

# C0. Introduction

## C<sub>0.1</sub>

#### (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 15 subsidiaries, providing customers with a full range of excellent financial services, including banking, credit cards, securities, insurance, and asset management. SFG currently serves approximately 19.54 million customers through approximately 30,477 employees at 1,241 networks.

### C<sub>0.2</sub>

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

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1, 2021	December 31, 2021	Yes	1 year

## C<sub>0.3</sub>

#### (C0.3) Select the countries/areas in which you operate.

Republic of Korea

#### C<sub>0.4</sub>

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

**KRW** 

### C<sub>0.5</sub>

(C0.5) Select the option that describes the reporting boundary for which climaterelated 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 activities does your organization undertake, and which industry sectors does your organization lend to, invest in, and/or insure?

	Does your organization undertake this activity?	Insurance types underwritten	Industry sectors your organization lends to, invests in, and/or insures
Banking (Bank)	Yes		Exposed to all broad market sectors
Investing (Asset manager)	Yes		Exposed to all broad market sectors
Investing (Asset owner)	Yes		Exposed to all broad market sectors
Insurance underwriting (Insurance company)	Yes	Life and/or Health	

## C<sub>0.8</sub>

# (C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

	ndicate whether you are able to provide a unique identifier for our organization	Provide your unique identifier
Υ	es, an ISIN code	KR7055550008

# 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	The ESG Strategy Committee and Risk Management Committee deliberate and
committee	make final decisions on important agenda for the transition to a low-carbon



economy and strategic direction to counter climate change.

In 2015, Shinhan became the first financial company in Korea to establish the CSR Committee (currently ESG Strategy Committee). The Committee oversees all major decision making related to ESG and climate change strategies. The Risk Management Committee identifies, measures, monitors, and controls risks that arise from various transactions in a timely manner, and comprehensively manages them.

By creating the ESG Implementation Committee in 2021 that is participated in by all Group subsidiary CEOs, Shinhan Financial Group built a driving system for unified ESG and climate change strategy implementation at the Group level, along with the Group ESG CSSO Council and Group Risk Council.

In addition, the GCSSO and GCRO, who are officials in charge of executing work, are respectively in charge of the overall ESG driving system and climate risk management, and report major matters to the ESG Strategy Committee and Risk Management Committee.

The ESG Strategy Committee held a total of four committees in 2021. At each committee meeting, the current financed emissions status was identified and strategies for achieving the reduction target were discussed. In May 2021, the ESG Strategy Committee chose to join the Net Zero Banking Alliance (NZBA) initiative for accelerating net-zero finance. In August 2021, the ESG Committee approved the establishment of ESG strategic indicators to expand carbon emission-related indicators to strategic tasks for all subsidiaries. In May 2021, the Risk Management Committee approved the project to establish an ESG integrated risk management system and started to promote the integration of the risk management system centered on climate change.

## 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	Climate-related risks and opportunities to our own operations Climate-related risks and opportunities to our banking activities	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.



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 investment activities Climate-related risks and opportunities to our insurance underwriting activities The impact of our own operations on the climate The impact of our banking activities on the climate The impact of our investing activities on the climate The impact of our investing activities on the climate The impact of our investing activities on the climate The impact of our insurance	Risk Management Committee establishes polices for managing climate change risks by being reported on related issues through the Group Risk Council and checking them.
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# C1.1d

# (C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues
Row 1	Yes	The SFG is aiming to form a board of directors with various expertise so they can make important decisions based on a broader perspective considering all stakeholders. While organizing the board of directors, personnel are assigned in accordance to the characteristics of the committee's organization and related expertise.  Since the ESG Strategy Committee is an organization that has the authority to make final decisions on the group's sustainability management, including at least one person with experience related to sustainability management for more than three years or has expertise



in accounting and disclosure related to climate change is encouraged.
Currently, Shinhan's ESG Strategy Committee Chairman has served
as a member of the board of directors for the International Financial
Reporting Standards (IFRS) Foundation since 2017. Based on the
understanding of the draft climate-related financial information
disclosure (S2) recently announced by the International Sustainability
Standards Board (ISSB) under the IFRS Foundation, providing
professional and timely opinions within the organization and support
the Board of Directors to make rational decisions.

# 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 banking Risks and opportunities related to our investing activities Risks and opportunities related to our insurance underwriting activities Risks and opportunities related to our own operations	Quarterly

# 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 incentivized	Comment
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction target Energy reduction project Portfolio/fund alignment to climate-related objectives	The SFG discussed the ESG reflection in major strategic group company tasks in 2018, and the ESG performance was reflected in the evaluation system for all group CEOs including the group CEO in 2019. In 2021, we established the ESG performance management system to quantitatively measure and evaluate the ESG business performance of each group for the first time in a financial company and created ESG 3.0 to internalize ESG in all practical business activities. The evaluation included climate change-related performance measurement, such as eco-friendly finance and financed emission management. In 2022, for the first time in a domestic financial company, the quantitative performance of each group company's carbon emission reduction was reflected in the group company's CEO evaluation. If goals are achieved based on these climate change-related performance indicators, we provide incentives and other salary-linked compensation at the end of the year.

# C-FS1.4

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

	Employment-based retirement scheme that incorporates ESG criteria, including climate change	Describe how funds within the retirement scheme are selected and how your organization ensures that ESG criteria are incorporated
Row 1	Yes, as an investment option	Under the basic retirement pension system of domestic companies, the SFG can actively decide how to manage severance pay and form a portfolio according to the investment propensity of its employees. We provide ESG-related investment products that are segmented according to ESG investment strategies and target indicators of various asset management companies.



# 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	1	2	climate risk is rapidly coming into greater prominence in terms of policy aspects in accordance with the recent global net-zero trend. Matters that can influence relevant companies' profits, such as the carbon tax and emission trading system, are emerging in a short period, and such matters as mandatory environmental information disclosure by listed companies can become a risk in operation or legal aspects. Our analysis confirmed that relevant risks may have a short-term impact, and defined the period as at least one year to at most two years.
Medium- term	3	5	In the mid-term future, reputation risk may arise from the implementation of Zero Carbon Drive, which was declared by Shinhan Financial Group. Failure to reduce financed emissions or continued financial support for high emission businesses that have no will towards low-carbon transition can be interpreted as "green washing" and can have a negative impact on external, open evaluations. Also, these can be connected to passive investment, ESG-related ETF, and other financial products, having a direct impact on stock price decreases. There is concern that this can escalate into legal risks of shareholders and stakeholders. In this aspect, Shinhan defines the mid-term as a period of three to five years when we can conduct actual risk monitoring and analyses and review resulting exposure adjustment plans.
Long- term	6		Lastly, in the long term(6 years later from now, after mid-term future), we can confirm the existence of an inverse relationship according to how physical risks and implementation risks progress. Failure to respond to physical risks will also result in failure to manage implementation risk, which will further increase acute and chronic risks. As such, there is a need to review and consider all risks in both directions. SFG defines the long term as the point mentioned in IPCC and IEA reports.



### 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 1.5 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
- **Corporate 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 climaterelated risks and opportunities.

#### Value chain stage(s) covered

Direct operations

#### 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) Risk Identification, Assessment, Response
- a . Risk Identification Process

The SFG defines climate change risks based on the TCFD recommendations. Our risk department regularly identifies areas vulnerable to climate change based on climate change-related information from investment and loan companies. Moreover, we continuously identify climate change risks by reflecting on the latest research results and collaborating with internal and external specialized organizations.

#### b. Risk Assessment Process

The SFG developed an independent financed emission measurement system to systematically evaluate and manage climate change risks. Also, using the PCAF Greenhouse Gas Accounting Standards, we collected and monitored financed emissions of financial subsidiaries under the group. Financed emissions are shared throughout the company through the dashboard.

Property damage caused by natural disasters can spread to the financial sector. To manage these physical risks, the SFG analyzes the climate scenario step-by-step and analyzes its impact on the bank's portfolio by region and segmentation by industry.

#### c . Risk Response Process

The SFG conducts financial discharge measurement results in the credit/investment process, which is reflected in business decisions. When selecting excellent ESG company and asset investments targeting, we actively utilize ESG models, including climate change. Ultimately, we wish to integrate and apply it to existing decision-making systems.

We developed a system that can check the current financed emission and intensity levels compared to the target in connection with the financed emission reduction target for the entire group and each subsidiary. We efficiently manage risks by operating a financed emission dashboard system.

First, Select areas of concern that have a negative environmental or social impact or are sensitive, and Identify transition and physical risks factors. The area of interest consists of 12 areas with many environmental and social issues, such as global warming, fine dust, biodiversity, and occupational safety and health, based on International Finance Corporation (IFC) guidelines.

The SFG operates a system to proactively review and check the environmental and social risks that may occur when making business decisions when providing large-scale financial services (business scale of KRW 10 billion or more) that fall within a significant area.

- 1) In the prescreening stage, we examined whether the investment project met the "Environmental and Social Risk Management Policy Framework(ESRM)" pursued by the group.
- 2) During classification, the risk grade (A, B, C) of the project is categorized according to the environmental and social impact.
- 3) In the environmental and social impact assessment, the impact of the high-risk (risk grade A, B) project on the environment and society is evaluated in detail. When it is necessary to reduce or manage environmental and social risk factors, this is reflected in the financial contract.
- 4) In follow-up management, the implementation of mitigation and management measures prepared to minimize environmental and social impacts is checked, and the



major risk factors of climate change are managed through a monitoring system. In 2021, according to the PCAF guidance, financed emission measurement was expanded to a total of six assets, approximately KRW 227 trillion, and all asset classes and industry items that the group could measure were branched. Risks are analyzed and managed using measuring units.

Furthermore, internal and external stakeholders' environmental and social risks for communication with major policies related to management are open to operation.

#### ii) Priority process

The SFG defines the most important management factor in climate change as 'financed emissions.' We evaluate 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, possibility of risks and opportunities due to climate change, and the financial impact of climate change on investment targets. We evaluate the carbon intensity risk priority (carbon emissions per unit of 100 million won) by the industrial sector and assets through the measurement and analysis of financed emissions in 2021 and reflects the total limit of high-risk areas.

### iii) Case study of Process reflection (Transition Risk)

According to the ESRM, SFG has assessed the environmental and social impact for 12 large project financing projects(over KRW 10 billion PF of the area of interest) in 2021. For projects that may have large environmental and social impacts, financial conditions are provided for measures to reduce environmental impacts. In 2021, Shinhan Bank conducted a review of the Equator Principles on a total of 36 cases. Financial agreements are reflected for projects that have received risk grades, and we requested the submission of an environmental impact assessment report.

SFG is aware of the risks to high-carbon industry borrowers that climate change may pose and is implementing regular monitoring of financed emissions. Thus, we developed a financed emission measurement system based on the PCAF standards in 2021. The calculation of financed emissions according to the increase in assets every quarter and monitoring is in progress. As of December 2021, Power generation(181.39), steel(131.76), cement(122.65), and chemical(77.03) were classified as major high-carbon industries(unit: tCO2e/KRW 100 million). For industries that emit high-risk groups, separate monitoring through the risk dashboard is performed, and thresholds are set. Subsequently, we continued to respond through cause analysis. (Physical Risk)

The SFG considers that physical risks are specific operational risk factor, and strives to reflect it in emergency plans. According to the Detailed Climate Change Prospect Report for South Korea of the National Academy of Meteorology, the extreme climate index is defined as the extreme temperature and precipitation extreme index, and SFG uses the precipitation extreme index as a major physical hazard index that can have a direct impact on operating domestic branches. Among them, an increase in the number of days of heavy rain was considered, which refers to an increase in the number of days



per year with a daily precipitation of 80 mm or more.

The SFG analyzes the physical risks caused by climate change by dividing them into two types. The first is to identify and prevent buildings and branches vulnerable to acute physical hazards in advance by selecting regions that may have an impact on SFG's internal operations. The other, in terms of assets held by the group, is to identify the nature and scope of the assets exposed to physical risks and check the financial impact.

# C2.2a

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

assessment		
	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	[Implementation of Greenhouse Gas Regulations] 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 2021, the amount of asset, bond, loan products are totally 21.3 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	[Enhancing the climate change-related regulations] We analyzed the expected financial impact and determined the response direction according to the scale in consideration with the direct and indirect impact of climate change-related regulations. The Shinhan Bank is currently regulated by the 'GHG and Energy Target Management System'. 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.



		[Enhancing the obligation to disclose the environment] As climate change poses an increasing financial risk to companies, the need for standardized financial information disclosure grows. Followed by the request of the G20 Finance Minister and central bank presidents meeting, the Financial Stability Board (FSB), an international financial institution, announced the Climate Change Financial Disclosure Recommendation (TCFD). The International Accounting Standards Foundation (IFRS) established the ISSB in 2021 and is promoting the enactment of the 'IFRS Sustainability Disclosure Standards.' In September 2020, New Zealand made it mandatory for banks and businesses to disclose climate change risks. The UK is pursuing a mandatory disclosure policy for climate change risks of all listed companies by 2023. Accordingly, domestic financial authorities are pursuing a plan to make ESG disclosure mandatory in stages, and ESG disclosure is measuring climate risk by each disclosure standard as mandated. A lack of analytical capabilities can introduce regulatory and reputation risks.
Technology	Relevant, always included	[Low-Carbon technology business expansion] Low-carbon, eco-friendly technologies are being developed to achieve climate change and carbon-neutral goals. Sales are expected to decrease if the expansion and development of related financial products are insufficient to keep pace with the pace of technological development. In addition, the success of low-carbon technology conversion of companies in high-carbon emission industries can have a significant impact on the company's profit and loss. This can also affect the financial health of our portfolio.  The Shinhan Financial Group is developing technologies and markets due to climate change. We monitor customer demand trends regularly and apply them in decision-making such as for new product development.  Moreover, we are operating building energy-related products such as green energy factoring, green remodeling secondary loan, and the New and Renewable Energy Fund. In the future, we plan to expand related financial products according to the development pace in the field of technology.
Legal	Relevant, sometimes included	[Increasing litigation related to climate issues] 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. Litigation cases related to climate change issues are internationally on the rise. A recent case in Korea included an application for an injunction prohibiting the conclusion of an investment contract with the



		Korea Trade Insurance Corporation and the Export-Import Bank of Korea for financial support of SK E&S's 'Australian Barossa gas field project.' The case was dismissed in a domestic court, but the case is ongoing in a local Australian court. Therefore, environmental legal cases related to financial support are expected gradually increase in Korea.  The Shinhan Financial Group decides whether to invest by evaluating the financial impact on investment companies or projects through the environmental and social risk management system. If necessary, we preemptively respond to these risks by providing conditional financial support that makes it mandatory to reflect measures to reduce environmental impact.
Market	Relevant, always included	[Increase in demand for new and renewable energy business] 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 958.7 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	[Growing consumer interest in climate change] 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.  Financed emission management and greenwashing issues by financial companies are directly related to reputational risks from the media and customers. They can have a huge impact on short-term customer churn. Furthermore, the recent reputation may affect the evaluation of the ESG rating agency, which may also lead to a decline in the stock value due to the decline in the group's ESG rating.



