Shinhan ESG Value Index Report

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INTRODUCTION

The Importance of Measuring Performance on ESG Activities

As corporate business activities cause various social problems such as environmental pollution and human rights violations, it is necessary for companies to create environmental and social value in addition to financial performance and to enhance the value of all stakeholders. Socially responsible investment has emerged as a major investment technique in response to the demands of this era, recognizing the importance of measuring non-financial performance to assess corporate sustainability.

As companies have limited capital and workforce available for environmental and social value creation, they need to quantify and evaluate the performance of their non-financial ESG activities for managing resources more efficiently and improving their performance. Measuring the performance of a company's ESG activities enables efficient management by comparing performance across businesses and prioritizing for optimized resource allocation. Moreover, it also facilitates communication with various stakeholders such as customers, employees, investors, and rating agencies to expanding the horizons of ESG management.

Shinhan's Journey to Create ESG Value

Shinhan Financial Group has been promoting various ESG activities that imply a good-hearted environmental and social impact under the ESG promotion principle of 'Finance for Impact'. Shinhan recognized the need to diagnose the current status of ESG activities of each group company consistently with the direction of sustainable strategies and contribute to the spread of value creation through quantitative and qualitative growth.

To promote systematic and efficient management by quantifying performance of ESG activities, we developed the 'Shinhan ESG Value Index', the first global financial company to develop a performance measurement model for ESG activities, and have been disclosing the measurement results since 2019. In addition, we joined the VBA (Value Balancing Alliance), the first Asian financial company to develop ESG currency value measurement standards, and is promoting advancement by incorporating the know-how of global ESG leaders into the Shinhan ESG Value Index.

In the future, we will measure environmental and social value through quantification and objectification of ESG activities based on the 'Shinhan ESG Value Index' and create more value to achieve sustainable growth and development with stakeholders.

Direction of Shinhan ESG Value Index



- Measure/analyze performance of ESG activities in monetary value to
 ensure authenticity of ESG activities and to ensure objectivity and
 fairness in environmental and social value measurements
- Continue to develop and upgrade the 'Shinhan ESG Value Index' system in cooperation with Yonsei University's ESG/Corporate Ethics Center to objectively measure the value of money

Measurement

Evidence-based

- Personnel in charge of the development, promotion, and management of individual projects and programs participates in the measurement process
- The Shinhan ESG Value Index measures value by developing performance data and precise proxy for ESG activities based on monetary value measurement principles

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INTRODUCTION

Shinhan ESG Value Index Performance Management System

Shinhan Financial Group has established a 'Shinhan ESG Value Index' performance management system in line with its sustainable management strategy. Based on Shinhan ESG's five impact tasks, ESG activities are finely divided into nine categories: eco-friendly growth, innovative growth, inclusive growth, social diversity pursuit, financial education, financial consumer protection, support for the vulnerable, community growth, and social contribution.

We then categorized each program into business innovation programs and social contribution ESG programs so to manage performance accordingly. In addition to corporate profitability, Shinhan Financial Group focuses on projects that can create ESG values by adding social responsibility and triple bottom line, especially by solving environmental and social problems that cannot be solved by individual efforts.

Shinhan ESG Top 5		Middle classification (20)	Business innovation type		Social contribution type		on type	Category of beneficiary							
Impact Tasks	Large classification (9)		E	S	G	E	S	G	Socially vulnerable	Children/ adolescents	Youth	Small business owner	Social enterprise/ venture/start up, etc	Local community	Consumer/ overall environment and social
		Eco-friendly financial support	•			•							•		٠
-	Eco-friendly growth	Eco-friendly products	•												•
Green	eco-menaty growth	Spread of eco-friendly	•			•							٠	٠	٠
		Environmental protection				•								٠	٠
		Innovative financial support		٠									٠		
Reduce carbon emissions and expand eco-friendly finance	Innovative growth	Innovative financial support				•	٠								٠
		Fostering startups		٠			٠						٠		
	Inclusive growth	Inclusive financial support		•			•		•			•	•	•	
S Win-win		Financial support for social enterprises		٠									٠		
		Inclusive growth services				•	•					•	٠		٠
Building an innovative	→ Pursuit of social diversity	Pursuit of social diversity					٠	٠	•	٠	٠		٠		
growth ecosystem Expanding social	Financial education	Financial education					•		•	٠	٠				٠
contribution through finance	Financial consumer protection	Financial consumer protection					٠	٠	•						٠
	Support for the	Support for the vulnerable		٠		•	٠		•	٠	٠	٠			
G Trusted	socially vulnerable	Scholarship program					٠		•	٠	٠				
	Community growth	Youth education and employment linkage		-			٠		•		•				
		Creating jobs and solving local problems					٠							•	
Pursuit of social diversity Financial consumer protection		Revitalizing the culture and arts ecosystem					٠		•	٠					٠
	Donations to social	Charitable donation					•		•	•					
	contribution	Other social contribution donations]	٠		•					٠	

