TCFD Report

TCFD Recommendations

The founding of the Task force on Climate-related Financial Disclosures (TCFD) was led by the Financial Stability Board, a consultative body of G20 Finance Ministers and Central Bank Governors, in 2015 for the purpose of establishing climate change-related information disclosure measures.

Through consistent disclosures of information on climate-related risk based on TCFD recommendations, the TCFD presents criteria that help investors and stakeholders make investment decisions in terms of green finance, while aiming to enhance resilience against external impact in preparation for climate and environmental impact. As of now, around 1,500 organizations from 37 countries are TCFD supporters.

The recommendations consist of four elements.

GOVERNANCE

The organization's governance around climate-related risks and opportunities

STRATEGY

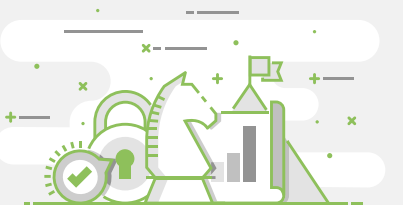
The impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning

RISK MANAGEMENT

The processes used by the organization to identify, assess, and manage climate-related risks

METRICS AND TARGETS

The metrics and targets used to assess and manage relevant climate-related risks and opportunities



TCFD Implementation Status of the Group

Shinhan Financial Group has expanded its activities for climate change responses in accordance with the TCFD recommendations.

We became the first in Korea to declare to support TCFD in September 2018, and also was the nation's first to disclose a TCFD report according to the recommendations in 2019. In 2020, we declared the Zero Carbon Drive, making us the first in East Asia to move forward with carbon neutrality of our asset portfolio.

1 GOVERNANCE

Set science-based quantitative reduction targets and establish a system for carbon neutrality

Board of Directors
ESG Strategy Committee[1)]

CEO
Group ESG Implementation Committee

Dedicated executives
Chief Strategy & Sustainability Officer (CSSO)
Group ESG CSSO Council

Team in charge
Group ESG Working Group Council
Group Risk Working Group Council

Dedicated teams
Shinhan Financial Group (holding company), Shinhan Bank, and Shinhan Card newly established an ESG-dedicated team

2 STRATEGY

"Zero Carbon Drive", an eco-friendly strategy for carbon neutrality of the asset portfolio of the Group

Participate in the UNEP FI's second pilot program of TCFD implementation

Adopt best practices for environmental/social risk management

Establish the Group's principles for climate change response

- Equator Principles, TCFD, CDP, PRB, PSI, SBTi, PCAF, NZBA

3 RISK MANAGEMENT

Analyze climate change-related physical and transition risks, and opportunities

Operate an environmental and social risk management system

- Selecte12 significant environmental/social areas
- Exclude areas with significantly negative environmental/social impact from offering financial services and implement conditional support policies
- Conduct impact assessments by categorizing risk ratings for large-scale development PF, and include a reduction plan in financial contracts, if needed

Analyze the impact of climate change on the Group's asset portfolio and develop management measures

4 METRICS AND TARGETS

Goals for Zero Carbon Drive

Reduction

Reduce carbon emissions of the Group and the Group asset portfolio by 46.2% and 38.6%, respectively, by 2030
(compared to the figures in 20119)

Offset

Expand green finance performance to reach KRW 30 trillion
(cumulative figure from 2020 to 2030)

Conduct investment portfolio monitoring that reflects climate change risk factors