Acuto	Polovost	[Increase in abnormal weather phanemana]
Acute physical	Relevant, always included	[Increase in abnormal weather phenomena] Acute physical hazards such as the rainy season, heavy rain, and typhoons can cause direct damage to the SFG's business units by causing branch business and computer center operation suspension. According to the Korea Meteorological Administration(KMA)'s past climate change trend analysis (1912~2020), the amount of precipitation days is decreasing but annual precipitation increases by 17.71mm every 10 years, showing an increase in precipitation intensity. Similarly, as a result of the extreme climate index analysis, extreme climate phenomena such as torrential rain are appearing more frequently and intensely.  In the South Korea Detailed Climate Change Prospect Report (2021) of the National Academy of Meteorological Sciences, the average amount of heavy rain days in Korea (the amount of days per year for days with daily precipitation of 80 mm or more) is 2.1 days. The amount of heavy rain days in Jeju (which has the greatest amount of extreme precipitation) was 4.9 days, which is more than twice the average. For Jeju Bank, as most of the branches of the SFG are located in the Jeju area, the probability of physical damage due to heavy rain is higher than in other areas, and the probability of damage due to temporary business suspension is expected to be greater.  The group has suffered business losses due to natural disasters and are aware of this possibility. By accounting for specific risk factors, we are attempting to identify and prevent buildings and branches vulnerable to acute physical hazards in advance.
Chronic physical	Relevant, always included	[Increased number of days of heavy rain] 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 IPCC 6th Assessment Report (ARG) published in August 2021, if greenhouse gases are emitted at the current level, the global average temperature between '2021-2040' will be 1.5°C compared to pre-industrial levels. It is likely to be greater than this in Asia owing to its heat waves and heavy rains. All droughts are predicted to be severe. In 2021, Shinhan analyzed changes in long-term climate change patterns through the Ewha Woman's University-Financial Supervisory Service Physical Risk Project. Heavy rain-related and future scenario data were obtained for each administrative district in Korea, and hazardous areas under climate change scenarios were identified through heavy rainfall level data for each administrative district by RCP scenario. These climate risks can lead to a decline in the value of regional-based real estate-backed assets, so that we analyse risks for commercial real estate and mortgage loans



# **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
Banking (Bank)	Yes
Investing (Asset manager)	Yes
Investing (Asset owner)	Yes
Insurance underwriting (Insurance company)	Yes

# **C-FS2.2c**

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

	Type of risk managemen t process	Proportion of portfolio covered by risk managemen t process	Type of assessmen t	Time horizon(s ) covered	Tools and methods used	Provide the rationale for implementing this process to assess your portfolio's exposure to climate-related risks and opportunities
Banking (Bank)	Integrated into multidisciplinary companywide risk management process	51.2	Qualitative and quantitative	Short-term Medium- term Long-term	Portfolio temperature alignment Internal tools/method s External consultants	The evaluation process for Shinhan's portfolio exposure to climate change-related risks is a PCAF-based financed emissions calculation. The most significant factor that a financial group can be exposed to with climate change



is recognized
as 'financed
emissions' and
emission
calculation
requirements
for assets have
been defined,
and a system
has been
established
based on the
existing group's
risk
management
system (RMS).
A total of six
groups(listed
equity and
corporate
bonds,
business loans
and unlisted
equity, project
finance,
commercial
real estate,
mortgages, and
Motor Vehicle
loans) are
integrated and
monitored
every quarter,
and analysis of
the absolute
amount of
financed
emissions and
the intensity of
emissions per
unit of 100
million won,
industry field,
and asset class



						has been implemented.
Investing (Asset manager)	Integrated into multi-disciplinary company-wide risk management process	43	Qualitative and quantitative	Short-term Medium- term Long-term	Portfolio temperature alignment Internal tools/method s External consultants	Portfolio carbon emissions were measured using a PCAF-based financed emissions calculation process. The process was monitored quarterly and managed using absolute emission and emission intensity indicators. We measure emissions for domestic listed stocks and domestic credit bonds among assets under management. In the future, we plan to expand the asset classes subject to evaluation, as the measurement methodologies and data accessibility will improve. The goal is to reduce asset portfolio emissions by 31.89% compared to



						2020 by 2030, using the sectoral decarbonizatio n approach (SDA).
Investing (Asset owner)	Integrated into multi-disciplinary company-wide risk management process	26.5	Qualitative and quantitative	Short-term Medium- term Long-term	Portfolio temperature alignment Internal tools/method s External consultants	The evaluation process for Shinhan's portfolio exposure to climate change-related risks is a PCAF-based financed emissions calculation. The most significant factor that a financial group can be exposed to with climate change is recognized as 'financed emissions' and emission calculation requirements for assets have been defined, and a system has been established based on the existing group's risk management system (RMS). A total of six groups(listed equity and corporate bonds,



						business loans and unlisted equity, project finance, commercial real estate, mortgages, and Motor Vehicle loans) are integrated and monitored every quarter, and analysis of the absolute
						amount of financed emissions and the intensity of emissions per unit of 100 million won, industry field, and asset class has been implemented.
Insurance underwritin g (Insurance company)	Integrated into multi-disciplinary company-wide risk management process	31.6	Qualitative and quantitative	Short-term Medium- term Long-term	Portfolio temperature alignment Internal tools/method s External consultants	The evaluation process for Shinhan's portfolio exposure to climate change-related risks is a PCAF-based financed emissions calculation. The most significant factor that a financial group can be exposed to with climate change is recognized as 'financed



			emissions' and
			emission
			calculation
			requirements
			for assets have
			been defined,
			and a system
			has been
			established
			based on the
			existing group's
			risk
			management
			system (RMS).
			A total of six
			groups(listed
			equity and
			corporate
			bonds,
			business loans
			and unlisted
			equity, project
			finance,
			commercial
			real estate,
			mortgages, and
			Motor Vehicle
			loans) are
			integrated and
			monitored
			every quarter,
			and analysis of
			the absolute
			amount of
			financed
			emissions and
			the intensity of
			emissions per
			unit of 100
			million won,
			industry field,
			and asset class
			has been
			implemented.
			•



### **C-FS2.2d**

# (C-FS2.2d) Does your organization consider climate-related information about your clients/investees as part of your due diligence and/or risk assessment process?

	We consider climate-related information
Banking (Bank)	Yes
Investing (Asset manager)	Yes
Investing (Asset owner)	Yes

## **C-FS2.2e**

(C-FS2.2e) Indicate the climate-related information your organization considers about clients/investees as part of your due diligence and/or risk assessment process, and how this influences decision-making.

#### **Portfolio**

Banking (Bank)

### Type of climate-related information considered

**Emissions data** 

Energy usage data

Emissions reduction targets

Climate transition plans

#### Process through which information is obtained

Directly from the client/investee

Data provider

Public data sources

#### Industry sector(s) covered by due diligence and/or risk assessment process

Energy

Materials

Capital Goods

Commercial & Professional Services

Transportation

Automobiles & Components

Consumer Durables & Apparel

Consumer Services

Retailing

Food & Staples Retailing

Food, Beverage & Tobacco

Household & Personal Products

Health Care Equipment & Services

Pharmaceuticals, Biotechnology & Life Sciences



Software & Services
Technology Hardware & Equipment
Semiconductors & Semiconductor Equipment
Telecommunication Services
Media & Entertainment
Utilities
Real Estate

#### State how this climate-related information influences your decision-making

Emissions, energy consumption, and ESG evaluation information are reflected in the loan/investment review process. The target of the review process is 30 billion won or more in the case of conglomerate and external financial audit corporation, and 50 billion won in the IB sector.

Particularly, the Group operates the 'Carbon Reduction Effort Score Card' in the power plants, steel, cement, chemical sectors and etc, which are identified as major 'high-carbon' industries. Based on the checklist for information disclosure, management system, technology, and production facilities, the loan/investment subject to review process are categorized into excellent, good, or average, and reflected in the carbon reduction effort score card.

To consider the determination of the current status of carbon emissions and make an effort to reduce them, we are differentially operating financial support such as expansion, conversion, and maintenance.

#### **Portfolio**

Investing (asset manager)

#### Type of climate-related information considered

Emissions data Energy usage data

Emissions reduction targets

Climate transition plans

#### Process through which information is obtained

Directly from the client/investee

Data provider

Public data sources

### Industry sector(s) covered by due diligence and/or risk assessment process

Energy

Materials

Capital Goods

Commercial & Professional Services

Transportation

Automobiles & Components

Consumer Durables & Apparel

**Consumer Services** 



Retailing

Food & Staples Retailing

Food, Beverage & Tobacco

Household & Personal Products

Health Care Equipment & Services

Pharmaceuticals, Biotechnology & Life Sciences

Software & Services

Technology Hardware & Equipment

Semiconductors & Semiconductor Equipment

**Telecommunication Services** 

Media & Entertainment

Utilities

Real Estate

#### State how this climate-related information influences your decision-making

For all general equity funds, SFG rates them according to their own ESG rating criteria, reflecting climate-related information. (As of 2021, the proportion of BB grade or higher is 70%) Also, we are also proactively monitoring financial emissions through regular measurement and internal reporting.

Engagement activities are carried out for enterprises within the portfolio that do not have the climate disclosures required by TCFD or CDP. In addition, we manage climate risks through individual company interviews and shareholder letters for high-emission industries and companies with poor response to climate change.

### 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?

Banking portfolio

#### 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

Credit 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, a company that has one or more establishments with 25,000 tons or more or a company that has voluntarily applied for designation as an allocation target company 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.

Among the Shinhan Financial Group's customers/investors, there are a total of 689 companies subject to the emission trading system, and their exposure scale is KRW 37,257 billion. 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)

372,600,000,000

Potential financial impact figure - minimum (currency)

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

#### **Explanation of financial impact figure**

The strictness of the regulation of the emission trading system(ETS) is affected by the nationally determined contributions(NDC). Last year, the Korean government raised the NDC from 27.3% reduction to 40% reduction. As a result, it is expected that the ETS will become stricter and the emission cap and allowances will decrease.

The Network for Greening the Financial System (NGFS) predicts that the price of Korea's emission permits will rise from 26.7 dollars/ton at the end of 2021 to 139.5 dollars/ton in 2030. This can increase the operating costs of regulated companies and



reduce their value added.

The Bank of Korea, the central bank of Korea, estimated the change in the value added of regulated companies according to the NGFS scenario.

In the case of high-carbon industries, the value added is analyzed to decrease by an average of 0.95% per year, and by 2030, the value added is expected to decrease by about 10%.

Therefore, considering the impact of carbon regulations on the portfolio of regulated companies by 2030, it is expected that approximately 10% of the regulated company exposure (KRW 372.6 billion, which is 10% of regulated company exposure; KRW 37,257 billion) will turn into a negative margin.

#### Cost of response to risk

1,700,000,000

#### Description of response and explanation of cost calculation

The Shinhan Financial Group established a financed emission calculation system for the first time as a domestic financial company and set annual/industry reduction targets by 2050. The financed emission scope plans to expand its area and is currently used in reduction target management, identifying and managing vulnerable areas in terms of implementation risk, screening/investment process, and business divisions. Through this system, we monitor quarterly performance and conduct strategic analyses on assets and corporate customers to reduce financed emissions. Furthermore, from a risk management perspective, a financed emissions dashboard system was established to monitor financed emissions by group portfolios and risks caused by sharp increases or biases in intensity. High-emission areas are designated separately and are utilized for monitoring and business decision-making.

A total of 17 personnel (including 1 person from each of the 15 group companies and 2 from the holding company) were included in the 2021 portfolio analysis. Assuming an average annual salary of KRW 100 million per person, labor costs for portfolio analysis are estimated to be approximately KRW 1,700 million.

#### Comment

#### Identifier

Risk 2

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

Direct operations

#### Risk type & Primary climate-related risk driver

Acute physical Heavy precipitation (rain, hail, snow/ice)

#### 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

Acute physical hazards such as the rainy season, heavy rain, and typhoons can cause direct damage to the Shinhan Financial Group's business units by causing branch business and computer center operation suspension.

According to the Korea Meteorological Administration's past climate change trend analysis (1912~2020), the amount of precipitation days is decreasing but annual precipitation increases by 17.71mm every 10 years, showing an increase in precipitation intensity. Similarly, as a result of the extreme climate index analysis, extreme climate phenomena such as torrential rain are appearing more frequently and intensely. In the South Korea Detailed Climate Change Prospect Report (2021) of the National Academy of Meteorological Sciences, the average amount of heavy rain days in Korea (the amount of days per year for days with daily precipitation of 80 mm or more) is 2.1 days. The amount of heavy rain days in Jeju (which has the greatest amount of extreme precipitation) was 4.9 days, which is more than twice the average. For Jeju Bank, as most of the branches of the Shinhan Financial Group are located in the Jeju area, the probability of physical damage due to heavy rain is higher than in other areas, and the probability of damage due to temporary business suspension is expected to be greater.

#### **Time horizon**

Long-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)

443,000,000

Potential financial impact figure - minimum (currency)

Potential financial impact figure – maximum (currency)

#### **Explanation of financial impact figure**

The Shinhan Financial Group measured the financial effect that will occur for Jeju bank by using the average amount of heavy rain days and annual operating profit.

Jeju Bank may have to close the operation for approximately 4.9 days for recovering from physical damages due to heavy rainfall, in which case a financial loss of approximately 443 million KRW is expected to occur.



- Annual operating profit of Jeju Bank branch in 2021: KRW 22,602 million
- Average number of business days per year: 250 days
- Expected operating loss: (22,602 million won/250) \*4.9 = 443 million
- \* Annual operating profit of Jeju bank: 22,602,403,649 KRW

#### Cost of response to risk

18,240,000

#### Description of response and explanation of cost calculation

In preparation for natural disasters such as flood, heavy snowfall, and typhoon, major subsidiaries 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, Jeju Bank is responding to Disaster/ Calamity crisis management through a safety management plan.

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 to the head of the sales division and the safety management office or the department in charge of each disaster situation (the department in charge of each major event/emergency measure) and related organizations (the Self-Governing Province Fire and Disaster Prevention Headquarters, Jeju Disaster Situation Office, National Police Agency, and Jeju Airport). 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.

Moreover, we purchase comprehensive property insurance to minimize the cost of recovery from physical damage caused by natural disasters and to minimize financial damage.

According to the 2021 business continuity plan, the training cost is KRW 12.4 million, and the comprehensive property insurance premium is KRW 5.84 million.

#### Comment

## 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

Opp2

#### Where in the value chain does the opportunity occur?

Banking portfolio

#### **Opportunity type**

Products and services

#### Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

#### Primary potential financial impact

Increased revenues resulting from increased demand for products and services

#### Company-specific description

The Shinhan Financial Group is conducting periodic surveys and analyses to understand customer requirements and consumer and market trends according to climate change.

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). The supply duty ratio is continuously expanding. In 2021, 9% of renewable energy was supplied. Government plans to increase the share of renewable energy by 25 % by 2026. 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.

Shinhan Financial Group expects to see growing demands from our corporate clients for renewable energy PFs(958.7 billion KRW in 2021) 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)

958,700,000,000

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 2021 and provided approximately 958.7 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

3,500,000,000

#### Strategy to realize opportunity and explanation of cost calculation

As the customer's response to regulations related to new and renewable energy is expected to increase, we are making efforts to actively utilize opportunities related to new and renewable energy by participating in various types of renewable energy power generation projects as an investment advisor or continue to invest in expanding to new and renewable energy sources such as solar power, wind power, fuel cell, and biomass. The Shinhan Financial Group's GIB division is participating in a total of 59 projects in Japan, Vietnam, and other countries. (Japan Shuki 26MW solar power generation PF, Imjado 99.94MW solar power generation project finance, Japan Yamanashi Kai 17.28MW solar power generation PF)

Moreover, as financial needs new and renewable energy in the non-solar energy sector (such as wind, solar cells, and waste), Shinhan Bank also expanded our investment in the non-solar energy sector.

With the Shinhan Financial Group's expanding eco-friendly finance policy, renewable energy, energy efficiency, and Capital investment in business such as fuel conversion, we plan to continue expanding loans and PF.