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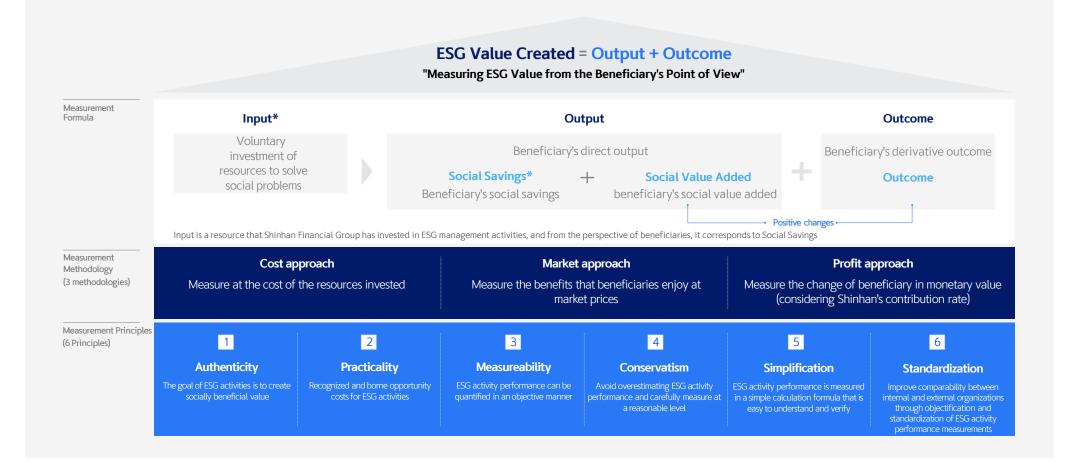
Shinhan ESG Value Index System

Measurement Model and Structure

Shinhan Financial Group identifies the cost (Input) of resources voluntarily invested in ESG activities and measures the performance of ESG activities from the beneficiary's point of view into monetary value by calculating the value generated from them as the sum of 'Direct Output' and 'Derivative Outcomes'. The direct output is categorized into the beneficiary's social savings and the beneficiary's social value added, and the positive changes to the beneficiary due to ESG activities are measured as the sum of the beneficiary's value-added measure and the beneficiary's derivative outcome.

Measurement Principles

The 'Shinhan ESG Value Index' includes six measurement principles so that various stakeholders can easily understand and universally utilize Shinhan Financial Group's ESG value creation system.



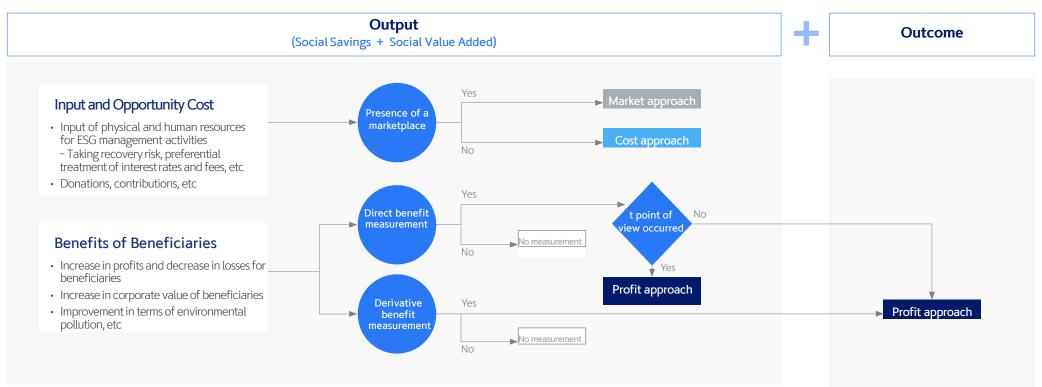
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Shinhan ESG Value Index System

Measurement Methodology and Process

Shinhan Financial Group internalizes ESG value creation and measurement concepts in ESG management activities. As a measurement method for each ESG management activity, we used the cost approach, the market approach, and the profit approach, and we can apply multiple methodologies for one activity, depending on its characteristics. These three approaches are conceptually identical to the historical cost and current value, which are the metrics of financial accounting.

For example, if Shinhan Financial Group provides consulting programs to startups, Social Savings measures Shinhan's opportunity cost in terms of historical costs whilst the value of consulting programs provided to startups is 'Output' according to the market approach. The increase in startup value is 'Outcome' according to the profit approach.



- Measured by the cost of resources input
- (Amount equivalent to the monetary value of human
 + material resources)

t ESG activities are me

 Benefits earned by beneficiaries are measured at market prices Measure the change in beneficiaries provided by ESG activities in monetary value equivalent (considering Shinhan's contribution rate)

Profit

approach

(Unit: KRW 100 million)

Shinhan ESG Performance

Shinhan ESG Value in 2022

Shinhan Financial Group defines the value created by each ESG activity measured based on the 'Shinhan ESG Value Index' as ESG Value Created, and reports the amount, which excludes environmental costs (GHG emissions Scope 1, 2, 3) and social costs (penalty paid for violating laws), as 'Shinhan ESG Value.' However, indirect economic contribution such as dividends, interest, tax payment, and employment is the amount generated by Shinhan Financial Group's original activities, that makes difficult to evaluate ESG purpose. Thus, these are excluded from the consideration when calculating Shinhan ESG Value.

