio considering future carbon price scenario based on the IEA scenario. The power generation, utilities, energy, material sectors

			with high carbon emissions are would be exposed to transition climate risk due to the increase in future carbon price. For the transition of the Group's portfolio to low-carbon pathway the financial support to the renewable energy projects which can provide us carbon offsets would be the opportunities. Based on the national development plan goal we have established the goal to expand eco-friendly finance.
Investing (Asset owner)	Minority of the portfolio	Qualitative and quantitative	Shinhan Financial Group estimated the additional carbon cost for the companies in the Group's portfolio considering future carbon price scenario based on the IEA scenario. The power generation, utilities, energy, material sectors with high carbon emissions are would be exposed to transition climate risk due to the increase in future carbon price. For the transition of the Group's portfolio to low-carbon pathway the financial support to the renewable energy projects which can provide us carbon offsets would be the opportunities. Based on the national development plan goal we have established the goal to expand eco-friendly finance.

C-FS2.2d

(C-FS2.2d) Do you assess your portfolio's exposure to water-related risks and opportunities?

	We assess the portfolio's exposure	Please explain
Bank lending (Bank)	No, we don't assess this	So far, there have been no direct financial impacts due to water issues, so it was not taken into account.
Investing (Asset manager)	No, we don't assess this	So far, there have been no direct financial impacts due to water issues, so it was not taken into account.
Investing (Asset owner)	No, we don't assess this	So far, there have been no direct financial impacts due to water issues, so it was not taken into account.
Insurance underwriting (Insurance company)	No, we don't assess this	So far, there have been no direct financial impacts due to water issues, so it was not taken into account.
Other products and services, please specify	Not applicable	There are no other products and services.

C-FS2.2e

(C-FS2.2e) Do you assess your portfolio's exposure to forests-related risks and opportunities?

	We assess the portfolio's exposure	Please explain
Bank lending (Bank)	No, we don't assess this	So far, there have been no direct financial impacts due to forest issues, so it was not taken into account.
Investing (Asset manager)	No, we don't assess this	So far, there have been no direct financial impacts due to forest issues, so it was not taken into account.
Investing (Asset owner)	No, we don't assess this	So far, there have been no direct financial impacts due to forest issues, so it was not taken into account.
Insurance underwriting (Insurance company)	No, we don't assess this	So far, there have been no direct financial impacts due to forest issues, so it was not taken into account.
Other products and services, please specify	Not applicable	There are no other products and services.

C-FS2.2f

(C-FS2.2f) Do you request climate-related information from your clients/investees as part of your due diligence and/or risk assessment practices?

	We request climate-related information	Please explain
Bank lending (Bank)	Yes, for some	Shinhan Bank requested 16 PF projects for ESRA from energy source, carbon emissions etc to assess the environmental and social impact. In the second half of 2020 Shinhan Bank joined the Equator Principle. Based on the principle, Shinhan Bank monitors potential risks and factors of major PF projects to influence on climate change and requests climate-related information from relevant companies to measure and reduce carbon emissions of the portfolio.
Investing (Asset manager)	Yes, for some	Shinhan Asset Manager declared its support for TCFD in the second half of 2020. Based on TCFD, Shinhan Asset Manager requested our clients climate-related information such as carbon emissions, reduction targets etc to assess the climate impact.

Investing (Asset owner)	Yes, for some	Shinhan Life Insurance signed up the Principles of Sustainable Insurance in 2020 and plans to request investee climate-related information such as carbon emissions, CDP evaluation results, etc. to assess the climate impact.
Insurance underwriting (Insurance company)	No, and we don't plan on requesting climate-related information	Shinhan Life Insurance plans to review the practices of customer's behavior that may affect climate change(e.g. use of public transportation, etc.) and integrate them into individual insurance products to encourage individuals to reduce carbon emissions.
Other products and services, please specify	Not applicable	There are no other products and services.

C2.3

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

Yes

C2.3a

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

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Downstream

Risk type & Primary climate-related risk driver

Current regulation

Carbon pricing mechanisms

Primary potential financial impact

Reduced profitability of investment portfolios

Climate risk type mapped to traditional financial services industry risk classification

Funding risk

Company-specific description

As of 2015, Controlled Entities of the 'GHG & Energy Target Management System' with an average GHG emissions of the 3 most recent years greater than 125,000tCO2eq are subject to participate in the Emission Trading System; they are allocated the emissions

allowance based on the past GHG record and must carry out operation activities and emissions reduction activities within the given range. If the emissions allowance is not enough, a company must purchase permits from other liable companies to meet the balance between the GHG emissions and the allowance.
As a result, some regulated companies would have negative profits considering the long-term effects of climate change which increases operating costs due to equipment investments, purchasing carbon credits etc. As of 2020, the amount of asset, bond, loan products are totally 58.6 trillion KRW for which is included in the area of interest. Therefore some companies with negative profit margins by climate change which are related to these products could give SFG a loss of financial asset or profit margin due to the difficulty in repayment.

Time horizon

Long-term

Likelihood

Virtually certain

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

5,860,000,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Internal analysis suggests that by 2030, approximately 10% of the portfolio will be converted to a negative margin, given the cost of carbon. Therefore, by 2030, the financial assets are expected to lose 5.86 trillion KRW, equivalent to approximately 10% of the size of asset, bond, loan products(58.6 trillion KRW).

Cost of response to risk

1,700,000,000

Description of response and explanation of cost calculation

In 2019, Shinhan Financial Group began the analysis of the financial impact of climate change on loans, bonds and equity portfolios with more than 10 billion KRW assets and including in the area of interest. This analysis will calculate the carbon footprint and predict future carbon costs of the portfolio to analyze the impact on profits. Based on the result, we will establish a climate change impact analysis system for all portfolios in the

group. The labor cost for performing portfolio analysis was about 1700 million KRW (17 employees for a year, average annual salary at 100,000,000 KRW/employee).

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Chronic physical

Changes in precipitation patterns and extreme variability in weather patterns

Primary potential financial impact

Decreased revenues due to reduced production capacity

Climate risk type mapped to traditional financial services industry risk classification

Operational risk

Company-specific description

According to the Korea Meteorological Administration, between the years 2001 and 2010, Korea saw 2.6 days per year on average, during which daily precipitation exceeded 800mm; such heavy rain effects not only agricultural and mountainous regions but also urban areas, which would bring upon physical damages to the business branches of Shinhan Financial Group. Particularly, the 18 branches of Shinhan Bank located in Gangwon Province are considered more geographically vulnerable to physical damages from heavy rainfall, which may cause operational loss from temporary business shut-down.

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

1,337,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The 18 branches of Shinhan Bank may have to close the operation for approximately 3 days for recovering from physical damages due to heavy rainfall, in which case a financial loss of approximately 1,337 million KRW is expected to occur.
* Considering the total operational profit of a branch in Gangwon Province (111,376 milllion KRW) and the average operational days per year (250 days) in 2020.

Cost of response to risk

493,000,000

Description of response and explanation of cost calculation

In preparation for natural disasters such as flood, heavy snowfall, and typhoon, major affiliates of Shinhan Financial Group such as Shinhan Bank, Shinhan Card, Shinhan investment Corp., and Shinhan Life operate individual Disaster Restoration Centers. Furthermore, Shinhan Future Strategy Research Institute and Shinhan investment Corp. regularly carry out climate change researches to determine risks and opportunities. In particular, Shinhan Bank has the 'Disaster/Calamity Crisis Management Guidelines' aimed at preventing damages from natural disasters such as typhoons, heavy rain, heavy snow, and earthquakes and responding to such events in a timely manner so as to protect both human and financial resources in advance and ensure continued operation. Following these Guidelines, occurrence of a natural disaster is reported to the branch manager, who then reports the incident to the Sales Division Head as well as the company's safety management division and/or business division. The safety management division, upon receiving the report, works with other teams in charge of such event and reports a summary to the management. In case of emergency, the Head of the Crisis Center directly reports to the CEO about the status of the event and the entire organization is transformed to be on call. In addition, to prepare for major losses related to climate change SFG takes out insurance on major buildings and branches every year.

The operational cost of Disaster Restoration Centers for response to climate change is included in total operation costs of Shinhan Financial Group. Each of the major affiliates and their headquarters, major buildings, and branches are insured and the total insurance costs incurred in 2020 was 493 million KRW while the limit of liability for property damage is 1,383 billion KRW.

Comment

A total financial loss is 5.79 billion KRW due to heavy rainfall and snowfall.

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical

Increased severity and frequency of extreme weather events such as cyclones and floods

Primary potential financial impact

Decreased revenues due to reduced production capacity

Climate risk type mapped to traditional financial services industry risk classification

Operational risk

Company-specific description

According to the National emergency Management Agency, between the years 1981 and 2010, Korea saw 12.5 days per year on average, during which fresh snow cover was above 5cm; such heavy snowfall would damage both rural and urban areas and evidently bring upon physical damages to the business branches of Shinhan Financial Group. Particularly, the 18 branches of Shinhan Bank located in Gangwon Province, which is the most geographically vulnerable region in Korea, would be most severely exposed to physical damages from heavy snowfall, which may cause operational loss from temporary business shut-down.

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

4,455,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The 18 branches of Shinhan Bank may have to close the operation for approximately 10 days for recovering from physical damages due to heavy snowfall, in which case a financial loss of approximately 4,455 million KRW is expected to occur.

