



Whitepaper on Korea ESG finance in 2020

Sustainable Finance of Korea Stands at the Crossroads



Korea Sustainability Investing Forum www.kosif.org www.kosif.org

Korea Sustainability Investing Forum is a non-profit organization founded in 2007 for the purpose of contributing to building a sustainable society through the promotion of socially responsible investments (SRIs), and it has been carrying out various activities to this end. The Forum has also organized and operated the CDP Korea Committee to promote environmental response among domestic financial institutions and companies. In addition, KoSIF is contributing to enhancing sustainability by spreading global initiatives such as TCFD, PCAF, RE100, EV100, SBTi, etc., to Korean financial institutions and companies.



Yongwoo Lee, Member, National Assembly Republic of Korea

Yongwoo Lee is the 21st member of the National Assembly and is currently working on the Political Affairs Committee. After graduating from Seoul National University with a bachelor's, master's, and doctoral degree in economics, he was in charge of investment, bond, asset, and trust management at company. As the public representative of Kakao Bank in 2016, he is an economist who has gone through practical work in the economy and finance fields, such as establishing Korea's first internet-only bank. In 2020, he held a debate on ESG bonds at the National Assembly and announced a policy report on ESG activation at national audit in 2021. To prepare this report, he requested and collected data from financial institutions on the ESG finance status from public and private institutions to secure the data necessary for the report.

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KIM YOUNG-HO

CHAIRMAN OF KOREA SUSTAINABILITY INVESTING FORUM

Currently, the world is facing a new paradigm. Changes happening from shareholder capitalism to stakeholder capitalism, exclusionary to inclusionary growth, and high carbon usage to a net-zero society. The key to entering the new paradigm is initiating ESG (Environment. Social. Governance).



“

The term ‘greenwashing’ and ‘social washing’ is used to prevent ESG-washing. Nonetheless, green taxonomy and social taxonomy would need further development and to be mandatory from preventing ‘ESG-washing’.

”

The capital flow is a key to social change and currently the capital around the world is converging into ESG. In fact, just looking into ‘ESG Investment’ in 2020, world-wide scale was equivalent to 35.3 trillion USD. In 2018, EU had released a Sustainable Finance Action Plan including 10 different law and policies to reorganize the flow of the capital market into a sustainable economy, maintaining sustainability in risk management, and promoting transparency in financial activities.

In 2020, EU has already created the Green Taxonomy and in July of this year, a draft of the Social Taxonomy was released. The Sustainable Financial Disclosure Regulation (SFDR), a corporation that strengthened financial institutions’ sustainability-related obligations, was implemented in March this year, and the Corporate Sustainability Reporting Guidelines (CSRD), which further strengthened the scope and level of disclosure, will be applied from 2024. Other countries around the world are also creating ESG financial policies in a similar direction to the EU. The same goes on to the South Korea’s “Green Financial Strategy” announced in January this year.

For the first time in South Korea, Korea Sustainability Investment Forum(KOSIF) published the “Korean ESG Finance Report” collaborating with the National Assembly Member Lee Yong-Woo. This is the first report to identify ESG financial methods including 132 public and private financial institutions that responded questionnaires through a survey. As a result, Korea’s ESG investment, ESG loans, ESG financial products (insurance, deposits and installment savings, cards, funds (retails), and ESG bonds amount to approximately 492 trillion won. This result shows the South Korean’s ESG finance is rising with-in the global growth of ESG Finance.

The figures in this report are based on ESG concepts or ESG classification systems that individual financial institutions think of themselves. The reason behind this is having the possibility of green washing and social washing leading to ESG washing. It is the development of the government’s Green Taxonomy and Social Taxonomy. Currently, the government plans to announce the Korean green classification

system within this year. Discussions for the development of social taxonomy should also be held as soon as possible. In order not to repeat the painful failures of green finance during the Lee Myung Bak government, it is also necessary to make it mandatory for Taxonomy. In addition, it should be mandatory to disclose ESG information as soon as possible. This is because ESG information is the core of the ESG financial ecosystem.

There are three ways people respond to the transition of the new paradigm. A rule-setter that actively reorganizes new rules, a rule-follower that follows and adapts to these rules, and a person who fails to adapt to new rules. South Korea, which has become one of the most advanced countries, should create laws and institutions in ESG finance from the perspective of a rule setter.

However, ESG has a strong concept centered on the perspective of financial investors. Sustainability is fundamentally achievable through the performance of social responsibility according to one’s size, influence, and competence. ISO26000 states that various economic actors should take social responsibilities (SRs) on the seven themes of governance, human rights, labor, environment, fair trade practices, consumer issues, community participation and development. In this regard, ESG from the perspective of financial investors and ISO26000, the international standard for social responsibility, should be viewed from the perspective of integration rather than exclusion from each other, and laws and systems related to social responsibility should be broadly established.

Lastly, I would like to express my gratitude to Rep. Lee Yong-Woo’s for making such efforts to publish the “Korean ESG Finance Report” and Morning Star Korea for providing separate data related to ESG funds.

LEE YONG-WOO

National Assembly Member

We are on a new path that no one has ever experienced. We are facing the challenge of overcoming the unprecedented economic crisis caused by low growth, aging, polarization, and environmental problems to leap into a sustainable society leading the global economy.



“

“Systems such as establishing an ESG classification system to prevent ESG washing in line with the Korean situation, diversifying the supply of ESG bonds at the government level, reflecting them in credit ratings by ESG element issuers, policies on costs associated with certification issues, and appropriate incentives should be preceded.”

”

Recently, there has been a growing perception on companies with environment, to cope with climate change, value creation (Social) for stakeholders, including workers, consumers, and social communities, and small shareholders are developing sustainably and have a high return on investment in the long run.

“ESG management is no longer an option, but a matter of survival.” Larry Pink, chairman of BlackRock, the world’s largest asset management company, has vowed to make sustainability a key investment indicator.

According to the Global Sustainable Investment Association (GSIA), global sustainable investment sums up to a total of \$35.3 trillion at the end of 2020. In addition, the total amount of ESG finance in South Korea, including ESG-related loans, investments, financial products, and bonds sums up to approximately 492 trillion won. This is a rapid growth trend with an increase of 242% since 2017.

It is necessary to look at the current status and suggest alternatives to achieve qualitative growth on the expansion of ESG financial trends.

First, the National Pension Service should expand on its social responsibility investment. The National Pension Service mentioned, it will expand its obligation to submit responsible investment reports to domestic stock consignment management companies from next year to all domestic and foreign stock and bond consignment management companies and reflect whether responsible investments are implemented. I hope that the social investment of public pension funds can be well established in the private sector.

Next, the mandatory disclosure of ESG information should be implemented as soon as possible. Financial authorities aimed to mandate KOSPI-listed companies to disclose E&S by 2030. In accordance with the mandatory G (Governance) disclosure schedule aimed at 2026, it is necessary to push for a plan to combine ESG into sustainable management disclosure.

It is important to remember best practices such as EU’s SFDR (Sustainable Finance Disclosure Regulation) and TCFD (Task Force on Climate-Related Financial Disclosure), which promotes ESG management through mandatory information disclosure.

In addition, systems such as establishing an ESG classification system to prevent ESG washing along with the Korean situation, diversifying the supply of ESG bonds at the government level, reflecting them in ESG element issuers’ credit ratings, policies on costs associated with certification issues, and appropriate incentives should precede.

I published the Korean ESG Financial Report with great responsibility. There is also a burden that it is the first data to study the overall status of ESG finance. We are looking forward to research ESG finance with more perspectives and insights in the future. I hope it will serve as the basis for public and private financial sectors to examine the current status of ESG finance in Korea and to discuss future directions.

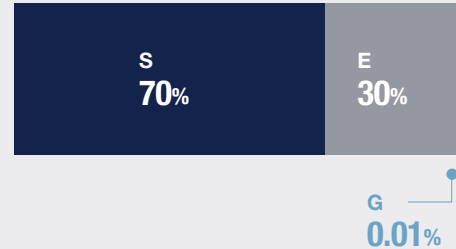
Thank you.

Key Findings

ESG Loan

184 Trillion
KRW

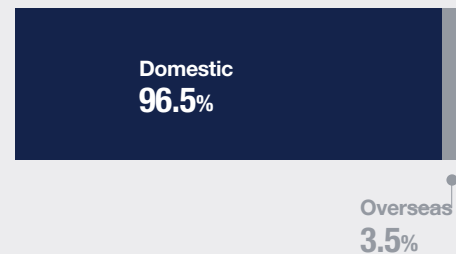
Personal Loan	17 Trillion
Corporate Loan	147 Trillion
Project Financing	20 Trillion



ESG Investment

188 Trillion
KRW

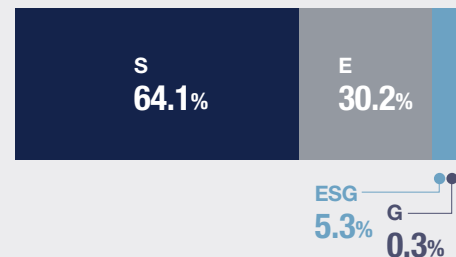
Equity	107 Trillion
Bonds	65 Trillion
Alternative Investment	16 Trillion



ESG Product

62 Trillion
KRW

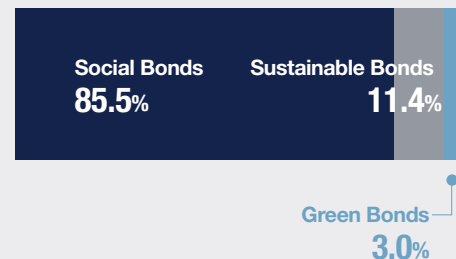
Insurance	15 Trillion
Savings/Deposit	39 Trillion
Credit Card	3 Trillion
Fund (Retail)	5 Trillion



ESG Bond ^{1,2}

59 Trillion
KRW

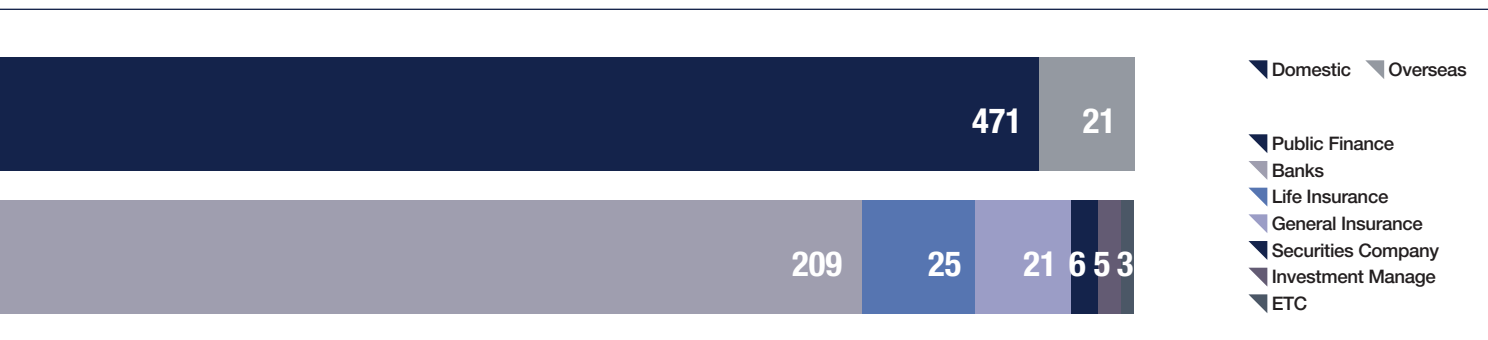
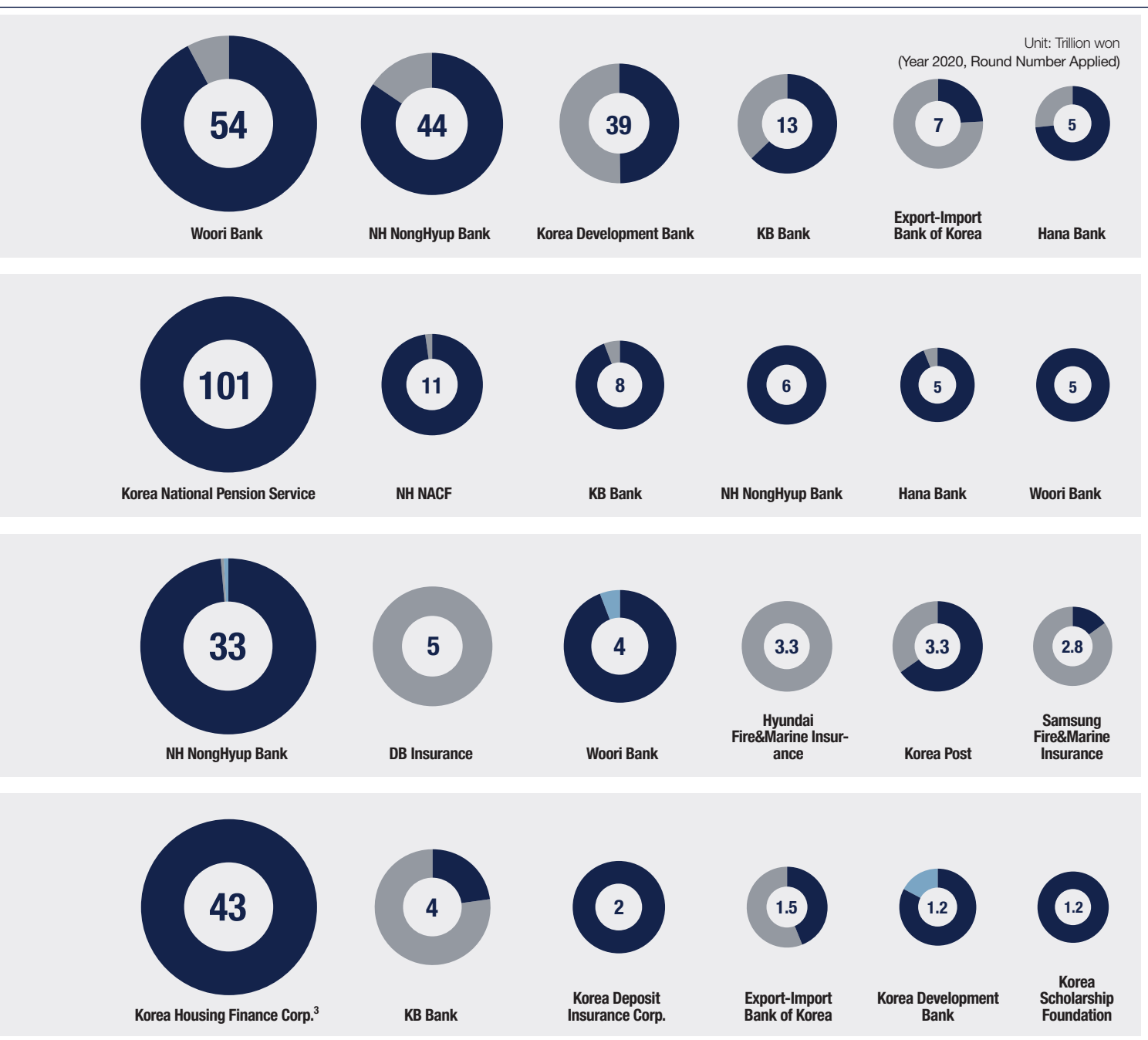
Financial	55 Trillion
Non-Financial	4 Trillion



ESG Finance Ratio

492 Trillion
KRW





Key Findings

Establishment of ESG Financial Ecosystem for Qualitative & Quantitative Growth

- From 2017, ESG finance increased up to 242% adding up to 492 trillion KRW in 2020
- Although all ESG types have shown growth, several ESG issues and financial institutions cover a high proportion
- Qualitative growth on (Definition of ESG Finance, Taxonomy, Disclosure System, and ESG Washing Prevention Policy) is still inadequate.