In 2021, operational cost of climate change-related financial products was included in the total operational costs. Almost 3,500 million KRW was incurred as labor costs for renewable energy generation project investment (35 employees for a year, average annual salary at 100,000,000 KRW/person).

#### Comment

Identifier

Opp3



#### Where in the value chain does the opportunity occur?

Investing (Asset manager) portfolio

#### Opportunity type

Products and services

## Primary climate-related opportunity driver

Shift in consumer preferences

#### Primary potential financial impact

Increased revenues resulting from increased demand for products and services

#### 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. According to Morningstars's report on average in 2021, sustainable funds attracted \$17.3 billion in net flows each quarter, topping the \$12.8 billion average seen in 2020 and leading to another record-setting year. In total, U.S. sustainable funds netted nearly \$70 billion for the year, a 35% increase over 2020's high-water mark. Shinhan Asset Management: Recognizing these changes as an opportunity factor, we have continuously increased the proportion of ESG-related investments by approximately 1% every year.

As of 2021 the climate related ESG fund size is 3,069.5 billion KRW increased ratio about 15%, including renewable energy/energy efficiency 2,211.2 billion KRW, ecotransportation 858.3 billion KRW etc.

The Shinhan Financial Group plans to support the transition to a low-carbon economy through eco-friendly finance tailored to the characteristics of each group company. We plan to continuously expand ESG-related investments.

#### **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)

3,069,500,000,000

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 2021, these funds amount to 3,069.5 billion KRW and Shinhan Asset Management expects this figure to continue growing in the future to lead to greater profit.

#### Cost to realize opportunity

900,000,000

#### Strategy to realize opportunity and explanation of cost calculation

As ESG-related systems and institutional investors' investments are expanding world-widely, we are reviewing ESG investment policies and increasing the proportion of ESG investment in our investment assets. As a result, the return of ESG-related funds managed by Shinhan Asset Management is expected to increase, and the expected return of investors such as Shinhan Life insurance, Shinhan Bank, and Shinhan Investment Corp. is also expected to improve.

To take advantage of this related opportunity, alternative investment products such as Shinhan Green Sunshine Dream General Private Equity Special Asset No. 1, Daegu Green Power Combined Heat and Power General Private Equity Special Asset, Japan Solar Power Project General Private Equity Special Asset No. 3, Green New Deal Energy General Private Equity Special Asset No. 2, WTE (Waste To Energy) General Private Equity No.1, and SRI (Socially Responsible Investment) fund products such as SOL Global Carbon Emissions Futures IHS Special Asset Listed Index, SOL Europe Carbon Emissions Futures S&P Special Asset Listed Index and Global Carbon Neutral Solution have been developed and are operating.

In 2020, Shinhan Asset Management incurred about 900 million KRW (assigned 9 employees for a year, 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) Does your organization's strategy include a transition plan that aligns with a 1.5°C world?

#### Row 1

#### **Transition plan**

Yes, we have a transition plan which aligns with a 1.5°C world

#### Publicly available transition plan

Yes



# Mechanism by which feedback is collected from shareholders on your transition plan

We have a different feedback mechanism in place

#### **Description of feedback mechanism**

When the Shinhan Financial Group announces its quarterly earnings, financed emissions, and eco-friendly financial performance, and receives feedback from shareholders on progress. As well as, We are communicating about discussing transition plans for investors through irregular investor meetings and NDRs.

### Frequency of feedback collection

More frequently than annually

#### Attach any relevant documents which detail your transition plan (optional)

SFG\_2021\_ESG\_Report\_kor.pdf

## C3.2

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

	Use of climate-related scenario analysis to inform strategy	
Row 1	Yes, qualitative and quantitative	

## C3.2a

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

Climate- related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios NGFS scenarios Framework	Portfolio		The SFG conducted a scenario analysis, in two ways to understand the impact of climate change on its portfolio. Based on the NGFS scenario using the top-down method of applying the data from the Bank of Korea(BOK), the central bank of Korea, to analyze the implementation risk due to climate change based on the NGFS scenario to the SFG's portfolio, and S&P Global's Climate Credit Analytics(CCA) model. The financial impact of high-carbon industries was analyzed using a bottom-up method.  ① Top-down scenario analysis - parameters and assumptions The decline in the value of financial assets is embodied as a real risk that increases the credit risk of financial institutions through the default rate(probability



of default within one year from the time of measurement). Result of scenario analysis by the BOK: The default rate of the high-carbon industry is 3.7%~6.3% in 2030, 6.6%~9.8% in 2040, and 10.2%~18.8% in 2050, which is estimated to have a large impact from climate change. The default rate of low-carbon industries is 0% in 2030, 0%~0.1% in 2040, and 0.1%~0.4% in 2050, which is estimated to have little impact on climate change.

SFG used this result to estimate the change in the BIS ratio. The structure of holding financial assets was assumed to have the same base point and analysis

- analysis

target period.

The Scenario analysis was performed with an orderly transition model, NGFS 1.5°C or less and 1.5°C  $\sim$  2°C suppression.

- ② Bottom-up scenario analysis
- parameters and assumptions

The SFG conducted a detailed scenario analysis for each high-carbon sector.

For analysis, macroeconomic variables and regulatory changes due to climate change, changes in demand/supply and investment in the industry, sales of individual companies within the industry, and changes in profitability are assumed.

SFG estimated the change in default rates and the financial impact of individual companies in two industries, which have high priority for financed emissions: power generation and oil & gas (over KRW 10 billion or more). These can have a significant impact on profitability on a group basis.

Accordingly, changes in the soundness of high-carbon industries due to climate change were confirmed through changes in default rates and credit ratings.

- analysis

S&P Global's CCA model was used for the scenarios. There are 6 NGFS scenarios (2050 net-zero, 1.5°C, Delayed Transition, Divergent Net Zero, NDC Implementation, and Current Policies) were all applied and analyzed.



## C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

#### Row 1

#### **Focal questions**

The problem that the SFG ultimately wants to solve through climate change scenario analysis is to find the direction of portfolio adjustment. As climate change is a major risk and opportunity factor that fluctuates corporate asset values, financial services companies must proactively understand the impact of climate change on their portfolios and adjust appropriately. The prediction of changes in the financial soundness of the portfolio due to climate change needs to be analyzed for the transition to an eco-friendly portfolio. The SFG defined the factors representing the financial soundness of a portfolio as 'default rate' and 'credit rating.'

NGFS is an international consultative body established by central banks and supervisory authorities of each country to promote climate change risks and has published a greenhouse gas reduction scenario to support each country's climate change risk assessment. The NGFS scenario is composed of a total of 6 in the combination of a low-carbon economy transition path (ordered transition, chaotic fulfillment, and maintenance of status quo) and the global average temperature (within 1.5~2°C, below 1.5°C). The SFG determined that this scenario was appropriate to analyze the impact of changes in asset values of portfolio companies on financial institutions due to the transition to a low-carbon economy.

# Results of the climate-related scenario analysis with respect to the focal questions

The SFG conducted scenario analysis in two ways to understand the impact of climate change on its portfolio. The results according to the scenario analysis are as follows.

#### [Scenario analysis result]

1 Top-down method scenario analysis result

The SFG estimated the change in the BIS ratio by applying the NGFS scenario analysis results of the Bank of Korea to its portfolio. As a result of the scenario analysis, the BIS ratio of the SFG's loan assets as of 2021 is 18.18%, and it is estimated to decrease by 0.70% to 1.00% p in 2030, 1.03% to 1.44%p in 2040 and 1.47 to 2.30%p in 2050.

Accordingly, the negative impact of climate change is expected to gradually increase.

2 Bottom-up method scenario analysis result

Shinhan Bank confirmed that the climate risk for high-carbon industries is relatively large through to-down scenario analysis and financed emission measurement. Accordingly, a detailed scenario analysis was conducted for the power generation and oil & gas sectors, which have the highest priority among high-carbon industries. Changes in the soundness of high-carbon industries due to climate change were confirmed through changes in default rates and credit ratings.



As a result of the scenario analysis, the electricity price pressure in the power generation industry is initially high due to the energy transition to renewable energy. Over time, the electricity price pressure is expected to decrease due to the decrease in renewable energy prices. The credit rating of the power generation industry has dropped by 1 to 4 grades compared to the baseline. The default rate was analyzed to increase 3 to 10 times compared to the reference point.

In the oil & gas industry, product prices rise due to increased regulatory response costs, but demand for fossil fuels decreases due to the transition to a low-carbon economy. Sales are expected to decline in the long run due to the decline in price competitiveness. The credit ratings of the oil & gas industry have been downgraded by 2~3 grades compared to the baseline. The default rate was analyzed to increase 3 to 10 times compared to the baseline.

## 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	[Analysis of climate-related risks and opportunities and impacts]  The government's greenhouse gas and energy target management system, greenhouse gas emission trading system(K-ETS), RPS system, and the total building energy management system are being strengthened. Following these policies, environmental changes and consumer perceptions of change and climate change, is increasing.  Demand for investment in new and renewable energy power generation projects is increasing such as technology improvement and innovation to support a low-carbon and energy-efficient economy. Investment in low-carbon/high-efficiency facilities and new and renewable energy power generation projects is increasing. We perceive this business change to a low-carbon transition as a new business opportunity to expand eco-friendly financial products and increase investment subsidies.  [Strategic decision-making and cases]  By reflecting green financial market growth opportunities through changes in consumer perception about climate change and environmental problems, the SFG is continuously expanding and operating related loan products



		such as green remodeling secondary maintenance loans, green environmental management excellent company loans, green energy factoring, new green business loan, and new, renewable energy PF.  As of the end of 2021, the new loans and the PF funding are 152.6 billion KRW, 958.7 billion KRW. If loan demand and investment increase by 10 billion KRW, the profit of 149 million KRW is expected to increase.  [Time Horizon]  The SFG plans to achieve 14.8 trillion won in eco-friendly financial support by 2025 and 30 trillion won by 2030 according to the goal of its eco-friendly strategy 'Zero Carbon Drive.'
Supply chain and/or value chain	Yes	[Analysis of climate-related risks and opportunities and impacts] 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.
		[Strategic decision-making and cases] 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, the amount of ESG investment (AUM) increased by 55.1 billion KRW from 30.6 billion KRW as of the end of 2020 to 85.7 billion KRW as of the end of 2021. And the profit of 500 million KRW is expected to increase due to the expanding ESG investment trend.  [Time Horizon]
		Shinhan Asset Management has been engaging with ESG investment target investees since 2020. In 2021, to increase engagement, the scope was expanded from 242 companies to 338 companies. By 2025, the mid-term unit of the Zero



		Carbon Drive strategy, we plan to promote the engagement of more than 95% of asset management companies in financed emissions portfolio, reflect them in the management process and promote the development and expansion of new investment products through communication with investment companies.
Investment in R&D	Yes	[Analysis of climate-related risks and opportunities and impacts] Government regulations, such as greenhouse gas energy target management system, greenhouse gas emission trading system, RPS system, and total building energy management are intensifying and low-carbon, eco-friendly technologies are being newly developed to achieve climate change and carbon-neutral goals.  The demand for investment in new and renewable energy power generation projects is increasing in line with the expansion of low-carbon technology businesses such as electric cars, energy storage systems (ESS), renewable energy (solar power, wind force, and hydraulic power, etc.), and demand of as well as for a low-carbon/high-efficiency facility is also increasing.  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.  [Strategic decision-making and cases] 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 reflects them in the decision-making of response strategies in the 'R&D investment area.' Shinhan participated in the K-EV100 declaration in 2021, hosted by the Ministry of Environment and Korea Automobile Environment Association. As a result, we made a strategic decision to convert all vehicles operated at our business sites to electric/hydrogen vehicles.  By 2030, 100% of all owned or leased vehicles will be converted, and about 3% of the total number of corporate
		vehicles were converted to electric/hydrogen vehicles in 2021.  [Time Horizon] Shinhan declared the K-EV100 and set a plan to convert the



		electric or hydrogen vehicle ratio to more than 30% by 2025, more than 70% by 2028, and 100% by 2030. In order to convert approximately 510 units (excluding lease/rent) in the next 25 years, an investment of about KRW 25.5 billion is required.
Operations	Yes	[Analysis of climate-related risks and opportunities and its impacts] In particularly, Jeju Bank that a subsidiary of the SFG, is expected to have an operating loss since when exposed to physical damage in the event of acute climate disasters because as most of its branches are located in Jeju Island, which is exposed to the most acute climate change risk in Korea.  The SFG calculated the financial effect of climate risk on Jeju Bank using an average number of days with heavy rain and annual operating profit in 2021. As Shared Socioeconomic Pathway scenarios(analyzed by the KMA), assuming that the business is closed while 4.9days with damage caused by heavy rain, an operating profit loss of approximately 443 million KRW is expected (The Operating Profit of Jeju Bank: KRW 22,602,403,649 Average number of business days per year: 250 days)
		[Strategic decision-making and cases] To prepare for natural disasters, major subsidiaries of the SFG branches operate individual Disaster Restoration Centers, and regularly carry out climate change research to determine risks and opportunities. We respond to disaster/calamity crisis management through a safety management plan to prepare for physical risks. Shinhan Bank has the 'Disaster/Calamity Crisis Management Guidelines' aimed to prevent damages from natural disasters and respond to such events in a timely manner so as to protect both human and financial resources in advance. Following these guidelines, natural disaster occurrence is reported to the branch manager, who then reports to the head of the sales division and to the safety management office or the department in charge of each disaster situation and related public institutions.  In case of emergency, the Head of the Crisis Center directly details the CEO about the status of the event and the entire organization is informed to be on call.
		[Time Horizon] For acute risk, the analysis focused on the effects of short-



term (1 to 2y) and mid-term (3 to 5y). For chronic risk, the
impact on the mid- to long-term (3 to 10y) was analyzed.
The purpose is to identify and prevent buildings and
branches vulnerable to acute physical hazards by selecting
regions that may have an impact on Shinhan's internal
operations. For assets held by the group, the nature and
scope of the assets exposed to physical risks were identified
and the financial impact was verified.
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## 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., SFG 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 2021, the remaining balances of climate change-related loans are 13,666.1 billion KRW and the company's funding towards renewable energy projects reached 958.7 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 Bank and 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 2021, SFG has approximately 62,843 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 311billion KRW in addition to the
	existing purchasing cost is expected to cost, resulting in higher operation
	expense.

## C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's transition to a 1.5°C world?

No, but we plan to in the next two years

## C-FS3.6

(C-FS3.6) Does the policy framework for your portfolio activities include climaterelated requirements for clients/investees, and/or exclusion policies?

Yes, our framework includes both policies with client/investee requirements and exclusion policies

## **C-FS3.6a**

(C-FS3.6a) Provide details of the policies which include climate-related requirements that clients/investees need to meet.

