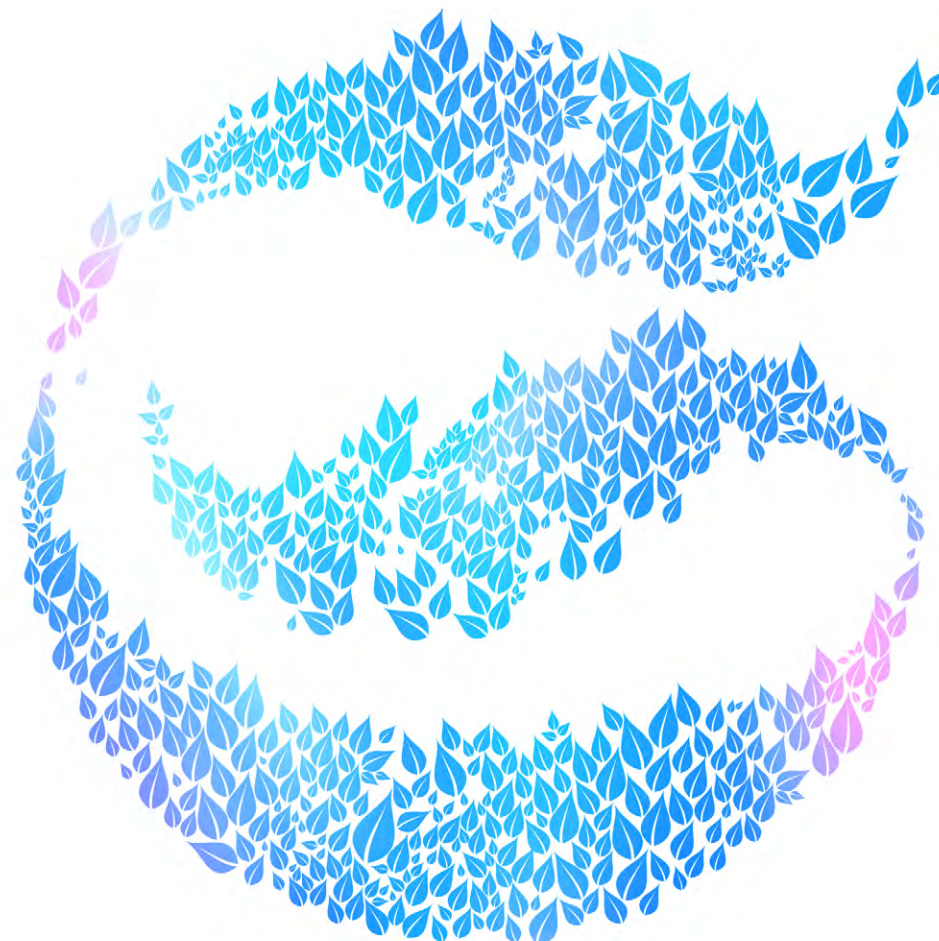


# Grow Sustainably

GS HOLDINGS 2022 SUSTAINABILITY REPORT





**GS**

**Grow  
Sustainably**

GS is creating new life experiences  
and planning a better future for our customers.



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# 01



# Introduction

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# CEO Message



## GS Holdings leads the change for a sustainable future.

### Dear Stakeholders,

I would like to express my sincere appreciation for your continuous trust and support of GS Holdings. Based on its management philosophy, GS Group is creating new experiences and planning a better future for our customers. The company makes its efforts to practice customer-prioritized management. We will do our best to become a company that listens to the interest and voices of stakeholders and grows together with them along with the achievements it has made.

While concerns over a global recession are growing in 2023, external circumstances, such as oil price, exchange rate, and inflation, are expected to be unfavorable to the company. Therefore, innovation led by new businesses and employees' creative efforts became essential factors for a company's survival. At this juncture, GS Holdings is building a foundation for future growth by promoting digital innovation internally while continuing the investment in new technologies externally.