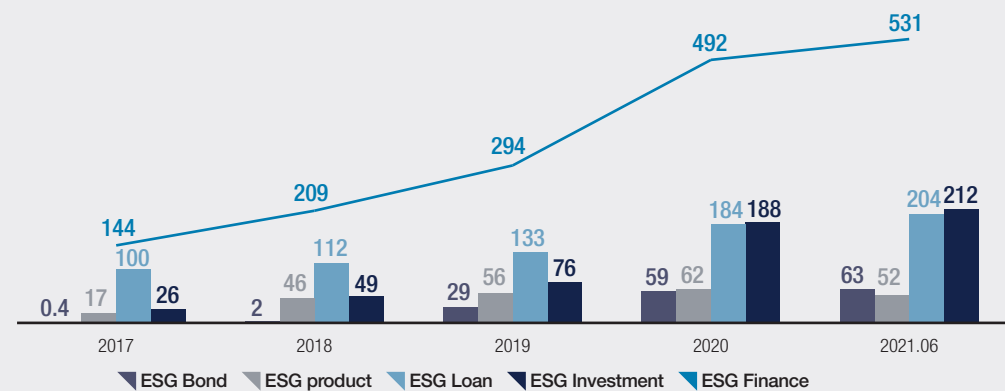
Suggestion

Mid/Long-Term Strategy Required for ESG Finance to be Sustainable

- Financial Service Commission's '2021 Green Finance Promotion Plan' does not cover ESG Finance in short-term
- ESG Finance refers to long term attribution which needs mid-long term strategic planning for sustainable finance

Yearly Trend of ESG Finance Types

(Unit : Trillion KRW)



Establishing Consistent Target for ESG Finance Goals

- 32 Financial Institutions (Private 27, Public 5), Reported ESG Finance Target
- All 5 Major Financial Group reported, among all major public financial institutions only National Pension Service had not reported goals on future investments and had a different target strategy towards sustainable ESG finance

5 Major Financial Groups / Major Public Financial Institution ESG Finance Goals¹

Financial Institution	Target Year	Target Amount	2020 AUM Ratio
Nonghyup Financial Group	2021	2 Trillion KRW	0.37%
Shinhan Financial Group	2023	79 Trillion KRW	16.25%
Woori Financial Group ²	2030	100 Trillion KRW	27.90%
Hana Financial Group ³	2030	60 Trillion KRW	14.67%
KB Financial Group ⁴	2030	50 Trillion KRW	9.52%
National Pension Service	2022	No Specific Target Disclosed	
Industrial Bank of Korea	2025	12 Trillion KRW	3.57%
Korea Development Bank ⁵	2030	13 Trillion KRW	5.24%
Export-Import Bank of Korea	2030	180 Trillion KRW	184.45%

Proposal

Need Clear ESG Finance Goal to Prevent 'ESG Washing'

- Need to provide funds to take-action for climate change and sustainable social realization
- 『Identify Necessary Funds → Check Investment Goals → (If Not Enough) Establish Policy for Additional Funds』 Establish Policy
- Need to establish clear ESG finance goal guidelines to make policy decisions and prevent distorted information distribution

1. Target Standard: Accumulate Billing Amount / Issue Bonds not included, FIs that apply different standards are mentioned separately (Refer Annotation)
 2. Issue Bonds (10 Trillion KRW) included
 3. Issue Bonds (25 Trillion KRW) included
 4. Year 2030 Balance Standards
 5. Year 2030 Current year Input Amount

Unclear Domestic Financial Institution Reporting Standards, Taxonomy Revision Needed

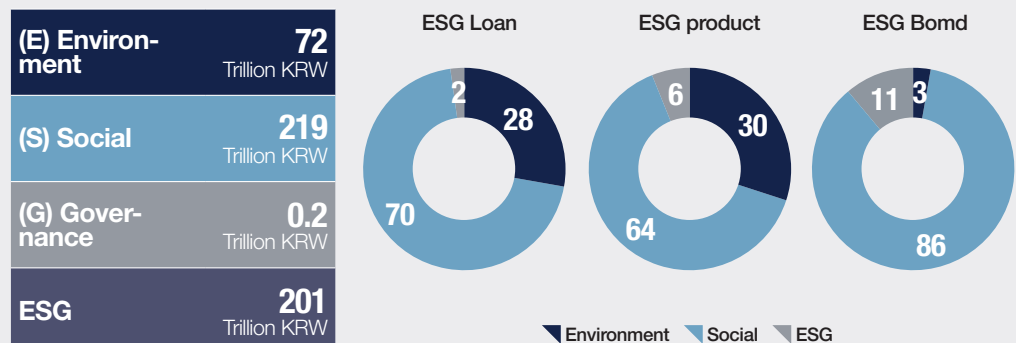
- ▼ The (S) Social area of ESG Finance performance is comprehensively higher than the other in terms of investment, decision-making, and ESG performance.
- ▼ Financial institutions have applied ICMA's SBP¹, UN's SDGs², and their own standards to classify financial activities in the (S) social criteria, but several activities found to be difficult to categorize as ESG finance.

Suggestion Prevent ESG Greenwashing for Sustainable Finance, Taxonomy is the Key to ESG Financing

- ▼ The Korean Ministry of Environment announced a draft plan to introduce the "Korean Taxonomy" within 2021 but the social controversy is continuous due to the inclusion of LNG development
- ▼ EU has introduced a draft of Social Taxonomy this July, but it has not yet been mentioned in Korea

ESG Issue Type-Scale (Loan, Product, Bonds)

(Unit : %)



ESG Product's Purpose and Standard Not Clear, Clear ESG Disclosure Needed for Financial Consumers

- ▼ Majority of financial institutions classify ESG financial products as part of finance, including when setting goals
- ▼ In 2020, the total scale of ESG financial products³ stood at 62 Trillion KRW
- ▼ Due to the lack of standards for ESG financial products, there was a significant difference in size by financial institution, and the actual environmental and social contribution of financial products was unclear

Major ESG Financial Product Types

Financial Products	Amount	Major Financial Product
Fund (Retail)	5 Trillion KRW	NH-Amundi Responsible Investment No.1 (National Pension), ETF(Electric Vehicle), (Public) Hanhwa Pension Securities Conversion Investment Trust (Stocks), KB Korea New Deal Securities Investment Trust (Stocks)
Savings/Deposit	39 Trillion KRW	NH Plus Time Deposit, Senior Plus Deposit, Blue Sky Bank Account, KB Sky Savings, Diddim Seed, 365 Challenge Installment Savings, National Pension Security Amount
Insurance	15 Trillion KRW	Special Agreement of Quality Certified Parts, ECO Mileage Car Insurance, Special Terms and Conditions for Mileage, Cham-Health Insurance, Dementia Insurance for Lifelong Care
Credit Card	3 Trillion KRW	Rural Love Club Check Card, START Debit Card, Green Card, Hybrid Vacation Debit Card

Related Financial Products Need Standards and Disclosure Policy

- ▼ EU's SFDR (Sustainable Finance Disclosure Regulation) launched in March 2021, mainly targeting financial fund products
- ▼ Currently, domestic financial institutions categorize ESG financial products as regular deposit/savings, insurance, etc. distinct standards and disclosure standard is needed

1. International Capital Market Association (ICMA)'s Social Bond Principle (SBP)
 2. UN's Sustainable Development Goals (SDGs)
 3. ESG Financial Products: Fund(Retail), e.g., Savings, Insurance, Credit Card

Domestic/Overseas of ESG Finance Trends

Effort to Promote ESG Finance

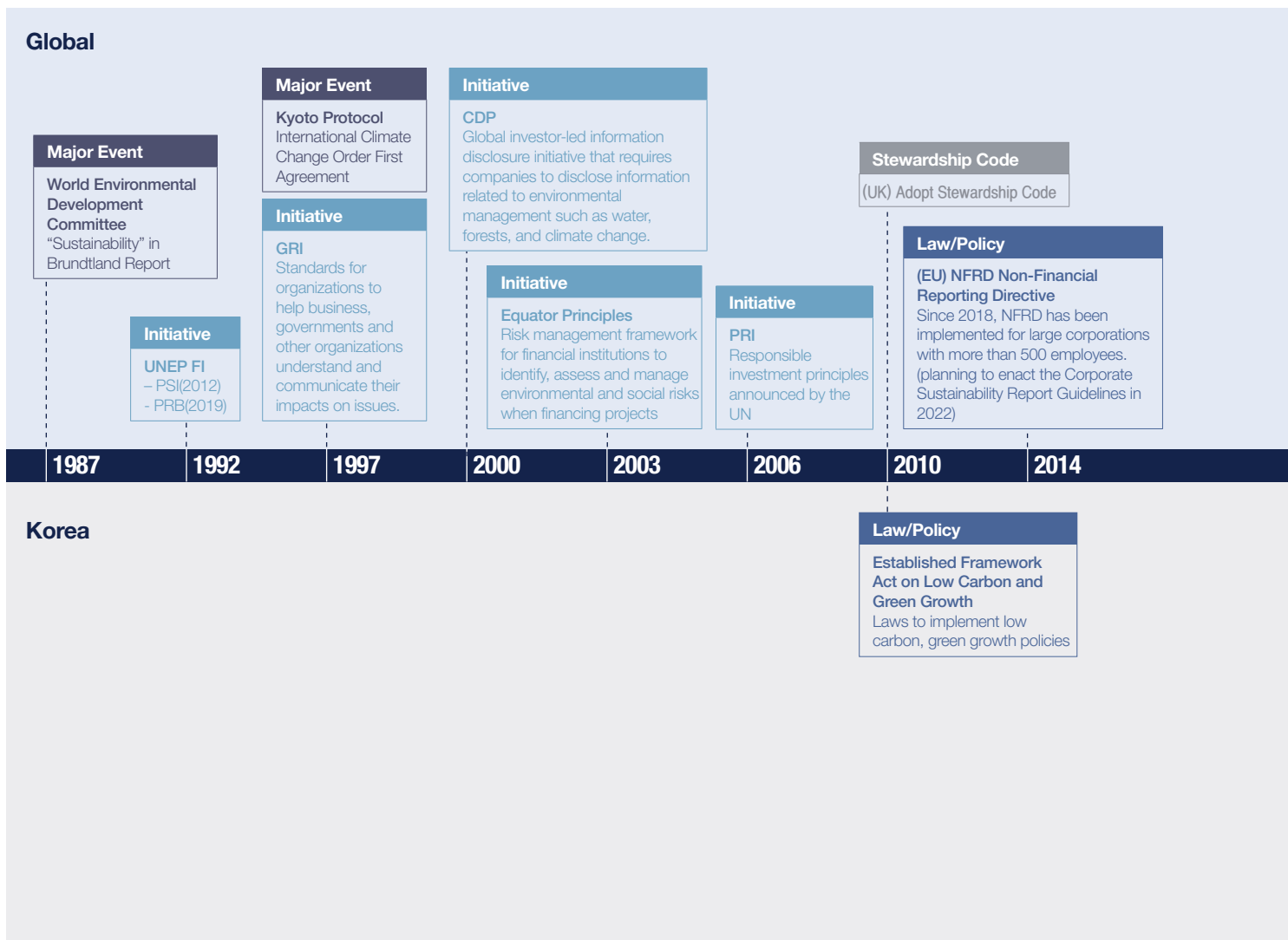
Currently, ESG is at its highest point. The reason behind this is because ESG is attracting attention as a keyword in the transition from exclusionary to inclusive growth, from high carbon society to decarbonized society, and from shareholder capitalism to stakeholder capitalism to overcome the crisis of sustainability. Without capital movement, it is impossible to face social change which we face the main importance in ESG finance being the key driving force for transformation.

“Sustainable Finance Action Plan” released by EU in 2018 presents most of the current trends, directions, and tasks of ESG finance at home and abroad. The EU’s Sustainable Finance Action Plan reflects issues related to capital market flow readjustment such as △ sustainability with a sustainable economy at the core of risk management △ presents 10 major tasks in the nature of the legal system package and focusing on the three pillars of transparency. Typical examples include the development of the

Taxonomy in the green social sectors, the strengthening of SFDR, stewardship codes, and mandatory disclosure by companies. By 2024, EU will also establish the European Single Access Point (ESAP), an electronic disclosure system that allows users to view sustainability information such as corporate financial information and ESG in one place.

Currently, ‘climate change’ is a keyword that leads ESG finance. A sense of crisis that climate change

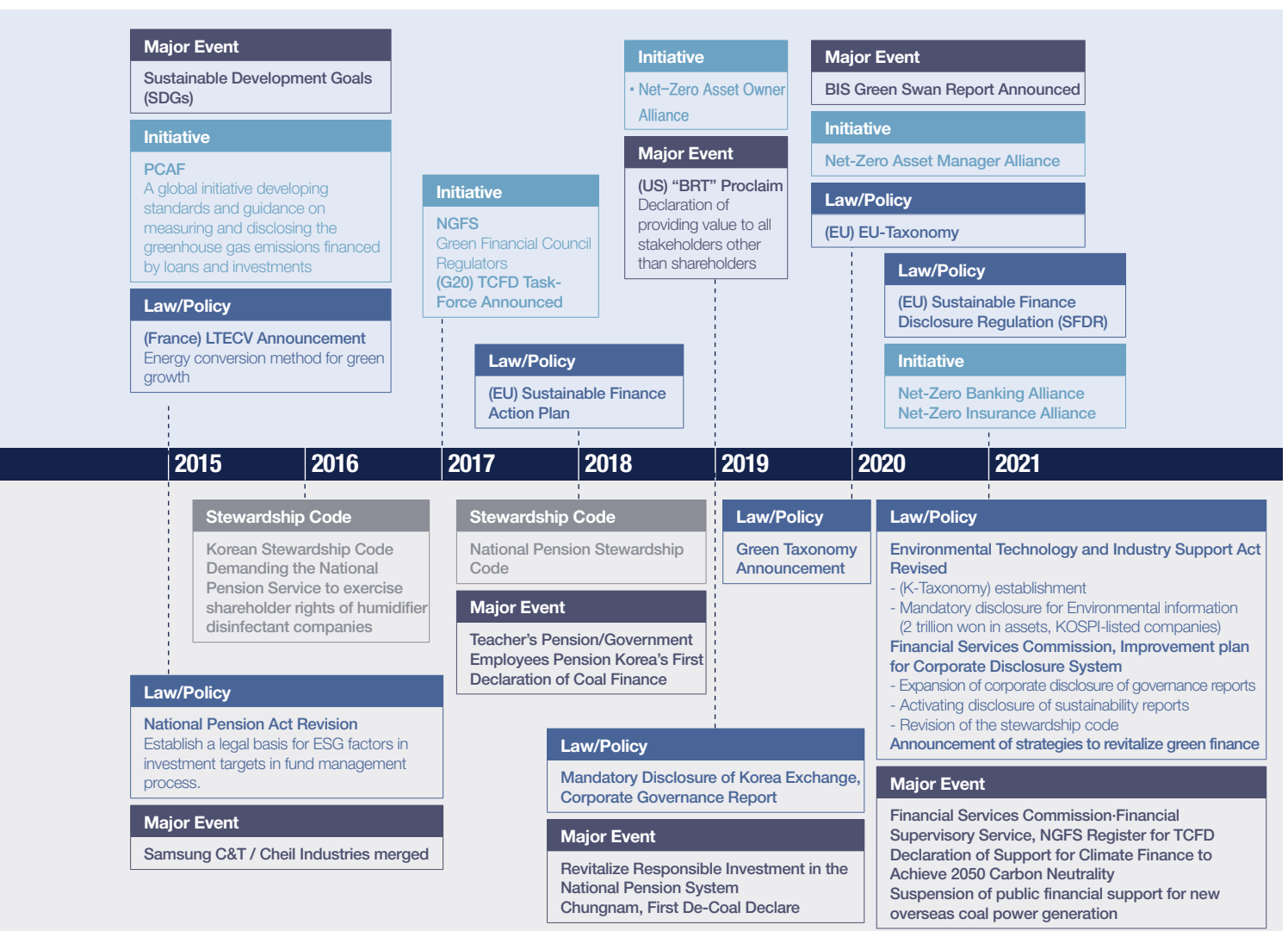
ESG Finance Milestone



could lead to the collapse of the financial system created a task force (TCFD) to study climate change-related financial information based on CDP's historical achievements, and launched NGFS, a green financial consultative body for financial regulators. As carbon neutrality to limit the global average temperature rise of 1.5 degrees has become a hot topic, financial institutions around the world are stepping up efforts to neutralize investment portfolios. The increase in financial institutions' membership and activities in Net-Zero initiatives, science-based indicators (SBTi), and carbon accounting and financial partnerships (PCAF) reflects that trend.