ESG Value by ESG Activity Type in 2022

Of the nine criteria for Shinhan Financial Group's ESG activities, the largest ESG Value Created was measured in the Innovative Growth area to support innovative finance and digital transformation, and the Inclusive Growth area to support small business owners and the financially vulnerable. ESG Value Created was the highest for ESG activities in the 'Financial Consumer Protection' area, which consists of building a financial fraud prevention system such as voice phishing and damage prevention activities, and green investment and environmental protection activities.

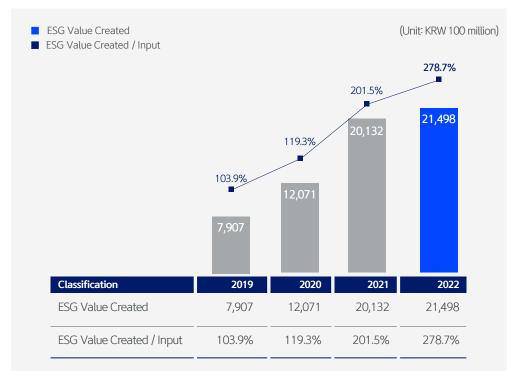
Number of ESG Activities **ESG Value Created** 신한 KRW 2.1498 trillion 111 18 45 12 9 59 23 35 16 Value Index 328 Eco-friendly Innovative Inclusive Pursuit of Financial Financial Supporting Local Donationsfor Environmental cost growth growth growth social education consumer socially community social GHG emissions diversity protection vulnerable growth contribution (Scope 1,2,3) KRW 11.4 billion ESG Value Total emissions 103,522 tons, Created social cost of carbon 110,165 won/t applied 2.212 12.477 4.264 100 1.551 160 93 600 41 Social cost 21,498 Fines and penalties, KRW 6.7 billion etc Eco-friendly Innovative Inclusive Pursuit of Financial Financial Supporting Local Donationsfor growth growth growth social education consumer socially community social diversity protection vulnerable growth contribution Based on management disclosure of Shinhan Financial Group in 2022 ESG Value Created / Input Shinhan ESG Value 599.7% 548.8% 102.3% 177.3% 185.8% 2.927.2% 146.1% 147.3% 100.1% 278.7% KRW 2.1290 trillion Eco-friendly Innovative Inclusive Pursuit of Financial Financial Local **Donations** for Supporting growth growth growth social education consumer socially community social contribution diversity protection vulnerable growth

Shinhan ESG Performance

Trend of ESG Value Created

Shinhan Financial Group's ESG Value Created has continued to increase since its first measurement in 2019 due to the annual expansion of the 'Shinhan ESG Value Index' measurement target, accumulation of non-financial performance data, and discovery and application of precise proxy.

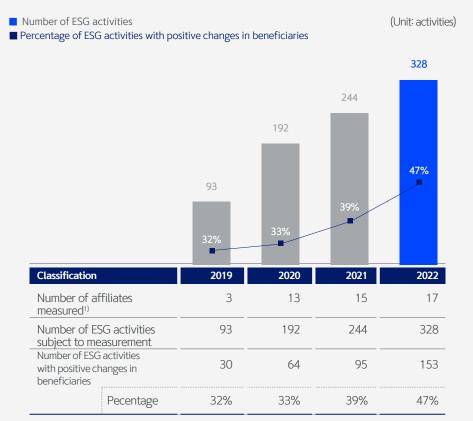
Trend of ESG Value Created



Note: ESG Value Created as measured by the 'Shinhan ESG Value Index' can be significantly affected by variations in factors such as assumptions and estimates, and does not warrant the actual value of ESG management activities.

In 2022, Shinhan Financial Group and all group companies invested KRW 771.2 billion in 328 ESG activities, and ESG Value Created totalled KRW 2.1498 trillion, and ESG Value Created compared to the input was 278.6%. Due to Shinhan's resource input, a total of 153 ESG activities showed positive changes in beneficiaries, accounting for 47% of the total.