To turn the connection between the investment and the innovation into an opportunity for new businesses, we are accelerating the new projects focusing on the transition to environment-friendly energy, such as GS Caltex's hydrogen and biofuels development project and GS Energy's blue ammonia and small modular reactors development project, based on GS Holding's core management value of 'Grow Sustainably.' On the other hand, GS Retail has expanded its sustainable products, and GS E&C has accelerated its new businesses based on environment-friendly smart construction.

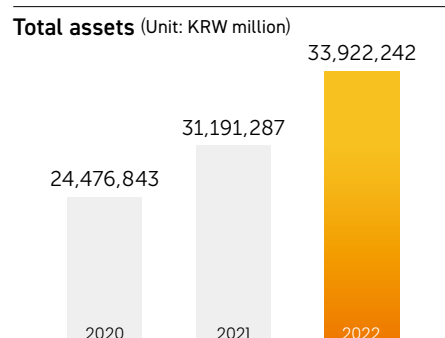
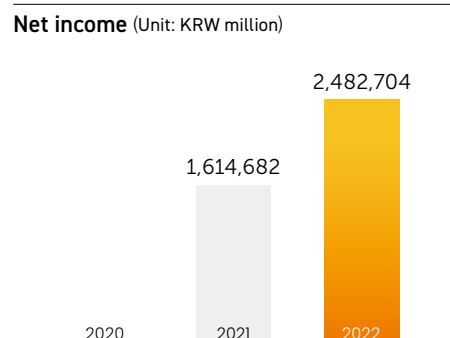
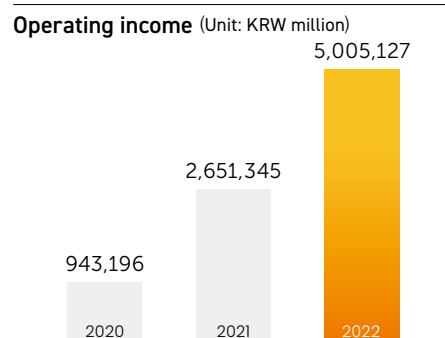
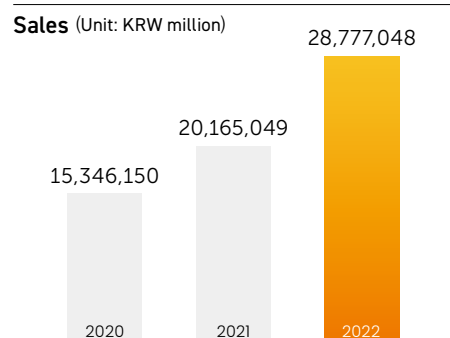
Moreover, GS Holdings' digital and open innovation business process created an organizational culture where employees can work more creatively and actively to drive their voluntary innovation. The 52g program, celebrating its third anniversary this year, serves as an innovation engine, enabling a better problem-solving skills to deal with transformational issues in the field and the shared growth of all affiliates. In 2022, we worked on 21 projects to address issues in the field.

To turn the risks into an opportunity and enable sustainable growth, GS Holdings will continue to concentrate on the ESG Management. The company will share our ESG management activities and achievements with the stakeholders through the annual sustainability report. I ask for your continuous interest and encouragement in its effort for the sustainable growth. Thank you.

**CEO Soon-Ky Hong**

# Company Overview

As the holding company, GS Holdings sets the future direction for its affiliates for shared growth and suggest a company-level vision that each affiliate can implement. For sustainable management, we analyze business- and subsidiary-specific issues and discuss solutions thereto.