In Korea, ESG finance has traditionally been concentrated on ESG investment by the National Pension Service, but as de-coal finance to cope with the climate crisis began, it received attention and began to expand its scope. There are currently 101

de-coal financial institutions since the initial declaration in 2018. The participation of 112 organizations in the "2050 Declaration of Climate Finance Support to Achieve Carbon Neutrality" hosted by the Korea Social Responsibility Investment Forum accelerated the spread of ESG finance. The government announced a "plan to revitalize green finance" in January this year, starting the creation of an ESG financial ecosystem. It announced a roadmap for mandatory disclosure of ESG information. It has created guidelines for green bonds and plans to announce a Korean green classification system within 2021. The stewardship code will also be strengthened and presented this year.



ESG Finance Status

Korea's ESG Finance Scale

As of 2020, ESG finance recorded a total of 492 trillion won. By type of financial activities, ESG loans recorded to 184 trillion won, ESG investment KRW 188 trillion, ESG financial products KRW 62 trillion, and ESG bond issuance to KRW 59 trillion. By ESG issue factors, the environment (E) of 72 trillion won, society (S) 219 trillion won, governance (G) 0.2 trillion won, and the total of ESG recorded 201 trillion won.

492

Trillion KRW

ESG Finance
in South Korea

ESG is a term used by financial institutions to identify non-financial factors that affect the mid- to long-term value of the investment target company. Recently, domestic financial institutions have been actively engaged in ESG Finance. However, there has been no comprehensive data on ESG financial activities of domestic financial institutions.

For the first time in Korea, this report comprehensively compared and analyzed the current status of ESG Finance of all financial institutions. Considering that no common standards have yet been established for “definition” and “classification”, this report tried to show the current status of ESG Finance as it is, rather than evaluating the superiority and performance of individual financial institutions. The survey conducted for this report did not present separate “definition” and “classification” criteria for ESG Finance and the questionnaire was organized by respecting the judgement of individual financial institutions but confirming the basis of the judgement.

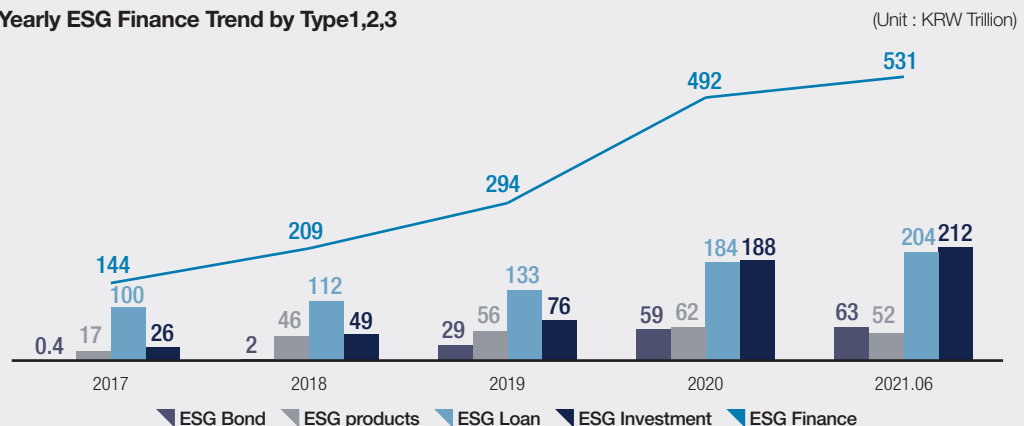
As of 2020, ESG Finance adds up to approximately 492 trillion won, having 242% increase since 2017. The following activities of ESG Investment to 188 trillion won, ESG Loan 184 trillion won, ESG Product 62 trillion won, ESG Bond 59 trillion won (based on 2020 issuance) respectively. In the past 5 years, all financial types have more than doubled, and the growth rate of ESG investment and ESG Bond has been steep.

ESG Finance Type Classification

Type	Detail
ESG Loan	<ul style="list-style-type: none"> • Private Loan • Corporate Loan • Project Financing (PF)
ESG Investment (SRI)	<ul style="list-style-type: none"> • Asset Group: Stocks / Bonds / Alternative Investment • Region: Domestic / Overseas
ESG Financial Products	<ul style="list-style-type: none"> • Insurance: Original Premium • Savings / Deposit : Amount Received • Credit Card : Card Usage • Fund(Retail) : Fund Sales
ESG Bond	<ul style="list-style-type: none"> • Issuer: Financial / Non-financial sector • Issue Type : Green / Social / Sustainable Bonds • Amount of Bond Issuance

ESG loans accounted for a large portion of 147 trillion won, or 80% of the total in corporate loan. There were many loans related to technology finance, job creation, and SME support. ESG investment accounted for 54% (101 trillion won) of the total and has shown rapid growth since 2019 when the National Pension Service announced its policy to boost ESG investment. ESG financial products accounted for 64% (39 trillion won) of deposits and installment savings, while NH Nonghyup Bank's “NH Plus Sharing Regular Deposit” accounted for 32 trillion won. ESG bond issuance accounted for 85% of the total social bonds, and social bonds issued by the Korea Housing Finance Corporation (KRW 43 trillion) were very

Yearly ESG Finance Trend by Type^{1,2,3}



1. Data for 2020 and 2021 of the Public Officials Benefit Association (POBA) are based on 2019 data.
 2. 2021 National Pension Service (data refers to end of April 2021)
 3. Refers to end of July 2021

high for the purpose of raising funds necessary for private financial institutions' purchases of mortgage bonds and payment guarantees for MBS issuance.

By ESG issue types, the environment (E) recorded 72 trillion won, social (S) 219 trillion won, governance (G) 0.2 trillion won, and ESG integration adds up to 201 trillion won. It turns out that social (44%) was three times higher than environment (15%). Social (S)-related ESG loans (129 trillion won, 70%) took a huge role in the ESG Finance type. The proportion of society (S) was also large in bond issuance, and it seems to be due to the issuance of 43 trillion won worth of social bonds by the Korea Housing Finance Corporation. ESG investment was generally reflected in investment decision-making by comprehensively evaluating the ESG performance of the invest-

ment target company. Most of the ESG integration was within the area of ESG investment.

When dividing financial institutions into public and private sectors, private finance accounted for 55% with 270 trillion won. Comparing private finance by financial groups, Woori Financial Group and NH Nonghyup Financial Group^{1,2} showed significantly higher than the remaining three major financial groups (Shinhan, Hana, and KB). Particularly, Woori Bank and NH Nonghyup Bank showed a large loan size classified as society (S), showing a difference up to 10 times compared to other banks. In the case of Nonghyup Financial Group, ESG investment (ESG bond investment: 10 trillion won by the National Agricultural Cooperative Federation and 6 trillion won by NH Nonghyup Bank) was high as well.

1. Nonghyup Financial Group is classified as private.
2. The National Agricultural Cooperative Federation includes Nonghyup Financial Group.

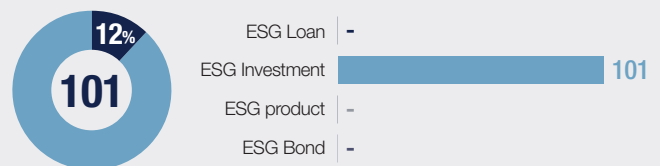
Ratio of 5 Major Financial Groups and Major Public Financial Institutions related to ESG Finance

(Unit : KRW Trillion)

Nonghyup Financial Group(8)



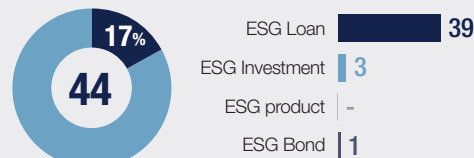
National Pension Fund



Woori Financial Group(6)



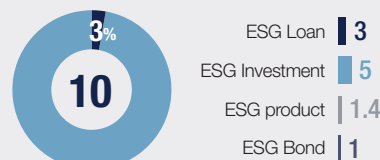
Development Bank of Korea



KB Financial Group(7)



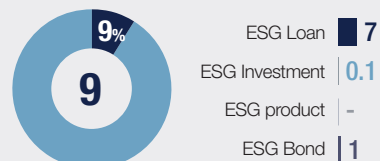
Industrial Bank of Korea



Hana Financial Group(4)



Export-Import Bank of Korea



Shinhan Financial Group(8)



ESG Finance Status

ESG Finance Goal

A total of 32 financial institutions have set ESG financial goals and all five major financial groups reported group-level goals. Among major national banks and public pension funds, only the National Pension Fund have not presented specific goals. None of the local financial groups reported group-level goals as well.

32 Institutions

ESG Financial Target Establishment Institutions

Public 5
Private 27

Target establishment Standards and Annual Amount – Shinhan Financial Group (Highest)

It was not easy to simply compare the target level due to the criteria for setting goals being different for each financial institutions. However, Shinhan Financial Group is expected to be the highest at around 25 trillion won based on the average annual new fund input. In order to identify ESG-related economic activities and to prevent ESG washing by financial institutions, it would be necessary to establish consistent standards for comparing each target levels.

5 Major Financial Groups Establishes ESG Financial Goals

All five major financial groups in Korea have reported their future ESG financial goals. KB, Woori, and Hana Financial Group has reported their goals by 2030, while Shinhan and Nonghyup reported their goals by 2023. Excluding KB, four financial groups had set goals by accumulating new input funds, and KB has reported goals based on the balance in year 2030. Additionally, Hana and Woori Financial Group included ESG bond issuance amounting to KRW 25 trillion and KRW 10 trillion, while the rest of the groups has yet included bond issuance.¹

All Major Public Financial Institutions have a specific target except – National Pension Service

Major government-run banks such as the Korea Development Bank, the Export-Import Bank of Korea, and the Industrial Bank of Korea have all established ESG financial goals. The financial goals did not include (S) social and were focused on the environment and the Green New Deal. The Export-Import Bank of Korea and the Industrial Bank of Korea reported their goals in a way that accumulates new input funds, while the Korea Development Bank reported their goals based on the amount of money applied for the current year as of 2030. Considering the 2020 target level (8.7 trillion won), the cumulative amount is expected to be more than 100 trillion won by 2030.

The National Pension Service responded, “We have not set the target amount, but we are establishing and implementing a plan for how and when to apply for responsible investment by asset group.” However, there was no specific response of the application ratio of responsible investment in asset groups yet.

Among insurance companies, Samsung Life Insurance and Samsung Fire & Marine Insurance reported the highest level of ESG financial goals.

ESG Financial Goals of the 5 Major Financial Groups and Public Financial Institutions

Target Year

2030

Financial Institution	2020 AUM Contrast Ratio	Target Amount
KB Financial Group	9.52%	50
Woori Financial Group	27.90%	100
Hana Financial Group	14.67%	60
Korea Development Bank	5.24%	13
Export-Import Bank of Korea	184%	180

2025

Industrial Bank of Korea	3.57%	11
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2023

Shinhan Financial Group	16.25%	79
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2022

National Pension Fund		No Target
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2021

NH Financial Group	0.37%	2
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1. Most financial institutions' ESG Bond issuance is used for loans or investments, there may have judgement for double accounting.
2. Balance based on year 2030.
3. Input amount based on year 2030.

Individual ESG Financial Target Establishment

	Financial Institution	Target Year	2020 AUM Contrast Ratio	Target Sum (Trillion Won)
Public	Korea Development Bank ¹	2030	5.24%	13.2
	Export-Import Bank of Korea	2030	184%	180
	Industrial Bank of Korea	2025	3.57%	11.95
	Government Employees Pension Service ²	2021	5.52%	0.45
	Korea Radioactive Waste Agency	2021	0.97%	0.03
Bank	Hana Bank	2030	7.42%	28
	KB Bank	2023	5.69%	24
	Shinhan Bank	2021	5.01%	19.86
	NH Bank	2021	0.40%	1.34
Life Insurance	Mirae Asset Life Insurance	2031	0.51%	0.3
	Samsung Life Insurance	2030	6.46%	20
	NH Life Insurance	2021	0.30%	0.2
	KB Life Insurance	2021	2.56%	0.27
General Insurance	Samsung Fire & Marine Insurance	2030	14.72%	13.5
	KB General Insurance	2023	2.66%	1
	NH Property & Casualty Insurance	2021	1.11%	0.1
Securities Firm	Mirae Asset Securities	2025	11.98%	10
	KB Securities	2023	2.44%	1.34
	SK Securities	2022	0.14%	0.01
	Meritz Securities	2021	1.42%	0.5
	NH Investment & Securities	2021	0.31%	0.19
	Shinhan Investment	2021	1.13%	0.18
Asset Management	NH-Amundi Asset Management	2025	14.34%	6.5
	BNK Asset Management	2021	183.49%	0.21
	Hi Asset Management ^{3,4}	2021	-	0.18

1. Input Amount based on year 2030

2. Response by setting ESG financial target amount as ESG stock and bond valuation amount.

3. Former DGB Asset Management

4. 2020 AUM not available

- ESG Finance Target Committed, but no target sum available:
- Kyobo AXA Investment Managers, Samsung Securities, Woori Asset Management, Hyundai Motor Securities, BNK Securities, DB Financial Investment, IBK Insurance

ESG Finance Status

ESG Loan

In addition to ESG investments, recent leading sector of ESG finance resulted as ESG loan. The survey that was conducted for this report found ESG loans resulting to 184 trillion won. However, unlike ESG investment being continuously monitored and institutionalized, ESG loan-related system is still insufficient which needs institutional maintenance for its scale in the future.

184

Trillion KRW

ESG Loan¹

Loans can be classified into private loans, corporate loans, and project financing. PF refers to loans made based on future cash flows of the project, and corporate loans are generally divided into operating fund necessary for the operation of ordinary companies and facility investment.

ESG loans cover loans for facility investment purposes related to the environment, social, and governance structure, as well as loans for those who reflect ESG elements in loan screening or need ESG-related support. As of the end of 2020, the size of ESG loans resulted to 184 trillion won, showing a significant growth from 2019. Corporate loans accounted for 80% of the total, or 147 trillion won, while PF and private loans amounted to 20 trillion won and 17 trillion won, accounting for an overwhelming proportion of corporate loans.

In near future, ESG loans from financial institutions centered on banks are expected to increase. According to the results of the stress test² conducted by the Bank of Korea based on the NGFS Network for Greening the Financial System 1.5°C scenario, as of 2050 the Korean economy's GDP loss due to climate change implementation risks is expected to reach up to 7.4% (average 0.25% per year). As a result, the BIS ratio of domestic banks is also expected to fall by up to 5.8% (annual average of 0.19%) in 2050 due to rising bankruptcy rates and falling stock prices in the high-carbon industry.