* Considering the total operational profit of a branch in Gangwon Province (111,376 million KRW) and the average operational days per year (250 days) in 2020

Cost of response to risk

493,000,000

Description of response and explanation of cost calculation

In preparation for natural disasters such as flood, heavy snowfall, and typhoon, major affiliates of Shinhan Financial Group such as Shinhan Bank, Shinhan Card, Shinhan investment Corp., and Shinhan Life operate individual Disaster Restoration Centers. Furthermore, Shinhan Future Strategy Research Institute and Shinhan investment Corp. regularly carry out climate change researches to determine risks and opportunities. In particular, Shinhan Bank has the 'Disaster/Calamity Crisis Management Guidelines' aimed at preventing damages from natural disasters such as typhoons, heavy rain, heavy snow, and earthquakes and responding to such events in a timely manner so as to protect both human and financial resources in advance and ensure continued operation. Following these Guidelines, occurrence of a natural disaster is reported to the branch manager, who then reports the incident to the Sales Division Head as well as the company's safety management division and/or business division. The safety management division, upon receiving the report, works with other teams in charge of such event and reports a summary to the management. In case of emergency, the Head of the Crisis Center directly reports to the CEO about the status of the event and the entire organization is transformed to be on call. In addition, to prepare for major losses related to climate change SFG takes out insurance on major buildings and branches every year.

The operational cost of Disaster Restoration Centers for response to climate change is included in total operation costs of Shinhan Financial Group. Each of the major affiliates and their headquarters, major buildings, and branches are insured and the total insurance costs incurred in 2020 was 493 million KRW while the limit of liability for property damage is 1,383 billion KRW.

Comment

A total financial loss is 5.79 billion KRW due to heavy rainfall and snowfall.

C2.4

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

Yes

C2.4a

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

Identifier

Opp1

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

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

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Target companies of the GHG & Energy Target Management Scheme with over 125,000tCO2eq of GHG emissions is subject to participate in the Emission Trading System and the GHG & Energy Target Management Scheme comes into effect and becomes stricter on buildings with over 10,000 TOE of annual energy consumption. In addition, global warming will eventually increase clients' energy management expenses. Therefore it is expected that companies will show greater demands for installing GHG reduction facilities, hiring more experts in the area, and managing building energy consumption. Recently, the ESG fund ratio increased by approximately 1% annually compared to the total fund of the Group. Consequently and the ESG fund size increased by approximately 50% annually. Shinhan Financial Group expects to see growing demands from our corporate clients for eco-friendly loans(remaining balances 1,205.10 billion KRW in 2019) and active promotion of related products can be big opportunities to create profits.

Time horizon

Long-term

Likelihood

Virtually certain

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

12,821,590,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

As of the end of 2020, the remaining balances of eco-friendly loans such as Green Remodeling Interest Subsidy Loan, Loan for companies with outstanding green environmental management, Green Energy Factoring, and New Green Corporate Loan etc are 1,205.10 billion KRW. If such demands continue to grow, Shinhan Financial Group expects to create higher profits in this area.

Cost to realize opportunity

233,000,000

Strategy to realize opportunity and explanation of cost calculation

In response to the clients' growing demand for new financial products and services that can help them address climate change regulations, Shinhan Financial Group launched and is operating various products that can help its corporate clients focus on energy saving activities. Particularly, the Bank introduced new loans such as Loan for companies with outstanding green environmental management, Green Energy Factoring, and New Green Corporate Loan. For reference, Green Remodeling Interest Subsidy Loan is targeted at customer seeking to remodel his/her building to gain energy efficiency, assisting with the construction cost, while the customer is eligible for the government's support for 2~4% of the loan interest rate depending on the energy efficiency performance. Loan for companies with outstanding green environmental management is a loan product that applies prime rate to SMEs that receive a certain grade or more in the Ministry of Environment's environmental evaluation. Green Energy Factoring provides financial support for LED replacement works and allows customers to repay construction costs with the saving costs from electric bills. In addition, New Green Corporate Loan provides loans to green companies and new ventures in the environmental industry, so as to contribute to the revitalization of the industry.
In 2020, operational cost of climate change-related products was included in the total operational costs. The labor cost for operating Loan for companies with outstanding green environmental management, Green Energy Factoring, New Green Corporate Loan, etc. was about 233million KRW (14 products, 2 employees per product for a month, average annual salary at 100,000,000 KRW/employee).

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

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

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

In 2012, a policy where generators must supply a certain percentage of energy from renewable sources known as the RPS (Renewable Portfolio Standard) was introduced. The RPS continues to be in effect along with the FIT (Feed-in Tariff) and after 2022 the government plans to increase the percentage of renewable energy supplied to 10%. Since 2007, SFG has seen growing trends of renewable energy in comparison to non-renewable energy and expect to find greater opportunities in the renewable energy generation business. By continuing investment in the renewable energy sector, Shinhan Bank, Shinhan investment Corp. and Shinhan Life Insurance strive to find new business opportunities.

Recently, the ESG fund ratio increased by approximately 1% annually compared to the total fund of the Group. Consequently and the ESG fund size increased by approximately 50% annually. Shinhan Financial Group expects to see growing demands from our corporate clients for renewable energy PFs(remaining balances 805.7 billion KRW in 2020) and active promotion of related products can be big opportunities to create profits.

Time horizon

Long-term

Likelihood

Virtually certain

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

805,700,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

As an effort to support renewable energy projects, Shinhan Bank participated in renewable energy projects as an investor in 2020 and provided approximately 805.7 billion KRW of loan, actively supporting the renewable energy sector. If such demands continue to grow, SFG expects to create higher profits in this area.

Cost to realize opportunity

1,333,000,000

Strategy to realize opportunity and explanation of cost calculation

In order to support our clients' response to climate change regulations, SFG has been either participating as an advisor or making investment for 9 renewable energy generation projects such as solar, wind, fuel cell, and biomass which spread in Japan, Vietnam, etc in 2020. (ex. Japan Tanakura PV plant (25.5MW), Vietnam Quang Binh PV plant (49.4MW), etc.)

In 2020, operational cost of climate change-related financial products was included in the total operational costs. Almost 1,333 million KRW was incurred as labor costs for renewable energy generation project investment (13 employees for a year and the other 2 employees for 2 months, average annual salary at 100,000,000 KRW/person).

Comment

Identifier

Opp3

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Shift in consumer preferences

Primary potential financial impact

Other, please specify

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

Company-specific description

More investors are taking climate change and ESG indicators into consideration for making investment decisions. As such, whether a company seeking for investment is fulfilling its environmental and social responsibilities became an important issue. In Korea, ESG funds grew to 9 trillion KRW as of the end of 2013 (ASrIA, 2014) and are showing an upward trend every year.

In this regard, Shinhan Asset Management increased ESG investment ratio and size annually by about 1% and 50% respectively. As of 2020 the climate related ESG fund size is 2,664.6 billion KRW, including renewable energy/energy efficiency 1,992.6 billion KRW, eco-transportation 672 billion KRW etc. Shinhan Asset Management can expect to create more profit by developing climate change and ESG-related financial products.

Time horizon

Short-term

Likelihood

More likely than not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

2,664,600,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Shinhan Financial Group has launched and is currently managing various climate change and ESG-related funds. As of the end of 2020, these funds amount to 2,664.6 billion KRW and Shinhan Asset Management expects this figure to continue growing in the future to lead to greater profit.

Cost to realize opportunity

533,000,000

Strategy to realize opportunity and explanation of cost calculation

As more investors become aware of climate change and ESG issues, Shinhan Asset Management has developed and are currently managing various SRI funds such as Shinhan Private Equity Green Energy Special Asset Investment Trust, Shinhan Future Energy Specialized-Type Private Equity Special Asset Investment Trust, Shinhan Japanese Solar Power Special Asset Investment Trust, Shinhan Japanese Solar Power Special Senior Loan Asset Investment Trust, Shinhan Global Solar Energy Private Equity Special Asset Investment Trust, Shinhan US' Nevada Solar Power Special Asset Investment Trust.

In 2020, Shinhan Asset Management incurred about 533 million KRW (assigned 5 employees for a year, 2 employees for 2 months, average salary at 100,000,000 KRW/employee) as labor cost for managing climate change and ESG-related funds. Other product-related sales commission was included in the total operational costs.

Comment

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?

Yes, and we have developed a low-carbon transition plan

C3.1a

(C3.1a) Is your organization's low-carbon transition plan a scheduled resolution item at Annual General Meetings (AGMs)?