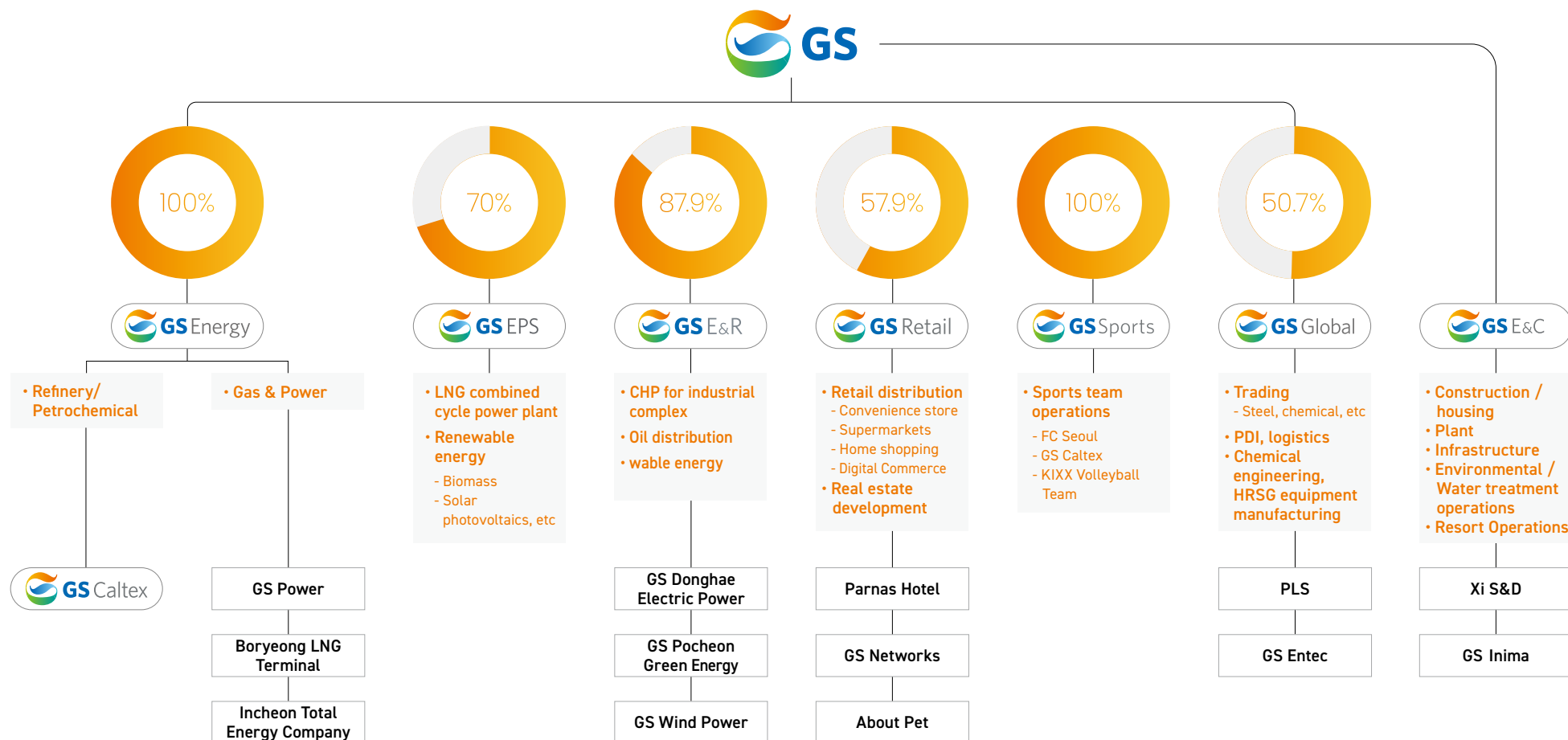


 <p><b>Name</b> GS Holdings Corp.</p>	 <p><b>Date of Establishment</b> July 1, 2004 <small>(Equity spinoff from LG Corp.)</small></p>	 <p><b>Type of business</b> Holding company</p>	 <p><b>Presidents</b> Tae-Soo Huh, Soon-Ky Hong</p>
 <p><b>Head Office</b> GS Tower, 508 Nonhyeon-no, Gangnam-gu, Seoul</p>	 <p><b>Employees</b> 71 people</p>	 <p><b>Credit rating</b> A1 <small>(Korea Credit Ratings and Nice Credit Ratings, Dec 2022)</small></p>	 <p><b>ESG evaluation rating</b> A <small>(KCGS ESG evaluation)</small></p>
 <p><b>Total assets*</b> 33,922,242 <small>(Unit: KRW million)</small></p>	 <p><b>Total equity*</b> 16,487,810 <small>(Unit: KRW million)</small></p>	 <p><b>Sales*</b> 28,777,048 <small>(Unit: KRW million)</small></p>	 <p><b>Operating income*</b> 5,005,127 <small>(Unit: KRW million)</small></p>