Corporate Loan	147.26 Trillion KRW
Project Financing	19.72 Trillion KRW
Private Loan	16.86 Trillion KRW

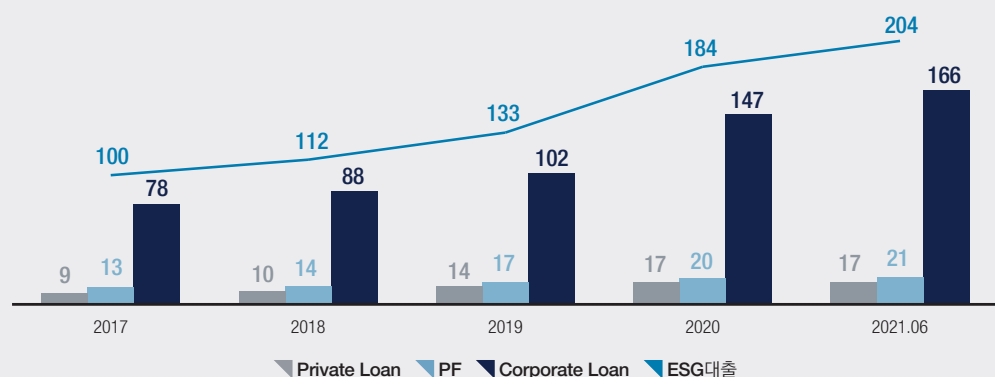
Examples of ESG Loan Type

Types	Case
Private Loan	Green Remodeling Loan / Eco-Car Purchase Loan / Youth Housing Loan / Saitdol Mid-Interest Loan
Corporate Loan	Energy Fund Loan / Green Industry Corporate Loan / Job Creation Corporate Loan / COVID-19 Finance Loan
PF (Project Financing)	Renewable Energy Power Plant/ Infrastructure Construction Projects (Highways, Schools)

The Financial Services Commission and the Financial Supervisory Service announced the establishment of a climate risk management and supervision plan for financial companies to prevent instability caused by climate change. As a result, preparations for climate risk management system centered on the banking sectors are becoming more active, which will be reflected throughout the loan screening process in the future.

Yearly Trend of ESG Loan

(Unit : Trillion KRW)



1. As of 2020

2. Source: Bank of Korea (2021), Financial Stability Report- Ref.7. Stress test in the banking sector considering the risk of implementing climate change.

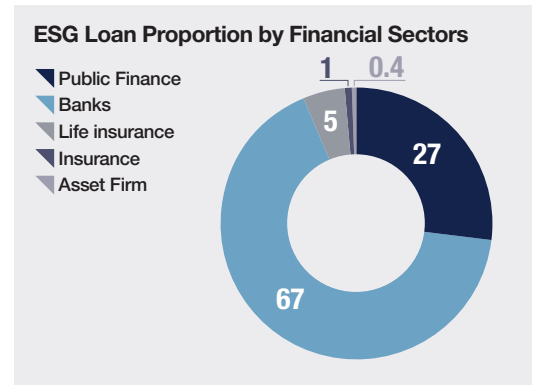
Korea is expected to take a similar process, considering overseas ESG financial trend policies expanding to other sectors such as environment, social, and governance issues.

After EU announced the Sustainable Financial Action Plan in 2018, it prioritized on expanding climate change finance and the entire ESG. For example, the introduction of the green classification system and a draft of social classification system was announced in July this year.

While in Korea, stakeholders and consumers are increasingly interested in social and governance-related issues such as unfair trade practices, abuse power of owners, and embezzlement being affected by the actual performance of companies. In terms of risk management, it is expected that the number of financial institutions that want to reflect not only the environment issues but social and governance in the loan process as well.

ESG Loans related to Social (S) is Relatively High
Tproportion of ESG loans being classified, social being the highest at 70%, 30% for the environment, and 0.01% for governance. Private banks' social and environment ratios were 84% and 16% respectively, while the average ratio of the rest of the sectors was at 43% and 52%, indicating that private banks having higher ratio of loans upon the social sector. Among the five major commercial banks, Woori Bank and NH Nonghyup Bank showed relatively high proportion of social (S)-related loans. Woori Bank reported a total of 54 trillion won worth of ESG loans 50 trillion won (90%), was related to the social (S) sector. NH Nonghyup Bank also accounted for 85% (37 trillion won) for the social sector.

On the other hand, government-run banks such as



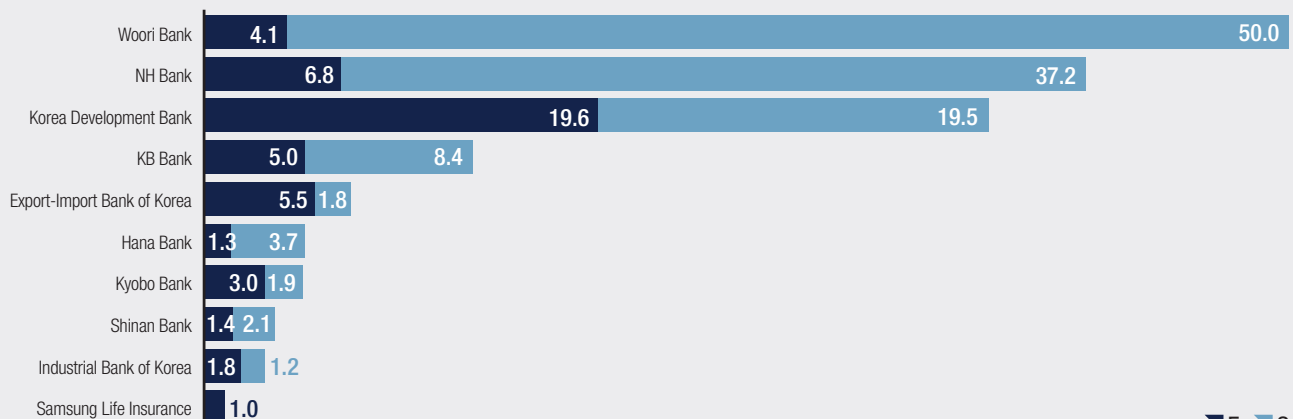
the Korea Development Bank, Export-Import Bank of Korea, and Industrial Bank of Korea showed higher environment (E) loans than social (S).

The total amount of loans in the environment (E) sector was 51 trillion won, with corporate loans of 42 trillion won (83.5%), PF of 8 trillion won (16%), and personal loans of 200 billion won (0.5%). In order to achieve carbon neutrality, it is essential to reduce greenhouse gases in the building and transportation sectors that requires individual participation. Personal loans such as green remodeling and eco-friendly car purchases seem necessary as well.

The total amount of loans in the social (S) sector was 129 trillion won, with 105 trillion won (81%) in corporate loans, 17 trillion won (13%) in personal loans and 7 trillion won (6%) in project financing. Support for social service companies such as technology financing (46 trillion won), low-income finance (21 trillion won), health and public services (19 trillion won), COVID-19 support (10 trillion won), job creation and SME support (10 trillion won) were reported. In governance (G), one acquisition financing for the purpose of improving governance has been reported.

ESG Loan by Financial Institutions

(Unit : Trillion KRW)



Necessity for Social Taxonomy

Recent topic of ESG Finance is climate change. However, it is found that the actual ratio of ESG finance is not social (S) but twice as much in the environment (E) sector. Not only it is urgent to prepare standards related on the social (S) sector but also important to adopt the social taxonomy. Financial institutions are making their effort to secure their reliability by applying global standards such as the Capital Markets Association's Social Bond Principles (SBP) and the UN's Sustainable Development Goals (SDGs) to classify loans related to social (S). As a result of analyzing the details reported by financial institutions, several loans were found that questioned whether it was appropriate to classify them as ESG financial activities.

One of the reason why financial institutions cannot apply the social taxonomy is from not providing specific standards for each financial activities. For example, ICMA's Social Bond Principles (SBP) or UN SDGs, which are most used in the social (S) sector, only present a wide range of "Accessible Basic Infrastructure" and "Socioeconomic Advancement and Empowerment". In addition to the detailed criteria for social taxonomy which includes "Do Not Significantly Harm, DNSH" and "Safeguard" are insufficient compared to other taxonomy.

In fact, some financial institutions have reported activities that seriously undermine environmental values, such as financial support for coal-fired power generation. With recent increase in social interest in ESG, concerns about ESG washing¹ are also increasing. This is an example of the needs to establish clear standards for ESG finance in the social sector.

ESG Loan (Applied) Various Taxonomy

Taxonomy Types	
E	EU Taxonomy
	ICMA Green Bond Principle
	CBI Climate Bond Principle
	Green Bond Guidelines from the Ministry of Environment
	Draft of Korean Taxonomy by Ministry of Environment
S	ICMA Social Taxonomy
	UN Sustainable Development Goals (SDGs)

Needs on Reflecting Governance Issues

In this research, no cases were reported for the governance relate loans. Governance is a very important factor that affects the competitiveness and mid-long-term repayment of loaned companies. When using loans, governance issue should always be considered. Generally, from a standpoint of financial loan institutions, it is very difficult to demand governance improvements which can be the core of corporate management. However, in special cases where loans are provided at a certain time when significant changes occur in the governance structure of the acquired company. Such as acquisition financing, is believed that financial institutions will be able to exert sufficient influence on the governance sector. As one of the conditions for providing acquisition financing, it will be possible to suggest improvement in governance structure.

1. ESG Washing: A deceptive marketing technique that aims to manage ESG.

(ICMA), (Social Bond Principles) Taxonomy

Social Project Category	Target Population
<p>Social Project categories include, but are not limited to providing or promoting:</p> <ul style="list-style-type: none"> Affordable basic infrastructure (clean drinking water, sewers, sanitation, transport, energy) Access to essential services (health, education, healthcare financial services) Affordable housing Employment generation, and programs designed to prevent or alleviate unemployment stemming from socioeconomic crises including through the potential effect of SME financing and microfinance Food Security (physical, social, and economic access to safe, nutritious, sufficient food that meets dietary needs and requirements; resilient agricultural practices; reduction of food loss and waste; and improved productivity of small-scale producers) Socioeconomic advancement and empowerment (equitable access to and control over assets, services, resources, and opportunities; equitable participation and integration into the market and society, including reduction of income inequality) 	<p>Examples of target populations include, but are not limited to, those that are:</p> <ol style="list-style-type: none"> Living below the poverty line Excluded and/or marginalised populations and/or communities People with disabilities Migrants and/or displaced persons Undereducated Underserved, owing to a lack of quality access to essential goods and services Unemployed Women and/or sexual and gender minorities Aging populations and vulnerable youth Other vulnerable groups, including as a result of natural disasters

ESG Finance Status

ESG Investment (SRI, Socially Responsible Investment)

Domestic ESG investment (socially responsible investment) has paid attention to the role of public pension funds, including the National Pension Service. However, the ESG investments by private financial institutions such as banks and insurance companies as well as public pension funds are currently at active level. At the end of year 2020, ESG investment resulted 188 trillion won and 37% (70 Trillion KRW) accounted on private financial institutions.

4,482
Trillion KRW

Global ESG Investment
Total

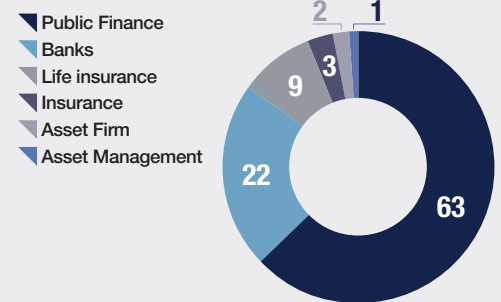
Until now, ESG investment has been identified only for public financial institutions and public offering funds. This is the first time in Korea to grasp the scale of ESG investment in the private financial sector. ESG investment refers to investments that considered in financial factors of a company as well as the non-financial factors represented by environment (E), society (S), and governance (G). ESG investment can be applied not only to stocks but also to all investment asset groups such as bonds and alternative investments¹.

As of 2020, global ESG investment is sustainably growing with the total value of 35.3 Trillion USD (4,482.4 Trillion KRW). Domestic ESG investment has been far behind compared to the global scale but has been significantly grown recently. Current domestic ESG investment total results approximately 188 Trillion KRW, being 6 times higher than 2017. This growth not only had an impact from the National Pension Service policy, but the private financial institution took a big part as well. The total of Public Finance on ESG investment was 70 Trillion KRW, banks being 42 Trillion KRW, and insurance 22 Trillion KRW. Asset management companies' ESG investment was only 2.3 Trillion KRW. The reason behind this was to prevent duplicate accounting of consignment management assets, entrusted assets, and operated asset management companies were excluded from the calculation of the total amount of ESG investment in this survey.

Categorically, funds are invested in stocks(57%), bonds(35%), alternative investments(9%). In terms

Stock	106.44 Trillion KRW
Bond	64.84 Trillion KRW
Alternative Investment	16.30 Trillion KRW

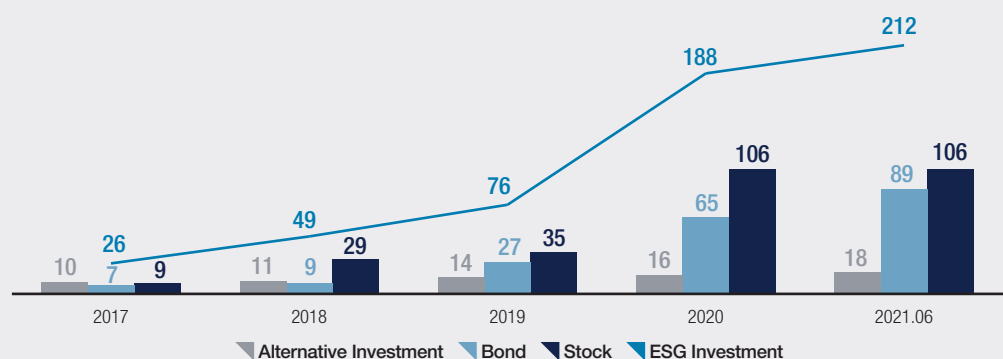
Financial Sector Ratio on ESG Investment



of the Public pension fund, equity weighting(88%) was by far the highest, with the influence of the National Pension Service's funding in ESG related stocks. On the other hand, the private financial sector has been applying ESG investment methods mainly to bonds and alternative investments (Bank : bonds 97%, Insurance companies: bonds 41% / alternative investments 58%). In general, domestic banks and insurance companies showed a prefer-

ESG Investment by Year^{3,4}

(Unit : Trillion KRW)



1. Alternative Investment: All alternative investment excluding stocks and bonds is said representing investment target such as real estate, SOC, etc.
2. (NAFC) National Agricultural Cooperative Federation is classified as Private Sector
3. In case of National Pension, standard amount was applied (July 2021)
4. Public Officials Benefit Association: the amount applied at the end of 2019 to the end of 2020 and June 2021

ence for safe assets, and same for its fundings related to ESG investment.

Private financial institution's ESG investment for NAFC2(11 Trillion KRW), KB Financial Group(9 Trillion KRW), NongHyup Bank(6 Trillion KRW), Hana Financial Group(5 Trillion KRW) turns out private banks were relatively high. For non-banking sectors Kyobo Life Insurance(4.5 Trillion KRW), Samsung Life Insurance(3.3 Trillion KRW).

National Pension Service's Responsible Investment

As of 2020, the National Pension Service operating assets are 833 trillion KRW, and it is expected to surpass 1,000 trillion KRW by 2022. The National Pension Service's investment in domestic stocks and bonds totaled 503 Trillion KRW, of which 128 trillion KRW is entrusted to asset management companies. Considering not only the amount of direct investment but also the indirect influence on asset management companies, can be stated that the impact of the national pension on the domestic capital market is absolute.

The National Pension Service is divided into two sectors being — the Global Responsible Investment & Governance Division which manages policy related decisions, and the Investment Strategy Division that executes the implementation plan. In November 2019, the Fund Management Committee voted on a "plan to revitalize responsible investment in the National Pension Fund," which includes plans to expand responsible investment in domestic and foreign stocks and bonds by 2022, and the size of responsible investment by the National Pension Service has increased significantly ever since.

Currently, the National Pension Service's responsible investment is limited to domestic stocks. With the assistance of the Global Responsible Investment & Governance Division, the Investment Strategy Division operates 92%(93 trillion KRW), and the remaining 8 trillion KRW is entrusted to asset management

companies. The National Pension Service claims its aim to expand the amount of responsible investment up to 50% of its total assets but has not yet disclosed its specific plans.