	Is your low-carbon transition plan a scheduled resolution item at AGMs?	Comment
Row 1	No, but we intend it to become a scheduled resolution item within the next two years	

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

Yes, qualitative and quantitative

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenarios and models applied	Details
Nationally determined contributions (NDCs)	Scenario analysis procedures are as follows. Step 1. identify risk and opportunity factors (Regulatory) Under the 2030 GHG Reduction roadmap, building sector GHG reduction target is a reduction of 18.1% compared to the BAU in 2030. The government plans to support for reducing GHG emission in the building sector through promoting Green remodeling, making Zero Energy Building mandatory, strengthening energy equipment efficiency standards, etc. (Market/Technology) The government regulations on GHG will continue to increase demands for low-carbon/high efficiency technologies, renewable power projects. In particular, the development of transparent and thin film solar panel technology will make it easier to install them in existing building windows. (Reputation) If a company makes an investment in business that emits large-scale GHG such as coal-fired power generation, the corporate image will be damaged and it will be even worse gradually. Step 2. define scope of scenario Shinhan Financial Group used NDCs as a climate change scenario for

	establishing sustainability management strategies, since SFG has been operating its business based on domestic market. The scenario analysis was conducted based on 2030 of NDC target year and 2050 of 2 degrees scenario target year Step 3. assess business impacts If climate change-related financial support products are not properly ready to meet the market demands, the loss of profit will occur. As of 2020, the remaining balance of funds investing in green energy and solar energy is about 1,702.3 billion KRW and Shinhan Bank should establish a competitive strategy to meet the ever-increasing demands. As consumers' interest in climate change and the enviro nment increases, if a company makes an investment in business that emits large-scale GHG, the corporate image will be damaged, which can lead to boycotts. Therefore, Shinhan Bank needs to consider environmental and social risks in addition to financial feasibility when selecting financial support projects. Step 4. identify the responses Shinhan Financial Group established its GHG emissions target for 2043, which is a net zero emission, in order to not only make a step by step response to complying with the government GHG reduction target in 2030 and 2 degrees scenario target in 2050, but also manage GHG emissions of Shinhan Bank and other group affiliates which are not subject to the government's GHG regulation. In addition, Shinhan Bank, which has the largest amount of GHG emissions among group affiliates, analyzed the GHG emission scenarios in case of maintaining the current level and in case of applying the GHG emission reduction options and prepared alternatives for specific reduction plans such as installation of solar panels on windows, closing of branches, installation of high-efficiency equipment, etc., to achieve the targets. To respond to demands for social responsibility and manage risks for business investment, the group environmental and social risk management system was established in 2018 to assess and manage environmental and social risks in financial support. In addition, to establish the group-wide climate risk management system, at first in 2019 SFG undertook the analysis of group portfolio impacts by climate change according to 2 degree scenarios. SFG analyzed the group portfolio's carbon footprints, carbon disclosure, fossil fuel exposure, energy transition, carbon earnings at risk etc. Based on the analysis results which will be derived in 2020, the climate risk monitoring system, the management plan of carbon intensive industry etc would be established. In 2020, the carbon emissions were measured for the Group's exposure(58.6 trillion KRW) and the monitoring system for carbon emissions and intensity by sector, by asset was established. In 2021, the management plan for carbon intensity industries will be established based on the monitoring system.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	As demands for investment in low-carbon / high efficiency facility, renewable energy generation business, etc., have increased because of government GHG target management system, GHG emission trading system, RPS system, building energy total management system, technology improvement and innovation to support low carbon and energy efficient economy, change of consumer awareness about climate change, etc., Shinhan Financial Group continues to operate and expand the related products such as Green remodeling interest subsidy loan, Loan for companies with outstanding green environmental management, Green energy factoring, renewable energy PF etc. As of the end of 2020, the remaining balances of climate change-related loans are 1,205.10 billion KRW and the company's funding towards renewable energy projects reached 805.7 billion KRW. If loan demand and investment increase by 10 billion KRW, the profit of 149 million KRW is expected to increase.
Supply chain and/or value chain	Yes	As ESG related systems and institutional investors' investments expand around the world, ESG performance, which has been perceived to be relatively inferior, is also improving. According to the relative performance of the ESG index compared to the equity index released by Bloomberg, the ESG index performed well by 1-2% compared to the EUROSTOXX, S& P500 and MSCI General Index. Shinhan Asset Management whose investors are Shinhan Life Insurance, Shinhan Bank , Shinhan Investment Corps etc is expanding its ESG investment ratio by keeping up with the trend of expanding the size of global sustainable investments. As a result, it is expected for the return on ESG related funds operated by Shinhan Asset Management to increase, which will improve the expected return of investors such as Shinhan Life Insurance, Shinhan Bank, and Shinhan Investment Corps. For example, at the end of 2020 the remaining balances of Shinhan Life Insurance's ESG fund are 186.4 billion KRW and the profit of 1.86 billion KRW is expected to increase due to the expanding ESG investment trend.

Investment in R&D	Yes	As demands for investment in low-carbon / high efficiency facility, renewable energy generation business, etc., have increased because of government GHG target management system, GHG emission trading system, RPS system, building energy total management system, technology improvement and innovation to support low carbon and energy efficient economy, change of consumer awareness about climate change, etc., Shinhan Bank invested approximately 233 million KRW in labor costs for operating the related products such as Shinhan Bank's Green remodeling interest subsidy loan, Loan for companies with outstanding green environmental management, Green energy factoring, and renewable energy PF etc. and developing new climate change-related products. Moreover, it is necessary to assess and manage the non-financial risks such as environmental and social impact, since investment in companies or businesses that negatively affect climate change could result in loss of operating profit as consumers' interest in climate change increases. To improve the soundness of investment, Shinhan Financial Group analyzed a climate impact of portfolio with a total capital cost of more than 100 billion KRW to establish the system to assess the impact and invested about 1.7 billion KRW in human resources.
Operations	Yes	Physical risks such as heavy rainfall, heavy snow, etc., due to climate change can lead to business losses at some Shinhan branches. Since the 18 branches of Shinhan Bank in Gangwon-do Province, which is considered more geographically vulnerable to physical risk, are expected to be closed for 3 day in the case of heavy rainfall and 10 days in the case of heavy snow, a financial loss of about 57.9 billion KRW is expected to occur considering operating profit in 2020.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence

Row 1	Revenues Assets	[Revenue] As demands for investment in low-carbon / high efficiency facility, renewable energy generation business, etc., have increased because of government GHG target management system, GHG emission trading system, RPS system, building energy total management system, technology improvement and innovation to support low carbon and energy efficient economy, change of consumer awareness about climate change, etc., Shinhan Financial Group continues to operate and expand the related products such as Green remodeling interest subsidy loan, Loan for companies with outstanding green environmental management, Green energy factoring, renewable energy PF etc. As of the end of 2020, the remaining balances of climate change-related loans are 1,250.6 billion KRW and the company's funding towards renewable energy projects reached 581.6 billion KRW. If loan demand and investment increase by 10 billion KRW, the profit of 149 million KRW is expected to increase. [Asset] The government will support the provision of eco-friendly vehicles such as electric cars and hybrid cars to achieve the goal of reducing greenhouse gas emissions in 2030, and demand for eco-friendly vehicles continues to rise due to improved consumer awareness of climate change. Shinhan Card operates a rental car business, and to meet government policy direction and consumer demand, it must continue to increase the ratio of environmentally-friendly cars among existing gasoline and diesel vehicles. As of the end of 2020, Shinhan Card has approximately 61,000 vehicles and plans to replace them with 100% electric or hydrogen vehicles by 2030. Assuming that all existing vehicles are replaced with electric vehicles, extra 122 billion KRW in addition to the existing purchasing cost is expected to cost, resulting in higher operation expense.

C3.4a

(C3.4a) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

-

C-FS3.6

(C-FS3.6) Are climate-related issues considered in the policy framework of your organization?

Yes, climate-related issues are integrated into our general policy framework that relates to our financing activities

C-FS3.6a

(C-FS3.6a) In which policies are climate-related issues integrated?

	Type of policy	Portfolio coverage of policy	Description
Bank lending (Bank)	Credit policy Risk policy	Minority of the portfolio	In December 2019, in order to effectively respond to climate change, Shinhan Financial Group established and proclaimed the 'Principles for Responding to Climate Change' for the first time in domestic financial sector. The five principles of climate action explain the policy direction of climate finance and green finance revitalization. SFG strengthened financial support with assets, projects and corporate loans related to renewable and high-efficiency energy, and supports capital raising and technological innovations of eco-friendly businesses through the issuance of green bonds. In addition, each group companies(bank/investment/life insurance) are expanding their eco-friendly financial products and services based on these principles. SFG proactively manages the transition and physical risks from climate change by identifying the carbon intensity of the financial portfolio and conducting stress tests that closely analyze the potential impact and sensitivity according to climate change scenarios by industry and asset level. SFG supports and manages the low-carbon transformation of high-carbon emission industries and companies to keep customers and group assets safe from severe economic losses and declines of asset value caused by climate change. The target portfolio to be analyzed is determined by the cost of the project or asset of customer company with more than 10 billion, area of interests, etc.
Investing (Asset manager)	Risk policy Sustainable/Responsible Investment Policy	Minority of the portfolio	In December 2019, in order to effectively respond to climate change, Shinhan Financial Group established and proclaimed the 'Principles for Responding to Climate Change' for the first time in domestic financial sector. The five principles of climate action explain the policy direction of climate finance and green finance revitalization. SFG strengthened financial support with assets, projects and

			corporate loans related to renewable and high-efficiency energy, and supports capital raising and technological innovations of eco-friendly businesses through the issuance of green bonds. In addition, each group companies(bank/investment/life insurance) are expanding their eco-friendly financial products and services based on these principles. SFG proactively manages the transition and physical risks from climate change by identifying the carbon intensity of the financial portfolio and conducting stress tests that closely analyze the potential impact and sensitivity according to climate change scenarios by industry and asset level. SFG supports and manages the low-carbon transformation of high-carbon emission industries and companies to keep customers and group assets safe from severe economic losses and declines of asset value caused by climate change. The target portfolio to be analyzed is determined by the cost of the project or asset of customer company with more than 10 billion, area of interests, etc.
Investing (Asset owner)	Risk policy	Minority of the portfolio	In December 2019, in order to effectively respond to climate change, Shinhan Financial Group established and proclaimed the 'Principles for Responding to Climate Change' for the first time in domestic financial sector. The five principles of climate action explain the policy direction of climate finance and green finance revitalization. SFG strengthened financial support with assets, projects and corporate loans related to renewable and high-efficiency energy, and supports capital raising and technological innovations of eco-friendly businesses through the issuance of green bonds. In addition, each group companies(bank/investment/life insurance) are expanding their eco-friendly financial products and services based on these principles. SFG proactively manages the transition and physical risks from climate change by identifying the carbon intensity of the financial portfolio and conducting stress

			tests that closely analyze the potential impact and sensitivity according to climate change scenarios by industry and asset level. SFG supports and manages the low-carbon transformation of high-carbon emission industries and companies to keep customers and group assets safe from severe economic losses and declines of asset value caused by climate change. The target portfolio to be analyzed is determined by the cost of the project or asset of customer company with more than 10 billion, area of interests, etc.
Insurance underwriting (Insurance company)	Other, please specify No policy	Unknown	Life insurance products are aimed at individual customers, so there is no integrated policy on climate change issues.
Other products and services, please specify	Other, please specify No other products and services	Unknown	There are no other products and services

C-FS3.7

(C-FS3.7) Are climate-related issues factored into your external asset manager selection process?