#### **Portfolio**

Investing (Asset manager)

#### Type of policy

Risk policy

Policy related to other products and services

**Engagement policy** 

Credit policy

#### Portfolio coverage of policy

43.04

#### **Policy availability**

Publicly available

#### Attach documents relevant to your policy

0 2021 letter for engagement\_SAM.xlsx

#### Criteria required of clients/investees

Disclosure of Scope 1 emissions

Disclosure of Scope 2 emissions

Disclosure of Scope 3 emissions

Disclosure of product-related emissions



Set a science-based emissions reduction target

Set an emissions reduction target

Be on track to achieving a science-based emissions reduction target

Develop a climate transition plan

#### Value chain stages of client/investee covered by criteria

Direct operations only

#### Timeframe for compliance with policy criteria

No timeframe

### Industry sectors covered by the policy

Energy

Materials

Capital Goods

Commercial & Professional Services

Transportation

Automobiles & Components

Consumer Durables & Apparel

**Consumer Services** 

Retailing

Food & Staples Retailing

Food, Beverage & Tobacco

Household & Personal Products

Health Care Equipment & Services

Pharmaceuticals, Biotechnology & Life Sciences

Software & Services

Technology Hardware & Equipment

Semiconductors & Semiconductor Equipment

**Telecommunication Services** 

Media & Entertainment

Utilities

Real Estate

#### Exceptions to policy based on

Transaction size

#### Explain how criteria coverage and/or exceptions have been determined

Major portfolio items of domestic listed stocks including KOSPI 200 among assets under management

## **Portfolio**

Banking (Bank)

#### Type of policy

Credit/lending policy



#### Portfolio coverage of policy

7.28

### Policy availability

Not publicly available

## Attach documents relevant to your policy

SHB ESG mornitoring process.pdf

## Criteria required of clients/investees

Disclosure of Scope 1 emissions Disclosure of Scope 2 emissions

#### Value chain stages of client/investee covered by criteria

Direct operations only

## Timeframe for compliance with policy criteria

Clients/investees must be compliant within the next 2 years

### Industry sectors covered by the policy

Energy

Materials

Capital Goods

Commercial & Professional Services

Transportation

Automobiles & Components

Consumer Durables & Apparel

**Consumer Services** 

Retailing

Food & Staples Retailing

Food, Beverage & Tobacco

Household & Personal Products

Health Care Equipment & Services

Pharmaceuticals, Biotechnology & Life Sciences

Software & Services

Technology Hardware & Equipment

Semiconductors & Semiconductor Equipment

**Telecommunication Services** 

Media & Entertainment

Utilities

Real Estate

#### Exceptions to policy based on

Transaction size

#### Explain how criteria coverage and/or exceptions have been determined

Over 30 billion in general corporate loans and over 50 billion in IB investments



## **C-FS3.6b**

(C-FS3.6b) Provide details of your exclusion policies related to industries and/or activities exposed or contributing to climate-related risks.

#### **Portfolio**

Banking (Bank)

#### Type of exclusion policy

All Coal

#### Year of exclusion implementation

2,021

#### Timeframe for complete phase-out

By 2050

#### Application

New business/investment for new projects

#### Country/Region the exclusion policy applies to

Republic of Korea

## **Description**

SFG is the first financial group in Korea to setting "Environmental and Social Risk Management Policy Framework(ESRM)", which defines the objective, rules, major tasks and R&R. In 2018, SFG set the 'ESRM' and keep managing this 'ESRM' currently. ESRM refers that a series of activities to recognize, evaluate, and manage the impact of economic activities on the environmental and society of financial service provides. SFG selected 12 significant environmental/social areas that may have a harmful or sensitive impact in environmental/social aspect, and manage loans that are handled in the respective areas through more detailed monitoring.

Also, SFG established conditional financial standards for illegal activities and the construction of coal power plants, and set a management procedure that consists of environmental/social risk assessment of large scale project financing, and reflection of mitigation measures in financial contracts, if necessary.

In March 2021, Shinhan Bank officially declared "Exiting Coal Financing" by participating in the 'Climate Finance Support Declaration Ceremony' hosted by the KoSIF(Korea Sustainability Investing Forum).

A definition of 'Exiting Coal Financing' is below;

- Shinhan Bank will not provide project financing to the construction of new coal-fired power plants, for domestic and global.
- Shinhan Bank will not underwrite bonds issued by a special purpose company(SPC) for the construction of new coal-fired power plants, for domestic and global.
- Shinhan Bank will not underwrite any other bonds issued for the purpose of the construction of new coal-fired power plants, for domestic and global.



## **C-FS3.7**

## (C-FS3.7) Does your organization include climate-related requirements in your selection process and engagement with external asset managers?

	Climate-related requirements included in selection process and engagement with external asset managers	
Row	Yes	
1		

## C-FS3.7a

(C-FS3.7a) Provide details of the climate-related requirements included in your selection process and engagement with external asset managers.

#### Coverage

Majority of assets managed externally

# Mechanisms used to include climate-related requirements in external asset manager selection

Include climate-related requirements in investment mandates

Include climate-related requirements in requests for proposals

Review investment manager's climate performance (e.g., active ownership, proxy voting records, under-weighting in high impact activities)

Review investment manager's climate-related policies

## Describe how you monitor and engage with asset managers to ensure investment activities are consistent with your climate strategy

ESG evaluation items have been added to the evaluation table for external asset manager selection, and the evaluation is judged with a weight of 10 out of 100.

- Check whether the manager has enacted or has ESG-related regulations and quidelines
- Check whether to join ESG-related certifications and initiatives
- Check whether investment against ESG is prohibited

## **C-FS3.8**

## (C-FS3.8) Does your organization include covenants in financing agreements to reflect and enforce your climate-related policies?

	Climate-related covenants in financing agreements
Row 1	Yes



## C-FS3.8a

## (C-FS3.8a) Provide details of the covenants included in your organization's financing agreements to reflect and enforce your climate-related policies.

Types of covenants used	Asset class/product types	Please explain
Purpose or use of proceeds clause refers to sustainable project Margin or pricing depends on sustainability criteria Covenants related to compliance with your policies	Corporate loans Retail loans	National NDC reduction pathway policy and carbon neutrality: To implement the group's carbon-neutral initiative, we are operating loan support and preferential interest rate products when eco-friendly conditions set by laws or related organizations are met to reduce greenhouse gas and energy. A total of 13 products (two eco-friendly guarantee loans, five eco-only loans, and six eco-friendly policy fund loans) are in operation. As of 2021, we achieved a total loan of KRW 152.6 billion.

## 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 2

Year target was set

2020

**Target coverage** 

Company-wide

Scope(s)

Scope 1

Scope 2



#### Scope 2 accounting method

Location-based

Scope 3 category(ies)

Base year

2020

Base year Scope 1 emissions covered by target (metric tons CO2e)

15,951.39

Base year Scope 2 emissions covered by target (metric tons CO2e)

82.837.85

Base year Scope 3 emissions covered by target (metric tons CO2e)

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

98,789.24

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2030

Targeted reduction from base year (%)

42

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

57,297.7592

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

15,087.61



## Scope 2 emissions in reporting year covered by target (metric tons CO2e) 81,522.74

Scope 3 emissions in reporting year covered by target (metric tons CO2e)

## Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

96,610.35

### % of target achieved relative to base year [auto-calculated]

5.2514153701

#### Target status in reporting year

Revised

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

Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

#### **Target ambition**

1.5°C aligned

### Please explain target coverage and identify any exclusions

It is a company-wide reduction target including all group company's greenhouse gas emissions. This goal is aligned with the 2044 carbon neutrality long-term goal. Greenhouse gas removal due to bioenergy combustion is not included in the implementation of greenhouse gas reduction.

#### Plan for achieving target, and progress made to the end of the reporting year

The SFG will reduce its internal carbon emissions by 42% in 2030 and 84% in 2040 using scientific tools based on the Paris climate agreement (1.5°C scenario) suggested by the Scientific-Based Reduction Target Initiative (SBTi), and we plan to achieve net zero by 2044.

Electricity used by large Shinhan Bank branches accounts for approximately 80% of emitted internal carbon emissions. Accordingly, Shinhan Bank is focusing on the large buildings of the main branch through reduction activities such as efficiency improvement of air-conditioning and air-conditioning facilities. We have been monitoring the implementation and performance carbon emission reduction since 2017 and have reduced energy by 5% per year.

In addition, by 2030, the group's business vehicles are being expanded from gasoline vehicles to pollution-free vehicles such as electric and hydrogen vehicles, and plan to achieve our internal carbon reduction goals by purchasing a carbon emission certificate (REC) or green tariff.

## List the emissions reduction initiatives which contributed most to achieving this target



#### Target reference number

Abs 3

Year target was set

2020

#### **Target coverage**

Company-wide

### Scope(s)

Scope 1

Scope 2

#### Scope 2 accounting method

Location-based

Scope 3 category(ies)

#### Base year

2020

Base year Scope 1 emissions covered by target (metric tons CO2e)

15,951.39

Base year Scope 2 emissions covered by target (metric tons CO2e)

82,837.85

Base year Scope 3 emissions covered by target (metric tons CO2e)

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

98,789.24

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)



# Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

#### Target year

2040

#### Targeted reduction from base year (%)

84

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

15,806.2784

Scope 1 emissions in reporting year covered by target (metric tons CO2e) 15.087.61

Scope 2 emissions in reporting year covered by target (metric tons CO2e) 81,522.74

Scope 3 emissions in reporting year covered by target (metric tons CO2e)

# Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

96,610.35

## % of target achieved relative to base year [auto-calculated]

2.625707685

#### Target status in reporting year

Revised

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

Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

#### Target ambition

1.5°C aligned

#### Please explain target coverage and identify any exclusions

It is a company-wide reduction target including all group company's greenhouse gas emissions. This goal is aligned with the 2044 carbon neutrality long-term goal. Greenhouse gas removal due to bioenergy combustion is not included in the implementation of greenhouse gas reduction.

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In addition, by 2030, the group's business vehicles are being expanded from gasoline vehicles to pollution-free vehicles such as electric and hydrogen vehicles, and plan to achieve our internal carbon reduction goals by purchasing a carbon emission certificate (REC) or green tariff.

List the emissions reduction initiatives which contributed most to achieving this target

#### Target reference number

Abs 4

Year target was set

2020

#### **Target coverage**

Company-wide

### Scope(s)

Scope 1

Scope 2

#### Scope 2 accounting method

Location-based

Scope 3 category(ies)

#### Base year

2020

Base year Scope 1 emissions covered by target (metric tons CO2e)

15,951.39

Base year Scope 2 emissions covered by target (metric tons CO2e)

82,837.85

Base year Scope 3 emissions covered by target (metric tons CO2e)



Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

98,789.24

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

**Target year** 

2044

Targeted reduction from base year (%)

100

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

0

Scope 1 emissions in reporting year covered by target (metric tons CO2e) 15,087.61

Scope 2 emissions in reporting year covered by target (metric tons CO2e) 81,522.74

Scope 3 emissions in reporting year covered by target (metric tons CO2e)

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

96,610.35

% of target achieved relative to base year [auto-calculated]

2.2055944554

Target status in reporting year

Revised

Is this a science-based target?



Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

### **Target ambition**

1.5°C aligned

#### Please explain target coverage and identify any exclusions

It is a company-wide reduction target including all group company's greenhouse gas emissions. This goal is aligned with the 2044 carbon neutrality long-term goal. Greenhouse gas removal due to bioenergy combustion is not included in the implementation of greenhouse gas reduction.

#### Plan for achieving target, and progress made to the end of the reporting year

The SFG will reduce its internal carbon emissions by 42% in 2030 and 84% in 2040 using scientific tools based on the Paris climate agreement (1.5°C scenario) suggested by the Scientific-Based Reduction Target Initiative (SBTi), and we plan to achieve net zero by 2044.

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In addition, by 2030, the group's business vehicles are being expanded from gasoline vehicles to pollution-free vehicles such as electric and hydrogen vehicles, and plan to achieve our internal carbon reduction goals by purchasing a carbon emission certificate (REC) or green tariff.

List the emissions reduction initiatives which contributed most to achieving this target

#### Target reference number

Abs 5

Year target was set

2020

**Target coverage** 

Company-wide

Scope(s)

Scope 3

Scope 2 accounting method



#### Scope 3 category(ies)

Other (downstream)

Base year

2020

Base year Scope 1 emissions covered by target (metric tons CO2e)

Base year Scope 2 emissions covered by target (metric tons CO2e)

Base year Scope 3 emissions covered by target (metric tons CO2e) 43.816.695

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

43,816,695

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

100

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

**Target year** 

2030

Targeted reduction from base year (%)

33.7

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

29,050,468.785

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

Scope 2 emissions in reporting year covered by target (metric tons CO2e)



## Scope 3 emissions in reporting year covered by target (metric tons CO2e) 50.829.804

## Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

50,829,804

#### % of target achieved relative to base year [auto-calculated]

-47.4942541032

#### Target status in reporting year

Revised

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

Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

#### Target ambition

Well-below 2°C aligned

#### Please explain target coverage and identify any exclusions

When implementing greenhouse gas reduction, we did not include greenhouse gas removal due to bioenergy combustion. Financed emission reduction targets were established by applying the Sectoral Decarbonization Approach (SDA) of SBTi and applying the Absolute Amount Reduction Act (ACA) to sectors where SDA cannot be applied. To accomplish the target, we will reduce financed emissions by 33.7% in 2030, 59.5% in 2040, and 83% in 2050. We plan to achieve net zero in 2050 by implementing offsetting measures such as eco-friendly financial investments.

#### Plan for achieving target, and progress made to the end of the reporting year

The SFG has set the following stages for implementing the Zero Carbon Drive strategy from 2021 to 2050 to achieve the reduction goal.

- Build a portfolio emissions management system and database
- Strengthen limit management to restrain emission increases and perform engagement
- Reflect ESG factors, including climate change, in business decision-making, such as loans and investments
- Develop and detail climate change scenario analysis methodologies
- Set a quantitative reduction target and take an action to reduce

2021 was the first year of strategic implementation. A data system has been established for regular management and monitoring of financed emissions.

Measured financed emissions, using PCAF standard, and built a database

- Built an emissions monitoring/dashboard/ limit management system
- Set goals for internal and financed emissions, based on SBTi standard, and completed application
- Established a goal based on financed emission measurement assets of each Group subsidiary



- Expanded transition finance for reduction of financed emissions (planning to establish offset measures, 2022)

List the emissions reduction initiatives which contributed most to achieving this target

## Target reference number

Abs 6

Year target was set

2020

#### **Target coverage**

Company-wide

### Scope(s)

Scope 3

Scope 2 accounting method

#### Scope 3 category(ies)

Other (downstream)

#### Base year

2020

Base year Scope 1 emissions covered by target (metric tons CO2e)

Base year Scope 2 emissions covered by target (metric tons CO2e)

Base year Scope 3 emissions covered by target (metric tons CO2e)

43,816,695

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

43,816,695

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2



Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

100

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2040

Targeted reduction from base year (%)

59.5

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

17,745,761.475

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

Scope 3 emissions in reporting year covered by target (metric tons CO2e) 50,829,804

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

50,829,804

% of target achieved relative to base year [auto-calculated]

-26.9001069458

Target status in reporting year

Revised

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

Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

#### Target ambition

Well-below 2°C aligned

#### Please explain target coverage and identify any exclusions

When implementing greenhouse gas reduction, we did not include greenhouse gas removal due to bioenergy combustion. Financed emission reduction targets were established by applying the Sectoral Decarbonization Approach (SDA) of SBTi and applying the Absolute Amount Reduction Act (ACA) to sectors where SDA cannot be applied. To accomplish the target, we will reduce financed emissions by 33.7% in 2030,



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- Set goals for internal and financed emissions, based on SBTi standard, and completed application
- Established a goal based on financed emission measurement assets of each Group subsidiary
- Expanded transition finance for reduction of financed emissions (planning to establish offset measures, 2022)

## List the emissions reduction initiatives which contributed most to achieving this target

#### Target reference number

Abs 7

Year target was set

2020

**Target coverage** 

Company-wide

Scope(s)

Scope 3

Scope 2 accounting method

Scope 3 category(ies)

Other (downstream)

Base year



2020

Base year Scope 1 emissions covered by target (metric tons CO2e)

Base year Scope 2 emissions covered by target (metric tons CO2e)

Base year Scope 3 emissions covered by target (metric tons CO2e) 43.816.695

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

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Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

100

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

**Target year** 

2050

Targeted reduction from base year (%)

QΩ

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

7,448,838.15

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

Scope 3 emissions in reporting year covered by target (metric tons CO2e) 50,829,804



## Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

50,829,804

#### % of target achieved relative to base year [auto-calculated]

-19.2838116057

#### Target status in reporting year

Revised

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

Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

### **Target ambition**

Well-below 2°C aligned

## Please explain target coverage and identify any exclusions

When implementing greenhouse gas reduction, we did not include greenhouse gas removal due to bioenergy combustion. Financed emission reduction targets were established by applying the Sectoral Decarbonization Approach (SDA) of SBTi and applying the Absolute Amount Reduction Act (ACA) to sectors where SDA cannot be applied. To accomplish the target, we will reduce financed emissions by 33.7% in 2030, 59.5% in 2040, and 83% in 2050. We plan to achieve net zero in 2050 by implementing offsetting measures such as eco-friendly financial investments.