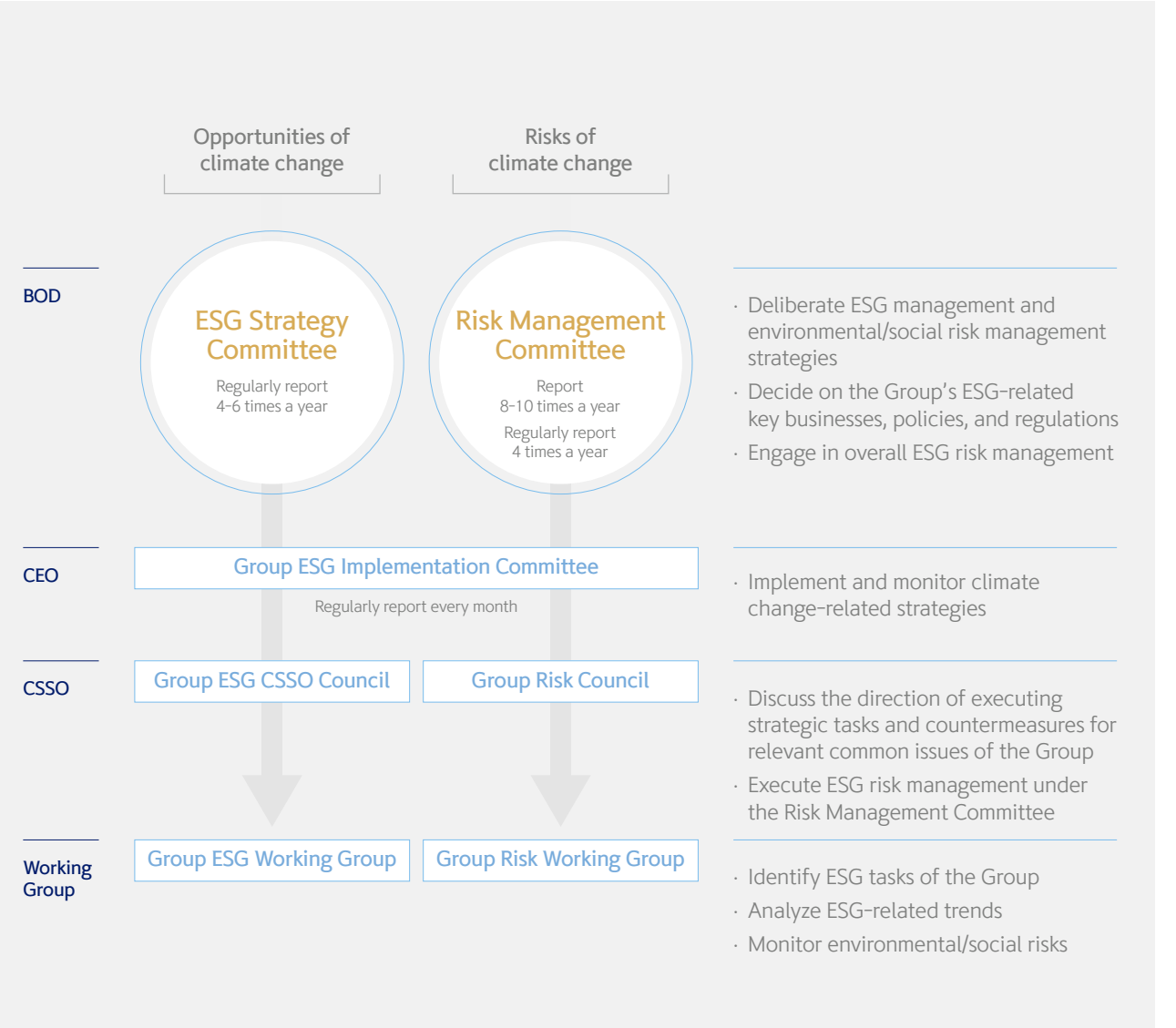
- Based on carbon emissions and carbon intensity

[1)] Became the first financial company in Korea to create an ESG-related sub-committee under the BOD in 2015 (former Corporate Social Responsibility Committee, the name will be decided after the annual general meeting held in March 2021)

1 GOVERNANCE

In 2015, Shinhan Financial Group became the first financial company in Korea to establish the Corporate Social Responsibility Committee (currently ESG Strategy Committee) and has been deliberating and deciding on ESG and climate change strategies.

In 2019, the Group became the first financial company to appoint a Chief Strategy & Sustainability Officer (CSSO), who is an executive in charge of strategies and sustainability, at all Group subsidiaries, and also designated working-level ESG officials and operated councils. In 2021, it launched the ESG Implementation Committee, participated by CEOs of all Group subsidiaries, to regularly review the status of executing climate change-related strategies, and to ensure detailed monitoring.



2 STRATEGY

Shinhan Financial Group is setting a new standard for green finance, with the goal of making the Group asset portfolio's carbon emissions "zero" by 2050. Through its distinctive Zero Carbon Drive strategy, the Group seeks to manage loans and investments for companies with large carbon footprints while expanding financial support for green industry, thereby contributing to the transition to a low-carbon economy. The Group also set a goal based on the SBTi methodology to achieve carbon neutrality of the Group asset portfolio, and will upgrade the measurement of carbon emissions by applying the criteria presented by the Partnership for Carbon Accounting Financials (PCAF).