\*as of 12.31.2022

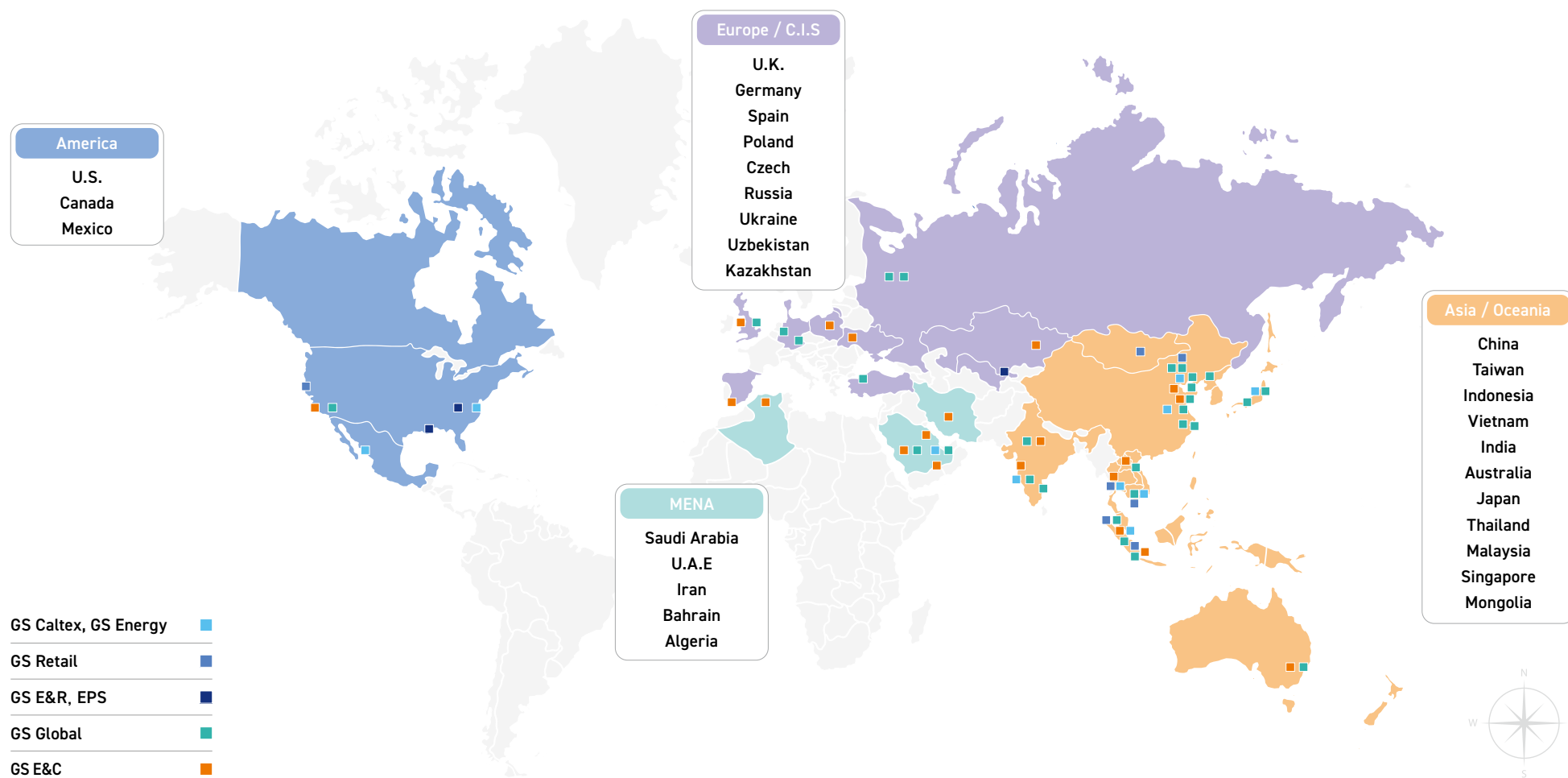
# Group Overview

As of the end of 2022, we comprise 249 companies (95 domestic and 154 overseas), with GS holdings at the center, including 6 major subsidiaries.



# Global Network

As of June 2023, dedicated to providing the best products and services, we have a global network of 95 offices in 27 countries, including 14 GS Caltex, 8 GS Energy, 9 GS Retail, 1 GS EPS, 2 GS E&R, 24 GS Global, and 37 GS E&C.



## Business Portfolio

### From consumption to circulation Energy & Power



GS' energy and power affiliates try to bring an environment-friendly world faster through technological innovation. GS Energy, an energy-specified holding company, discovers and operates sustainable energy sources to increase Korea's independent development ratio and contribute to energy security. GS Caltex, the first private oil refining company, enhances national prestige by exporting refined oil and petrochemical products to more than 50 countries worldwide with its advanced technology and differentiated quality. The first independent power generation company, GS EPS, strives to contribute to the national energy supply and demand and the local economy through power generation using clean fuel. GS E&R started the first private thermal power generation business based on its 30 years of know-how running an integrated energy business. It is growing into an environment-friendly comprehensive power generation company by developing large-scale wind power generation complexes.



### Every moment with customers Retail & Service



We strive to share a better life with our customers through the retail and service business that provides a range of convenience based on offline and online distribution platforms. As Korea's leading lifestyle platform, GS Retail operates various platforms, communicates with society, and creates value continuously. On the other hand, GS Sports, which has led the development of Korean sports since its foundation, has communicated with its fans and provided thrilling and entertaining experiences.



### Bringing new value to life Construction & Infrastructure



The construction and infrastructure sector, which provides better life values to our customers, consists of GS E&C and GS Global. Based on its international network, GS Global actively engages in commodity trading such as steel, petrochemicals, and resources and the vehicle inspection and transportation business. GS E&C encompasses constructing all types of buildings, including housing facilities, offices, and production facilities. It has made tireless advancements through overseas expansion and diversification of construction types. Also, it seeks to expand the business to high value-added areas such as EPC services by conducting FEED and the plant maintenance and O&M business and constantly discovers future growth engines.