No, for none of our externally managed assets

C-FS3.7b

(C-FS3.7b) Why are climate-related issues not factored into your external asset manager selection process?

Firstly Shinhan Financial Group is reviewing to integrate ESG into internal asset management, climate related issues are not yet reflected in the the external asset manager selection process. After SFG analyzes the impact of climate change in terms of asset management, SFG will derive the valid factors and reflect them in the external asset manager selection process. SFC is planning to adopt the negative screening policy which excludes the asset manager investing in the projects that have a negatively significant impact on climate change, for example coal-fired power plants.

C4. Targets and performance

C4.1

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

Absolute target

C4.1a

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

Target reference number
Abs 1

Year target was set
2018

Target coverage
Business division

Scope(s) (or Scope 3 category)
Scope 1+2 (location-based)

Base year
2012

Covered emissions in base year (metric tons CO2e)
95,906

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)
86

Target year
2025

Targeted reduction from base year (%)
18

Covered emissions in target year (metric tons CO2e) [auto-calculated]
78,642.92

Covered emissions in reporting year (metric tons CO2e)
72,232

% of target achieved [auto-calculated]
137.1365943968

Target status in reporting year
Achieved

Is this a science-based target?

Yes, we consider this a science-based target, but it has not been approved by the Science-Based Targets initiative

Target ambition

2°C aligned

Please explain (including target coverage)

The mid-term target in 2025 is linked with long-term target in 2050

Target reference number

Abs 2

Year target was set

2020

Target coverage

Other, please specify

Group-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (location-based)

Base year

2019

Covered emissions in base year (metric tons CO2e)

90,195

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2030

Targeted reduction from base year (%)

46.2

Covered emissions in target year (metric tons CO2e) [auto-calculated]

48,524.91

Covered emissions in reporting year (metric tons CO2e)

85,935.76

% of target achieved [auto-calculated]

10.221336215

Target status in reporting year

Revised

Is this a science-based target?

Yes, we consider this a science-based target, but it has not been approved by the Science-Based Targets initiative

Target ambition

1.5°C aligned

Please explain (including target coverage)

The mid-term target in 2030 is linked with long-term target in 2050

Target reference number

Abs 3

Year target was set

2020

Target coverage

Other, please specify

Group-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (location-based)

Base year

2019

Covered emissions in base year (metric tons CO2e)

90,195

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2040

Targeted reduction from base year (%)

88.2

Covered emissions in target year (metric tons CO2e) [auto-calculated]

10,643.01

Covered emissions in reporting year (metric tons CO2e)

85,935.76

% of target achieved [auto-calculated]

5.3540332555

Target status in reporting year

Revised

Is this a science-based target?

Yes, we consider this a science-based target, but it has not been approved by the Science-Based Targets initiative

Target ambition

1.5°C aligned

Please explain (including target coverage)

Target reference number

Abs 4

Year target was set

2020

Target coverage

Other, please specify

Group-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (location-based)

Base year

2019

Covered emissions in base year (metric tons CO2e)

90,195

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2043

Targeted reduction from base year (%)

100

Covered emissions in target year (metric tons CO2e) [auto-calculated]

0

Covered emissions in reporting year (metric tons CO2e)

85,935.76

% of target achieved [auto-calculated]

4.7222573313

Target status in reporting year

New

Is this a science-based target?

Yes, we consider this a science-based target, but it has not been approved by the Science-Based Targets initiative

Target ambition

1.5°C aligned

Please explain (including target coverage)

Target reference number

Abs 5

Year target was set

2020

Target coverage

Other, please specify

Group's Portfolio

Scope(s) (or Scope 3 category)

Scope 3: Investments

Base year

2019

Covered emissions in base year (metric tons CO2e)

11,617,023

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2030

Targeted reduction from base year (%)

38.6

Covered emissions in target year (metric tons CO2e) [auto-calculated]

7,132,852.122

Covered emissions in reporting year (metric tons CO2e)

12,889,127

% of target achieved [auto-calculated]

-28.3687672618

Target status in reporting year

New

Is this a science-based target?

Yes, we consider this a science-based target, but it has not been approved by the Science-Based Targets initiative

Target ambition

1.5°C aligned

Please explain (including target coverage)

Target reference number

Abs 6

Year target was set

2020

Target coverage

Other, please specify

Group's Portfolio

Scope(s) (or Scope 3 category)

Scope 3: Investments

Base year

2019

Covered emissions in base year (metric tons CO2e)

11,617,023

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2040

Targeted reduction from base year (%)

69.6

Covered emissions in target year (metric tons CO2e) [auto-calculated]

3,531,574.992

Covered emissions in reporting year (metric tons CO2e)

12,889,127

% of target achieved [auto-calculated]

-15.7332531078

Target status in reporting year

New

Is this a science-based target?

Yes, we consider this a science-based target, but it has not been approved by the Science-Based Targets initiative

Target ambition

1.5°C aligned

Please explain (including target coverage)

Target reference number

Abs 7

Year target was set

2020

Target coverage

Other, please specify

Group's Portfolio

Scope(s) (or Scope 3 category)

Scope 3: Investments

Base year

2019

Covered emissions in base year (metric tons CO2e)

11,617,023

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2050

Targeted reduction from base year (%)

90.2

Covered emissions in target year (metric tons CO2e) [auto-calculated]

1,138,468.254

Covered emissions in reporting year (metric tons CO2e)

12,889,127

% of target achieved [auto-calculated]

-12.1400711342

Target status in reporting year

New

Is this a science-based target?

Yes, we consider this a science-based target, but it has not been approved by the Science-Based Targets initiative

Target ambition

1.5°C aligned

Please explain (including target coverage)

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Net-zero target(s)

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number

NZ1

Target coverage

Other, please specify

Group-wide

Absolute/intensity emission target(s) linked to this net-zero target

Abs2

Abs3

Abs4

Target year for achieving net zero

2043

Is this a science-based target?

Yes, but we have not committed to seek validation of this target by the Science Based Targets initiative in the next 2 years

Please explain (including target coverage)

Through the SBTi methodology which conforms to the Paris Agreement, Shinhan Financial Group set the net-zero target. The group plans to reduce its own carbon emissions by 46% in 2030 and 88% in 2040 compared to 2019 and reduce carbon emissions of asset portfolio by 38% in 2030 and 69% in 2040 compared to 2019.

Target reference number

NZ2

Target coverage

Other, please specify

Group's Portfolio

Absolute/intensity emission target(s) linked to this net-zero target

Abs5

Abs6

Abs7

Target year for achieving net zero

2050

Is this a science-based target?

Yes, but we have not committed to seek validation of this target by the Science Based Targets initiative in the next 2 years

Please explain (including target coverage)

Through the SBTi methodology which conforms to the Paris Agreement, Shinhan Financial Group set the net-zero target. The group plans to reduce its own carbon emissions by 46% in 2030 and 88% in 2040 compared to 2019 and reduce carbon emissions of asset portfolio by 38% in 2030 and 69% in 2040 compared to 2019.

C4.3

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

Yes

C4.3a

(C4.3a) Identify the total number of 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	0	
To be implemented*	1	1,763.34

Implementation commenced*	1	266
Implemented*	4	6,763.52
Not to be implemented	0	

C4.3b

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

Initiative category & Initiative type

Company policy or behavioral change

Other, please specify

Behavioral change

Estimated annual CO2e savings (metric tonnes CO2e)

3,122.56

Scope(s)

Scope 1

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

1,020,273,272

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

5,057,434,800

Payback period

4-10 years

Estimated lifetime of the initiative

6-10 years

Comment

Lights-out, limited use of elevators/boilers/air-conditioning, for energy saving
Subject to the head office under the ownership of the Bank, Ilsan Computer Center, Shinhan Data Center, Gwanggyo Main Building, 100 Anniversary Center, Gangnam Annex 1, Gangnam Annex 2, Giheung Training Institute (Appropriated labor costs for the building maintenance contract in the investment)

Initiative category & Initiative type

Energy efficiency in buildings
Lighting

Estimated annual CO2e savings (metric tonnes CO2e)
859.87

Scope(s)
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
246,312,828

Investment required (unit currency – as specified in C0.4)
553,201,312

Payback period
1-3 years

Estimated lifetime of the initiative
3-5 years

Comment
LED light replacement (7,805 lights in total) at some of the head offices and the branches to reduce energy consumption

Initiative category & Initiative type
Transportation
Business travel policy

Estimated annual CO2e savings (metric tonnes CO2e)
1,967.28

Scope(s)
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
1,236,350,000

Investment required (unit currency – as specified in C0.4)
2,048,100,000

Payback period
1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Introduced video conferencing to the 30 sales divisions and 900 sales branches to reduce GHG emissions from business travel

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Initiative category & Initiative type

Other, please specify

Other, please specify

Resource saving

Estimated annual CO2e savings (metric tonnes CO2e)

813.8

Scope(s)

Scope 3

Voluntary/Mandatory

Voluntary

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

1,331,427,655

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

6,181,000,000

Payback period

4-10 years

Estimated lifetime of the initiative

6-10 years

Comment

Introducing the Shinhan Sol, the electronic filing system (EFS) and the digital kiosk is expected to save papers used as various application forms and transaction statements.