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- Established a goal based on financed emission measurement assets of each Group subsidiary
- Expanded transition finance for reduction of financed emissions (planning to establish offset measures, 2022)



## List the emissions reduction initiatives which contributed most to achieving this target

### 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**

Company-wide

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

Abs2

Abs3

Abs4

## Target year for achieving net zero

2044

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

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next 2 years

#### Please explain target coverage and identify any exclusions

The internal greenhouse gas reduction target was established by reflecting the reduction level required by SBTi 1.5℃.

## Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?

Yes

# Planned milestones and/or near-term investments for neutralization at target year

Through the SBTi methodology which conforms to the Paris Agreement, SFG set the net-zero target. The group plans to reduce its own carbon emissions by 42% in 2030 and 84% in 2040 compared to 2020.

Shinhan plans to continuously review expanding participation in the eco-friendly PF and emission permit markets to reduce internal emissions from 2022. We are planning to



reduce internal emissions by promoting projects to secure RECs or purchasing green premium electricity, as well as expanding investment/support for eco-friendly new technologies.

Among internal facilities, we plan to review infrastructure construction that can produce renewable energy for remodeling. Shinhan assigns the internal carbon emission target set at the group level to each group company as a strategic task, and the target achievement is reflected in the evaluation. Each group company voluntarily submits an achievement plan every quarter for the annual 4.2% reduction target.

## Planned actions to mitigate emissions beyond your value chain (optional)

#### 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, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next 2 years

### Please explain target coverage and identify any exclusions

The Sectoral Decarbonization Approach (SDA) of SBTi and applying the Absolute Amount Reduction Act (ACA) to sectors where SDA cannot be applied. As the reduction target was established by applying SBTi methodology, it is assumed that the target is equivalent to the science-based reduction target. With this target, we will reduce financed emissions by 33.7% in 2030, 59.5% in 2040, and 83% in 2050. We plan to make residual emissions net zero by reflecting offsetting measures such as eco-friendly financial investments.

# Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?

Yes

Planned milestones and/or near-term investments for neutralization at target year



Through the SBTi methodology which conforms to the Paris Agreement, SFG set the net-zero target. The group plans to reduce its own carbon emissions by 42% in 2030 and 84% in 2040 compared to 2020 and reduce carbon emissions of asset portfolio by 33.7% in 2030 and 59.5% in 2040 compared to 2020.

If the SFG's financed emissions target for 2050 is achieved, approximately 17% residual emissions will remain. Currently, Shinhan has a plan to expand investments through the formation of a dedicated fund for eco-friendly companies including climate technology. We plan to promote more than KRW 130 billion eco-friendly investments by 2022. Moreover, the offset plan through forest conservation financial investment mentioned in the Leaf Coalition is under review.

Planned actions to mitigate emissions beyond your value chain (optional)

## 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		
To be implemented*	2	692,920.28
Implementation commenced*	3	112,559.28
Implemented*	6	1,650.54
Not to be implemented		

## C4.3b

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

#### Initiative category & Initiative type

Transportation
Company fleet vehicle replacement



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

13.9

### Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

#### **Voluntary/Mandatory**

Voluntary

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

5,277,851

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

314,800,000

#### Payback period

4-10 years

#### Estimated lifetime of the initiative

6-10 years

#### Comment

[Replacing business vehicles with electric vehicles and establishing electric vehicle charging facilities]

- Environmental pollution was reduced by replacing business vehicles with 10 new electric vehicles, and the introduction of electric vehicles was encouraged by establishing 5 electric vehicle charging facilities.
- The estimated annual carbon emission reduction is 13.9 tons.

(Note) CO2 emissions amount per km

- 1. General gasoline vehicle: 192g
- 2. Electric vehicle: 53g
- 3. Reduction amount per 10,000km, 1 unit of vehicle: 1,390 kg
- 4. Reduction amount per 10,000km, 10 unit of vehicle: 13,900 kg

## Initiative category & Initiative type

Energy efficiency in production processes Product or service design

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

110.26

#### Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)

## Voluntary/Mandatory

Voluntary

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



30,832,800

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

50,000,000

#### Payback period

1-3 years

#### Estimated lifetime of the initiative

3-5 years

#### Comment

[The Shinhan Bank Data Center's Refrigeration Differential Pressure Valve Digitization] The power consumption was reduced by changing the operating conditions of the cooling water pump to 30Hz

Reduction amount of power usage per year : 240,000kWh Reduction amount of GHG emission per year : 110.26tCO2e

#### Initiative category & Initiative type

Energy efficiency in buildings Lighting

## Estimated annual CO2e savings (metric tonnes CO2e)

1.470.7

#### Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)

#### Voluntary/Mandatory

Voluntary

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

416,859,456

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

1,431,400,000

### Payback period

4-10 years

#### Estimated lifetime of the initiative

3-5 years

#### Comment

[LED installation]

Number of LED replacement: 10,816 EA

LED Capacity: 50W

Light Capacity before LED replacement: 100W

Reduction amount of power usage per year: (100W - 50W) x (250d x 24h) x 10,816



EA = 3,244,800 kWh

Reduction amount of GHG emission per year: 1,490.7 tCO2e

### Initiative category & Initiative type

Energy efficiency in buildings Lighting

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

19.96

#### Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)

#### Voluntary/Mandatory

Voluntary

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

5,580,737

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

10,000,000

#### Payback period

1-3 years

#### Estimated lifetime of the initiative

1-2 years

#### Comment

[Lighting control sensor installation in the Shinhan Bank underground parking lot] The power consumption was reduced by replacing the underground storage sheds' low-efficiency fluorescent lighting fixtures with high-efficiency LED lighting fixtures and changing the lighting method for vehicles and human body detection sensors.

Reduction amount of power usage per year : 43,440kWh Reduction amount of GHG emission per year : 19.96tCO2e

#### Initiative category & Initiative type

Energy efficiency in production processes Product or service design

## Estimated annual CO2e savings (metric tonnes CO2e)

15.72

#### Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)

#### Voluntary/Mandatory



Voluntary

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

4,395,473

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

15,000,000

#### Payback period

1-3 years

#### Estimated lifetime of the initiative

6-10 years

#### Comment

[Change in the Shinhan Bank data center's air conditioner operation method] In order to reduce power consumption due to the air conditioner operation, the inverter control method was adopted to reduce the electricity consumption of the existing operation method.

Reduction amount of power usage per year : 34,214kWh Reduction amount of GHG emission per year : 15.72tCO2e

## 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	SFG invested approximately 1,431 million KRW per year to replace the lights of the headquarter and other business branches with the more energy-efficient LED lights and 8,208 million KRW in addition to purchase IT products that are certified as environmentally friendly.
Dedicated budget for other emissions reduction activities	SFG declared 'Zero Carbon-Zero Fuel', a project to replace a total of 62,843 units of the group's business vehicles to zero-emission vehicles such as electric and hydrogen vehicles. This is part of the group's eco-friendly strategy, 'Zero Carbon Drive'. SFG has replaced 53 of its 1,783 corporate vehicles with electric/hydrogen vehicles, accounting for about 3% of corporate vehicles. Assuming that all existing vehicles are replaced with electric vehicles, an additional cost of approximately KRW 86.5 billion is expected.

## C-FS4.5

(C-FS4.5) Do any of your existing products and services enable clients to mitigate and/or adapt to the effects of climate change?



Yes

### C-FS4.5a

(C-FS4.5a) Provide details of your existing products and services that enable clients to mitigate and/or adapt to climate change, including any taxonomy used to classify the products(s).

## Product type/Asset class/Line of business

Investing
Other, please specify
Asset Manager, Green Building REITs product

#### Taxonomy or methodology used to classify product

Externally classified using other taxonomy or methodology, please specify K-Taxonomy

#### **Description of product**

Shinhan Alpa REITs: This product contributes to the energy cost reduction in buildings and environmental costs by acquiring eco-friendly building (LEED) certification for real estate assets operated by Shinhan REITs Management. The new Shinhan Alpa REITs operating amount in 2020 was 306.1 billion won, and the new operating amount in 2021 was 130.1 billion won.

## Product enables clients to mitigate and/or adapt to climate change Mitigation

#### Portfolio value (unit currency – as specified in C0.4)

436,200,000,000

#### % of total portfolio value

14.7

#### Type of activity financed/insured or provided

Green buildings and equipment

#### Product type/Asset class/Line of business

Banking

Project finance

#### Taxonomy or methodology used to classify product

Externally classified using other taxonomy or methodology, please specify K-Taxonomy

## **Description of product**



Solar, Waste, wind and other renewable energy Power Project Investment: We provide advisory services and/or invest in various projects in the solar, waste, wind and other renewable energy 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 1,2 emissions reduction)

## Product enables clients to mitigate and/or adapt to climate change

Mitigation

#### Portfolio value (unit currency – as specified in C0.4)

958,700,000,000

#### % of total portfolio value

65.5

#### Type of activity financed/insured or provided

Renewable energy

## C5. Emissions methodology

## C5.1

## (C5.1) Is this your first year of reporting emissions data to CDP?

No

## C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

#### Row 1

#### Has there been a structural change?

Yes, an acquisition Yes, a merger

#### Name of organization(s) acquired, divested from, or merged with

Orange Life, Shinhan Venture Investment

#### Details of structural change(s), including completion dates

On July 1st, 2021, Shinhan Life and Orange Life merged to form Shinhan Life. Orange Life's emission sources were included in Shinhan Life's organizational boundaries to account for additional greenhouse gases.

On January 11th, 2021, we acquired Neoflux, a venture capital (VC), and changed the company name to Shinhan Venture Investment. Accordingly, we calculated the greenhouse gas emissions by adding the Shinhan Venture Investment emission sources to the inventory.



## C5.1b

## (C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	Yes, a change in methodology	We have updated the energy calorific value and emission coefficients of the fuel applied when calculating greenhouse gas emissions.

## C5.1c

## (C5.1c) Have your organization's base year emissions been recalculated as result of the changes or errors reported in C5.1a and C5.1b?

	Base year recalculation	Base year emissions recalculation policy, including significance threshold
Row 1	Yes	When changes in the structure of the group occur (such as merges, take overs, or sales), the SFG determines if recalculation of the base year's emissions is required. With the merger of Shinhan Life Insurance and Orange Life, the organizational boundaries have been expanded. The combined greenhouse gas emissions of Orange Life were additionally calculated.

## C5.2

## (C5.2) Provide your base year and base year emissions.

#### Scope 1

#### Base year start

January 1, 2020

#### Base year end

December 31, 2020

## Base year emissions (metric tons CO2e)

15,951.39

#### Comment

Organizational boundaries changed due to mergers and acquisitions, and the emission factors have been updated to recalculate GHG emissions.

#### Scope 2 (location-based)

#### Base year start

January 1, 2020



#### Base year end

December 31, 2020

### Base year emissions (metric tons CO2e)

82,837.85

#### Comment

Organizational boundaries changed due to mergers and acquisitions, and the emission factors have been updated to recalculate GHG emissions.

### Scope 2 (market-based)

#### Base year start

#### Base year end

### Base year emissions (metric tons CO2e)

#### Comment

#### Scope 3 category 1: Purchased goods and services

#### Base year start

January 1, 2020

#### Base year end

December 31, 2020

## Base year emissions (metric tons CO2e)

18,371.13

#### Comment

We recalculated greenhouse gas emissions by updating the emission factors.

### Scope 3 category 2: Capital goods

#### Base year start

January 1, 2020

#### Base year end

December 31, 2020

## Base year emissions (metric tons CO2e)

1,213.53

#### Comment

We recalculated greenhouse gas emissions by updating the emission factors.



## Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

#### Base year start

January 1, 2020

#### Base year end

December 31, 2020

## Base year emissions (metric tons CO2e)

613.32

#### Comment

We recalculated greenhouse gas emissions by updating the emission factors.

#### Scope 3 category 4: Upstream transportation and distribution

#### Base year start

January 1, 2020

#### Base year end

December 31, 2020

## Base year emissions (metric tons CO2e)

487.3

#### Comment

We recalculated greenhouse gas emissions by updating the emission factors.

#### Scope 3 category 5: Waste generated in operations

#### Base year start

January 1, 2020

### Base year end

December 31, 2020

#### Base year emissions (metric tons CO2e)

627.48

#### Comment

We recalculated greenhouse gas emissions by updating the emission factors.

#### Scope 3 category 6: Business travel

#### Base year start

January 1, 2020

### Base year end

December 31, 2020



## Base year emissions (metric tons CO2e) 68.65 Comment This required the same calculation method as previously mentioned. Scope 3 category 7: Employee commuting Base year start January 1, 2020 Base year end December 31, 2020 Base year emissions (metric tons CO2e) 16,278.77 Comment This required the same calculation method as previously mentioned. Scope 3 category 8: Upstream leased assets Base year start Base year end

Coope 2 cotogony 0	Downstroom	transpartation	and distribution
Scope 3 category 9:	Downstream	transportation	and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Base year emissions (metric tons CO2e)

#### Scope 3 category 10: Processing of sold products

Base year start

Comment



### Base year end

# Base year emissions (metric tons CO2e)

#### Comment

# Scope 3 category 11: Use of sold products

# Base year start

January 1, 2020

### Base year end

December 31, 2020

# Base year emissions (metric tons CO2e)

42,727.5

# Comment

This required the same calculation method as previously mentioned.

# Scope 3 category 12: End of life treatment of sold products

# Base year start

January 1, 2020

# Base year end

December 31, 2020

# Base year emissions (metric tons CO2e)

249.13

# Comment

We recalculated greenhouse gas emissions by updating the emission factors.

# Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

# Scope 3 category 14: Franchises



	Base year start
	Base year end
	Base year emissions (metric tons CO2e)
	Comment
Sco	ope 3 category 15: Investments
	Base year start
	Base year end
	Base year emissions (metric tons CO2e)
	Comment
Sco	ope 3: Other (upstream)
	Base year start
	Base year end
	Base year emissions (metric tons CO2e)
	Comment
Sco	ope 3: Other (downstream)
	Base year start
	Base year end
	Base year emissions (metric tons CO2e)
	Comment



# C5.3

# (C5.3) 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)

Other, please specify

Partnership for Carbon Accounting Financials(PCAF)

# 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)

15,087.61

Start date

January 1, 2021

**End date** 

December 31, 2021

Comment

# Past year 1

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

15,951.39

Start date

January 1, 2020

**End date** 

December 31, 2020

#### Comment

Organizational boundaries changed due to mergers and acquisitions, and the emission factors have been updated to recalculate GHG emissions.