National Pension Service is Still Indifferent to ESG Investments

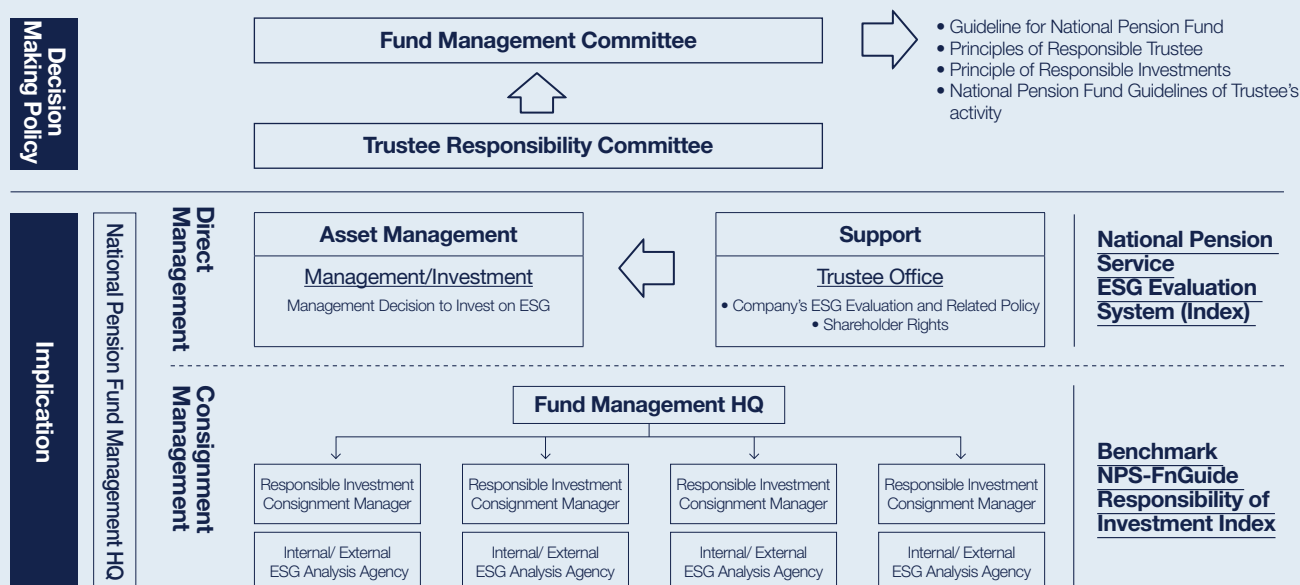
The National Pension's ESG investment is showing rapid quantitative growth, but several concerns have been found in terms of the qualitative growth upon ESG investments.

First, the role of disclosing ESG information is absent. A company's ESG disclosure is the key point upon ESG investment. Overseas pension funds and operators such as the Pension Fund of Norway and BlackRock are actively demanding companies to disclose information relating to climate change. On the other hand, the National Pension Service, one of the world's top three pension funds, is also refusing to participate in well known climate related initiatives such as TCFD (Task Force on Climate-Related Financial Disclosures) and CDP (Carbon Disclosure Project). As a result, if the National Pension Service does not request companies to disclose ESG information, it could lead to a severe damage to the entire domestic capital market.

Compared to 2017, the scale of National Pension Service's responsible investment has improved 1,373%, whereas the scale of responsible investment type consignment management has increased only by 16%. The consignment management of the National Pension Service has served as a 'priming water' for the entire domestic ESG investment market. In fact, many private asset management companies have been cooperating with ESG evaluators to develop ESG public offering funds aiming to operate National Pension Service's responsible investment-type funds. As long as this slow rate of growth prolongs, it will be difficult to expect much progress in the domestic ESG investment system.

1. The National Agricultural Cooperative Federation is classified as a banking sector of a private financial institution.

National Pension Service: Responsible Investment Policy Decision and Investment Structure



ESG Financial Analysis

ESG Public Fund (Socially Responsible Investment Public Fund)

Public offering funds are funds that collect investors through public offering under the Capital Markets Act. It is mainly funded by many unspecified investors and operated by professional fund managers. Therefore, it is an indicator of how much ESG is spreading to financial institution investors such as asset management companies as well as general public managers. The contents below were prepared based on the data from Morning Star Korea.

3,456
Billion KRW

SRI Public Fund's
New Set Sum

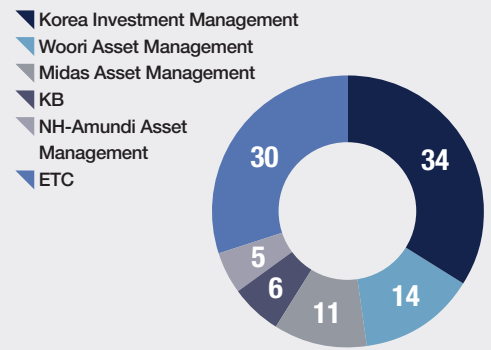
ESG Public Offering Fund 7 Times Higher than Last Year

As of the end of 2020, the market size of ESG public offering funds in Korea was estimated at KRW 3.818 trillion. It jumped more than seven times from 414.5 billion won at the end of 2019. First, this is analyzed from the impact of the National Pension Service's ESG move, which is being reflected in public offering funds in Korea. The National Pension Service's subscription to the Stewardship Code in July 2018 and the plan for responsible investment in November 2019, can be concluded to have given considerable signals to asset management companies that launch public offering fund products. In particular, the National Pension Service's policy to strengthen consignment management responsible investment, such as expanding responsible investment assets, considering responsible investment factors when selecting consignment funds, stimulated institutional investors, and including asset managers.

ESG Public Offering's Proportion Still Insignificant at 1%

As the size of ESG public offering funds surged, the proportion of the total size of public offering funds in Korea increased. In 2017, the percentage was 0.2%, 0.3% in 2018, 0.2% in 2019, and 1.1% in 2020. However, the proportion of ESG public offering funds is small enough to account for only 1%. This confirms that ESG funds are still in their early stages in Korea. In addition, despite the global and domestic ESG

SRI Public Offering Fund Market Shared by Asset Management Company

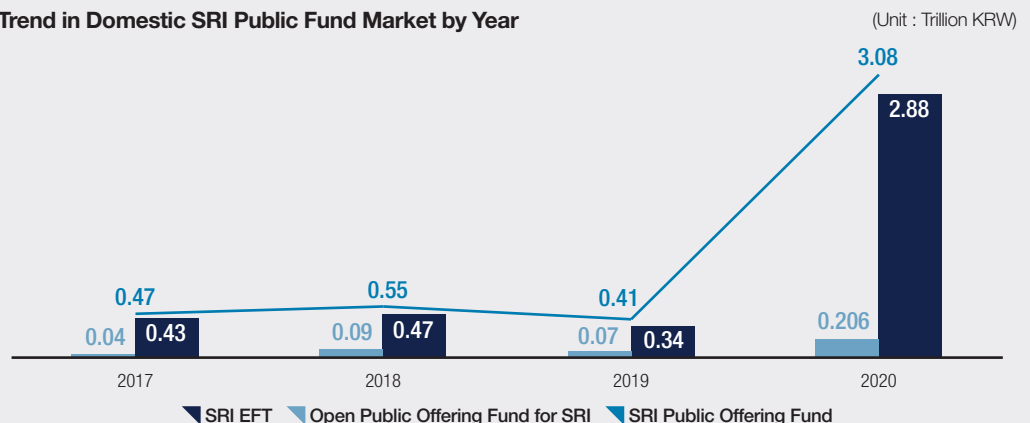


interest, it suggests that various policies and more time are needed to spread to the domestic market.

ESG Public Funds by Asset Management Companies

As of the end of 2020, it was estimated that 31 asset managers launched 84 funds (including OE and ETF). According to an analysis of ESG public offering fund market shared by asset management company (based on asset management company NAV), Han Investment and Industrial Management accounted for the highest at 34.3%, followed by Woori Asset Management and Midas Asset Management at 13.6% and 11.1%. This showed the market share soar as Korea Investment Management and Woori

Trend in Domestic SRI Public Fund Market by Year



Asset Management changed their strategy from existing bond funds to ESG. Midas Asset Management was the Midas Liability Investment Stock Fund in 2009 and has consistently maintained its long-standing performance and top market share in the field of responsible investment. However, as many asset management companies are expanding or preparing products with high interest in ESG public offering funds, there is a possibility of a change in the market in the future.

New ESG Public Funds and Types

In 2020 there were 12 new funds that were set up, all of which were open funds that allow investors to make repurchase claims after investing in the fund. As of the end of 2020, the operating scale estimated at about 345.6 billion won. Five of these 12 funds are bond funds, and bond-type ESG public offering funds have increased in the ESG public offering fund market, which has been functioning to attract funds from investors who prefer bond assets.

ESG public offering funds were dominated by environmental funds on the theme of clean energy or climate change until 2014, and the launch of ETF products using ESG-specific indexes increased from 2017. From 2018, the number of funds investing in consideration of ESG factors is increasing. In the past, asset management companies have released products focused on themes such as environment, renewable energy, and green growth in line with government policies, but asset management companies have recently tended to focus more on ESG.

As of 2020, the Korean bond resulted 33.7% being higher than Korean large stock being 32.7%. Large Korean stocks accounted for the largest portion at 80% at the end of 2019. This change in perception is attributed to the new setting of bond-type ESG public offering funds and the impact of existing funds' strategy change to ESG.

Morning Star Current Status

Morning Star analyzed the distribution of star ratings of 220 public funds (class level) that received three-year star ratings among ESG public offering funds. Also found that ESG public funds' star ratings were slightly higher overall meaning that the risk-adjusted return of ESG public funds are relatively superior to general public funds of the same type, and the performance of ESG public funds being improved in recent years.

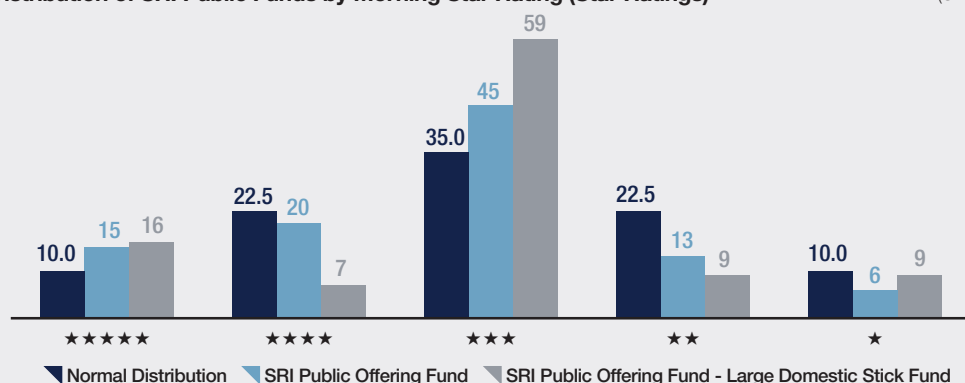
When targeting large Korean stock funds (122 class funds), the proportion of 4-star was relatively low, but overall, the ESG public fund rating was good in the large Korean stock type.

ESG Public Funds: National Pension Important Role

In Korea, the beginning of ESG public funds started back in 2006 but it is still currently at an early stage today. However, now that laws and institutional systems such as ESG Korea Investment and ESG information disclosure are in full swing domestically and internationally, ESG public offering funds are becoming objective for growing in terms of quality. Also, ESG's clear definition, ESG public funds suitable portfolio, blocking ESG washing, business strategies of operators to improve performance centered on domestic equity ESG public funds, and creating a long-term investment culture is needed. However, looking at mid long-term conditions, the role of the National Pension Service is very important. Specifically, the proportion of ESG consignment management should be increased in the short term to increase asset management companies' interest. In this case, asset management companies are likely to launch several ESG public funds on their own to accumulate and management records to become a consignment management companies. In other words, the role of the National Pension is very important.

Distribution of SRI Public Funds by Morning Star Rating (Star Ratings)¹

(Unit : %)



1. As of the end of 2020

ESG Finance Analysis

ESG Finance Product¹

Domestic financial institutions classify ESG-related loans, investments, and bond issuance, as well as products and services sold by financial institutions. Most of the financial institutions have disclosed the sales amount of ESG financial product to stakeholders through sustainability reports when establishing ESG goals.

ESG deposits refer to products that provide preferential interest rates in connection with ESG activities of a specific class, or donation of the sales revenue from financial institutions. For example, these include high-interest installment savings products for basic living recipients, deposit products that provide preferential interest rates for customers who do not issue paper bank accounts, and installment savings products that support some of the proceeds from sales. The size of ESG installment savings refers to the total balance of deposits for the product.

ESG insurance refers to a product that contributes some of the sales revenue of insurance related products for ESG-related activities of a specific target subscriber. This also includes products developed by insurance companies for those who have difficulty subscribing to insurance. For example, insurance premium discount products according to mileage, dementia insurance that the elderly can subscribe to, and environmental liability insurance are included. The size of ESG insurance refers to the total amount of insurance premiums (original insurance premiums) paid by the subscriber of the products in the current year.

ESG card is referred to credit card users related to ESG activities on mileage or discount that are provided for each products. Typically, this includes eco-friendly cards that provide mileage when purchasing eco-products or using public transportation. The size of the ESG card refers to the amount of use

Savings / Deposit	39.36 Trillion KRW
Insurance	14.54 Trillion KRW
Credit Card	2.92 Trillion KRW
Fund (Retail)	5.10 Trillion KRW

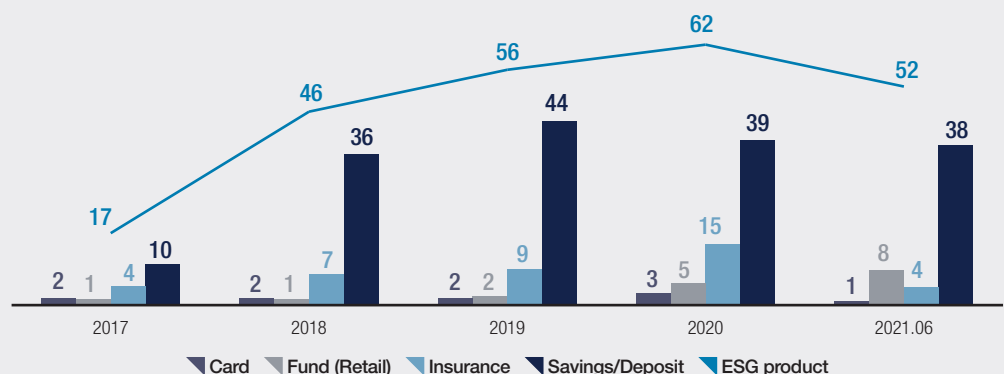
of the product in the current year.

ESG funds (retail) refer to public offering/private equity ESG funds sold to individual customers by financial institutions such as banks and securities firms. Most fund products, including ESG funds, are developed and operated by asset management companies, but operators that lack contact with customers generally entrust banks or securities firms to sell their products. The ESG fund (retail) in this report refers to the amount of ESG fund sales sold by banks and securities firms on behalf of asset managers.

As of the end of 2020, the size of ESG financial products was about 62 trillion won, of which the proportion of deposits and installment savings accounted for 64% of the total. It showed significant growth between 2017 and 2018, which seems to be a sharp increase in trustees for NH Nonghyup Bank's "NH Plus Sharing Regular Deposit."

ESG Financial products by year

(Unit : Trillion KRW)



1. The purpose of this report is to comprehensively grasp ESG-related activities of domestic financial institutions. Accordingly, it was included in the survey and analysis for this report regardless of whether it is reasonable to define "ESG financial products" as "ESG finance."

Financial products by

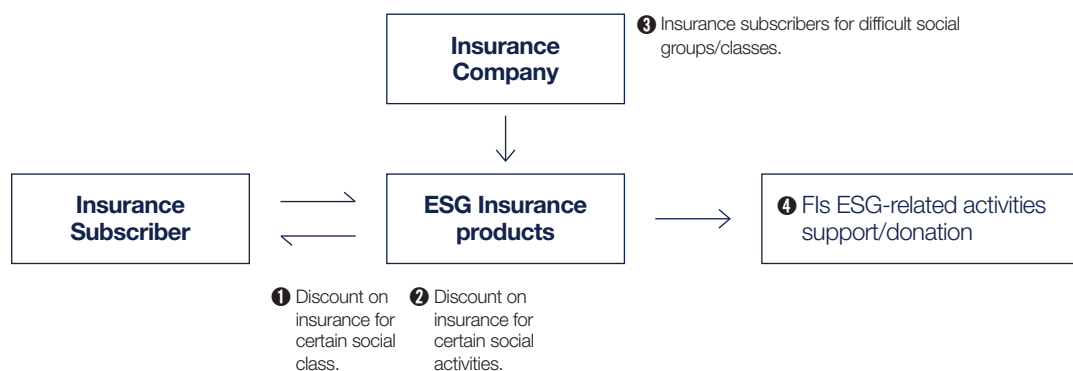
Savings / Deposit

Savings/Deposit product made to utilize some of the profits for ESG purposes.