TCFD Implementation Roadmap of the Group

2017-2018

Establishment of ECO Transformation 20·20 Strategy

Climate change agenda set by the Corporate Social Responsibility Committee

- Make eco-friendly investments worth KRW 20 trillion and reduce GHG emissions of the Group by 20% by 2030
- Adopt new products and services by sector

Establishment of the Group's environmental and social risk management system

- Designate and manage areas that need special attention
- Exclude areas, that require caution in terms of negative environmental/social impact, from offering financial services and implement conditional support policies
- Conduct environmental/social reviews for large-scale development PF

2019-2020

Assessment of portfolio impact from climate change

Advancement of climate change agenda for business impact assessment

- Analyze climate change-related portfolio impact and establish management measures
- Analyze the climate change-related status (carbon emissions, etc.) of companies with exposures of KRW 10 billion or more (including loans, bonds, and stocks)
- Monitor areas that require caution in terms of negative environmental/social impact

Declaration of Zero Carbon Drive in 2020

- Declare a plan to achieve carbon neutrality of the Group assets

2021-2050

Zero Carbon Drive implementation phase

Establishment of a Group-wide management system and reduction of emissions to achieve the reduction target

- 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 reduce

Zero Carbon Drive goal for 2030

- ⊖ Reduce carbon emissions of the Group and the Group asset portfolio by 46.2% and 38.6%, respectively (compared to the figures in 2019)
- ⊕ Expand green finance performance to reach KRW 30 trillion (cumulative figure from 2020 to 2030)