ESG Activity Trends with Positive Changes in Beneficiaries



¹⁾ Including Shinhan Financial Group and Shinhan Financial Group Hope Foundation

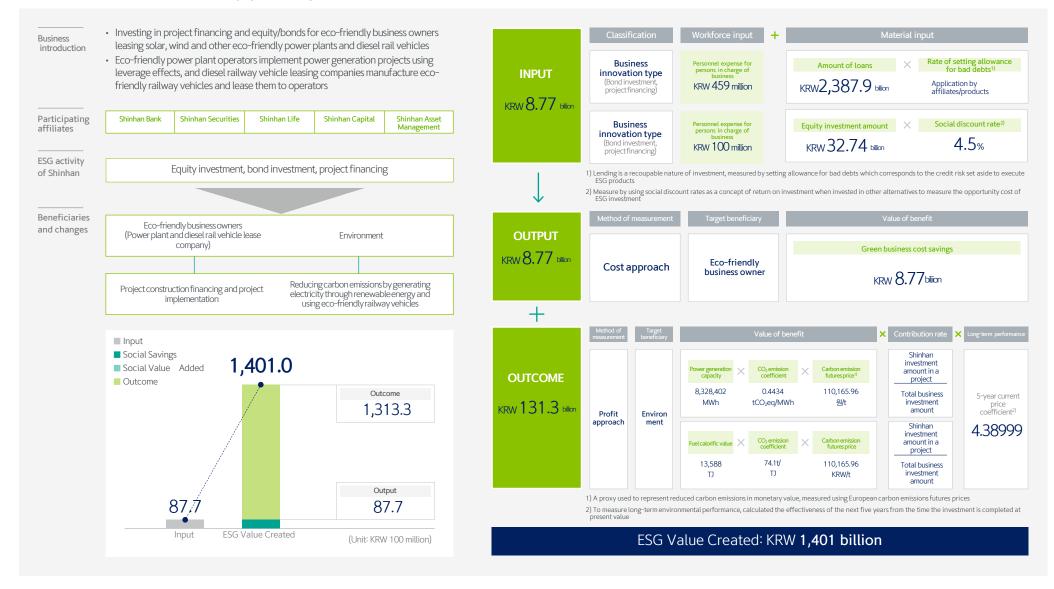
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Green

Key ESG Activity Measurement Cases

Through this report, Shinhan Financial Group introduces eight representative cases of measuring the Shinhan ESG Value Index' and transparently discloses the methodology and results of measuring ESG Value to stakeholders.

Investment in eco-friendly power plants and rail vehicles



Key ESG Activity Measurement Cases





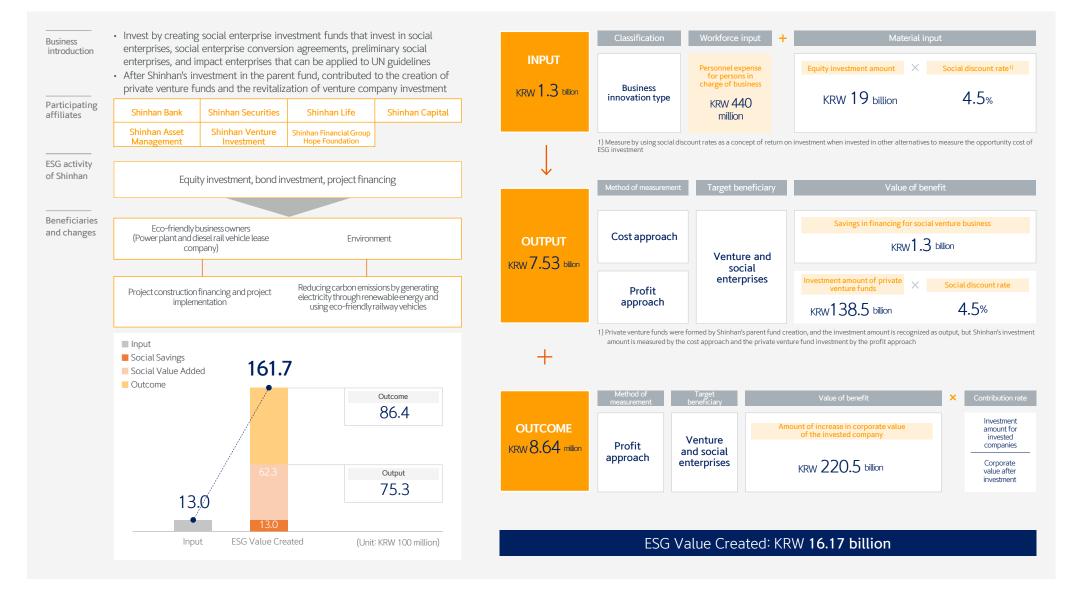
E Green Reduce carbon emissions and

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Key ESG Activity Measurement Cases