C4.3c

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

Method	Comment
Employee engagement	To raise employees' awareness on the environmental issues, Shinhan Bank holds various activities including surveys, quizzes, and pledges. Also, all employees enroll in the on-line training session on green management every year.

Dedicated budget for energy efficiency	Shinhan Financial Group invested approximately 1.22 billion KRW per year to replace the lights of the headquarter and other business branches with the more energy-efficient LED lights and 7.01 billion KRW in addition to purchase IT products that are certified as environmentally friendly.

C4.5

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

Yes

C4.5a

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

Level of aggregation

Product

Description of product/Group of products

Fuel Tax Refund Credit Card for Compact Cars: This product aims to promote compact cars for minimization of air pollution and maximization of energy efficiency. Energy saving and GHG reduction can be realized if more consumers drive compact cars. (Scope 1 GHG reduction)

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

Korea GHG and Energy Target Management System

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

0

% of total portfolio value

0

Asset classes/ product types

Bank lending

Other, please specify

Fuel Tax Refund Credit Card for Compact Cars

Comment

[Taxonomy, project or methodology used to classify products/s as low carbon or to calculate avoided emissions]

- Guideline: Korea GHG and Energy Target Management System
- Calculation method: Amount of fuel subject to discount per cardholder x total number of cardholders x (average fuel efficiency of a medium-sized car x emission factor – average fuel efficiency of a compact car x emission factor)
- Assumption: Average fuel efficiency of a compact car (e.g. Kia Morning) at 15.7km/L, average fuel efficiency of a medium-sized car (e.g. Hyundai Avante) at 15.4km/L
- Emission factor: Average emission factor of Kia Morning is 104gCO2/km while that of Hyundai Avante is 115gCO2/km
- GWP: Not applicable

[Estimated GHG reduction]
As of the end of 2020, there were 11,272 accounts for the Fuel Tax Refund Card for Compact Cars. Assuming that every cardholder reaches the fuel tax refund limit and receives discounts up to 800 liters of fuel, GHG reduction achieved would be 1,246tCO2.
Reduction: 800L x 11,272 accounts x (15.4km/L x 115gCO2/km – 15.7km/L x 104gCO2/km) / 10^6 = 1,246tCO2

Level of aggregation
Product

Description of product/Group of products
Solar Power Project Investment: We provide advisory services and/or invest in various projects in the solar power generation sector both in and outside of Korea, as efforts to achieve GHG emissions reduction by contributing to less use of fossil fuel in generation plants. (Scope 1 emissions reduction)

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
Korea GHG and Energy Target Management System

% revenue from low carbon product(s) in the reporting year
0.01

% of total portfolio value
15.28

Asset classes/ product types
Bank lending
Project Finance

Comment
[Taxonomy, project or methodology used to classify products/s as low carbon or to calculate avoided emissions]

- Guideline: Korea GHG and Energy Target Management System
- Calculation method: power generation capacity (invested) x Hours of operation per year x Electrical emissions factor x Investment / Total Project cost
- Assumption: capacity factor: Solar 15%, Wind 20%
- Emission factor: 0.459tCO2e/MWh (Korea national emission factor), 0.436 tCO2e/MWh (Japan national emission factor), 0.602 tCO2e/MWh (Vietnam national emission factor)
- GWP: CO2 1, CH4 21, N2O 310

[Estimated GHG reduction]
Funded 9 renewable energy power projects and total project cost, loan from Shinhan Bank, and generation capacity are as follows:
Total project cost 685.6 billion KRW, loan from Shinhan Bank 181.6 billion KRW, generation capacity 211MW
Able to reduce GHG emissions as per renewable energy power generation of the project invested, and after appropriating the investment ratio (26.5%), reduction is calculated at 4,316tCO2e per year
[% revenue from low carbon product]
0.00514%

C5. Emissions methodology

C5.1

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

Scope 1

Base year start
January 1, 2019

Base year end
December 31, 2019

Base year emissions (metric tons CO2e)
14,086.52

Comment

Scope 2 (location-based)

Base year start
January 1, 2019

Base year end
December 31, 2019

Base year emissions (metric tons CO2e)

76,108.43

Comment

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

C5.2

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

ISO 14064-1
Korea GHG and Energy Target Management System Operating Guidelines
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

C6. Emissions data

C6.1

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

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

13,796.82

Comment

C6.2

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

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

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

Comment

C6.3

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

Reporting year

Scope 2, location-based

77,081.34

Comment

C6.4

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

Yes

C6.4a

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

Source

Scope 1, 2 emissions from Orange Life(Insurance company)

Relevance of Scope 1 emissions from this source

Emissions excluded due to recent acquisition

Relevance of location-based Scope 2 emissions from this source

Emissions excluded due to recent acquisition

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

No emissions from this source

Explain why this source is excluded

Since SFG recently acquired Orange Life and it is difficult to collect climate related data, scope 1, 2(location-based) emissions from Orange Life are excluded in 2020. But they will be included from 2021.

C6.5

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

Purchased goods and services

Evaluation status

Relevant, calculated

Metric tonnes CO2e

17,076.89

Emissions calculation methodology

[Printing papers]
- Calculation method: paper usage x emission factor
- Paper usage: 2562.89ton
- Emission factor: 1.12kgCO2/kg (National LCI DB)

[Credit cards]
- Calculation method: No. of credit cards issued x emission factor
- No. of credit cards issued: 11,399,364units
- Emission factor: 1,224gCO2/unit (Carbon Footprint Labeling DB)

[Bankbooks]
- Calculation method: No. of bankbooks issued x emission factor
- No. of bankbooks issued: 5,673,240units
- Weight of each bankbook: 18.2g/unit
- Emission factor 1.12kgCO2/kg (National LCI DB)

[Water]
- Calculation method: Water usage x emission factor
- Water usage 379,940ton
- Emission factor 0.000332kgCO2/kg (National LCI DB)

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

0

Please explain

Calculated GHG emissions of purchasing printing papers, credit cards, bankbooks, and water.
Purchasing products and water usage were assured by a third party.

Capital goods

Evaluation status

Relevant, calculated

Metric tonnes CO2e

777.97

Emissions calculation methodology

[Office supplies]
- Calculation method: Office electronic equipment (PCs, monitors, printers) purchased x emission factor
- 379 laptops, 6,296 PCs, 6,492 monitors, 1,973 printers
- PC: 30.50kgCO2/unit,
Monitor: 16.40kgCO2/unit, Printer: 147.50kgCO2/unit (Carbon Footprint Labeling DB)
[LED lights]
- Calculation method: No. of LED lights x emission factor
- Total capacity of LED lights purchased 267,525W (50W each, 5,351units)
- Emission factor of a 50W LED light: 34kgCO2/unit (Carbon Footprint Labeling DB)

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

0

Please explain

Calculated GHG emissions from purchasing office supplies (PCs, monitors, and printers) and LED lights.
The number of office supplies and LED lights were assured by a third party.

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

Evaluation status

Relevant, calculated

Metric tonnes CO2e

1,070.84

Emissions calculation methodology

[Fuel]
- Calculation method: Fuel purchased x emission factor
- LNG usage 2,025,039m3, gasoline usage 1,549 3,637,799liter, diesel 17,680liter, kerosene 6,193liter, LPG usage 6,193m3
- Emission Factor: LNG 0.595kgCO2/kg, gasoline 0.0832kgCO2/kg, diesel 0.0682kgCO2/kg, kerosene 0.253kgCO2/kg, LPG 0.394kgCO2/kg (National LCI DB)
- Unit Conversion Factor: LNG 0.7kg/m3, gasoline 0.74kg/liter, diesel 0.85kg/liter, kerosene 0.80kg/liter, LPG 1.9kg/m3 (CDP Technical Note)

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

0

Please explain

Calculated GHG emissions for each type of fuel (LNG, gasoline, diesel, kerosene, and LPG) at the production stage.
Emissions from transmission and distribution electricity losses are already included in Scope 2.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Metric tonnes CO2e

478.96

Emissions calculation methodology

[Cash, bankbooks, and credit card plates transport]
- Calculation method: fuel usage x caloric value x emission factor
- Diesel usage 183,627liter
- Diesel caloric value 35.2MJ/liter
- Diesel emission factor 74.1tCO2/TJ (IPCC)

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

100

Please explain

Calculated GHG emissions from transporting cash, bankbooks, and credit card plates. The fuel usage for transporting cash, bankbooks, and credit card plates were assured by a third party.

Waste generated in operations

Evaluation status

Relevant, calculated

Metric tonnes CO2e

80.749

Emissions calculation methodology

[Waste management]
- Calculation method: Waste disposed x emission factor
- Waste incinerated 523.89tons, waste recycled 165.10tons (paper 103.54ton, styrofoam 0ton, glass 34.59ton, can 3.21ton, plastic 23.77ton)
- emission factor of waste incinerated 0.123kgCO2/kg, emission factor of waste(paper) recycled 0.12kgCO2/kg, emission factor of waste(styrofoam) recycled 0.0186kgCO2/kg, emission factor of waste(glass) recycled 0.0979kgCO2/kg, emission factor of waste(can) recycled 0.0178kgCO2/kg, emission factor of waste(plastic) recycled 0.0186kgCO2/kg (National LCI DB)

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

0

Please explain

Calculated GHG emissions from treating waste.
Waste which is not recycled is incinerated.
The amount of waste treated were assured by a third party.