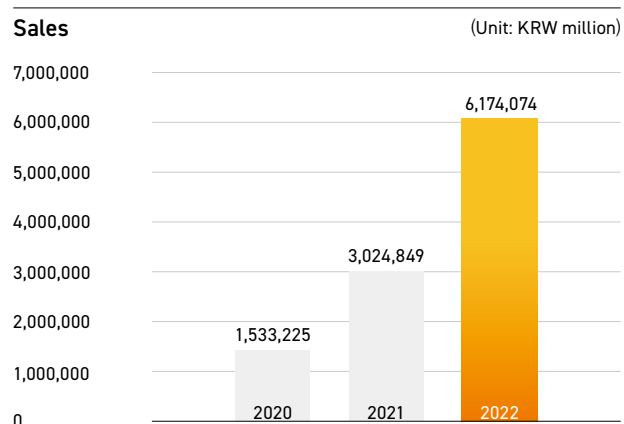
## Business Brochure

### Energy & Power

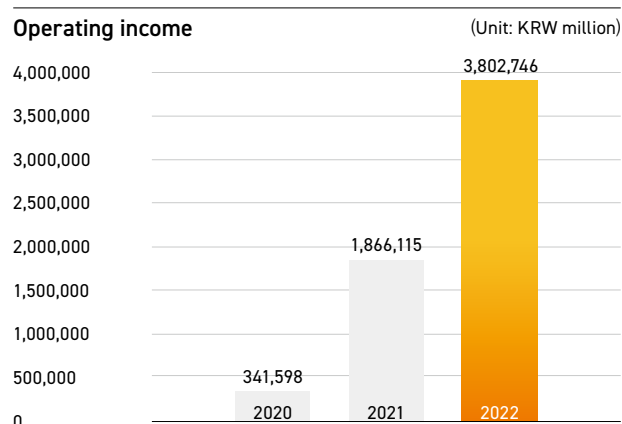


#### GS Energy

Since GS Energy was launched in 2012 as a holding company specializing in the energy business of GS Group, all employees have committed to contributing to the energy industry development, which is the artery of the national economy, and leading the energy paradigm shift for the future. GS Energy is now running the overseas resource development business focusing on the Middle East to lead the independent development ratio and enhance energy security in Korea, which has poor natural resources. Besides, GS Energy stably provides energy based on environment-friendly natural gas to create a clean and comfortable living environment and a happy society. From importing LNG to operating LNG terminals and CHP business that uses LNG as fuel, it established the LNG Value Chain to enhance its capabilities. To contribute to a carbon-neutral society through energy conversion, we also found the Electric Vehicle Charging Value Chain and created a closed loop to recycle waste batteries from end-of-life electric vehicles. As such, we will tirelessly discover new businesses incorporating new energy technologies and achieve sustainable.



\* Sales is the sum of merchandise sales and product sales



\* Based on NICE Credit Ratings, Korea Ratings, and Korea Investors Service

<b>Date of Establishment</b>	January 3, 2012
<b>Major Industry</b>	Holding company
<b>CEO</b>	Yong-Soo Huh
<b>Head Office Address</b>	508, Nonhyeon-ro, Gangnam-gu, Seoul, Republic of Korea
<b>Number of Employees</b>	191
<b>Listed/Unlisted</b>	Unlisted
<b>Credit Rating*</b>	AA corporate bond (January 2023) A1 commercial paper (September 2022)

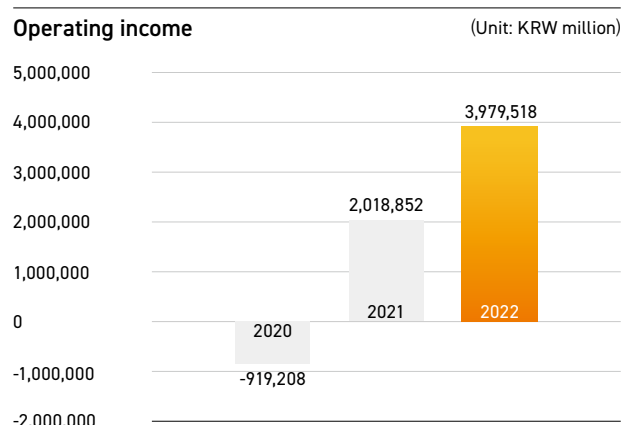
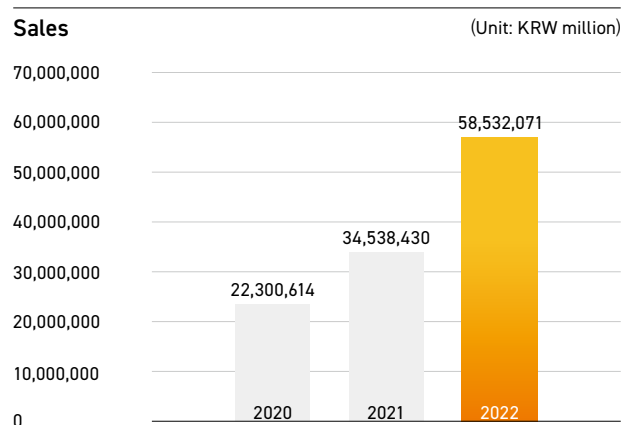
## Business Brochure