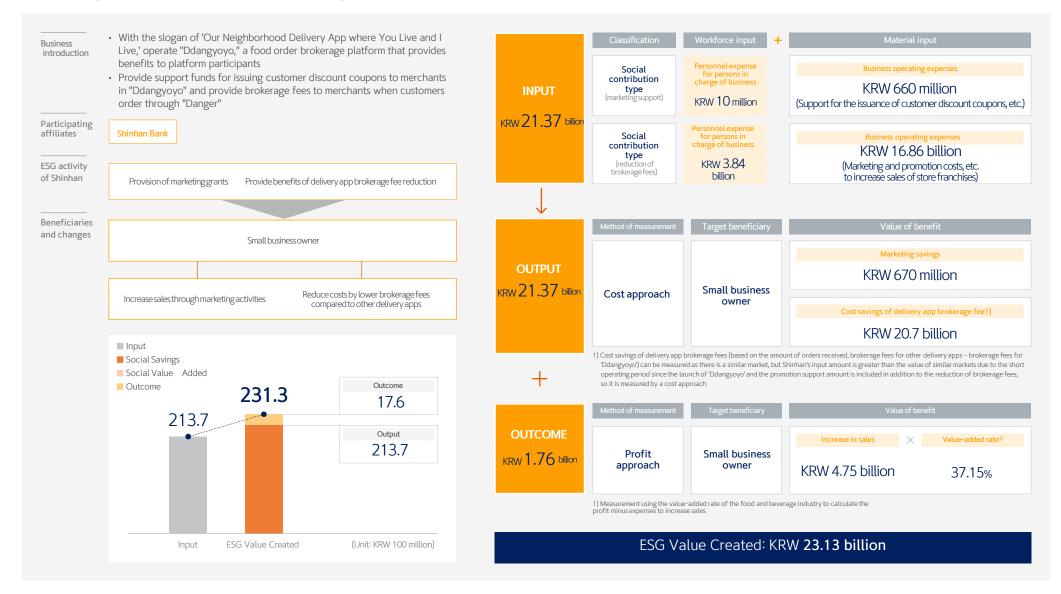
Investing in Social Ventures



Win-win

Key ESG Activity Measurement Cases

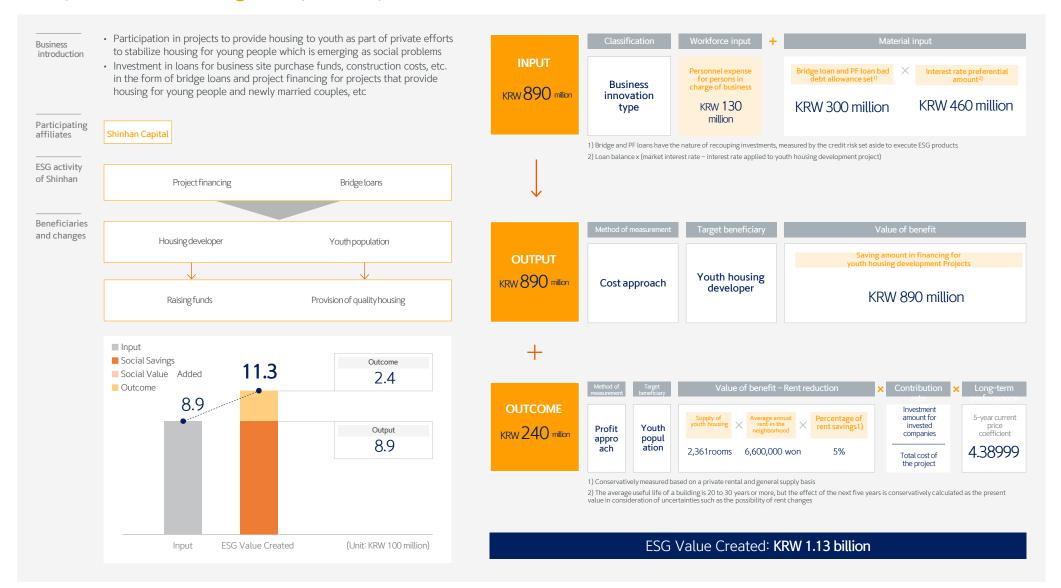
Operating Win-win Delivery App, 'Ddangyoyo'



Key ESG Activity Measurement Cases



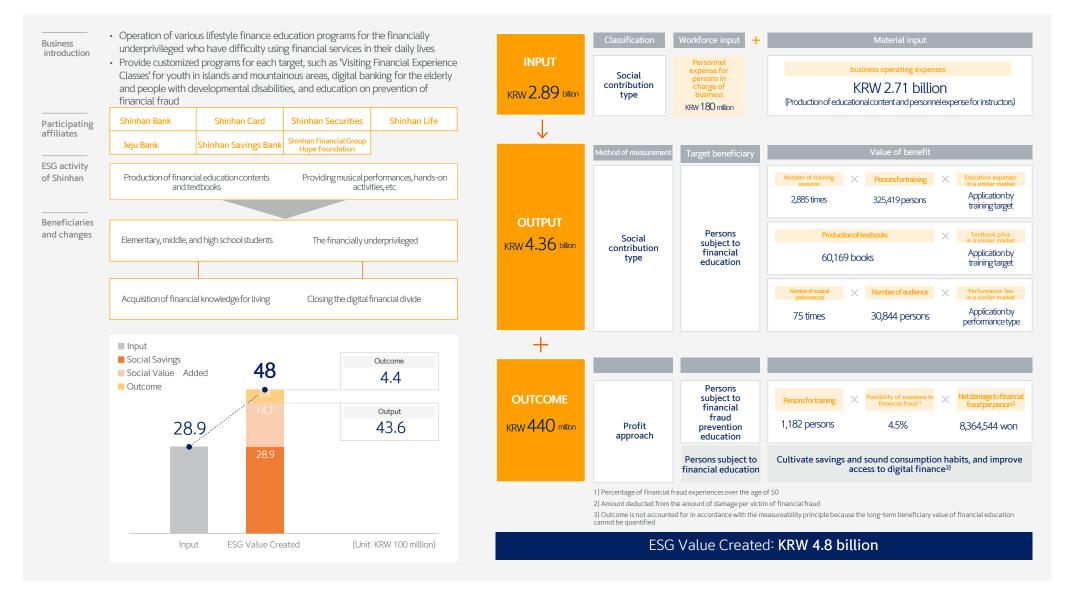
Participation in Youth Housing Development Project