2050 ZERO CARBON

Reduce carbon emissions

Manage carbon emissions of the Group's asset portfolio

Establish carbon leadership by achieving carbon neutrality of the Group

Customer engagement, participation in initiatives, and new business alliances

Expand green finance

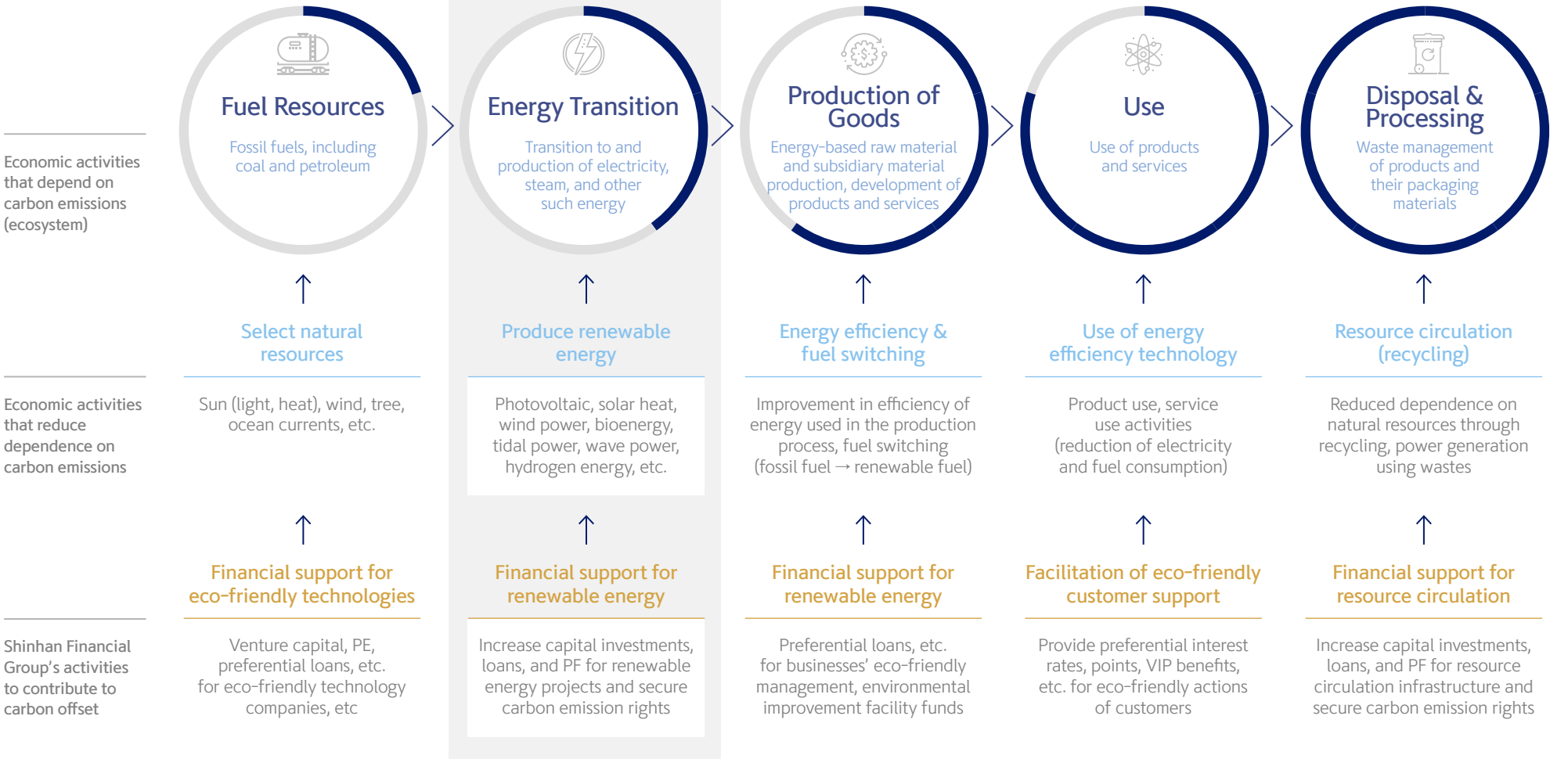
Offset carbon emissions

Extraited from Shinhan Financial Group 2020 ESG Highlight

2 STRATEGY

Analysis of opportunities of climate change

Shinhan Financial Group identified the following opportunities across the overall economic ecosystem that depends on carbon emissions. Of these, the Group discovered areas of opportunities to respond to climate change with a focus on the energy transition process that measures actual amount of carbon offset. Going forward, we will contribute to carbon offset through financial support that is needed for generating renewable energy, which can lower dependence on carbon emissions.

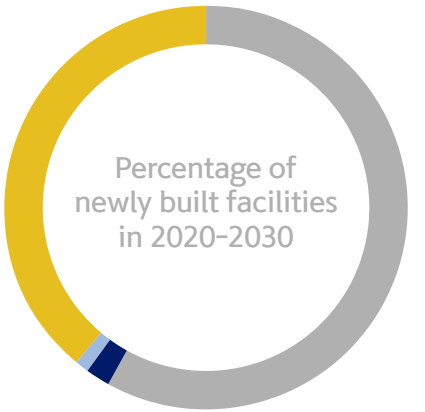


2 STRATEGY

Analysis of offset scenarios based on size of renewable energy investment

We will achieve the eco-friendly goal of Zero Carbon Drive by quantitively analyzing carbon emission offset effects by financial support amount, in consideration of growth of the future renewable energy market.

Process and grounds for determining emission offset effects



Hydro	Bio	Wind	Solar
1%	2%	39%	58%

Grounds for selecting technologies for offset renewable energy

Facility size per KRW 100 million (MW)	×	Annual power generation hours[1] (h)	=	Annual generation volume (MWh)
Annual generation volume (MWh)	×	Electricity emission factor[2]	=	Carbon emissions per KRW 100 million

[1] Possible power generation hours in consideration of the amount of sunshine, etc.
[2] Amount of carbon emitted for producing 1 MW of energy

Expansion of eco-friendly financial investments with a focus on renewable energy projects

We will contribute to carbon offset by transforming risks into opportunities by expanding friendly financial investments centered on renewable energy. This has larger project size and more reduction effects compared to other projects, and enables prior estimation of carbon emission offset effects.

Backgrounds of selecting opportunities

- Such renewable energy projects as photovoltaic and wind power generation have the effect of reducing greenhouse gases that are generated by fossil fuel-based electricity, and therefore can secure carbon emission rights.

Project size and reduction effects

- Project's size is big and is developed on the premise of a financial institution's participation.
- Compared to energy efficiency projects or fuel conversion projects, GHG reduction effects are exceptionally high compared to input costs.

Estimation of reduction effects

- Measurement is possible, and reduction effect estimation is easy because there are preconditions established to estimate the carbon offset amount and investment amount.