# 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

81,522.74

#### Start date

January 1, 2021

#### **End date**

December 31, 2021

#### Comment

# Past year 1

# Scope 2, location-based

82,837.85

#### Start date

January 1, 2020

#### **End date**

December 31, 2020

# Comment

Organizational boundaries changed due to mergers and acquisitions, and the emission factors have been updated to recalculate GHG emissions.



# C6.4

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

No

# C6.5

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

# Purchased goods and services

#### **Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO2e)** 

16,403.25

# **Emissions calculation methodology**

Average data method

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

0

#### Please explain

[Printing papers]

- Calculation method: paper usage x emission factor
- Paper usage: 1013.73ton
- Emission factor: 1.12kgCO2e/kg (National LCI DB)

[Credit cards]

- Calculation method: No. of credit cards issued x emission factor
- No. of credit cards issued: 11,243,163units
- Emission factor: 1,341gCO2e/unit (National LCI DB)

[Bankbooks]

- Calculation method: No. of bankbooks issued x emission factor
- No. of bankbooks issued: 4,779,352units
- Weight of each bankbook: 18.2g/unit
- Emission factor 1.12kgCO2e/kg (National LCI DB)

[Water]

- Calculation method: Water usage x emission factor
- Water usage 393,958ton
- Emission factor 0.000237kgCO2e/kg (National LCI DB)

# **Capital goods**



#### **Evaluation status**

Relevant, calculated

# **Emissions in reporting year (metric tons CO2e)**

936.44

# **Emissions calculation methodology**

Average data method

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

0

# Please explain

[Office supplies]

- Calculation method: Office electronic equipment (PCs, monitors, printers) purchased x emission factor
- 781 laptops, 5,793 PCs, 6,231 monitors, 716 printers
- Laptop: 19.32kgCO2e/Unit
- PC: 32.76kgCO2e/unit,
- Monitor: 16.45kgCO2e/unit, Printer: 359.49kgCO2e/unit (Carbon Footprint Labeling DB)

[LED lights]

- Calculation method: No. of LED lights x emission factor
- Total capacity of LED lights purchased 540,800W (50W each, 10,816units)
- Emission factor of a 50W LED light: 34.36kgCO2e/unit (Carbon Footprint Labeling DB)

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

### **Evaluation status**

Relevant, calculated

# **Emissions in reporting year (metric tons CO2e)**

813.44

#### **Emissions calculation methodology**

Average data method

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

0

#### Please explain

[Fuel]

- Calculation method: Fuel purchased x emission factor
- LNG usage 2,704,713 m3, gasoline usage 3,860,868 liter, diesel 25,876 liter, kerosene 5,678 liter, LPG usage 77,057 m3
- Emission Factor: LNG 0.2723 kgCO2e/kg, gasoline 0.0832 kgCO2e/kg, diesel 0.0682 kgCO2e/kg, kerosene 0.253 kgCO2e/kg, LPG 0.394 kgCO2e/kg (National LCI DB)



- Unit Conversion Factor: LNG 0.7 kg/m3, gasoline 0.74 kg/liter, diesel 0.85 kg/liter, kerosene 0.80 kg/liter, LPG 1.9 kg/m3 (CDP Technical Note)

# **Upstream transportation and distribution**

#### **Evaluation status**

Relevant, calculated

# **Emissions in reporting year (metric tons CO2e)**

469.17

# **Emissions calculation methodology**

Fuel-based method

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

100

# Please explain

[Cash, bankbooks, and credit card plates transport]

- Calculation method: fuel usage x caloric value x emission factor

- Diesel usage: 176,794 liter

- Diesel caloric value: 35.2 MJ/liter

- Diesel emission factor: 75.39tCO2e/TJ (IPCC)

# Waste generated in operations

#### **Evaluation status**

Relevant, calculated

### **Emissions in reporting year (metric tons CO2e)**

676.293

### **Emissions calculation methodology**

Waste-type-specific method

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

0

# Please explain

[Waste management]

- Calculation method: Waste disposed x emission factor
- Waste incinerated 557.48 tons, waste recycled 371.92 tons (paper 205.61 ton, styrofoam 52.98 ton, glass 49.25 ton, can 7.74 ton, plastic 56.34 ton)
- emission factor of waste incinerated 1.182 kgCO2e/kg, emission factor of waste(paper) recycled 0.07 kgCO2e/kg, emission factor of waste(styrofoam) recycled 0.0186 kgCO2e/kg, emission factor of waste(glass) recycled 0.00978kgCO2e/kg, emission factor of waste(can) recycled 0.0178kgCO2e/kg, emission factor of waste(plastic) recycled 0.0186kgCO2e/kg (National LCI DB)



#### **Business travel**

#### **Evaluation status**

Relevant, calculated

# **Emissions in reporting year (metric tons CO2e)**

65.68

# **Emissions calculation methodology**

Distance-based method

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

0

### Please explain

[Domestic business trips]

- Calculation method: Travel distance for each transportation method x emission factor for each transportation method
- Travel distance by domestic flight 213,275 km, travel distance by train (KTX) 1,049,948 km, travel distance by bus 78,994 km
- emission factor for domestic flights 150 gCO2e/km, emission factor for trains 30 gCO2e/km, emission factor for buses 27.7 gCO2e/km (Ministry of Environment's Low Carbon Green Event Guideline)

### **Employee commuting**

#### **Evaluation status**

Relevant, calculated

# **Emissions in reporting year (metric tons CO2e)**

16,077.82

#### **Emissions calculation methodology**

Distance-based method

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

0

# Please explain

[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: 21,943
- Percentage of cars, buses, subways, and on-foot commuting is 31.71%, 23.47%, 12.38%, and 31.37%, respectively
- 6,957 employees commute via cars, 5,150 employees commute via buses, 2,717



employees commute via subways, 6,883 employees commute on foot

- emission factor of cars 210 gCO2e/km, emission factor of buses 27.7 gCO2e/km, emission factor of subways 1.53 gCO2e/km (Ministry of Environment's Low Carbon Green Event Guideline)

### **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

# **Emissions in reporting year (metric tons CO2e)**

17.658.79

# **Emissions calculation methodology**

Average data method

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

100

# Please explain

[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: 21,943
- Percentage of cars, buses, subways, and on-foot commuting is 31.71%, 23.47%, 12.38%, and 31.37%, respectively
- 6,957 employees commute via cars, 5,150 employees commute via buses, 2,717 employees commute via subways, 6,883 employees commute on foot
- emission factor of cars 210 gCO2e/km, emission factor of buses 27.7 gCO2e/km, emission factor of subways 1.53 gCO2e/km (Ministry of Environment's Low Carbon Green Event Guideline)

[Online banking]

- Calculation method: PC electricity consumption x hours of usage x electricity emission factor
- Online banking hours by individual customers: 118,890,422 h (directly measured)
- Assume PC electricity consumption as 300W
- Total electricity consumption: 35,667 MWh
- Electricity emission factor 0.4951 tCO2e/MWh (National LCI DB)

### End of life treatment of sold products

#### **Evaluation status**

Relevant, calculated

# **Emissions in reporting year (metric tons CO2e)**

237.86

# **Emissions calculation methodology**

Waste-type-specific method

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

0

# Please explain

[Disposal of credit cards]

- Calculation method: Credit cards disposed x emission factor
- Weight of credit cards disposed 56,216 kg (5g/unit)
- Emission factor for incineration of mixed plastic waste 3.41 kgCO2e/kg (National LCI DB)

[Disposal of bankbooks]

- Calculation method: Bankbooks disposed x emission factor
- Weight of bankbooks disposed (issued) 86,984 kg (18.2g/unit)
- Emission factor for incineration of waste paper 0.529 kgCO2e/kg (National LCI DB)

#### 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

# C6.5a

(C6.5a) Disclose or restate your Scope 3 emissions data for previous years.

# Past year 1

#### Start date

January 1, 2020

#### **End date**

December 31, 2020

Scope 3: Purchased goods and services (metric tons CO2e)

18,371.13

Scope 3: Capital goods (metric tons CO2e)

1,213.53

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

613.32

Scope 3: Upstream transportation and distribution (metric tons CO2e)

487.3



Scope 3: Waste generated in operations (metric tons CO2e)

627.48

Scope 3: Business travel (metric tons CO2e)

68.65

Scope 3: Employee commuting (metric tons CO2e)

16,278.77

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream transportation and distribution (metric tons CO2e)

Scope 3: Processing of sold products (metric tons CO2e)

Scope 3: Use of sold products (metric tons CO2e)

42,727.5

Scope 3: End of life treatment of sold products (metric tons CO2e)

249.13

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

#### Comment

We recalculated greenhouse gas emissions by updating the emission factors.

# 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** 

0.0000000021



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

96.610.35

#### **Metric denominator**

unit total revenue

Metric denominator: Unit total

45,730,000,000,000

# Scope 2 figure used

Location-based

# % change from previous year

5

# **Direction of change**

Increased

### Reason for change

In 2021, SFG reduced Scope 1 and 2 emissions by 2,178.88tCO2e compared to 2020 through replacement of corporate vehicles to pollution-free vehicles, replacement of LED lighting, and digitalization of pressure valves in data centre refrigerators. Revenues decreased by KRW 3,297.2 billion from KRW 49,027.2 billion in 2020 to KRW 45,730.0 billion in 2021, and emissions per unit increased by

5.0%(=0.0000000010/0.00000000201) compared to the previous year.

- 2020 Scope 1, 2 emissions: 98,789.24 tCO2

- 2021 Scope 1, 2 emissions : 96,610.35 tCO2

- 2020 Revenue: 49,027.2 Billion KRW

- 2021 Revenue: 45,730.0 Billion KRW

- 2020 Intensity figure: 0.00000000201

# Intensity figure

4.403

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

96,610.35

### **Metric denominator**

full time equivalent (FTE) employee

Metric denominator: Unit total

21,943

# Scope 2 figure used

Location-based



# % change from previous year

1.1

# **Direction of change**

Decreased

### Reason for change

In 2021, SFG reduced Scope 1 and 2 emissions by 2,178.88tCO2e compared to 2020 through replacement of corporate vehicles to pollution-free vehicles, replacement of LED lighting, and digitalization of pressure valves in data centre refrigerators. The FTE(Full Time equivalent Employee) decreased by 273 from 22,216 in 2020 to 21,943 in 2021, and emissions per unit increased by 1.1%(=0.047/4.450) compared to the previous year

- 2020 Scope 1, 2 emissions : 98,789.24 tCO2.- 2021 Scope 1, 2 emissions : 96,610.35 tCO2

- 2020 FTE: 22,216 people- 2021 FTE: 21,943 people- 2020 Intensity figure: 4.450

# Intensity figure

2.404

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

96,610.35

#### Metric denominator

Other, please specify
Net profit(billion KRW)

#### Metric denominator: Unit total

4,019,300,000,000

#### Scope 2 figure used

Location-based

# % change from previous year

16.9

# **Direction of change**

Decreased

# Reason for change

In 2021, SFG reduced Scope 1 and 2 emissions by 2,178.88tCO2e compared to 2020 through replacement of corporate vehicles to pollution-free vehicles, replacement of LED lighting, and digitalization of pressure valves in data centre refrigerators.

The net profit increased by KRW 604.7 billion from KRW 3,414.6 billion in 2020 to KRW



4,019.3 billion in 2021, and emissions per unit decreased by 16.9% (=0.489/2.893) compared to the previous year.

- 2020 Scope 1, 2 emissions: 98,789.24 tCO2- 2021 Scope 1, 2 emissions: 96,610.35 tCO2

- 2020 Net profit: 3,414.6 billion KRW- 2021 Net profit: 4,019.3 billion KRW

- 2020 Intensity figure: 2.893

# Intensity figure

1.623

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

96,610.35

#### **Metric denominator**

Other, please specify
Operating profit(billion KRW)

Metric denominator: Unit total

5,952,100,000,000

# Scope 2 figure used

Location-based

#### % change from previous year

21 9

# **Direction of change**

Decreased

### Reason for change

In 2021, SFG reduced Scope 1 and 2 emissions by 2,178.88tCO2e compared to 2020 through replacement of corporate vehicles to pollution-free vehicles, replacement of LED lighting, and digitalization of pressure valves in data centre refrigerators.

The operating profit decreased by KRW 1,198.2 billion from KRW 4,753.9 billion in 2020 to KRW 5,952.1 billion in 2021, and emissions per unit decreased by

21.9%(=0.455/2.078) compared to the previous year.

- 2020 Scope 1, 2 emissions: 98,789.24 tCO2

- 2021 Scope 1, 2 emissions : 96,610.35 tCO2

- 2020 Operating profit: 4,753.9 billion KRW

- 2021 Operating profit: 5,952.1 billion KRW

- 2020 Intensity figure: 2.078



# 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	43.65	Decreased	0.04	The Shinhan Data Center's photovoltaic system produced and consumed 88 MWh of electricity and 13.671Mcal of heat to reduce greenhouse gas emissions by 43.65 tCO2e (2020 emissions 98,789.24 tCO2e, reduced emissions 43.65 tCO2e, reduction rate 0.04%= 43.65/98,789.24)
Other emissions reduction activities	1,650.54	Decreased	1.67	SFG reduced emissions by a total of 1,650.54 tCO2e in 2021 through actions aimed at emission reductions such as operating an environmentally friendly data center, saving energy by replacing the existing lamps with LEDs, etc. (2020 emissions 98,789.24 tCO2e, reduced emissions 1,650.54 tCO2e, reduction rate 1.67%= 1,650.54/98,789.24)
Divestment				
Acquisitions				
Mergers				
Change in output				
Change in methodology	292.18	Decreased	0.3	The greenhouse gas emission and fuel energy calorific value coefficients have been updated.



Change in boundary				(2021 emissions 96,610.35 tCO2e, reduction emissions 292.18 tCO2e, reduce rate 0.30%= 292.18/98,789.24)
Change in physical operating conditions				
Unidentified				
Other	192.51	Decreased	0.19	SFG reduced emissions by a total of 192.51 tCO2e in 2021 through actions aimed at emission reductions such as video conference at headquarters and branches, power saving and lights-out during lunch break, controlled operation of elevators, boilers, air-conditioning equipments, introducing Shinhan Sol, electronic filing system and digital kiosk, etc. (2020 emissions 98,789.24 tCO2e, reduced emissions 192.51 tCO2e, reduction rate 0.19%= 192.51/98,789.24)

# 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 energyrelated 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)		70,294.1	70,294.1
Consumption of purchased or acquired electricity			177,293.9	177,293.9
Consumption of purchased or acquired heat			1,132.7	1,132.7
Consumption of self- generated non-fuel renewable energy		103.9		103.9
Total energy consumption		103.9	248,720.7	248,824.6

# C8.2g

(C8.2g) Provide a breakdown of your non-fuel energy consumption by country.