Insurance

Insurance product made to use part of the revenue for ESG purposes.



Credit Card

products that provide mileage for activities that mee ESG objectives.



Fund (Retail)

ESG fund products sold by financial firms such as banks and securities firms.



Savings/Deposit (S) Social, Insurance/Card (E) Environment Proportion is High

When ESG financial products were classified by ESG elements, 64.1% of society (S), 30.2% of environment (E), 5.3% of ESG overall, and 0.3% of governance (G). By type of financial product, society (S) accounted for 98% of savings/deposit products, while environmental (E) accounted for 96% and 82% of insurance and cards, respectively. For fund (retail) products, ESG integration and environment (E) accounted for 62% and 30%. This is analyzed because ESG deposits and installment savings are concentrated on interest rate preferential products for the socially vulnerable, ESG insurance is concentrated on auto insurance, which provides mileage special contracts, and ESG cards are concentrated on eco-friendly card products. On the other hand, ESG funds (retail) are believed to have a higher proportion of ESG integration because sales of funds that apply strategies are more dominant than theme funds recently.

ESG Insurance products were the Highest Contribution Overall

This report focused on the sales volume of ESG financial products on subscribers and social benefits (hereinafter referred to as 'direct contributions') directly arising from the products. For example, this includes interest additionally provided to subscribers through preferential interest rates, insurance premium cuts, or donations using product returns. As of 2020, the total amount of direct contributions was about 650 billion won, of which 94% came from insurance products. Insurance premium discounts under the mileage agreement were the largest at about 500 billion won.

The development and sales of ESG financial products had a positive function on subscribers' interest and behavior in ESG. However, under the current ambiguous standards, there is a big factor of 'ESG washing' taking place. In order to secure consumer and social trust in ESG financial products, it seems necessary to establish definitions and standards for ESG financial products as soon as possible.

ESG Savings/Deposit Ranking (Unit : Trillion KRW)

Rank	Institution	Total	Major Product
1	NH Bank	32.30	NH plus regular sharing deposit, Beop-love Plus
2	Woori Bank	3.69	Senior Plus Our Deposit, Wellich 100 Pension Account
3	Postal Service Head-quarters	2.11	Time deposits for neighborhood love, time deposits for small businesses in post offices

ESG Insurance Ranking

Rank	Institution	Total	Major Product
1	DB Insurance	4.77	Evergreen special contract, mileage special contract
2	Hyundai Fire Marine Insurance	3.32	Special agreement for use of quality certified parts, discount agreement for Hicar Green service
3	Samsung Fire Marine Insurance	2.76	ECO mileage auto insurance, foreign workers' exclusive insurance

ESG Card Ranking

Rank	Institution	Total	Major Product
1	Postal Services Headquarters	1.14	Happy check cards, start check cards, etc.
2	Busan Bank	0.65	Green card, camellia match.
3	Industrial Bank of Korea	0.47	Green Check, Green Card V2.

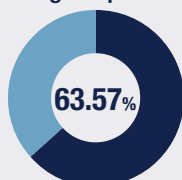
ESG Fund (Retail) Ranking

Rank	Institution	Total	Major Product
1	Shinhan Asset Management	0.96	Green Sun Dream Specialist Private Equity No. 1, Shinhan Investment Co., Ltd. 202011
2	NH-Amundi Asset Management	0.83	NH-Amundi Responsible Investment No. 1 (National Pension Service), 100-year company Green Korea Securities Investment Trust [stock]
3	Mirae-Asset Management	0.63	ETF (Electric Vehicle), ETF (K-Green New Deal)

ESG Financial products by year

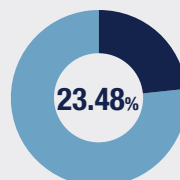
(Unit : Trillion KRW)

Savings/Deposit



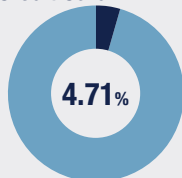
Environment (E)	1
Social (S)	38
Governance (G)	0
ESG Integration	0.04

Insurance



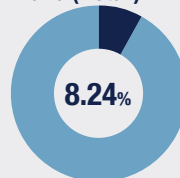
Environment (E)	14
Social (S)	1
Governance (G)	0
ESG Integration	0

Credit Card



Environment (E)	2
Social (S)	0.4
Governance (G)	0
ESG Integration	0.1

Fund (Retail)



Environment (E)	2
Social (S)	0.2
Governance (G)	0.2
ESG Integration	3

ESG Finance Status

ESG Bond

Interest in ESG bonds is a hot topic around the world. In 2020, global ESG bonds grew 74 percent year-on-year to about \$500 billion (US), and Korea also grew more than 100% to 59 trillion won. There is also an active movement to establish standards for ESG bonds as well. EU announced the green bond standard in 2019, and the Ministry of Environment of Korea also announced the green bond guidelines in December 2020. Recently, the International Organization for Standardization (ISO) is also preparing green bond standards as well.

5,000
Billion USD

Global ESG Bond Sum

Bonds are characterized by profitability, stability, and liquidity in that the government, local governments, financial institutions, or corporations issue securities that have the right to receive certain interest payments to investors after a certain period. At the time of issuance, bonds are classified into general bonds and special purpose bonds depending on whether the purpose of use is specified. ESG bonds, which have recently been on the rise, are special purpose bonds.

Bonds are also divided into public and private equity issuance according to the procedure. In case of public offering, a securities report is submitted, and the issuance rate is determined through the demand process. ESG bonds are mainly issued by public offering, and the issuance process is more complicated than general bond issuance. In order to issue ESG bonds, you must first meet the ESG bond standards that meet the purpose of the funds and then comply with the procedures stipulated in those standards.

ESG-related bond standards require bond issuers to establish and disclose bond management systems including key contents such as “use of funds,” “project evaluation and selection procedures,” “fund

	2020 Issued Amount	Accumulated Issued Amount ¹
Financial Institution	55 Trillion KRW	131 Trillion KRW
Non-Financial Institution	3.5 Trillion KRW	21.9 Trillion KRW

ESG Bond Types

Bond Types	Detailed Explanation
Green Bonds	Special purpose bonds issued to finance investment in eco-friendly projects.
Social Bonds	Special purpose bonds issued to raise investment funds for projects that generate social gains.
Sustainable Bonds	Special purpose bonds issued to raise investment funds for projects that create eco-friendly or social value.

management,” and “post-report” to investors.

Bond issuers are also obligated to review whether their bond management system meets the bond standards through external evaluation agencies.

1. Amount issued by the end of July 2021

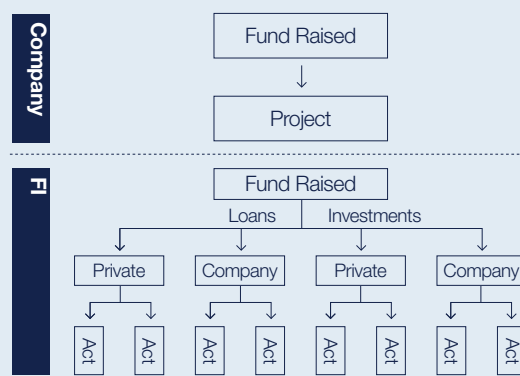
ESG Bond Issuance Process

Pre-Issuance of Bonds

- Overview of issuance (Purpose of issuance, matters concerning linkage between green management strategy and environmental improvement goal)
- Source of Financing
- Project evaluation and selection process
- Management of procurement funds
- Follow-up report

External review prior to issuance (obligation)

Execution of Funds



Post-Issuance External Review

Follow-up Report (Report to Investors)

- List of projects
- Summary of each project and amount
- Expected Environmental Improvement Effects of each project
- If unused funds, the unused amount, estimated time, and method of operation

Taxonomy-Based

Green Bond Organizations (accumulated issuance amount¹)

1. Korea Development Bank

3 Trillion KRW

2. Export-Import Bank of Korea

1.4 Trillion KRW

3. Shinhan Bank

1.2 Trillion KRW

4. Hyundai Card

1.1 Trillion KRW

5. Hyundai Capital

1 Trillion KRW

The ESG bond standard monitors whether the funds have been used for issue purposes by requiring issuers to regularly report on the status of funds used. External review is also recommended for matters such as the execution and effect of funds after issuance, but this is not mandatory.

Financial and non-financial institutions are different in the process of executing funds raised through bonds. In general, non-financial institutions use procurement funds directly for their projects, while financial institutions provide funds again to companies and individuals who want to promote ESG-related activities in the form of loans and investments. Accordingly, for financial institutions to manage the funds raised through ESG bonds to be used in accordance with the purpose of issuance, it is necessary to establish a more systematic system.

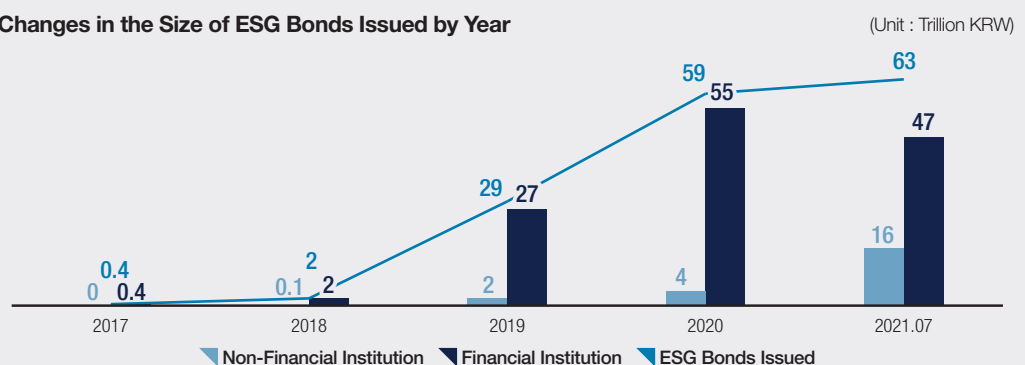
As of July 2021, the total cumulative issuance of ESG bonds in Korea was 153 trillion won. Domestic ESG bond issuance has increased little by little since the Export-Import Bank of Korea issued overseas green bonds in 2013. Of the total cumulative issuance, the issuance ratio of financial institutions accounted for a large portion of 86% (131 trillion won), while MBS² issued with 87 trillion won worth of social bonds by the Korea Housing Finance Corporation analyzed to have a significant impact. It is also notable that the

	2020 Issued Amount	Accumulated Issued Amount ¹
Social Bond	50.4 Trillion KRW	113.1 Trillion KRW
Sustainable Bond	6.7 Trillion KRW	22.3 Trillion KRW
Green Bond	1.8 Trillion KRW	17.7 Trillion KRW

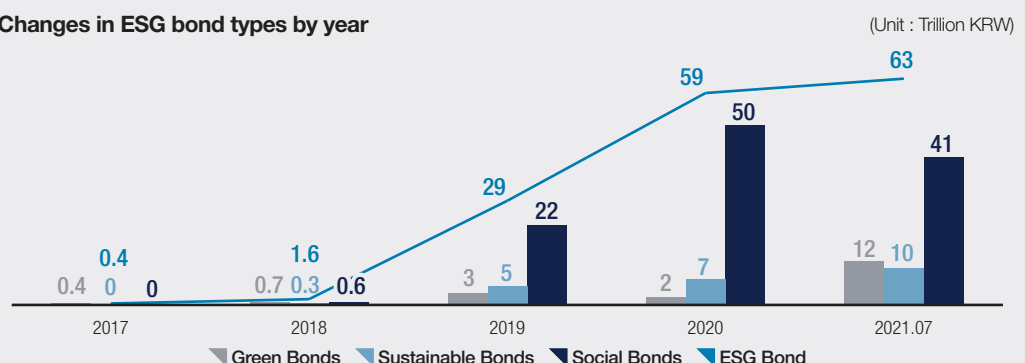
issuance of non-financial institutions has been rapidly increasing recently in the ESG bond market, which has been issued mainly by financial institutions.

ESG bonds can generally be classified into green bonds for the purpose of investing in eco-friendly projects, social bonds to invest in projects to create social values, and sustainable bonds that combine the environment and society. Based on the cumulative issuance in July 2021, the proportion of social bonds was the highest at 74%. Likewise, this seems to be largely influenced by MBS of the Korea Housing Finance Corporation. Excluding the Korea Housing Finance Corporation, the proportions of social bonds, sustainable bonds, and green bonds were 39%, 34%, and 27%, respectively, showing no significant difference.

Changes in the Size of ESG Bonds Issued by Year



Changes in ESG bond types by year



1. Based on the cumulative issuance amount issued by the end of July 2021.

2. Financial firms have mortgage bonds, which are sold to the Korea Housing Finance Corporation, and MBS products are sold by investors in the capital market.

Social Bond Organizations (accumulated issuance amount¹)

1. Korea Housing Finance Corporation
87 Trillion KRW
2. Industrial Bank of Korea
5 Trillion KRW
3. Korea SMEs and Startups Agency
4 Trillion KRW
4. Korea Credit Guarantee Fund
2.8 Trillion KRW
5. Korea Deposit Insurance Corporation
2.6 Trillion KRW

Green Bonds Increased Rapidly by Companies

All types of ESG bond issuance are gradually increasing, but the recent increase in green bond is remarkable. Until now, issuance of ESG bonds has been led by financial institutions and public enterprises. However, this year, private companies are actively issuing green bonds.

Until the end of July 2021, the issuance of green bonds reached KRW 12 trillion, showing a significant growth compared to the total issuance of KRW 1.8 trillion in 2020. This is believed to be due to the recent highlight of social interest in climate change and carbon neutrality, and more and more companies are seeking to raise funds for facility investment in eco-friendly fields such as renewable energy, electric vehicles, and batteries by issuing green bonds. In fact, in 2021, 40 companies issued 76 green bonds, and the amount of procurement funds was 8.1 trillion won.

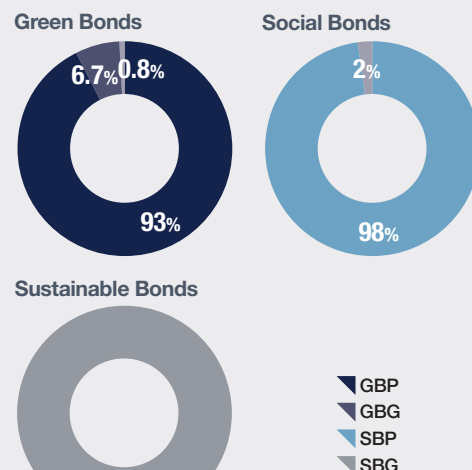
ESG Bonds Increased Rapidly

Bonds can be classified into KRW or foreign currency bonds according to the currency used at the time of repayment. Bonds designated as foreign currency, such as dollars and euros, are called foreign currency bonds and currency designated as KRW bonds. Starting in 2019, the size of won-issued bonds has been increasing significantly. KRW 100 billion in ESG bonds were issued in 2018, KRW 24.7 trillion in 2019, and KRW 57.4 trillion by the end of July 2021. Excluding social bonds from the Korea Housing Finance Corporation, the issuance scale has more than doubled every year since 2019.

International Capital Markets Association (ICMA) ESG Bond Standards Most Used

ICMA's ESG bond standards, the Green Bond Principles (GBP), the Social Bond Principles (SBP), and the Sustainable Bond Guidelines (SBG), were the most widely used in Korea. Based on the cumulative number of issuance, 93% of green bonds, 98% of social bonds, and 100% of sustainable bonds were found to have applied the ICMA standards. There were eight cases of applying the Green Bond Guidelines

ESG Bond Standards



(GBG) announced by the Ministry of Environment in December 2020. It was 9% based on the number of green bonds issued in 2021 and 10% based on the amount issued.