3 RISK MANAGEMENT

Definition of risks

Transition risk

Risk that arises in the process of shifting to a low-carbon economy to respond to climate change at the global or individual country level

Increase in losses of loans and investments in companies that are exposed to transition risk or decline in the value of investment assets (bank, financial investment, life insurance company, etc.)

Physical risk

Risk where direct/indirect material damages in the physical sector extend to the financial sector, following natural disasters, long-term climate change, etc.

Drop in the value of collateral, including real estate, as a result of such natural disasters as flooding and forest fire (bank, financial investment, life insurance, etc.), rise in insurance payouts from an increase in climate-related illnesses (life insurance

Risk assessment and management

We have a management process in place wherein we evaluate environmental/social risks of project financing with significant environmental/social impact, and reflect reduction measures in financial contracts, if needed.

Environmental/social review

We perform environmental/social reviews on large-scale project financing according to the Group's Environmental/Social Risk Management (ESRM) framework, and identify impact based on a review checklist. The operation process is as follows:

① Identify the project outline
② Categorize the risk rating in environmental/social aspects
③ Conduct an environmental/social review by referring to environmental/social impact evaluation, etc.
④ If needed, reflect reduction measures in the financial contract
⑤ Follow-up monitoring

Equator Principles

Shinhan Bank became the first commercial bank in Korea to join the Equator Principles in September 2020. The Equator Principles is a voluntary agreement of financial companies wherein they pledge not to finance large development projects that carry a risk of environmental destruction or human rights violations. The process is as follows:

① Categorization of the rating according to the degree of environmental/social risk and impact is required (A-C ratings)
② (According to the rating) Conduct an environmental/social impact evaluation; build a management system; establish an action plan; and verify monitoring
③ Reflect in the financial agreement (comply with agreed matters, etc.); regularly report on the implementation status of the Equator Principles; and disclose information

Future Plans

Set and manage limits for management of asset portfolio emissions

Reflect ESG factors, including climate change, in loan and investment decision-making

Identify and manage climate change-related risks

Shinhan Financial Group will identify risks by measuring relevant indices, including carbon emissions/intensity, and build a management system as follows to execute the Zero Carbon Drive.

Risk identification

Regularly monitor and report emissions of the Group subsidiaries

Monitor each company's portfolio carbon emissions, carbon intensity, high carbon-emitting sector/company's emissions, exposure status, etc.

Monitoring of areas that require caution in terms of negative environmental/social impact

* 12 areas include mining (water pollution by heavy metal), tobacco (child labor/health), drift-net fishing (destruction of the marine ecosystem), infrastructure (air pollution/migration of natives), weaponry/munitions (mass destruction), power generation (air pollution/radioactivity), forestry (water pollution/destruction of the ecosystem), crop production (soil/water pollution), oil refining (sea pollution), coal processing (air pollution), wastewater and waste treatment (water pollution), manufacturing of chemicals (harmful substances)

Future Plans

Risk dashboard alert system

Prior alarm using a signal light system in case of a considerable increase in monitoring indexes (emissions, intensity, etc.)