### Energy & Power



#### GS Caltex

As Korea's first private oil company, GS Caltex has led the heavy chemical industry by leading the petroleum and petrochemical industries for the past half-century. The bold and advanced investment and technology innovation grew the company, and we are currently producing products by stably importing various crude oils from around the world. Its cutting-edge automation facilities, such as a refinery facility capable of 0.8 million barrels of crude oil and desulfurization facilities for kerosene and diesel, not only allow us to provide high-quality gasoline and kerosene products but also has the industry's best competitiveness with a capacity of 2.8 million ton per year of aromatic products and 180 thousand ton per year of polypropylene products. However, we were not complacent. In July 2021, GS Caltex successfully operated the MFC (Mixed Feed Cracker) and HDPE(High-Density Poly-Ethylene) plants and started producing ethylene products of 750,000 tons and polyethylene products of 500,000 tons per year. GS Caltex will lead new changes in energy companies by preparing for another innovation in the energy industry and taking on challenges for future businesses.



<b>Date of Establishment</b>	May 19, 1967
<b>Major Industry</b>	Petroleum, Petrochemicals, Lube products
<b>CEO</b>	Sae-Hong Hur
<b>Head Office Address</b>	508, Nonhyeon-ro, Gangnam-gu, Seoul, Republic of Korea
<b>Number of Employees</b>	3,291
<b>Listed/Unlisted</b>	Unlisted
<b>Credit Rating</b>	AA+ corporate bond (March 2023) A1 commercial paper (June 2023)

\* Based on NICE Credit Ratings, Korea Ratings, and Korea Investors Service

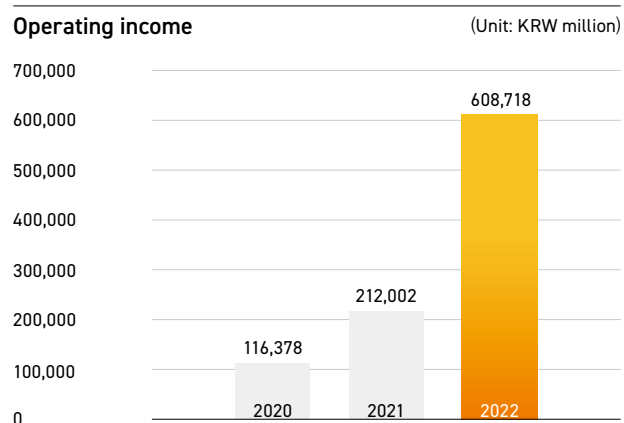
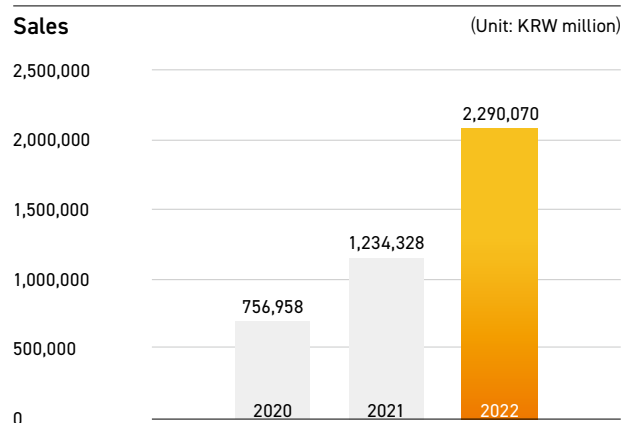
## Business Brochure

### Energy & Power



#### GS EPS

Since its foundation in 1996, GS EPS has produced and supplied electricity through natural gas and renewable energy to contribute to the stable power supply in Korea as a private power generation company. It operates an LNG combined thermal power plant (4 units, 2,406MW) and a biomass power plant (2 units, 210MW) in Dangjin, Chungcheongnam-do, Korea. In addition, GS EPS is doing its best to settle as an energy-specified company by concentrating its capabilities on achieving carbon neutrality and discovering new businesses that will become new growth engines for its future.