Social Bond Guidelines and Taxonomy Needed

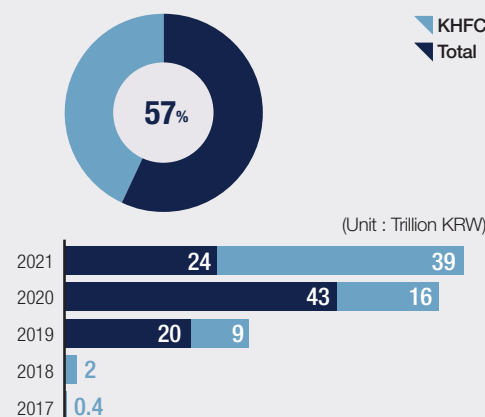
Along with interest in ESG bonds, concerns about green washing or ESG washing are also increasing. In addition to the EU and the International Organization for Standardization (ISO), a Korean-style green classification system will be introduced, and the green washing supervisory system for green bonds is expected to be established soon. However, discussions on social bonds and classification systems are still in their infancy. The Ministry of Strategy and Finance announced a plan to develop social bond guidelines in 2022, but there is no mention of the classification system that is the basis of ESG bonds. Considering the rapidly growing social bond market size, discussions on the introduction of the classification system should also be in a rush.

Case Study: Social Bonds by the Korean Housing Finance Corporation

The Korea Housing Finance Corporation is a quasi-governmental organization that plays a role in liquidating mortgage bonds² of housing loans provided by private banks, including credit guarantees related to housing finance and Bogeumjari loans. In other words, mortgage-backed securities and MBS are issued as collateral for purchased bonds, sold to investors to raise funds.

The Korea Housing Finance Corporation issued social bonds for the first time in 2019 and issued a total of 87 trillion won in social bonds by 2021. Funds generated through social bonds are used for the purpose of purchasing mortgage bonds, guaranteeing payment for MBS issuance, and paying interest. The issuance of social bonds by the Korea Housing Finance Corporation accounts for 57% of the cumulative issuance of ESG bonds (153 trillion won) in Korea and 73% of the issuance in 2020.

The proportion of the Korea Housing Finance Corporation among the total ESG bond issuance.



1. Based on the cumulative issuance amount issued by the end of July 2021.

2. The right of financial institutions to collect future loans from debtors with their homes as collateral.

ESG Finance Status

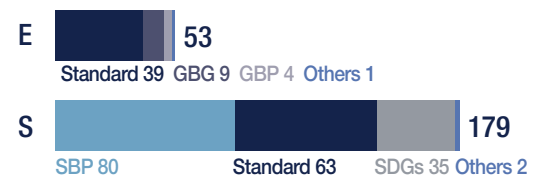
ESG Finance Taxonomy

Sustainable finance or ESG financial policy aims to enable capital to flow into sustainable economic activities along with mid- to long-term risk management of financial institutions. The ESG financial classification system is the starting point of ESG financial policy as a means of determining which economic activities contribute to improving the sustainability of the environment and society. The EU also announced a sustainable financial action plan in 2018 and suggested the development of a sustainable economic activity classification system as the first task.

The development of an ESG financial classification system at the national level has been in full swing since the EU announced the draft Green Taxonomy. EU and Korea are developing Taxonomy with the aim of this year and financial institutions often apply the categories suggested by ESG bond-related private organizations such as ICMA and CBI to their ESG financial activities classification.

There were a total of seven classification systems used by domestic financial institutions to classify ESG finance, and some financial institutions applied their own classification standards. In the case of the environment (E), loans had a high utilization rate of self-standard (77% based on amount) and GBG (18%), and all of them were using GBP when issuing bonds. In the case of society (S), loans were based on their own standards (48%), SDGs (27%), and SBP (24%), and SBP (96%) were mainly used when issuing bonds. However, it is judged that it is not enough to dispel concerns about ESG washing as most classification systems provide only a list corresponding to the level of major classification (partial

ESG Financial Type by Taxonomy (Unit : Trillion KRW)



	Taxonomy	Loan	Bond
E	Standard	39	-
	GBG	9	-
	GBP	2	2
	Others	1	-
S	SBP	31	48
	Standard	63	-
	SDGs	35	-
	Others	0.1	2

middle classification) on the industrial classification table rather than a clear standard for sustainable economic activities.

1. Classification System: Climate Bond Standard (CBS), Green Bond Principles (GBP), Social Bond Principles (SBP), Sustainable Bond Guidelines (SBG), Draft K-Taxonomy (K-Taxonomy), Green Bond Guidelines (GBG), Sustainable Development Goals (SDGs)

Korean Taxonomy Draft Structure

Background & Purpose	<ul style="list-style-type: none">Establishment of Green Economic Infrastructure in 2050 of Carbon NeutralityGlobal Green New Deal Policy expected to focus large scale funds on green economic activities → Need Standards to Prevent Green WashingPresent clear principles and standards for green economic activities → Green project or technology supporting funds				
Progress	<div><div>2020</div><div>Forum for developing the green taxonomy</div></div> <div>➡</div> <div><div>2021.01</div><div>Reflecting on 2021 Green finance promotion plan</div></div> <div>➡</div> <div><div>2021.04</div><div>Revise Environmental technology and industry support act</div></div> <div>➡</div> <div><div>2021.04~</div><div>Present a draft of the Korean Green Taxonomy guidelines</div></div> <div>➡</div> <div><div>~2021</div><div>Final Draft Announcement</div></div>				
Target for Green Economic Activities	<div>Green Category</div> <ul style="list-style-type: none">Including 57 green economic activities in 6 major areasManufacturing of greenhouse gas emission industry (steel, cement, organic chemicals) include up to 20% or more (EU 10%) as green activities based on the benchmark for raw unit emissionsExcluding economic activities using 100% fossil fuels and related economic activities		+	<div>Transition Category</div> <ul style="list-style-type: none">Process for converting carbon neutrality; including liquefied natural gas (LNG) power generation projects and LNG-based hydrogen power generation reduction activitiesTemporary recognition until 2025 or 2030	
Target	<ul style="list-style-type: none">Green Finance Guidelines used for Green Economic Activities (voluntary)Green Financial Activities (Green Loans, Green Funds, Green Project Financing) and Financial Institutions / Corporate disclosures as a whole				
Future Plans	<ul style="list-style-type: none">Korean Green Taxonomy plans to supplement all industries to coverConsidering EU's Green Taxonomy and ISO development, security status, national policy direction, reflecting opinions from stakeholdersMid, Long-term Ministry of Environment will review matters to disclosure of green taxonomy related to economic activities for 6 major environmental goals				

Final draft of the Korean green taxonomy system is imminent.

The Ministry of Environment began preparing for the development of the Korean green classification system in 2020 and revised the Environmental Technology and Environmental Industry Support Act in 2021 to lay the legal basis for the classification system. The final draft will be announced this year or early next year, and the draft is currently being released and is undergoing a public opinion gathering process.

Although it is temporary in the draft, social controversy continues as financial support for LNG power generation and internal combustion engine manufacturing can also be classified as green finance. However, despite this controversy, it seems that it can contribute to the prevention of green washing to some extent as it presents specific standards rather than the existing classification system.

The Export-Import Bank of Korea has no plans to use the Green Taxonomy

This report investigated domestic financial institutions' plans to use the Korean green classification system. 64 institutions said they had plans to use it, but 46 institutions said they had no plans to use it, and 22 institutions did not respond to the questions. In particular, a high percentage of public financial institutions responded with "no use plan," and the Export-Import Bank of Korea, which issued green bonds for the first time in Korea, also said it would not use the Korean classification system. The National Pension Service did not respond to the question.

Social Taxonomy Needed

Excluding ESG investment, which comprehensively reflects ESG performance of investment target institutions, the proportion of ESG financial sectors (loans, products, and bonds issuance) classified as social (S)-related financial activities was very high at

72%. However, many cases have been found to be questionable whether it is appropriate for financial institutions to include activities classified and reported as society (S) as ESG finance.

Rather than financial institutions intended ESG washing, it is believed that the number of applicable social (S)-related classification systems is limited, and the classification system does not provide specific standards. Both the category of ICMA's Social Bond Principles (SBP) and UNSDGs, which are most frequently applied by financial institutions, provide only a large classification level activity name and a limited number of examples.

Social infrastructure investment, SME support, technology financing, and job creation, which are classified and reported by many financial institutions as ESG Financial Society (S), need to be discussed socially. A draft EU Social Taxonomy was released in July this year. The draft divided the classification system into vertical dimension and horizontal dimension, presenting not only the supply (vertical) of socially necessary infrastructure and services, but also standards (horizontal) to prevent the quality of human rights and labor that may occur in the process. It is questionable whether domestic financial institutions are checking the process or effect of actual funds being used beyond simply providing funds to the project or company (or individual).

In August this year, the Ministry of Strategy and Finance announced plans to develop social bond guidelines by 2022. However, there was no specific mention of the social classification system. In order to prevent the increasing number of ESG finance from turning into ESG washing means, it is urgent to introduce a specific social classification system at the level of the green classification system.

EU Social Taxonomy Draft Structure¹

	Purpose	Sub-Purpose	Examples
Vertical dimension	Promoting adequate living standards	Improving accessibility of products and services for basic human needs	Water including wastewater / food / housing / healthcare / education (including vocational training)
		Promoting adequate living standards	Transport / telecommunication and internet / clean electricity / financial inclusion / waste management
Horizontal dimension	Promoting positive impacts and avoiding and addressing negative impacts on affected stakeholder groups	Ensuring decent work	Social dialogue/ Non-discrimination and equalities/ No child forced labor/ Decent employment conditions/ Health and safety/ Skills, learning & employment generation/ Social protection/ Impacts on workers in the value chain
		Promoting consumer interests	Safety and quality of products & services/ Protection of consumers' personal data, cybersecurity/ Responsible marketing practices
		Enabling inclusive and sustainable communities	Equality and inclusive growth/ Impacts on land and livelihoods/ Safety and security, human rights defenders, civic space

1. Reference: Draft Report by subgroup 4: Social Taxonomy (2021)

Survey and Analysis Methodology

[Survey Overview]

► **Survey Target:** A survey was conducted on all public and private financial institutions in Korea.

► Survey Method

- Public Financial Institution: Sent out a questionnaire to the agency in charge of the financial institutions through Rep. Yong Woo Lee, Member of the National Assembly.
- Private Financial Institution: Through Rep. Yong Woo Lee's office, requested Financial Service Commission to provide data. The Financial Services Commission provided data from each financial companies.

► Survey Details

- Time Period: August – September 2021
- Request Data
 - Asset Status
 - ESG Finance Status by Year
 - ESG Loan Status (As of 2020)
 - ESG Investment (SRI) Status (As of 2020)
 - ESG Finance product Status (As of 2020)
 - ESG Related Bond Status
 - ESG Finance Target and Goals

► **Survey Response Agency:** Total 132 Financial Institutions Responded

- Public Financial Institution: 46
- Private Financial Institution: 86
 - Bank: 9
 - Life Insurance: 16
 - Non-Insurance: 10
 - Securities companies: 29
 - Asset Management companies: 22

► ESG Bond Related Research

- ESG survey data on the Korea Exchange of bond issuance of 'socially responsible investment bonds' are referred from 2017 to 2021 on the data based on announced by the end of July.

► Public Offering Fund Data Research

- Reference on Morningstar Direct, Financial Investment Association, and Korea Exchange's disclosure data
- Morningstar decides on its own whether each public offering fund is eligible for ESG investment based on information in the investment manual.

[Analysis Methodology]

► Comprehensive Analysis Data and Methods

- In the analysis of this report, data by ESG financial type (ESG loan, ESG investment, ESG financial product, ESG bond issuance) are used as basic indicators as of 2020.
- In case of ESG loans, data are collected according to the type of loan and used for analysis.
- In case of ESG investment, data were collected according to the type of investment, but assets entrusted and operated by asset management companies were excluded from the calculation of ESG investment size to prevent overlapping accounting of entrusted management assets.
- In case of ESG financial products, data were collected and used for analysis by classifying them according to the type of financial product.
- In case of ESG bond issuance, the collected data and the data disclosed in "Social Responsibility Investment Bond" were collected and analyzed, but duplicated data was excluded and used by comparing the "bond name" and "item name" entered by the financial sector to prevent duplicate accounting.
- Annual Analysis: Data on ESG financial status provided from 2017 to Jun 2021 were used.
- E-S-G Issue Type Analysis: Among the collected data, only data divided into ESG were used.

► Public Fund Use Data & Method

- Morning Star Rating (Star Rating) Analysis: The number of stars were assigned and analyzed according to section 10%, 22.5%, 35%, 22.5, or 10% on the regular distribution by calculating the unique risk-adjusted return of Morning Star.
- Morningstar Sustainability Rating Analysis: Financial significant ESG risk issues were analyzed by measuring portfolio risk compared to the same group and giving the top 10% (5 globes), 22.5% (4), 35% (3), 22.5% (2), and 10% (1) within the comparison group.

ESG Finance Response Institution¹

Institution	Supervising Ministry	K-Taxonomy Application Plan	ESG Finance Target Status
Public Financial Institution			
Employment Insurance Fund	Ministry of Employment and Labor	No Response	No Response
Government Employees Pension Service	Ministry of Personnel Management	No	Yes
Korea Scientists & Engineers Mutual-aid Association	Ministry of Science and ICT	Yes	No
National Research Foundation of Korea	Ministry of Science and ICT	No Response	No Response
National Ocean Science Museum	Ministry of Oceans and Fisheries	No	No
Korea National Maritime Museum	Ministry of Oceans and Fisheries	No	No
Marine Biodiversity Institute of Korea	Ministry of Oceans and Fisheries	No	No
National Pension Service	Ministry of Health and Welfare	No Response	No Response
Government Properties Management Fund	Ministry of Economy and Finance	No Response	No Response
Korea Workers' Compensation & Welfare Service	Ministry of Employment and Labor	No Response	No Response
Korea Radioactive Waste Agency	Ministry of Trade, Industry and Energy	No	Yes
Korea Communications Agency	Korea Communications Commission	No Response	No Response
Ministry of Patriots and Veterans Affairs	Ministry of Patriots and Veterans Affairs	No Response	No Response
Busan Port Authority	Ministry of Oceans and Fisheries	Yes	No
Teachers Pension	Ministry of Education	No Response	No Response
Industrial Technology Promotion and Commercialization Promotion Fund	Ministry of Trade, Industry and Energy	No Response	No Response
Ministry of Employment and Labor	Ministry of Employment and Labor	No Response	No Response
MG Community Credit Cooperatives	Ministry of the Interior and Safety	Yes	No
Fishery Development Fund	Ministry of Oceans and Fisheries	No Response	No Response
Patriotic Patriotism Branch Project Fund	Ministry of Patriots and Veterans Affairs	No Response	No Response
Audience Media Foundation	Korea Communications Commission	No	No
Yeosu Gwangyang Port Corporation	Ministry of Oceans and Fisheries	Yes	No
Postal Services Headquarters	Ministry of Science and ICT	No	No
Ulsan Port Corporation	Ministry of Oceans and Fisheries	No	No
Nuclear Energy Fund	Ministry of Science and ICT	No Response	No Response
Port of Incheon	Ministry of Oceans and Fisheries	No	No
Wage Claim Guarantee Fund	Ministry of Employment and Labor	No Response	No Response
Employment Promotion and Vocational Rehabilitation Fund for the Disabled	Ministry of Employment and Labor	No Response	No Response
Information and Communication Promotion Fund	Ministry of Science and ICT	No Response	No Response
Housing & Urban Guarantee Corporation	Ministry of Land, Infrastructure and Transport	No	No
Industrial Bank of Korea	Financial Services Commission	Yes	Yes
Korean Teachers' Credit Union	Ministry of Education	No	No
Korea Broadcast Advertising Corporation	Korea Communications Commission	No Response	No Response
Korea Development Bank	Financial Services Commission	Yes	Yes
Korea Fisheries Resources Agency	Ministry of Oceans and Fisheries	No	No
Export-Import Bank of Korea	Ministry of Economy and Finance	No	Yes
Korea Fisheries Infrastructure Public Agency	Ministry of Oceans and Fisheries	No	No
Korea Institute of Aids to Navigation	Ministry of Oceans and Fisheries	No	No

1. Institution (Fund) Order:
Alphabetical order

2. The National Agricultural Cooperative Federation is not a member of the NH Financial Group but was calculated as the same group for convenience of the report.