↓

Integrated management within the existing risk dashboard

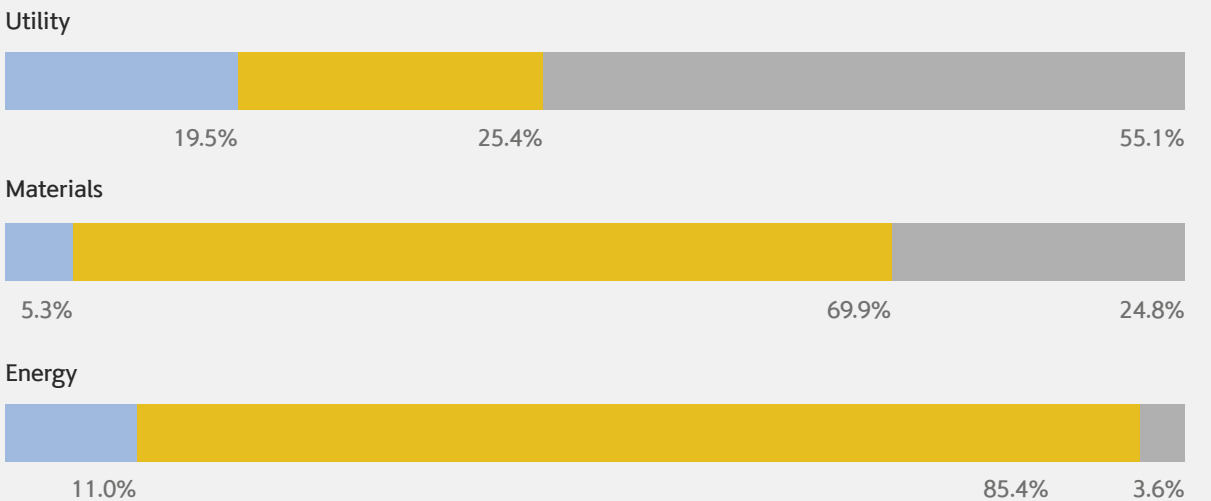
3 RISK MANAGEMENT

Analysis of climate change scenarios

Analysis of risk scenarios of the Group due to climate change

- Businesses with larger carbon footprints are forecast to be exposed to transition risk as a result of increased costs from future carbon price hikes. For this reason, Shinhan Financial Group analyzed risk scenarios in partnership with S&P Trucost.
- Carbon costs that portfolio companies of the Group asset as of 2019 need to additionally bear, in consideration of the future carbon price scenario[1], are around KRW 1.16 trillion (year 2030). Considering additional carbon costs, these companies' EBITDA margin[2] will drop, as indicated by scenario analysis results.
- In particular, if companies in major businesses with larger carbon footprints maintain current-level carbon emissions, a considerable number of companies will likely be impacted, including reduced margins.

Trucost
ESG Analysis
S&P Global



[1] Estimated price of International Energy Agency (IEA) was used for a simulation by Trucost (Based on 2℃ scenario)
[2] Ratio of EBITDA against sales

3 RISK MANAGEMENT

Case of environmental/social review during the risk evaluation and management process and reflection in contract

○○ SRF[1] Power Generation Project Case

OVERVIEW

Project involved with installing SRF production facilities and power generation facilities in Jeollanam-Do, and running a power generation program using the internally-produced SRF and externally-procured SRF

ENVIRONMENTAL ISSUE

Shinhan Financial Group arranged this project's financial advice in the second half of 2019, and categorized the risk rating as B in consideration of the project's type, size, etc.

Opinion after environmental/social review

- Definition of risk
  There is a possibility of an environmental and social issue that has a negative impact on the air, soil, water, etc. from waste treatment facilities
- Reduction measures
  Operate the business site in compliance with relevant laws
- Environmental/social issue
  Create a separate operational responsibility commitment document and reflect it in the business contract so as to impose the project's management and operation company with law observance and management duties and to continually monitor the above to ensure normal operations

Reflection of environmental/social review opinion

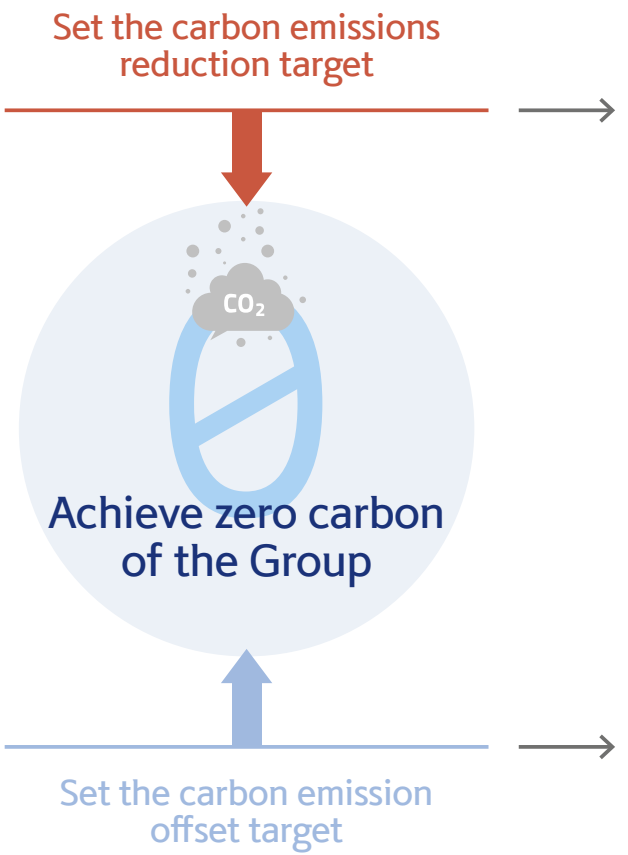
- Progress
  As of February 2020, two companies commenced service as this project's EPC/O&M contractor, and construction is underway
- Contractors were imposed with project management duties
  (reflected environment-related conditions in the contract as follows)