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO2e

68.65

Emissions calculation methodology

[Domestic business trips]
- Calculation method: Travel distance for each transportation method x emission factor for each transportation method
- Travel distance by domestic flight 233,749km, travel distance by train (KTX) 1,061,529km, travel distance by bus 63,060km
- emission factor for domestic flights 150gCO2/km, emission factor for trains 30gCO2/km, emission factor for buses 27.7gCO2/km (Ministry of Environment's Low Carbon Green Event Guideline)

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

0

Please explain

Calculated GHG emissions for travel distance by each type of transportation method.
Travel distance was assured by a third party.

Employee commuting

Evaluation status

Relevant, calculated

Metric tonnes CO2e

16,278.77

Emissions calculation methodology

[Employee commuting]
- Calculation method: Travel distance for each transportation method x emission factor for each transportation method
- Assumption: average travel distance of 40km, 250 working days

- No. of employees: 22,216
- Percentage of cars, buses, subways, and on-foot commuting is 31.71%, 23.47%, 12.38%, and 31.37%, respectively
- 7,044 employees commute via cars, 5,214 employees commute via buses, 2,751 employees commute via subways, 6,969 employees commute on foot
- emission factor of cars 210gCO2/km, emission factor of buses 27.7gCO2/km, emission factor of subways 1.53gCO2/km (Ministry of Environment's Low Carbon Green Event Guideline)

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

0

Please explain

Conducted an employee survey to determine the method of transportation used for commuting (by percentages) and calculated GHG emissions for all employees' commuting.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Such assets do exist; however, they have already been included in Scope 1, 2 emissions.

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

Not applicable because we do not manufacture products related to downstream transport.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Not applicable because we do not manufacture products in the middle of logistics chain.

Use of sold products

Evaluation status

Relevant, calculated

Metric tonnes CO2e

40,237.73

Emissions calculation methodology

[Online banking]
- Calculation method: PC electricity consumption x hours of usage x electricity emission factor
- Online banking hours by individual customers: 287,669,187h (directly measured)
- Assume PC electricity consumption as 300W
- Total electricity consumption: 86,301MWh
- Electricity emission factor 0.46625tCO2e/MWh (Korea GHG and Energy Target Management System Operating Guidelines)

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

100

Please explain

Calculated GHG emissions from individual customers' online banking.

End of life treatment of sold products

Evaluation status

Relevant, calculated

Metric tonnes CO2e

136.42

Emissions calculation methodology

[Disposal of credit cards]
- Calculation method: Credit cards disposed x emission factor
- Weight of credit cards disposed 56,997kg (5g/unit)
- Emission factor for incineration of mixed plastic waste 2.35kgCO2/kg (National LCI DB)

[Disposal of bankbooks]
- Calculation method: Bankbooks disposed x emission factor
- Weight of bankbooks disposed (issued) 103,253kg (18.2g/unit)
- Emission factor for incineration of waste paper 0.024kgCO2/kg (National LCI DB)

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

0

Please explain

Calculated GHG emissions from disposal of credit cards and bankbooks.
The number of credit cards and bankbooks disposed were assured by a third party.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Such assets do exist; however, they have already been included in Scope 1, 2 emissions.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

Not applicable, as we are not involved in franchise business

Other (upstream)

Evaluation status

Please explain

Other (downstream)

Evaluation status

Please explain

C6.10

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

Intensity figure

0.175

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

85,935.76

Metric denominator

Other, please specify

Revenue (one hundred million KRW)

Metric denominator: Unit total

490,272

Scope 2 figure used

Location-based

% change from previous year

14.7

Direction of change

Decreased

Reason for change

Various energy saving activities reduced GHG emissions to revenue. Energy saving activities are as follows; video conference at headquarters and branches, power saving and lights-out during lunch break, controlled operation of elevators, boilers, conditioning equipments, saving energy by replacing the existing lamps with LEDs, etc. (2019 intensity figure 0.206, change from 2019 0.030, % change from 2019 14.7%=0.030/0.206)

Intensity figure

3.87

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

85,935.76

Metric denominator

full time equivalent (FTE) employee

Metric denominator: Unit total

22,216

Scope 2 figure used

Location-based

% change from previous year

4

Direction of change

Decreased

Reason for change

Various energy saving activities reduced GHG emissions to the number of employees. Energy saving activities are as follows; video conference at headquarters and branches, power saving and lights-out during lunch break, controlled operation of elevators, boilers, conditioning equipments, saving energy by replacing the existing lamps with LEDs, etc. (2019 intensity figure 4.030, change from 2019 0.160, % change from 2019 4.0%=0.160/4.030)

Intensity figure

2.517

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

85,935.76

Metric denominator

Other, please specify

Net profit (one hundred million KRW)

Metric denominator: Unit total

34,146

Scope 2 figure used

Location-based

% change from previous year

5

Direction of change

Decreased

Reason for change

Various energy saving activities reduced GHG emissions to net profit. Energy saving activities are as follows; video conference at headquarters and branches, power saving and lights-out during lunch break, controlled operation of elevators, boilers, conditioning equipments, saving energy by replacing the existing lamps with LEDs, etc. (2019 intensity figure 2.650, change from 2019 0.133, % change from 2019 5.0%=0.133/2.650)

Intensity figure

1.808

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

85,935.76

Metric denominator

Other, please specify

Operating profit (one hundred million KRW)

Metric denominator: Unit total

47,539

Scope 2 figure used

Location-based

% change from previous year

1.5

Direction of change

Decreased

Reason for change

Various energy saving activities reduced GHG emissions to operating profit. Energy saving activities are as follows; video conference at headquarters and branches, power saving and lights-out during lunch break, controlled operation of elevators, boilers, conditioning equipments, saving energy by replacing the existing lamps with LEDs, etc. (2019 intensity figure 1.836, change from 2019 0.028, % change from 2019 1.5%=0.028/1.836)

C7. Emissions breakdowns

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	43.64	Decreased	0.05	The Shinhan Data Center's photovoltaic system produced and consumed 88 MWh of electricity and 56.24 GJ of heat to reduce greenhouse gas emissions by 43.65 tCO2e (2019 emissions 90,194.95 tCO2e, reduced emissions 43.65 tCO2e, reduction rate 0.05%= 43.65/90,194.95)
Other emissions reduction activities	5,949.71	Decreased	6.6	

Divestment				
Acquisitions				
Mergers				
Change in output				
Change in methodology				
Change in boundary				
Change in physical operating conditions				
Unidentified				
Other				

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 undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes

Consumption of purchased or acquired heat	Yes
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	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 (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	57,563.7	57,563.7
Consumption of purchased or acquired electricity		0	154,882.71	154,882.71
Consumption of purchased or acquired heat		0	907.15	907.15
Consumption of self-generated non-fuel renewable energy		103.9		103.9
Total energy consumption		103.9	213,353.55	213,457.45

C9. Additional metrics

C9.1

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

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 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

AS_GHG_SHbank_2020_En.pdf

Page/ section reference

Page 1 / Assurance Statement

Relevant standard

Korean GHG and energy target management system

Proportion of reported emissions verified (%)

81

C10.1b

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

Scope 2 approach
Scope 2 location-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Reasonable assurance

Attach the statement

AS_GHG_SHbank_2020_En.pdf

Page/ section reference
Page 1 / Assurance Statement

Relevant standard
Korean GHG and energy target management system

Proportion of reported emissions verified (%)
85

C10.1c

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

Scope 3 category
Scope 3: Purchased goods and services

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Moderate assurance

Attach the statement

SFG_2020_ESG_Report_En.pdf

Page/section reference
Page 30 / GHG Emissions (Scope3)

Relevant standard

AA1000AS

Proportion of reported emissions verified (%)

22.41

Scope 3 category

Scope 3: Capital goods

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Moderate assurance

Attach the statement

SFG_2020_ESG_Report_En.pdf

Page/section reference

Page 30 / GHG Emissions (Scope3)

Relevant standard

AA1000AS

Proportion of reported emissions verified (%)

1.02

Scope 3 category

Scope 3: Upstream transportation and distribution

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Moderate assurance

Attach the statement

SFG_2020_ESG_Report_En.pdf

Page/section reference

Page 30 / GHG Emissions (Scope3)

Relevant standard

AA1000AS

Proportion of reported emissions verified (%)

1.41

Scope 3 category

Scope 3: Waste generated in operations

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Moderate assurance

Attach the statement

SFG_2020_ESG_Report_En.pdf

Page/section reference

Page 30 / GHG Emissions (Scope3)

Relevant standard

AA1000AS

Proportion of reported emissions verified (%)

0.11

Scope 3 category

Scope 3: Business travel

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Moderate assurance

Attach the statement

SFG_2020_ESG_Report_En.pdf

Page/section reference

Page 30 / GHG Emissions (Scope3)

Relevant standard

AA1000AS

Proportion of reported emissions verified (%)

0.09

Scope 3 category

Scope 3: End-of-life treatment of sold products

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Moderate assurance

Attach the statement

SFG_2020_ESG_Report_En.pdf

Page/section reference

Page 30 / GHG Emissions (Scope3)

Relevant standard

AA1000AS

Proportion of reported emissions verified (%)

0.18

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
C7. Emissions breakdown	Year on year change in emissions (Scope 1 and 2)	Korea GHG and Energy Target Management System	Shinhan Bank was assured of its GHG emissions change of 2020 in comparison to the 2019 data

C11. Carbon pricing

C11.2

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

No

C11.3

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

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

C12. Engagement

C12.1

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

Yes, our suppliers

Yes, our investee companies

C12.1a

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

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Climate change performance is featured in supplier awards scheme

% of suppliers by number

50.82

% total procurement spend (direct and indirect)

46.68

% of supplier-related Scope 3 emissions as reported in C6.5

0.24

Rationale for the coverage of your engagement

Shinhan Financial Group is utilizing the 'CSR Examination Questionnaire for Partner Companies' to examine and evaluate the partner companies' CSR risks including climate change, so as to check the execution status of their CSR activities and improve understanding. This Questionnaire is composed of 20 questions under 4 categories of environment (including climate change), human rights, safety & health, and corporate ethics.