3. Former Shinhan Life Insurance Co., Ltd.

4. Former Orange Life

5. Former DGB Asset Management Co., Ltd.

Institution	Supervising Ministry	K-Taxonomy Application Plan	ESG Finance Target Status
Korea Institute of Ocean Science & Technology	Ministry of Oceans and Fisheries	No	No
Korea Maritime Transportation Safety Authority	Ministry of Oceans and Fisheries	No	No
Korea Institution of Maritime and Fisheries Technology	Ministry of Oceans and Fisheries	No	No
Korea Hydrography and Research Association	Ministry of Oceans and Fisheries	No	No
Korea Ocean Business Corporation	Ministry of Oceans and Fisheries	Yes	No
Korea Overseas Infrastructure & Urban Development Corporation	Ministry of Land, Infrastructure and Transport	No	No
Korea Institute of Marine Science Technology Promotion	Ministry of Oceans and Fisheries	No	No
Korea Marine Environment Management Corporation	Ministry of Oceans and Fisheries	No	No
Public Financial Institution			
Bank			
Kwangju Bank	JB Financial Group	Yes	No
NH National Agricultural Cooperative Federation ²	NH Financial Group	No Response	No Response
Busan Bank	BNK Financial Group	Yes	No
Shinhan Bank	Shinhan Financial Group	Yes	Yes
Woori Bank	Woori Financial Group	Yes	No
Hana Bank	Hana Financial Group	Yes	Yes
BNK Bank	BNK Financial Group	No	No
KB Bank	KB Financial Group	Yes	Yes
NH Bank	NH Financial Group	Yes	Yes
Life Insurance			
Kyobo Life Insurance	Kyobo Group	Yes	No
NH Life Insurance	NH Financial Group	Yes	Yes
Dongyang Life Insurance	China Multilateral Insurance Group	Yes	No
MetLife Life Insurance	MetLife USA	Yes	No
Mirae Asset Life Insurance	Mirae Asset Group	Yes	Yes
Samsung Life Insurance	Samsung Group	Yes	Yes
Shinahn Life ³	Shinhan Financial Group	Yes	No Response
Shinhan Life ⁴	Shinhan Financial Group	No Response	No Response
Hanwha Life Insurance	Hanwha Group	Yes	No
Heungkuk Life insurance	Taekwang Group	No	No
ABL Life	China Multilateral Insurance Group	No	No
DB Life Insurance	DB Group	No	No
DGB Life Insurance	DGB Financial Group	No	No
IBK Pension Insurance	IBK Financial Group	No	Yes
KB Life Insurance	KB Financial Group	No	Yes
KDB Life Insurance	KDB Financial Group	No Response	No Response
Non-life Insurance			
NH Insurance	Nonghyup Financial Group	Yes	Yes
Lotte Insurance	Lotte Group	No	No
Samsung Fire & Marine Insurance Co., Ltd.	Samsung Group	Yes	Yes

Institution	Supervising Ministry	K-Taxonomy Application Plan	ESG Finance Target Status
Seoul Guarantee Insurance Co., Ltd.	Seoul Guarantee Insurance Co., Ltd.	Yes	No
Korean Reinsurance Co., Ltd.	Korean Reinsurance Co., Ltd.	Yes	No
Hanwha Insurance Co., Ltd.	Hanwha Group	Yes	No
Hyundai Marine & Fire Insurance Co., Ltd.	Hyundai Marine & Fire Insurance Co., Ltd.	Yes	No
Heungkuk Fire & Marine Insurance Co., Ltd.	Taekwang Group	No Response	No
DB Insurance Co., Ltd.	DB Group	No	No
KB Insurance Co., Ltd.	KB Financial Group	Yes	Yes
Securities			
Kyobo Securities Co., Ltd.	Kyobo Group	Yes	No
Daishin Securities Co., Ltd.	Daishin Financial Group	Yes	No
Leading Investment & Securities Co., Ltd.		No	No
Meritz Securities Co., Ltd.	Meritz Financial Group	Yes	Yes
Mirae Asset Securities Co., Ltd.	Mirae Asset Group	Yes	Yes
Bookook Securities Co., Ltd.	Hanil Group	No	No
Samsung Securities Co., Ltd.	Samsung Group	Yes	Yes
Shinyoung Securities Co., Ltd.		Yes	No
Shinhan Investment Corp.	Shinhan Financial Group	Yes	Yes
Yuanta Securities Co., Ltd.	Yuanta Financial Group	No	No
Eugene Investment & Securities Co., Ltd.	Eugene Group	Yes	No
EBEST Investment & Securities Co., Ltd.		Yes	No
Kakao Pay Securities Co., Ltd.	Kakao	No	No
Cape Investment & Securities Co., Ltd.	Cape	No	No
Korea Asset Investment & Securities Co., Ltd.		Yes	No
Kiwoom Securities Co., Ltd.	Dow technology	Yes	No
Hana Financial Investment Co., Ltd.	Hana Financial Group	Yes	No
Hi Investment & Securities Co., Ltd.	DGB Financial Group	Yes	No
Korea Investment & Securities Co., Ltd.	Korea Investment Finance Corporation	No	No
Hanwha Investment & Securities Co., Ltd.	Hanwha Group	Yes	No
Hyundai Motor Securities Co., Ltd.	Hyundai Motor Group	Yes	Yes
Bnk Investment & Securities Co., Ltd.	BNK Financial Group	No Response	Yes
DB Financial Investment	DB Group	Yes	Yes
DS Investment & Securities Co., Ltd.		Yes	No
IBK Investment & Securities Co., Ltd.	IBK Financial Group	No	No
KB Securities Co., Ltd.	KB Financial Group	Yes	Yes
KTB Investment & Securities Co., Ltd.	KTB Financial Group	Yes	No
NH Investment & Securities Co., Ltd.	NH Financial Group	Yes	Yes
SK Securities Co., Ltd.		Yes	Yes
Asset Management			
Kyobo Axa Asset Management Co., Ltd.	Kyobo Group	Yes	Yes
Dashin Asset Management	Daishin Financial Group	No	No

Institution	Supervising Ministry	K-Taxonomy Application Plan	ESG Finance Target Status
Midas Asset Management Co., Ltd.		Yes	No
Multiasset Asset Management Co., Ltd.	Mirae Asset Group	No	No
Mirae Asset Management Co., Ltd.	Mirae Asset Group	Yes	No
Bearing Asset Management Co., Ltd.	Mass Mutual	No	No
Samsung Active Asset Management Co., Ltd.	Samsung Group	Yes	No
Shinyoung Asset Management Co., Ltd.		No	No
Shinhan Asset Management Co., Ltd.	Shinhan Financial Group	Yes	No
Woori Global Asset Management Co., Ltd.	Woori Financial Group	No	No
Woori Global Asset Management Co., Ltd.	Woori Financial Group	Yes	Yes
Truston Asset Management Co., Ltd.		Yes	No
Hi Asset Management Co., Ltd. ⁵	DGB Financial Group	Yes	Yes
Hanwha Asset Management Co., Ltd.	Hanwha Group	Yes	No
Hyundai Investment Asset Management Co., Ltd.	Hyundai Marine & Fire Insurance Co., Ltd.	No	No
Heungkuk Asset Management Co., Ltd.	Taekwang Group	Yes	No
BNK Asset Management Co., Ltd.	BNK Financial Group	Yes	Yes
DWS Asset Management Co., Ltd.	Deutsche Bank Group	No	No
IBK Asset Management Co., Ltd.	IBK Financial Group	Yes	No
KDB Infrastructure Asset Management	KDB Financial Group	Yes	No
KTB Asset Management Co., Ltd.	KTB Group	No	No
NH-Amundi Asset Management Co., Ltd.	NH Financial Group	Yes	Yes

ESG Public Fund

Sustainability Rating and Low-Carbon Designation¹

Fund Name	Set Date	Global Category	Morning Star Sustainability Rating ²	Low-Carbon Designation ²
Shinhan Global Sustainable Management ESG (H) [stock mix-reindirect] C-s	2020.9.17	Aggressive Allocation	High	
Schroeder Global Sustainable Growth Stocks [stock-reindirect] A-e	2020.7.27	Global Equity Mid/Small Cap	High	
Mirae Asset Global ESG Social Responsibility Investment Index Co., Ltd. (H) [stock-derivative] F	2020.4.20	Global Equity Large Cap	High	Yes
Mirae Asset Global ESG Social Responsibility Investment Index (UH) [stock] F	2020.4.20	Global Equity Large Cap	High	Yes
KBSTAR ESG SRI	2018.2.26	Korea Equity	High	No
TIGER MSCI Korea ESG Leaders	2018.2.6	Korea Equity	High	No
TIGER MSCI Korea ESG Universal	2018.2.6	Korea Equity	High	Yes
KODEX MSCI ESG Universal	2018.2.6	Korea Equity	High	No
Samsung Classic Global Clean Energy Pension Corporation (H) [stock-reindirect] Ce	2014.8.22	Energy Sector Equity	High	No
Korea Investment ESG 1 [Stock] C-F	2008.8.18	Korea Equity	High	Yes
Multi-Asset Retirement Pension Clean Energy Company [stock]	2008.5.2	Energy Sector Equity	High	
Kiwoom Future Energy 1[stock] A1	2007.6.28	Energy Sector Equity	High	
Samsung Global Clean Energy Company 2 [stock-reindirect] A	2007.6.25	Energy Sector Equity	High	No
Samsung Global Clean Energy Company 1 [stock-reindirect] A	2007.6.25	Energy Sector Equity	High	No
Multi-Asset Global Clean Energy Company[stock]C1	2007.4.16	Energy Sector Equity	High	
Multi-Asset Clean Energy Focus ruler [stock] A	2007.4.12	Energy Sector Equity	High	
Multi-Essence Global Clean Energy 2[stock]C1	2007.4.6	Energy Sector Equity	High	
KODEX 200ESG	2019.11.13	Korea Equity	Above Average	No
KB Global ESG Growth Leaders (H)[Stock] C-F	2019.5.29	Global Equity Mid/Small Cap	Above Average	Yes
CORATE Shareholder Growth Target [Stock] C-F	2019.5.16	Korea Equity	Above Average	
VI Kendrium Global Quaternary Industry Company (UH) [stock-reindirect] C-Pe2	2019.1.22	Technology Sector Equity	Above Average	Yes
VI Kendrium Global Quaternary Industry Company (H) [stock-reindirect] C-Pe2	2019.1.22	Technology Sector Equity	Above Average	Yes
Mirae Asset Global Innovation Company ESG Ja [Stock] A	2017.10.26	Global Equity Mid/Small Cap	Above Average	Yes
Samsung ESG Good Liability Investment 1 [Stock] Cf	2017.8.17	Korea Equity	Above Average	No
Samsung Europe ESG Company (UH) [Stock] Cp (Retirement Pension)	2016.8.10	Europe Equity Large Cap	Above Average	No
Samsung Europe ESG Company (H)[Stock] Cf	2016.5.19	Europe Equity Large Cap	Above Average	No
EAST SPRING Pension Savings Business, etc. ESG Ja. [Stock] C.	2015.12.14	Korea Equity	Above Average	Yes
IBK Davos Global High Dividend 4[stock] IB	2015.3.11	Global Equity Large Cap	Above Average	Yes
Mirae Asset Green New Deal Index. [Stock] A.	2009.6.5	Korea Equity	Above Average	No
KB ESG Growth Leaders Now [Stock] A	2008.5.9	Korea Equity	Above Average	No
IBK Davos Global High Dividend 5[Stock] A	2008.1.25	Global Equity Large Cap	Above Average	Yes
IBK Davos Global High Dividend 2 [Stock] A	2007.12.17	Global Equity Large Cap	Above Average	Yes
Alpha Global Renewable Energy Company 1[Stock] A	2007.9.3	Energy Sector Equity	Above Average	

1. Source : Morning Star Korea
2. Morningstar® Portfolio Carbon Risk Score™ and The Morningstar® Portfolio Fossil Fuel Intervention™

Fund Name	Set Date	Global Category	Morning Star Sustainability Rating ²	Low-Carbon Designation ²
IBK Davos Global High Dividend 6[stock] A	2007.6.21	Global Equity Large Cap	Above Average	Yes
East Spring Sustainable Growth Company[stock]C-F	2005.6.7	Korea Equity	Above Average	No
East Spring Up All Day Etc. ESG Ja. [Stock]	2005.1.18	Korea Equity	Above Average	Yes
NH-Amundi 100-year company Green Korea [stock] Cf	2020.9.3	Korea Equity	Average	
Kiwoom Proper ESG 1 [Stock] C-F	2019.6.4	Korea Equity	Average	No
KTb ESG 1st place [stock] CF	2019.3.20	Korea Equity	Average	
Kyobo Axa Green Digital 2 [stock] C-I	2015.8.24	Korea Equity	Average	
Shinhan Beautiful SRI Green New Dealers 2 [Stock] A1	2014.6.5	Korea Equity	Average	No
G Korea ESG Income Deduction Long-term Person [Stock] C	2014.3.25	Korea Equity	Average	No
Kyobo Aksa Green Digital Ja [Stock] A1	2010.11.15	Korea Equity	Average	
G Korea ESG. [Stock] A.	2008.10.29	Korea Equity	Average	No
HDC Good Governance 1 [Stock] A	2007.4.5	Korea Equity	Average	No
G Global Eco Tech [Stock] A	2007.3.6	Equity Miscellaneous	Average	Yes
NH-Amundi Long-Term Growth Company[Woori]C1	2006.8.1	Korea Equity	Average	No
Shinhan Beautiful SRI Green New Dealers 1 [Stock] A2	2005.11.15	Korea Equity	Average	No
Our sustainable ESG ruler 1 [stock] A	2004.10.6	Korea Equity	Average	No
Our sustainable ESG ruler 2 [stock]	2002.1.11	Korea Equity	Average	No
Korea Investment Global Good Company ESG [stock-reindirect] C-F	2019.3.8	Global Equity Large Cap	Below Average	Yes
Hanwha Korea Legend ESG Ja [Stock] C-f	2018.12.17	Korea Equity	Below Average	No
Meritz the Woman [Stock] CF	2018.11.2	Korea Equity	Below Average	
FOCUS ESG Leaders150	2017.12.12	Korea Equity	Below Average	No
ARIRANG ESG Excellent Company	2017.8.29	Korea Equity	Below Average	
Vi a socially responsible investment [stock] c f.	2017.5.29	Korea Equity	Below Average	No
KB Green Growth Focus [Stock]	2012.11.28	Equity Miscellaneous	Below Average	No
Samsung Retirement Pension Global Clean Energy 40 Characters 1 [bond mix]	2011.4.26	Cautious Allocation	Below Average	
Mirae Asset Good Company ESG. [Stock] C5.	2010.10.25	Korea Equity	Below Average	No
Midas responsible investment [stock], ce	2009.4.20	Korea Equity	Below Average	
[bond mix] a Samsung Global clean energy to 30 characters a.	2007.7.18	Cautious Allocation	Below Average	
Samsung Retirement Pension Global Water 40 Characters 1 [bond mix]	2007.6.22	Cautious Allocation	Below Average	
Hanwha Green Hero C-F	2020.10.16	Global Equity Large Cap	Low	
NH-Amundi Fourth Industrial Revolution Pension Securities Convertible Person [Stock] C-P1	2010.10.4	Technology Sector Equity	Low	
NH-Amundi Fourth Industrial Revolutionist [stock] A	2009.12.11	Technology Sector Equity	Low	



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