Contractual duties to be implemented by the contractors

- Acquisition of approvals and permissions needed for construction completion, and relevant permit and approval work
- Establishment and observance of a health, safety and environmental (HSE) plan in accordance with quality management and relevant laws, and execution of resulting management work

[1] Solid Refuse Fuel (SRF): Alternative fuel of fossil fuel that results from sorting, crushing, and drying combustible wastes

4 METRICS AND TARGETS



Management of the Group's carbon emissions

Set a reduction target using a scientific approach that is based on the Paris Climate Agreement (2℃ scenario)
(SBTi[1] 1.5℃ and SBTi SDA[2] 2℃ scenario)

Internal carbon emissions of the Group

46.2%

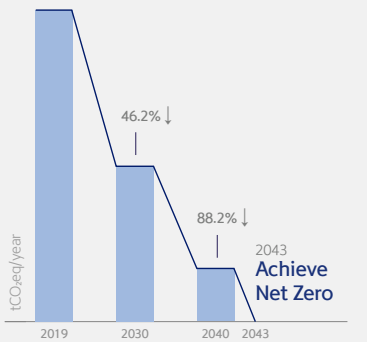
Carbon emissions of the Group asset portfolio

38.6%

(compared to 2019)

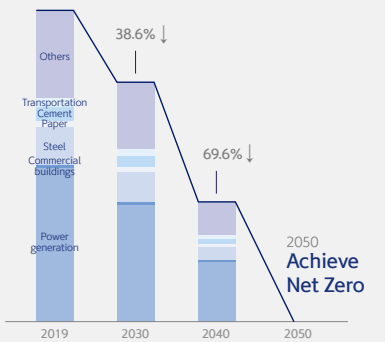
Internal carbon emissions of the Group

SBTi 1.5℃ scenario



Carbon emissions of the Group asset portfolio

SBTi 2℃ scenario



[1] Science Based Target initiative (SBTi), scientific scenario (Paris Climate Agreement)-based reduction target initiative

[2] SBTi Sectoral Decarbonization Approach (SDA): Financial assets' carbon emissions are categorized by industry (power generation/real estate/steel/cement, etc.), and a reduction target is determined according to the scenario by industry

Expansion of eco-friendly asset size

- Develop new eco-friendly growth drivers
  - Identify investment opportunities and companies in the area of eco-friendly new technology
  - Expand equity investments in renewable energy
- Plan to manage performance in consideration of K-Taxonomy

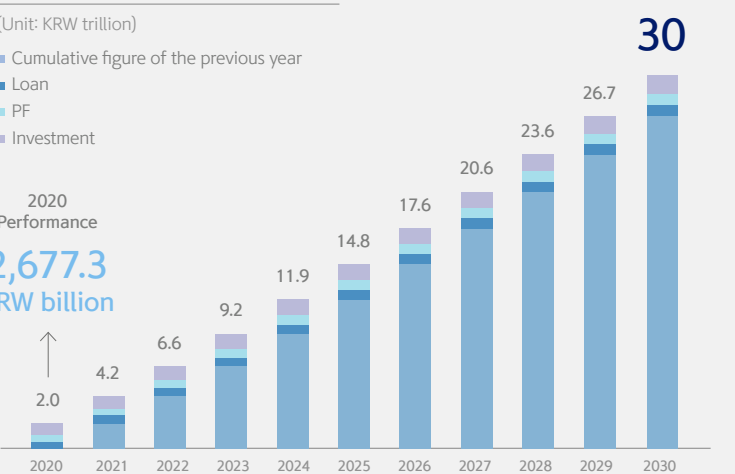
Green finance

30 KRW trillion

(Cumulative figure of new investment from 2020 to 2030)

Cumulative figure of the previous year

(Unit: KRW trillion)



* The offset target is the proportion of photovoltaic/wind power-based renewable energy PF. The level of carbon emissions that can be achieved without reduction efforts was estimated.