Among the partner companies in the ICT and general affairs sectors that are currently working with the Group, we consider factors such as greenhouse gas emissions, transaction volume (at least a medium-sized enterprise), transaction period (minimum of 2 years), nature of business (manufacturing sector), data management, and response potential to select the companies that are subject to the 'CSR Examination of Partner Companies in order to manage the risk of partner companies which could have a substantive climate-related impact.

Impact of engagement, including measures of success

Shinhan Financial Group evaluates each of the partner companies' CSR capability based on the result of their CSR examination result. Each company's evaluation score is divided into 6 (S, A+, A, B+, B, C) grades and depending on the evaluation grade we draw a line between the companies with excellent performance and the ones with poor performance. For the ones that need improvement, we visit their business sites to promote CSR activities and we provide the CSR examination report to each of the companies.

Based on the CSR evaluation result, we provide additional points to the partner companies with S and A+ grades when selecting excellent companies and reward them on a separate occasion. On the other hands, we advise the ones with poor CSR performance to improve and monitor their activities including GHG reporting and reductions, energy efficiency improvements etc and, if necessary, assist by one-on-one consulting or liaise them with external organizations to participate in CSR training support program.

Comment

C-FS12.1c

(C-FS12.1c) Give details of your climate-related engagement strategy with your investee companies.

Type of engagement

Information collection (Understanding investee behavior)

Details of engagement

Collect climate change and carbon information at least annually from long-term investees

% of investees by number

22.4

% Scope 3 emissions as reported in C-FS14.1a/C-FS14.1b

64.38

Portfolio coverage

Minority of the portfolio

Rationale for the coverage of your engagement

In order to manage and minimize investment risks caused by climate change, companies with a large proportion of assets and large carbon emissions are selected as engagement targets. That is, the target investees are top 200 companies by market capitalization and companies in SFG's core group which comply with Korea Emissions Trading Scheme or Korea GHG and Energy Target Management System.
We send response-based shareholder letter to investees to collect information such as carbon emissions, emissions reduction target, the sales ratio in green businesses, etc. The shareholder letter consists of three categories and 12 questions and the details are as follows;
1. Company Information: company name, industry, sales ratio by business
2. Carbon Emissions: emissions management, allowances, emissions in recent 3 years, CDP response, Scope 3 management, reduction target
3. Green Taxonomy: type of green business, the sales ratio in green businesses

Impact of engagement, including measures of success

We analyze the risks of climate change in the portfolio by understanding the status of carbon management and investment in green businesses of investees. That is, estimating the investees' carbon cost, we can identify the high risk group and manage the carbon intensity of the loan and investment portfolio.
In 2020, 101 out of a total 242 investees responded to shareholder letter(response rate 41.7$). 11 out of 101 investees were classified as low risk group with no carbon cost. Since 10 out of 101 investees were classified as high risk group, we requested them to make additional efforts to reduce carbon emissions. The investees with constant high-risk exposure could be excluded from the Group's portfolio.

C12.3

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

Direct engagement with policy makers

C12.3a

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

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Other, please specify Climate related financial disclosures	Support	Shinhan Financial Group participated in the Sustainability/Climate Finance Study Meeting, consisting of 13 financial institutions, 2 researchers, and 1 international organization(GCF), organized in May 2019 under the supervision of the Financial Supervisory Service in order to properly understand the climate change risks as a factor of financial system risks and respond to them. SFG analyzed and presented key details of the TCFD recommendations on behalf of financial institutions and proposed the role of central banks and supervisory authorities in the financial disclosure system related to climate change. In 2020, SFG participated in Green Finance Promotion Team established by the Financial Services Commission to discuss the green financial system including K-Taxonomy and proposed the direction of the climate risk response and environmental information disclosure.	Shinhan Financial Group strongly supports introduction of government's climate related financial disclosure system.
Other, please specify Climate related financial disclosures	Support	In recognition of the importance of social responsibility for a low-carbon financial market, Shinhan Financial Group is fully devoted to serving its role as a leading financial company by actively taking part in a global initiative to fight against climate change. In September 2018, as it signed up for TCFD Recommendations as the first Korean enterprise, it externally demonstrated its commitment toward transitioning to a low-carbon economy by taking a leading role. In 2019, Shinhan Financial Group took part in a 2nd pilot program, overseen by UNEP FI, to implement TCFD for the financial sector. SFG analyzed the impact of the Group's asset portfolio since 2020. SFG plans to quantitatively analyze the risk factors on climate change and adjust the group's portfolio accordingly.	Shinhan Financial Group strongly supports introduction of government's climate related financial disclosure system.

Climate finance	Support	Shinhan Bank participates in Ministry of Environment's annual 'Green Finance Expert Forum' as a technical expert and represents the private financial institutions' position towards the government's climate change and environmental policies. In this regard, Shinhan Bank has made various suggestions for the green growth as indicated in the Basic Act on Low Carbon Green Growth, such as corresponding strategies to Cap and Trade (Emissions Trading System) in finance as well as en-Vinance application and propagation plans, sharing of environmental risk evaluation systems, and development of foundation for disseminating green finance. In response to the 2018 government's comprehensive plan on fine dust, Shinhan Bank signed a business agreement with the Ministry of Environment to expand customers of electric vehicles in order to support the supply of 350,000 electric vehicles by 2022. In addition, Shinhan Bank has offered My car loan products to provide additional interest reduction benefit when purchasing electric cars.	Shinhan Financial Group strongly supports introduction of the revitalization policy of green finance for the government's response to climate change.
Climate finance	Support	In order to stipulate the role and responsibilities of financial institutions in implementing the Paris Agreement and the U.N. Sustainable Development Goals, Shinhan Financial Group established "Principles for Responsible Banking," an international agreement of the U.N. Environment Program Financial Initiative (UNEP FI) in conjunction with 28 global financial institutions. Shinhan Financial Group officially announced the adoption of Principles for Responsible Banking in September 2019. With the implementation of these principles, Shinhan Financial Group plans to promote and advocate sustainable management at the global level henceforth.	Shinhan Finance Group demands active participation in low-carbon economy from governments and supports the policy introduction of institutional financial support for energy-saving, low-carbon technologies.

Climate finance	Support	In February 2020, Shinhan Life Insurance signed up the Principle of Sustainable Insurance, a climate change initiative of insurance sector proclaimed by the United Nations Environmental Planning Finance Initiative(UNEP FI) as the first member of the domestic life insurance industry, in accordance with the Group's Principles for Responding to Climate Change. Shinhan Life Insurance will reflect the climate-related factors on operational strategy, risk management and investment decisions, and continuously make an effort to spread the importance of sustainability to the domestic insurance industry.	Shinhan Finance Group demands active participation in low-carbon economy from governments and supports the policy introduction of institutional financial support for energy-saving, low-carbon technologies.
Climate finance	Support	Shinhan Bank has established the internal process to join the Equator Principles in 2019. Shinhan Bank has strengthened the work capacity of our employees who need to analyze specific signatory requirements, benchmark advanced banks, and derive action plans to build and perform the process that meets international standards. Through joining the Equator Principles in the second half of 2020 Shinhan Bank will be a leading financial company in sustainable finance.	Shinhan Finance Group demands active participation in low-carbon economy from governments and supports the policy introduction of institutional financial support for energy-saving, low-carbon technologies.
Clean energy generation	Support	From 2018 Shinhan Financial Group participates in the Right of Choice for the RE Initiative to tackle the predicament of climate change and fine dust. The Right of Choice for RE Initiative led by the National Assembly's Renewable Energy Forum and six NGOs was launched with the aim to legalize a new and renewable energy power procurement system that separates solar power, wind power, and other sources of renewable energy from other forms of power generation. The Group is geared toward promoting a wider energy choice by businesses by proposing directions to ensure the effective design of a new and renewable energy power procurement system, and a road-map to encourage domestic firms to use renewable energy	Shinhan Financial Group strongly supports introduction of government's new and re¬newable energy power procurement system.

		and take part in promoting the voluntary use of new and renewable energy.	
Cap and trade	Support	Shinhan Bank is currently participating in the legislation process for the domestic 'Act on Allocation and Trading of Greenhouse Gas Emissions Allowances.' As a technical advisor of the Green Finance Expert Forum under the supervision of Ministry of Environment, it is our solid opinion that participation of private financial institutions such as banks is critical for ensuring liquidity of emissions trading.	Shinhan Financial Group strongly supports introduction of the Emissions Trading System for the government's response to climate change
Energy efficiency	Support	Shinhan Bank is participating in the "Zero Energy Building Convergence Alliance" jointly launched by the Ministry of Land, Infrastructure and Transport and Ministry of Trade, Industry and Energy as a financial advisory body. Shinhan Bank is the only commercial bank to participate in an alliance financial department and is going to continue its efforts to develop a commercialization model in line with the implementation of the zero energy building certification system.	Shinhan Financial Group actively supports the introduction of the government's energy efficiency policies.