# Country/area

Republic of Korea



# **Consumption of electricity (MWh)**

177,397.8

Consumption of heat, steam, and cooling (MWh)

1,132.7

Total non-fuel energy consumption (MWh) [Auto-calculated]

178,530.5

# 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



Mas\_GHG\_SHbank\_2021\_En.pdf

# Page/ section reference

Page 1 / Assurance Statement

# Relevant standard

Korean GHG and energy target management system

# Proportion of reported emissions verified (%)

69

# 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\_2021\_ESG\_Report\_kor.pdf

# Page/ section reference

Page 41 / GHG Emissions (Scope 1)

### Relevant standard

**AA1000AS** 

# Proportion of reported emissions verified (%)

100

# 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\_2021\_En.pdf

# Page/ section reference

Page 1 / Assurance Statement

# Relevant standard

Korean GHG and energy target management system

# Proportion of reported emissions verified (%)

78

# 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

Moderate assurance

# Attach the statement

SFG 2021 ESG Report kor.pdf

# Page/ section reference

Page 41 / GHG Emissions (Scope 2)

# Relevant standard

**AA1000AS** 

# Proportion of reported emissions verified (%)

100

# 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

Scope 3: Capital goods

Scope 3: Upstream transportation and distribution

Scope 3: Waste generated in operations

Scope 3: Business travel

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\_2021\_ESG\_Report\_kor.pdf

# Page/section reference

Page 42 / GHG Emissions (Scope3)

#### Relevant standard

**AA1000AS** 

# Proportion of reported emissions verified (%)

100

# **Scope 3 category**

Scope 3: Investments

# Verification or assurance cycle in place

Annual process

# Status in the current reporting year

Complete

# Type of verification or assurance

Limited assurance

# Attach the statement



SHB\_2022\_Climate Finance Report.pdf

# Page/section reference

Page 27~29 / Financed emissions (Scope 3)

#### Relevant standard

DNV VeriSustain Protocol/ Verification Protocol for Sustainability Reporting

# Proportion of reported emissions verified (%)

79

# 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 2021 in comparison to the 2020 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?

Yes

# C11.3a

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



# Objective for implementing an internal carbon price

Change internal behavior
Stress test investments
Identify and seize low-carbon opportunities

### **GHG Scope**

Scope 1

Scope 2

Scope 3

### **Application**

It is used as an important tool to achieve the net zero goal, in addition to improving internal employee efficiency. We would like to induce behavior change as well. For an internal carbon price, we must identify and utilize low-carbon-related opportunities such as investment and financial support based on this analysis, as well as for stress testing and financial asset scenario analysis. It also applies to the engagement of trading customers.

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

114.494.57

# Variance of price(s) used

Evolutionary pricing: a price that develops over time

# Type of internal carbon price

Shadow price

#### Impact & implication

External carbon price : KRW 20,000~30,000 Internal carbon price : (~'25) 87.5\$ ~ (~'50) 717.9\$

- Considering the internal carbon price, we estimated the change in the default rate of borrowers at each period according to the climate change implementation risk scenario analysis. Through this analysis, Shinhan identified two industries as specific high-carbon industries, power generation, and oil & gas. For credit rating, the minimum decreases from rank 2 to a maximum of rank 3, and for bankruptcy, it increased by approximately 3 to 10 times.
- Shinhan is currently carrying out engagement activities to acquire eco-friendly information for borrowers in high-carbon industries by operating an environmental checklist during the credit/investment screening process.



# C12. Engagement

# C12.1

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

Yes, our suppliers Yes, our investees

# 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

100

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

100

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

1 1

# Rationale for the coverage of your engagement

For the practicality expansion of the Zero Carbon Drive, which is Shinhan's ESG and eco-friendly implementation strategy, we are pushing to expand the adoption of ESG in the supply chain.

Thus, from April 2021, ESG items were reflected (5% of the total evaluation weight) in the evaluation criteria when evaluating and selecting ICT products of all group companies. Particularly, in the environmental field, organizations for environmental management, hazardous substance management level, and eco-friendly ICT product development efforts were reflected in the non-price sector evaluation table.

### Impact of engagement, including measures of success

Through checking specific climate change engagement items for partner companies including the existence of an organization for environmental management and whether there is organizational culture, we have seen climate change-related governance matters. We checked the operation of the company's internal clean production management system and whether they are carrying out activities to reduce pollutants such as greenhouse gas/carbon emissions. Finally, we examined whether the ICT product has acquired eco-friendly product technology patents or certifications. Hence, it is possible to provide an engagement effect that allows suppliers who were not prepared



for the related matters to supplement them before selecting a business operator. Since April 2021, Shinhan has acquired a total of 203 new projects with 15 group companies and conducted ESG evaluations for each related evaluation project. Shinhan has also provided KRW 601.7 billion of ICT business to suppliers subject to ESG engagement.

#### Comment

# C-FS12.1c

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

### Type of engagement

Information collection (Understanding investee behavior)

# **Details of engagement**

Collect climate-related and carbon emissions information at least annually from longterm investees

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

62.53

Investing (Asset managers) portfolio coverage

44.1

Investing (Asset owners) portfolio coverage

# Rationale for the coverage of your engagement

Engagement targeted at investees with the highest potential impact on the climate

### Impact of engagement, including measures of success

Through greenhouse gas management and climate information disclosure of investment target companies, participation in CDP, and compliance with TCFD recommendations, it is possible to identify groups that are of high-risk to climate change by estimating the annual carbon cost of investment target companies and managing the carbon intensity of your investment and loan portfolios.

SFG periodically sends shareholder letters and questionnaires to investment target companies. We are aiming to expand coverage or increase the response rate to inquiries compared to the previous year.

In 2021, SFG sent shareholder letters and questionnaires to 338 companies, an increase of about 40% compared to the previous year. The number of companies that responded to the questionnaire increase from 101 companies in 2020 to 182 companies in 2021, and the response rate increased by about 12% compared to the previous year. In addition, the number of companies that provided carbon emission in the past three



years increased from 82 companies in 2020 to 146 companies in 2021. Especially, the response rate of industries with high-carbon intensity sector(refining, chemical, steel, non-ferrous, utility) is increasing.

SFG plans to continuously expand its engagement in the future, identify climate change response information, such as carbon reduction of investment target companies, and reflect it in actual investment.

# C-FS12.2

# (C-FS12.2) Does your organization exercise voting rights as a shareholder on climate-related issues?

	Exercise voting rights as a shareholder on climate-related issues	Primary reason for not exercising voting rights as a shareholder on climate-related issues	Explain why you do not exercise voting rights on climate-related issues
Row 1	No, but we plan to in the next two years	Important but not an immediate priority	Among Shinhan's investee companies, no shareholder proposal or climate agenda related to climate change has been proposed.  Engagement with climate-related data provision and strategy establishment is ongoing, and there is a plan to exercise voting rights if climate-related issues based on this matter are proposed later.

# C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

# Row 1

Direct or indirect engagement that could influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

Yes

Attach commitment or position statement(s)

- $\ensuremath{\mathbb{Q}}$  NZBA\_Commitment\_ShinhanFinancialGroup.pdf
- NZAMI\_Commitment\_ShinhanAssetmanagement.pdf



- Greenfinancing Handbook.pdf
- NZIA Commitment ShinhanLife.pdf

# Describe the process(es) your organization has in place to ensure that your engagement activities are consistent with your overall climate change strategy

ESG-related working-level organizations report to the upper consultative body regularly a month and to the ESG Strategy Committee, a committee within the BOD, 4 to 6 times a year. Through this ESG governance, the group's climate change strategy is consistently applied.

# C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

# Focus of policy, law, or regulation that may impact the climate

Adaptation and/or resilience to climate change Mandatory climate-related reporting Sustainable finance

# Specify the policy, law, or regulation on which your organization is engaging with policy makers

The SFG with domestic financial authorities contributed to the production of the green finance handbook for the financial sector.

# Policy, law, or regulation geographic coverage

National

# Country/region the policy, law, or regulation applies to

Republic of Korea

# Your organization's position on the policy, law, or regulation

Support with no exceptions

#### Description of engagement with policy makers

The SFG participated in a green finance drive task force in 2021 to recognize the risks and opportunities of climate change as a major element of the financial system with domestic financial authorities and respond appropriately. The SFG, as the representative of a domestic financial holding company, continued to share green finance operation plans. We disseminated TCFD-based disclosure and reporting matters through all domestic financial institutions, and we contributed to the production of the green finance handbook for the financial sector.



# Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

# Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

# Focus of policy, law, or regulation that may impact the climate

Adaptation and/or resilience to climate change Sustainable finance

# Specify the policy, law, or regulation on which your organization is engaging with policy makers

To implement the K-Taxonomy promoted by the Ministry of Environment, a working group for the financial sector under the supervision of the Financial Services Commission was formed in September, and SFG also participated.

# Policy, law, or regulation geographic coverage

National

### Country/region the policy, law, or regulation applies to

Republic of Korea

#### Your organization's position on the policy, law, or regulation

Support with no exceptions

### Description of engagement with policy makers

To implement the K-Taxonomy promoted by the Ministry of Environment, a working group for the financial sector under the supervision of the Financial Services Commission was formed in September, and SFG also participated. In order to advance the green classification system, opinions were expressed to utilize these matters in the issuance of financial bonds and loan review.

Through the formation of an internal K-Taxonomy response team, Shinhan Group regularly collects opinions from various subsidiaries within the group on a monthly basis and forwards them to the Ministry of Environment and the Financial Services Commission. Based on the collected opinions, K-taxonomy was announced in December '21, and SFG is reviewing the group's application direction for eco-friendly classification.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?



Yes, we have evaluated, and it is aligned

# Focus of policy, law, or regulation that may impact the climate

Adaptation and/or resilience to climate change Renewable energy generation Subsidies on products Sustainable finance

# Specify the policy, law, or regulation on which your organization is engaging with policy makers

Shinhan participated in the K-EV100 declaration in 2021, hosted by the Ministry of Environment and Korea Automobile Environment Association.

# Policy, law, or regulation geographic coverage

National

### Country/region the policy, law, or regulation applies to

Republic of Korea

# Your organization's position on the policy, law, or regulation

Support with no exceptions

#### Description of engagement with policy makers

Shinhan Bank and the Shinhan Card are supporting and participating in the Korean-style zero-emission vehicle conversion project to expand the conversion and distribution of eco-friendly vehicles by private companies. Shinhan Bank and Shinhan card will switch our own and leased vehicles to electirc/hydrogen vehicles by 2030. Shinhan Bank has established a plan to convert 1,372 business vehicles to 100% by 2030. Shinhan Card plans to convert all approximately 61 thousand vehicles for business use, car rental, and leasing division into eco-friendly vehicles by 2030. We plan to encourage the participation of large car rental companies such as Lotte Rent-a-Car and SK Rent-a-Car, which are engaged in leasing and rental car businesses, and expand the scale of eco-friendly vehicle marketing for new customers.

# Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

# Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

# Focus of policy, law, or regulation that may impact the climate

Adaptation and/or resilience to climate change Mandatory climate-related reporting



# Specify the policy, law, or regulation on which your organization is engaging with policy makers

The SFG promoted a physical risk model cooperation according to the climate change risks with domestic financial authorities.

# Policy, law, or regulation geographic coverage

National

### Country/region the policy, law, or regulation applies to

Republic of Korea

# Your organization's position on the policy, law, or regulation

Support with no exceptions

# Description of engagement with policy makers

The SFG promoted a physical risk model cooperation with Ewha Woman's University and the Financial Supervisory Service to develop a management model according to the physical climate change risks with domestic financial authorities. We would like to develop a model by synthesizing analysis methodologies of climate change impacts on not only financial institutions but also on regions, industry, and industry data. Through this, we want to understand the physical risk for domestic corporate customers through the definition of physical risk regulations of the national supervisory authority and scenario analysis.

# Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

# Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

# Focus of policy, law, or regulation that may impact the climate

Mandatory climate-related reporting

# Specify the policy, law, or regulation on which your organization is engaging with policy makers

The SFG participated in opinion gathering to prepare a draft guideline-type indicator (K-ESG)

### Policy, law, or regulation geographic coverage

National

# Country/region the policy, law, or regulation applies to

Republic of Korea

#### Your organization's position on the policy, law, or regulation



Support with no exceptions

# Description of engagement with policy makers

The SFG participated in opinion gathering to prepare a draft guideline-type indicator (K-ESG) to minimize market confusion related to the ESG evaluation of domestic companies hosted by the Ministry of Trade, Industry, and Energy.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

# 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\_2021\_biz\_report.pdf

### Page/Section reference

Page 145~146, 661~668, 676, 763

#### **Content elements**

Governance Strategy

Emissions figures

# Comment

#### **Publication**

In voluntary communications

# **Status**



# Complete

#### Attach the document

SFG\_2021\_ESG\_Report\_kor.pdf

# Page/Section reference

Page 6, 13, 35~46, 82~83, 87~89

#### **Content elements**

Governance

Strategy

Risks & opportunities

**Emissions figures** 

**Emission targets** 

#### Comment

#### **Publication**

In voluntary communications

### **Status**

Complete

# Attach the document

SFG\_2021ESG Highlight\_ENG.pdf

# Page/Section reference

Page 8~11, 32, 42, 52, 54

### **Content elements**

Governance

Strategy

**Emissions figures** 

**Emission targets** 

#### Comment

# **Publication**

In voluntary communications

#### **Status**

Complete



# Attach the document

**◎** SFG\_2021\_TCFD\_ENG.pdf

# Page/Section reference

Page 59~79

#### **Content elements**

Governance

Strategy

Risks & opportunities

Emissions figures

**Emission targets** 

#### Comment

# C-FS12.5

# (C-FS12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1	CDP Signatory Equator Principles Net Zero Banking Alliance Net Zero Asset Managers initiative Net Zero Asset Owner Alliance Partnership for Carbon Accounting Financials (PCAF) Science-Based Targets Initiative for Financial Institutions (SBTi-FI) Task Force on Climate-related Financial Disclosures (TCFD) Task Force on Nature-related Financial Disclosures (TNFD) UN Global Compact UNEP FI UNEP FI Principles for Responsible Banking	- Equator Principles In 2019, we established a process to respond to the Equator Principles, and a dedicated organization is reviewing environmental/social impacts on large-scale PF and loans NZBA After joining in April 2021, pursuing a carbon-neutral banking strategy - NZAMI After joining in July 2021, pursuing a carbon-neutral asset management strategy - NZIA After joining in october 2021, pursuing a carbon-neutral insurance strategy - PCAF After joining in November 2020, building a PCAF-based financial emission measurement system in 2021 SBTi After joining in November 2020 and establishing an SBTi-based target at the end of 2021, verification is currently being conducted Task Force on Climate-related Financial Disclosures (TCFD)



UNEP FI Principles for	After the declaration of support in 2018, the TCFD report is
Sustainable Insurance	being pursued separately from 2019.
UNEP FI TCFD Pilot	- UNEP FI
	Since joining in 2008, Shinhan has been serving as the
	representative body for the Asia-Pacific Banking Sector
	Board (GSC) in 2020.
	Acting as a Leadership Council organization in 2021.
	- UNEP FI Principles for Responsible Banking
	Signed the UN PRB in 2019. Since 2020, the PRB report has
	been separately promoted.
	- UNEP FI Principles for Sustainable Insurance
	Signed the UN PSI in 2020, reflecting the PSI standards in
	insurance products and operating principles.

# C14. Portfolio Impact

# C-FS14.0

(C-FS14.0) For each portfolio activity, state the value of your financing and insurance of carbon-related assets in the reporting year.

# Lending to all carbon-related assets

Are you able to report a value for the carbon-related assets?

Value of the carbon-related assets in your portfolio (unit currency – as specified in C0.4)

188,135,843

New loans advanced in reporting year (unit currency – as specified in C0.4) 14,649,603

Percentage of portfolio value comprised of carbon-related assets in reporting year

47.45

# Lending to coal

Are you able to report a value for the carbon-related assets?
Yes

Value of the carbon-related assets in your portfolio (unit currency – as specified in C0.4)

1,431,346

New loans advanced in reporting year (unit currency – as specified in C0.4)



5,167

Percentage of portfolio value comprised of carbon-related assets in reporting year

0.36

# Lending to oil and gas

Are you able to report a value for the carbon-related assets?

Yes

Value of the carbon-related assets in your portfolio (unit currency – as specified in C0.4)

1,195,327

New loans advanced in reporting year (unit currency – as specified in C0.4) 3,603

Percentage of portfolio value comprised of carbon-related assets in reporting year

0.3

Investing in all carbon-related assets (Asset manager)

Are you able to report a value for the carbon-related assets?