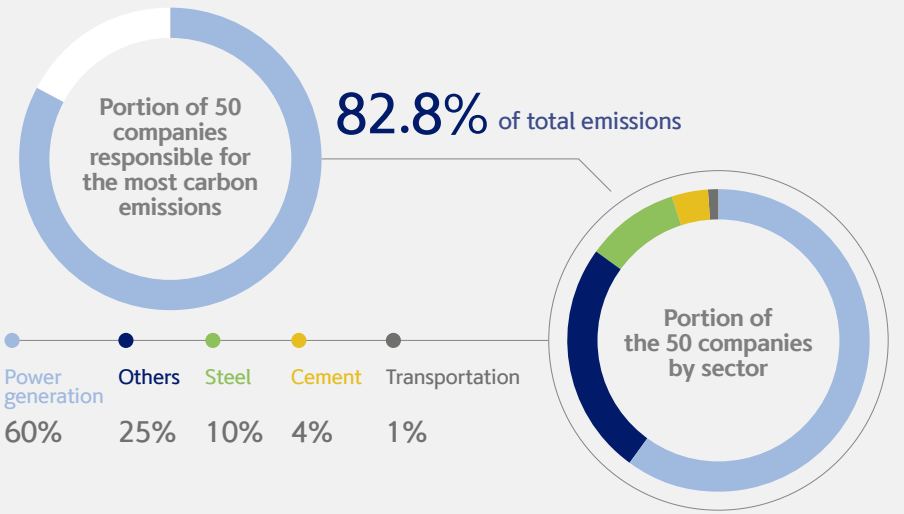
4 METRICS AND TARGETS

Measures to manage carbon emissions of the Group asset portfolio

To achieve its carbon emissions reduction target, Shinhan Financial Group manages it based on analyses of carbon emissions and carbon intensity of each industry sector of companies.

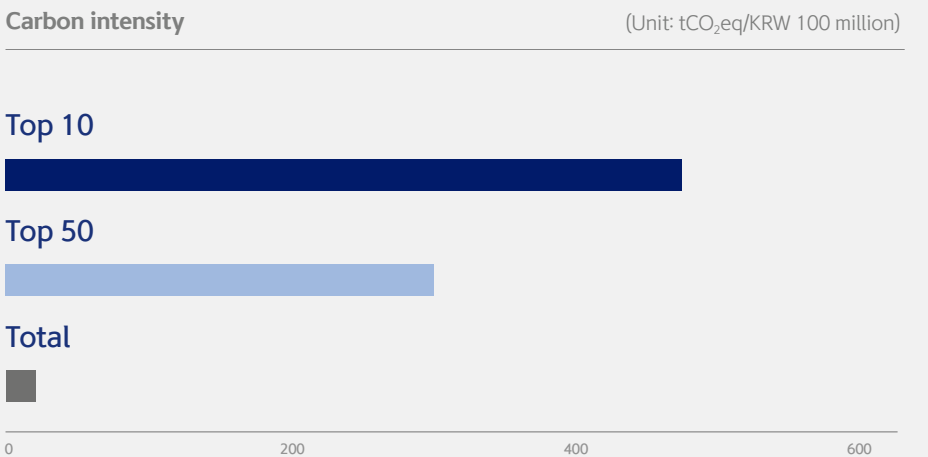
Analysis of the proportion of companies responsible for the most carbon emissions

- 50 companies contribute 82.8% of total carbon emissions, of which the power generation sector takes up 60%
- 10 companies contribute 53.9% of total carbon emissions



Efficiency of companies responsible for the most carbon emissions[1)]

- There are many companies in the cement and power generation sectors among top 10 / top 50 companies in carbon intensity
- The carbon intensity of top carbon intensity companies is around 15-25 times[2)] that of the total average



Enhance the effects of managing carbon emissions of the Group portfolio through pinpoint management of companies responsible for the most carbon emissions and the power generation sector

Enable companies responsible for the most carbon emissions to pursue a transition to eco-friendly management

Manage carbon intensity of each Group subsidiary as a major index, and reflect it as a major review item when making loan and investment decisions

[1)] Refers to carbon emissions per unit, including production volume, sales, and investment (Here, it means portfolio emissions per KRW 100 million in investment)
[2)] In case of the cement sector, it is managed as the Group's major sector outside power generation in Shinhan's asset portfolio