Key ESG Activity Measurement Cases

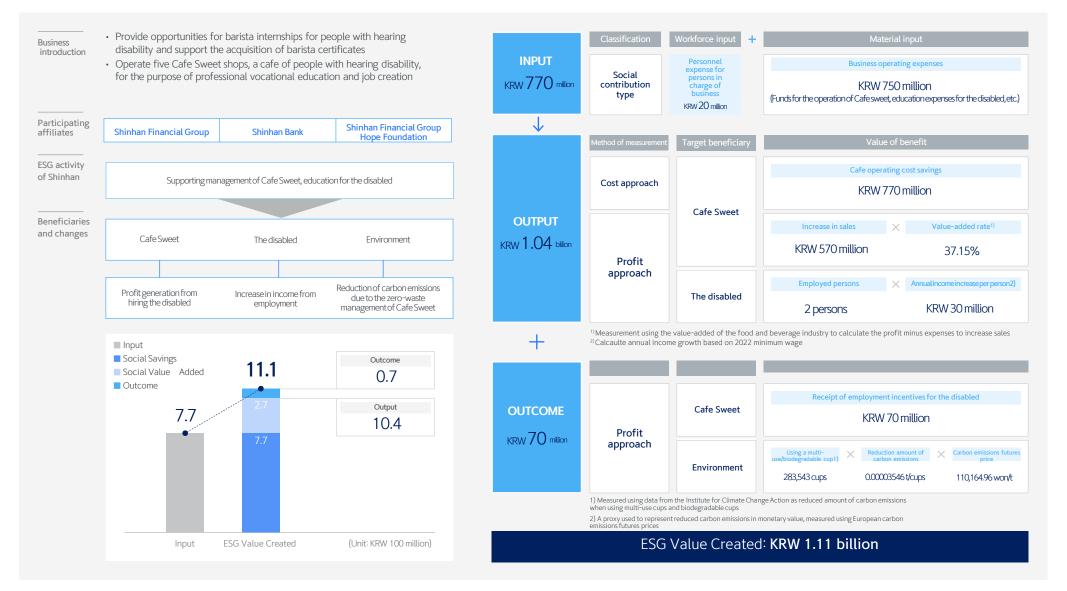


Financial Education



Key ESG Activity Measurement Cases





Pursuit of social diversity Financial consumer protection

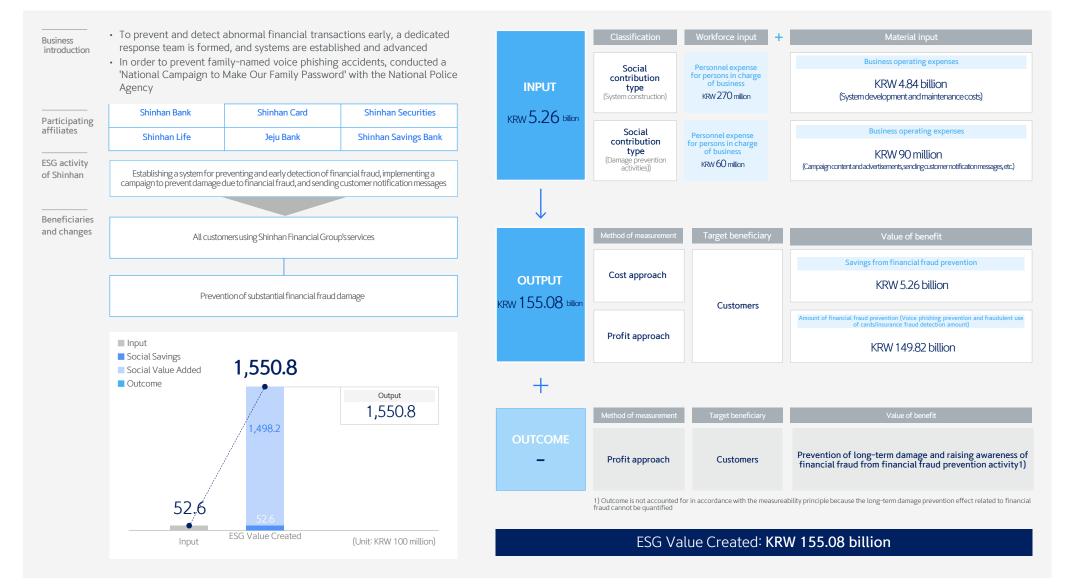
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Key ESG Activity Measurement Cases