Yes

Value of the carbon-related assets in your portfolio (unit currency – as specified in C0.4)

23,693,007

Percentage of portfolio value comprised of carbon-related assets in reporting year

43

### Investing in coal (Asset manager)

Are you able to report a value for the carbon-related assets?

Yes

Value of the carbon-related assets in your portfolio (unit currency – as specified in C0.4)

508,730

Percentage of portfolio value comprised of carbon-related assets in reporting year

0.92

Investing in oil and gas (Asset manager)



Are you able to report a value for the carbon-related assets?

Yes

Value of the carbon-related assets in your portfolio (unit currency – as specified in C0.4)

370,353

Percentage of portfolio value comprised of carbon-related assets in reporting year

0.67

Investing all carbon-related assets (Asset owner)

Are you able to report a value for the carbon-related assets?

Yes

Value of the carbon-related assets in your portfolio (unit currency – as specified in C0.4)

18,144,272

Percentage of portfolio value comprised of carbon-related assets in reporting year

19.7

Investing in coal (Asset owner)

Are you able to report a value for the carbon-related assets?

Yes

Value of the carbon-related assets in your portfolio (unit currency – as specified in C0.4)

1,588,432

Percentage of portfolio value comprised of carbon-related assets in reporting year

1.72

Investing in oil and gas (Asset owner)

Are you able to report a value for the carbon-related assets?

Yes

Value of the carbon-related assets in your portfolio (unit currency – as specified in C0.4)

343.008

Percentage of portfolio value comprised of carbon-related assets in reporting year

0.37



### C-FS14.1

#### (C-FS14.1) Does your organization measure its portfolio impact on the climate?

	We conduct analysis on our portfolio's impact on the climate	Disclosure metric
Banking (Bank)	Yes	Portfolio emissions
Investing (Asset manager)	Yes	Portfolio emissions
Investing (Asset owner)	Yes	Portfolio emissions

### C-FS14.1a

# (C-FS14.1a) Provide details of your organization's portfolio emissions in the reporting year.

#### **Banking (Bank)**

Portfolio emissions (metric unit tons CO2e) in the reporting year 41,434,450

#### Portfolio coverage

51.2

Percentage calculated using data obtained from clients/investees 38.5

#### **Emissions calculation methodology**

The Global GHG Accounting and Reporting Standard for the Financial Industry

#### Please explain the details and assumptions used in your calculation

According to the PCAF methodology, the group's loan and investment assets are divided into 6 asset classes (listed equity and corporate bonds, business loans and unlisted equity, project finance, commercial real estate, mortgages, and Motor Vehicle loans), We calculated financed emissions by collecting relevant data such as greenhouse gas emission data.

#### Investing (Asset manager)

## Portfolio emissions (metric unit tons CO2e) in the reporting year

4,141,718

#### Portfolio coverage

43

#### Percentage calculated using data obtained from clients/investees

62.5



#### **Emissions calculation methodology**

The Global GHG Accounting and Reporting Standard for the Financial Industry

#### Please explain the details and assumptions used in your calculation

According to the PCAF methodology, the group's loan and investment assets are divided into 6 asset classes (listed equity and corporate bonds, business loans and unlisted equity, project finance, commercial real estate, mortgages, and Motor Vehicle loans), We calculated financed emissions by collecting relevant data such as greenhouse gas emission data.

#### **Investing (Asset owner)**

#### Portfolio emissions (metric unit tons CO2e) in the reporting year

5,253,636

#### Portfolio coverage

26.5

#### Percentage calculated using data obtained from clients/investees

61.8

#### **Emissions calculation methodology**

The Global GHG Accounting and Reporting Standard for the Financial Industry

#### Please explain the details and assumptions used in your calculation

According to the PCAF methodology, the group's loan and investment assets are divided into 6 asset classes (listed equity and corporate bonds, business loans and unlisted equity, project finance, commercial real estate, mortgages, and Motor Vehicle loans), We calculated financed emissions by collecting relevant data such as greenhouse gas emission data.

#### C-FS14.2

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

	Portfolio breakdown
Row 1	Yes, by asset class

#### C-FS14.2a

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

Asset class	Portfolio metric	Portfolio emissions or alternative metric
Banking Corporate loans	Absolute portfolio emissions (tCO2e)	35,722,546
Banking Project finance	Absolute portfolio emissions (tCO2e)	2,320,360



Banking Corporate real estate	Absolute portfolio emissions (tCO2e)	530,679
Banking Retail mortgages	Absolute portfolio emissions (tCO2e)	137,519
Banking Other, please specify Motor vehicle loans	Absolute portfolio emissions (tCO2e)	469,559
Investing Listed Equity	Absolute portfolio emissions (tCO2e)	1,091,148
Investing Fixed Income	Absolute portfolio emissions (tCO2e)	10,263,554
Investing Private Equity	Absolute portfolio emissions (tCO2e)	294,438

# C-FS14.3

# (C-FS14.3) Did your organization take any actions in the reporting year to align your portfolio with a 1.5°C world?

	Actions taken to align our portfolio with a 1.5°C world
Banking (Bank)	Yes
Investing (Asset manager)	Yes
Investing (Asset owner)	Yes

# C-FS14.3a

# (C-FS14.3a) Does your organization assess if your clients/investees' business strategies are aligned with a 1.5°C world?

	Assessment of alignment of clients/investees' strategies with a 1.5°C world
Banking (Bank)	Yes, for all
Investing (Asset manager)	Yes, for all
Investing (Asset owner)	Yes, for all



# C15. Biodiversity

## C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	
Row 1	No, but we plan to have both within the next two years	

#### C15.2

# (C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Ro 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Adoption of the mitigation hierarchy approach	Other, please specify TNFD(Taskforce on Nature-related Financial Disclosures)

### C15.3

#### (C15.3) Does your organization assess the impact of its value chain on biodiversity?

	Does your organization assess the impact of its value chain on biodiversity?	
Row 1	No, but we plan to assess biodiversity-related impacts within the next two years	

# C15.4

# (C15.4) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	
No, we are not taking any actions to progress our biodiversity-related commitments, but we plan to within the next two years	

### C15.5

(C15.5) Does your organization use biodiversity indicators to monitor performance across its activities?



	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row	No, we do not use indicators, but plan to within the	Response indicators
1	next two years	

### C15.6

(C15.6) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In mainstream financial reports	Content of biodiversity- related policies or commitments	2021 ESG Repot 9p

<sup>&</sup>lt;sup>0</sup> ¹SFG\_2021\_ESG\_Report\_kor.pdf

# C16. 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.

When entering the carbon-related asset value in the C-14.0 column, it is not possible to enter more than the set range, so it is written in KRW million units for system input.

### C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

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

# SC. Supply chain module

### SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.



### SC0.1

#### (SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	

### SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

### SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

### SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges

#### SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

### SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

### SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?



#### SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

# FW-FS Forests and Water Security (FS only)

### **FW-FS1.1**

(FW-FS1.1) Is there board-level oversight of forests- and/or water-related issues within your organization?

	Board-level oversight of this issue area	Explain why your organization does not have board-level oversight of this issue area and any plans to address this in the future
Forests	No, but we plan to within the next two years	Based on the topic of biodiversity, the financial impact and risk factors on forests and water are being checked. We are pursuing an internal review with the same logic as climate change.
Water	No, but we plan to within the next two years	Based on the topic of biodiversity, the financial impact and risk factors on forests and water are being checked. We are pursuing an internal review with the same logic as climate change.

### FW-FS1.1c

(FW-FS1.1c) Does your organization have at least one board member with competence on forests- and/or water-related issues?

#### **Forests**

Board member(s) have competence on this issue area

#### Water

Board member(s) have competence on this issue area

### **FW-FS1.2**

(FW-FS1.2) Provide the highest management-level position(s) or committee(s) with responsibility for forests- and/or water-related issues.



## **FW-FS2.1**

# (FW-FS2.1) Do you assess your portfolio's exposure to forests- and/or water-related risks and opportunities?

	We assess our portfolio's exposure to this issue area	Explain why your portfolio's exposure is not assessed for this issue area and any plans to address this in the future
Banking - Forests exposure	No, but we plan to within the next two years	
Banking – Water exposure	No, but we plan to within the next two years	
Investing (Asset manager) – Forests exposure		
Investing (Asset manager) – Water exposure	No, but we plan to within the next two years	
Investing (Asset owner) – Forests exposure	No, but we plan to within the next two years	
Investing (Asset owner) – Water exposure	No, but we plan to within the next two years	

# **FW-FS2.2**

# (FW-FS2.2) Does your organization consider forests- and/or water-related information about clients/investees as part of its due diligence and/or risk assessment process?

	We consider forests- and/or water-related information	Explain why information related to this issue area is not considered and any plans to address this in the future
Banking – Forests- related information	No, but we plan to do so within the next two years	
Banking – Water-related information	No, but we plan to do so within the next two years	
Investing (Asset manager) – Forests- related information	No, but we plan to do so within the next two years	
Investing (Asset manager) – Water-related information	No, but we plan to do so within the next two years	



Investing (Asset owner)  – Forests-related information	No, but we plan to do so within the next two years	
Investing (Asset owner)  – Water-related information	No, but we plan to do so within the next two years	

### **FW-FS2.3**

(FW-FS2.3) Have you identified any inherent forests- and/or water-related risks in your portfolio with the potential to have a substantive financial or strategic impact on your business?

	Risks identified for this issue area	Primary reason why your organization has not identified any substantive risks for this issue area	Explain why your organization has not identified any substantive risks for this issue area
Forests	No		
Water	No		

### **FW-FS2.4**

(FW-FS2.4) Have you identified any inherent forests- and/or water-related opportunities in your portfolio with the potential to have a substantive financial or strategic impact on your business?

	Opportunities identified for this issue area	Primary reason why your organization has not identified any substantive opportunities for this issue area	Explain why your organization has not identified any substantive opportunities for this issue area
Forests	No		
Water	No		

# **FW-FS3.1**

(FW-FS3.1) Do you take forests- and/or water-related risks and opportunities into consideration in your organization's strategy and/or financial planning?

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Risks and opportunities related to this issue area taken into consideration in strategy and/or financial planning

Vater Vater



Risks and opportunities related to this issue area taken into consideration in strategy and/or financial planning

### **FW-FS3.2**

(FW-FS3.2) Has your organization conducted any scenario analysis to identify forestsand/or water-related outcomes?

Forests
Scenario analysis conducted to identify outcomes for this issue area
Water

Scenario analysis conducted to identify outcomes for this issue area

#### **FW-FS3.3**

(FW-FS3.3) Do any of your existing products and services enable clients to mitigate deforestation and/or water insecurity?

	Existing products and services that enable clients to mitigate deforestation and/or water insecurity	Explain why your organization does not offer products and services which enable clients to mitigate deforestation and/or water insecurity and any plans to address this in the future
Forests	No, but we plan to address this within the next two years	
Water	No, but we plan to address this within the next two years	

### **FW-FS3.4**

(FW-FS3.4) Does the policy framework for the portfolio activities of your organization include forests- and/or water-related requirements that clients/investees need to meet?

	Policy framework includes this issue area	Explain why your organization does not include this issue area in the policy framework and any plans to address this in the future
Forests	No, but we plan to include this issue area within the next two years	



ſ	Water	No, but we plan to include this	
		issue area within the next two	
		years	

### **FW-FS3.5**

# (FW-FS3.5) Does your organization include covenants in financing agreements to reflect and enforce your forests- and/or water-related policies?

	Covenants included in financing agreements to reflect and enforce policies for this issue area	Explain why your organization does not include covenants for this issue area in financing agreements and any plans to address this in the future
Forests	No, but we plan within the next two years	
Water	No, but we plan within the next two years	

# **FW-FS4.1**

# (FW-FS4.1) Do you engage with your clients/investees on forests- and/or water-related issues?

	We engage with clients/investees on this issue area	Explain why you do not engage with your clients/investees on the issue area and any plans to address this in the future
Clients – Forests	No, but we plan to within the next two years	
Clients – Water	No, but we plan to within the next two years	
Investees – Forests	No, but we plan to within the next two years	
Investees – Water	No, but we plan to within the next two years	

# **FW-FS4.2**

# (FW-FS4.2) Does your organization exercise its voting rights as a shareholder on forests- and/or water-related issues?

		Explain why your organization does not exercise voting rights on this issue area and any plans to address this in the future
Forests	No, but we plan to within the next two years	



Water	No, but we plan to within the	
	next two years	

# **FW-FS4.3**

# (FW-FS4.3) Does your organization provide financing and/or insurance to smallholders in the agricultural commodity supply chain?

	Provide financing and/or insurance to smallholders in the agricultural commodity supply chain	The state of the s	Explain why your organization does not provide finance/insurance to smallholders and any plans to change this in the future
Row 1	No, but we plan to in the next two years		

### **FW-FS4.4**

# (FW-FS4.4) Does your organization engage in activities that could directly or indirectly influence policy, law, or regulation that may impact forests and/or water security?

	Direct or indirect engagement that could influence policy, law, or regulation that may impact this issue area
Forests	
Water	

#### **FW-FS5.1**

# (FW-FS5.1) Does your organization measure its portfolio impact on forests and/or water security?

	We measure our portfolio impact on this issue area	Primary reason for not measuring portfolio impact on this issue area	Explain why your organization does not measure its portfolio impact on this issue area and any plans to change this in the future
Banking – Impact on Forests	No, but we plan to in the next two years		
Banking – Impact on Water	No, but we plan to in the next two years		
Investing (Asset manager) – Impact on Forests	No, but we plan to in the next two years		



Investing (Asset manager) – Impact on Water	No, but we plan to in the next two years	
Investing (Asset owner) – Impact on Forests	No, but we plan to in the next two years	
Investing (Asset owner) – Impact on Water	No, but we plan to in the next two years	

# **FW-FS5.2**

(FW-FS5.2) Does your organization provide finance or insurance to companies operating in any stages of the following forest risk commodity supply chains, and are you able to report on the amount of finance/insurance provided?

	Finance or insurance provided to companies operating in the supply chain for this commodity
Lending to companies operating in the timber products supply chain	No
Lending to companies operating in the palm oil products supply chain	No
Lending to companies operating in the cattle products supply chain	No
Lending to companies operating in the soy supply chain	No
Lending to companies operating in the rubber supply chain	No
Lending to companies operating in the cocoa supply chain	No
Lending to companies operating in the coffee supply chain	No
Investing (asset manager) to companies operating in the timber products supply chain	No
Investing (asset manager) to companies operating in the palm oil products supply chain	No
Investing (asset manager) to companies operating in the cattle products supply chain	No
Investing (asset manager) to companies operating in the soy supply chain	No



Investing (asset manager) to companies operating in the rubber supply chain	No
Investing (asset manager) to companies operating in the cocoa supply chain	No
Investing (asset manager) to companies operating in the coffee supply chain	No
Investing (asset owner) to companies operating in the timber products supply chain	No
Investing (asset owner) to companies operating in the palm oil products supply chain	No
Investing (asset owner) to companies operating in the cattle products supply chain	No
Investing (asset owner) to companies operating in the soy supply chain	No
Investing (asset owner) to companies operating in the rubber supply chain	No
Investing (asset owner) to companies operating in the cocoa supply chain	No
Investing (asset owner) to companies operating in the coffee supply chain	No

### **FW-FS6.1**

(FW-FS6.1) Have you published information about your organization's response to forests- and/or water-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

# Submit your response

In which language are you submitting your response?

English

#### Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public



# Please confirm below

I have read and accept the applicable Terms