C12.3f

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

Shinhan Financial Group has engaged in climate change activities. SFG delivered our opinions about mandatory carbon reporting, cap and trade scheme, and climate finance in both direct and indirect manner to the government and actively engaged in the relevant issues. Our engagement activities, along with the climate strategy at the group level, help to anticipate and prepare for climate change-related regulations. When regulatory issues arise, environmental management personnel of the holding company and the 6 affiliates attend the 'Environmental and Energy Management Council' to discuss issues at hand. If the issue is categorized as a significant one, it is reported and submitted as a major agenda to the ESG Implementation Committee that the Chairman of the Group presides over, and primary matters ultimately become implemented companywide after decision-making on the issue of the ESG Strategy Committee, the highest-level decision-making body. Through this process, SFG intend to operate a group-wide climate strategy and engagement activities with consistency.

C12.4

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

Publication

In mainstream reports

Status

Complete

Attach the document

SFG_2020_Biz_Report.pdf

Page/Section reference

Page 59~60, 584~591, 597, 675

Content elements

Governance
Strategy
Emissions figures

Comment

Publication

In voluntary sustainability report

Status

Complete

Attach the document

SFG_2020_ESG_Report_En.pdf

Page/Section reference

Page 6, 13, 26~30, 33, 50~57, 61~63

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures

Emission targets

Comment

Publication

In voluntary sustainability report

Status

Complete

Attach the document

SFG_2020_ESG_Report_Highlight_En.pdf

Page/Section reference

p5~8, 30~32, 37, 41~51

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets

Comment

C-FS12.5

(C-FS12.5) Are you a signatory of any climate-related collaborative industry frameworks, initiatives and/or commitments?

	Industry collaboration	Comment
Reporting framework	Equator Principles Principles for Responsible Investment (PRI) Task Force on Climate-related Financial Disclosures (TCFD) UNEP FI Principles for Responsible Banking UNEP FI Principles for Sustainable Insurance	
Industry initiative	Principles for Responsible Investment (PRI) UNEP FI Principles for Responsible Banking UNEP FI Principles for Sustainable Insurance UNEP FI UNEP FI TCFD Pilot	
Commitment	Other, please specify	

	No commitment	

C14. Portfolio Impact

C-FS14.1

(C-FS14.1) Do you conduct analysis to understand how your portfolio impacts the climate? (Scope 3 portfolio impact)

	We conduct analysis on our portfolio's impact on the climate	Disclosure metric	Comment
Bank lending (Bank)	Yes	Category 15 "Investment" total absolute emissions	
Investing (Asset manager)	Yes	Category 15 "Investment" total absolute emissions	
Investing (Asset owner)	Yes	Category 15 "Investment" total absolute emissions	
Insurance underwriting (Insurance company)	No, but we plan to do so in the next two years		
Other products and services, please specify	Not applicable		There are no other products and services.

C-FS14.1a

(C-FS14.1a) What are your organization’s Scope 3 portfolio emissions? (Category 15 “Investments” total emissions)

Category 15 (Investments)

Evaluation status

Relevant, calculated

Scope 3 portfolio emissions (metric tons CO2e)

12,889,127

Portfolio coverage

More than 10% but less than or equal to 20%

Percentage calculated using data obtained from client/investees

0

Emissions calculation methodology

Carbon emissions = clients/investees' total carbon emissions x the ratio of SFG's loan or investment compared to clients/investees' total assets

Please explain

To collect carbon emissions data as much as possible, The portfolio coverage was determined as the clients/investee* whose carbon emissions are publicly open and verified by the 3rd party.
*Subject to Korea Emissions Trading Scheme and Korea GHG and Energy Target Management system

C-FS14.1c

(C-FS14.1c) Why do you not conduct analysis to understand how your portfolio impacts the climate? (Scope 3 Category 15 "Investments" emissions or alternative carbon footprinting and/or exposure metrics)

[Insurance underwriting (Insurance company)]
Currently, the group is analyzing climate impact focused on bank activities(mostly loans), and non-bank activities are planned to be analyzed step by step. As a result, insurance underwriting's climate impact analysis was not performed at this time. Shinhan Life Insurance has considered the impact of climate change narrowly since the insurance products are managed mainly focused on individuals in life insurance sector. Recently Shinhan Life Insurance is expanding its interest in the impact of climate change on individual customer. Taking into account the physical risks that climate change can bring to individual customers such as fine dust, floods, etc., Shinhan Life Insurance plans to launch new products and incorporate them into existing insurance contracts. After that, we plan to analyze the product impact on climate change.

C-FS14.2

(C-FS14.2) Are you able to provide a breakdown of your organization's Scope 3 portfolio impact?

	Scope 3 breakdown	Comment
Row 1	Yes, by asset class	

C-FS14.2a

(C-FS14.2a) Break down your organization's Scope 3 portfolio impact by asset class.

Asset class	Metric type	Metric unit	Scope 3 portfolio emissions or alternative metric	Please explain
Corporate/SME loans	Total carbon absolute emissions (CO2e)	Metric tons CO2e	7,182,689.21	Asset portfolio's aggregate carbon emissions x the ratio of total loan amount compared to total assets

Fixed income	Total carbon absolute emissions (CO2e)	Metric tons CO2e	5,546,044.29	Asset portfolio's aggregate carbon emissions x the ratio of total stock purchase* compared to total assets *based on stock prices at the end of 2020
Listed equity	Total carbon absolute emissions (CO2e)	Metric tons CO2e	160,393.07	Asset portfolio's aggregate carbon emissions x the ratio of total bond purchase compared to total assets

C-FS14.3

(C-FS14.3) Are you taking actions to align your portfolio to a well below 2-degree world?

	We are taking actions to align our portfolio to a well below 2-degree world	Please explain
Bank lending (Bank)	Yes	In 2020 Shinhan Financial Group made an effort to understand the portfolio impact on climate by analyzing the carbon emissions of entire group's asset portfolio. The goal for Zero Carbon Drive, SFG's eco-frendly strategy, is achieving carbon neutrality by 2050 through cutting down carbon emissions of the Group's asset portfolio. The portfolio's aggregate carbon emissions reduction target was set of 38.6% by 2030 and 69.6% by 2040 based on the financial guidance of SBTi which is launched in October 2020.
Investing (Asset manager)	Yes	In 2020 Shinhan Financial Group made an effort to understand the portfolio impact on climate by analyzing the carbon emissions of entire group's asset portfolio. The goal for Zero Carbon Drive, SFG's eco-frendly strategy, is achieving carbon neutrality by 2050 through cutting down carbon emissions of the Group's asset portfolio. The portfolio's aggregate carbon emissions reduction target was set of 38.6% by 2030 and 69.6% by 2040 based on the financial guidance of SBTi which is launched in October 2020.
Investing (Asset owner)	Yes	In 2020 Shinhan Financial Group made an effort to understand the portfolio impact on climate by analyzing the carbon emissions of entire group's asset portfolio.

		The goal for Zero Carbon Drive, SFG's eco-frendly strategy, is achieving carbon neutrality by 2050 through cutting down carbon emissions of the Group's asset portfolio. The portfolio's aggregate carbon emissions reduction target was set of 38.6% by 2030 and 69.6% by 2040 based on the financial guidance of SBTi which is launched in October 2020.
Insurance underwriting (Insurance company)	No, but we plan to do so in the next two years	Shinhan Life Insurance is recently expanding its interest in the impact on climate change that retail customers can have. Taking into account the physical risks that climate change can bring to individual customers such as fine dust, floods, etc., Shinhan Life Insurance plans to launch new products and incorporate them into existing insurance contracts. After that, we plan to analyze the product impact on climate change. Further efforts will be made to implement the 1.5-degree world mentioned in the Group's Principles for Responding to Climate Change in the future.
Other products and services, please specify	Not applicable	There are no other products and services.

C-FS14.3a

(C-FS14.3a) Do you assess if your clients/investees' business strategies are aligned to a well below 2-degree world?

	We assess alignment	Please explain
Bank lending (Bank)	Yes, for some	SFG analyzes lending clients' carbon emissions and the target and assesses whether their business strategies are aligned to well below 2-degrees world. The clients whose business strategies are not aligned to well below 2-degrees world are monitored continuously and could be excluded from portfolio if their climate related risk persists.
Investing (Asset manager)	Yes, for some	SFG analyzes investees' carbon emissions and the target and assesses whether their business strategies are aligned to well below 2-degrees world. The investees whose business strategies are not aligned to well below 2-degrees world are monitored continuously and could be excluded from portfolio if their climate related risk persists.
Investing (Asset owner)	Yes, for some	SFG analyzes investees' carbon emissions and the target and assesses whether their business strategies are aligned to well below 2-degrees world. The investees whose business strategies are not aligned to well below 2-degrees world are monitored continuously and could be excluded from portfolio if their climate related risk persists.

C-FS14.3b

(C-FS14.3b) Do you encourage your clients/investees to set a science-based target?

	We encourage clients/investees to set a science-based target	Please explain
Bank lending (Bank)	No, but we plan to do so in the next two years	Since SFG set the GHG emissions reduction targets of company and portfolio at the end of 2020 based on SBTi, we have not yet encouraged our clients/investees to set a science-based target(SBT). In 2021 we will encourage them to set SBT.
Investing (Asset manager)	No, but we plan to do so in the next two years	Since SFG set the GHG emissions reduction targets of company and portfolio at the end of 2020 based on SBTi, we have not yet encouraged our clients/investees to set a science-based target(SBT). In 2021 we will encourage them to set SBT.
Investing (Asset owner)	No, but we plan to do so in the next two years	Since SFG set the GHG emissions reduction targets of company and portfolio at the end of 2020 based on SBTi, we have not yet encouraged our clients/investees to set a science-based target(SBT). In 2021 we will encourage them to set SBT.

C15. Signoff

C-FI

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

-

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chairman & CEO	Chief Executive Officer (CEO)