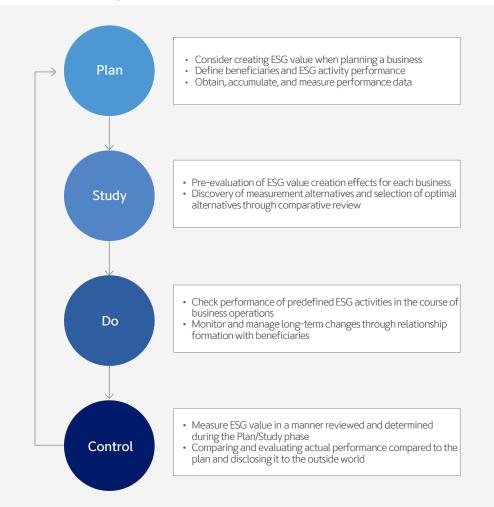
Business to Prevent Financial Fraud such as Voice Phishing



Shinhan's ESG Value Creation and Direction

This year marks the fifth anniversary of Shinhan Financial Group's collaboration with Yonsei University's ESG/Corporate Ethics Center to develop 'Shinhan ESG Value Index' and measure and manage ESG performance in monetary value every year. The performance of ESG activities, which was considered a non-financial achievement, is now the basis for solidifying Shinhan's steps toward ESG management practice, delivering them at a recognizable and understandable currency value. Based on 'Shinhan ESG Value Index,' we will increase the effectiveness of Shinhan Financial Group's ESG activities and focus on more valuable ESG activities to continue our efforts for sustainable growth with various stakeholders.

Shinhan Financial Group's ESG Value Review Process



Comment from the researchers of Shinhan ESG Value Index

We promote a virtuous cycle of social value creation through ESG internalization.

Shinhan Financial Group has shared its willingness to measure the monetary value of its ESG activities with executives and employees. In order for the 'Shinhan ESG Value Index' to be used as a strategic decision-making and performance assessment tool, it is necessary to establish an internal consensus on objective measurements and results by ensuring the suitability of data and measurements.

Therefore, we should consider creating ESG values from the stage of planning the actual business, and define performance indicators to measure in monetary value. In addition, efforts must be made to comply with the ESG Value Index measurement process, from data collection and measurement of monetary value to feedback.

As the 'Shinhan ESG Value Index' has advanced, Shinhan Financial Group has been encouraging the discovery and expansion of ESG activities which can meet the characteristics of each group company by reflecting it in the CEO evaluation of affiliates within the group since 2023. As a result, if a sustainability culture is spread and established within the group, we can expect a virtuous cycle of creating greater ESG values.

Jo Jung-hoon (Director of ESG at Shinhan Financial Group)



Shinhan's ESG Value Creation and Direction

Measuring ESG Value is a global trend.

Financial statements are a report that summarizes transactions that change financial position and can be measured in monetary amounts among economic events that occur through corporate management activities. The monetary value reported in the financial statements involves numerous assumptions, estimates, and discretionary judgments, and various measurement criteria are sometimes mixed. Despite these limitations, accounting information is the most useful source of information to help you understand a company.

I believe that 'Shinhan ESG Value Index' is a tool that can contribute to internalizing ESG management through quantified measurement and evaluation, despite multiple assumptions and estimates. Authentic ESG management and its performance measurements can improve enterprise value, including reduced regulatory costs and innovation in technology and processes, while generating long-term benefits for both businesses and society. The 'Shinhan ESG Value Index' will be a useful tool for Shinhan's contribution to society as a global financial group and sustainable growth.

Lee Ho-young

(Professor, Business School, Yonsei University, Director of ESG/Corporate Ethics Center)

ESG Value measurements should be beneficiary focused.

The core of the 'Shinhan ESG Value Index' metric is a beneficiary-focused ESG value measurement. This is because the 'value' criterion for ESG activities is the 'benefit' perceived by the beneficiary.

Shinhan Financial Group defines 'ESG Value' created by companies as tangible and intangible benefits perceived by all potential beneficiaries compared to the efforts and resources invested by companies and measures monetary value based on the principles of authenticity, practicality, and measurability. Furthermore, conservatism, simplification, and standardization principles are strictly applied so that they can be used convincingly and universally by more stakeholders. We look forward to Shinhan's continued efforts to develop 'Shinhan ESG Value Index' into a standardized indicator for measuring performance for ESG activities in the future.

Min Soon-hong

(Professor, Business School, Yonsei University and Vice President of the Korea Ethics Management Association)



Metrics by Subject

Environmental Performance Metrics

Large classification	Middle classification	Minor classification	Metrics					
			CO2 emission factor (unit of electricity)	Greenhouse Gas Information Center, Ministry of Environment				
			CO2 emission factor (unit of consumption)					
	GHG reduction		Price of carbon credit	International Futures Market Price				
		Reducing GHG emissions-electricity	CO2 emissions from electricity use	Korea Climate and Environment Network				
			CO2 emissions from fluorescent light use	Institute of Climate Change Action				
			PC standby power	Korea Institute of Electrical Research				
			Eco-cost per PC unit	Delft University of Technology Data				
			CO2 emissions from A4 paper use	Journal of the Korean Railroad Society				
			Plastic waste incineration CO2 emission coefficient	National Environmental Industry Technology Information System				
Environmental			CO2 emissions from sending E-mails	Korea Environmental Corporation				
performance			CO2 reduction from using multiple containers	Institute of Climate Change Action				
			CO2 reduction from credit card made by materials from waste plastic	THE FINTECH TIMES				
		Reducing GHG emissions-transportation	Annual CO2 reduction from using hybrid vehicles	Korea Automotive Engineering Association				
			n CO2 emissions from railways	Korea Environmental Corporation				
			CO2 emissions from gasoline use	Comprehensive Information on Energy and Greenhouse Gas				
		Reducing GHG emissions-heating	CO2 reduction from using eco-friendly boilers	National Academy of Environmental Sciences				
	Fine dust reduction	Reducing fine dust emissions	Fine dust environmental cost	Institute of Energy Economics				
		Reducing fine dust emissions-heating	Fine dust reduction using eco-friendly boilers	National Academy of Environmental Sciences				
		Reducing fine dust emissions-landscape	P Fine dust absorption from trees	Seoul Institute of Research				

Metrics by Subject

Social Performance Metrics

Large classification	Middle classification	Minor classification	Metrics	Reference		
		Personnel expense-general	Minimum wage	Ministry of Employment and Labor		
	Personnel expense		Average wage for startups (businesses with less than 50 employees)	National Statistical Office		
		Personnel expense-employee	Average wage of Shinhan Financial Group	Shinhan Financial Group		
			Training for middle-aged and elderly instructors	Korea Gender Equality Education Promotion Agency		
		Educational expenses-general	Cost of one-day class training completion	Market research		
			Training fee of Youth Employment Academy	Korea Development Institute		
		Educational expenses-students	Average monthly participation cost per after-school student (elementary/middle/high school)			
	Educational expenses		After-school program participation time per person (elementary/middle/high school)			
			EBS textbook fee (elementary/middle/high school)	National Statistical Office, Ministry of Education		
E Social performance			Average private education expenses for elementary school students			
			Private education hours per elementary school student	- · · · · · · · · · · · · · · · · · · ·		
			Cost of care per elementary school student per hour			
			Digital education expenses (certification acquisition, coding education expenses, etc.)	Market research		
			Reading education program			
			Reading ability test cost	Korea Educational Broadcasting Corporation		
			Environmental education	National Children's Science Museum		
	Space rental	Space rental-general	Average area of medium office building	Journal of Real Estate		
	Small business owner	Small business owner-general	Small business owners' annual income	Ministry of SMEs and Startups, National Statistical Office		
			Small business closure rate	Ministry of Public Administration and Security		
	Medical expenses	Medical expenses-the disabled	Neurodevelopmental intervention therapy	Market research		
			Developmental rehabilitation service for disabled children			
			Support for language development for disabled children	Social Service Electronic Voucher		
			·			

Metrics by Subject

Financial Social Performance Metrics

Large classification	Middle classification	Minor classification	Metrics	Reference			
Financial investment Financial social performance Financial fraud			Accumulation rate of allowance for bad debts on normal bank bonds	Banking Supervision Regulations			
			Accumulation rate of allowance for bad debts on normal insurance bonds	Insurance Industry Supervision Regulations			
	Bond investment-opportunity cost	Accumulation rate of allowance for bad debts on normal financial investment bonds	Financial Investment Business Regulations				
			Accumulation rate of allowance for bad debts on normal bonds from the credit- specialized financial business	Regulations for Supervision of Financial Businesses Specialized in Credit			
	Financial investment		Accumulation rate of allowance for bad debts on normal bonds from mutual savings banking business	Regulations for Supervision of Mutual Savings Bank Business			
		Equity investment-opportunity cost	Social opportunity cost of equity investment	Korea Development Institute			
		Innovative financial investment – contribution rate	Total capital investment efficiency	Bank of Korea			
		Innovative financial investment - value added .	Value-added inducement coefficient in industry				
			Commercialization success rate	Institute of Science and Technology Policy			
	Financial fraud	Prevention of financial fraud - occurrence	Percentage of financial fraud experiences over the age of 50	Research Institute on Consumer Problems			
		Prevention of financial fraud - damage	Net damage per victim of financial fraud	Financial Supervisory Service			

General Metrics

Large classification	Middle classification	Minor classification	Metrics	Reference		
General	Exchange rate	Exchange rate-general	Average foreign exchange rate	Shinhan Bank		
	Present value	Present value-general	Social discount rate pension current value coefficient	Korea Development Institute		
	Value added	Value-added rate-general	Value-added rate of corporate operators	National Tax Service		
			Value-added rate of general operators	National lax service		