<b>Date of Establishment</b>	October 9, 1996
<b>Major Industry</b>	Electricity production and sales
<b>CEO</b>	Chan-Soo Chung
<b>Head Office Address</b>	241, Bugokgongdan-ro, Songak-eup, Dangjin-si, Chungcheongnam-do, Republic of Korea
<b>Number of Employees</b>	285
<b>Listed/Unlisted</b>	Unlisted
<b>Credit Rating</b>	AA- corporate bond (June 2022)

\* Based on NICE Credit Ratings, Korea Ratings, and Korea Investors Service

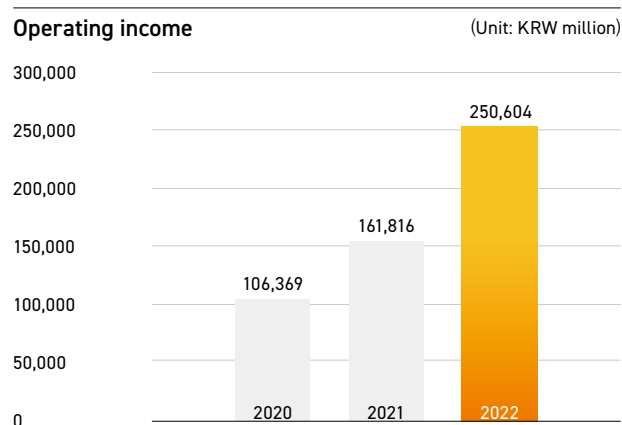
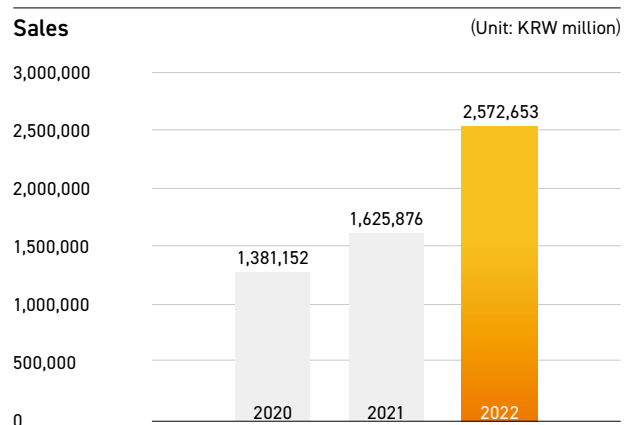
## Business Brochure

### Energy & Power



#### GS E&R

GS E&R has run collective energy businesses in the Banwol and Gumi national industrial complexes since 1990. It supplies high-quality thermal energy to companies in the complexes at affordable prices and contributes to the supply and demand of electricity by selling electricity produced through CHP(Combined Heat and Power) method. The company built the first private baseload thermal power plant in Donghae, Gangwon-do, in 2017 and a CHP plant in Pocheon, Gyeonggi-do, in 2019. Along with the operation of these plants, it also developed and is operating an onshore wind complex in Yeongyang-gun, Gyeongsangbuk-do. GS E&R has continuously grown the collective energy and power generation businesses in the industrial complexes for the past 30 years and has responded flexibly to decarbonization and environment-friendly trend. We are reviewing the transition to environment-friendly fuel and making efforts for low-carbon power generation, such as ammonia combustion and carbon capture. In addition, the company has expanded its wind power generation business to develop it as its core business. GS E&R will continue to secure differentiated competitiveness based on its experience and know-how while trying to lead the future energy and power industry by strengthening its renewable energy business portfolio.



<b>Date of Establishment</b>	January 2002
<b>Major Industry</b>	Collective energy
<b>CEO</b>	Seok-Hwan Kim
<b>Head Office Address</b>	404, Haean-ro, Danwon-gu, Ansan-si, Gyeonggi-do, Republic of Korea
<b>Number of Employees</b>	320
<b>Listed/Unlisted</b>	Unlisted
<b>Credit Rating</b>	Corporate bond A+ (June 2022)

\* Based on NICE Credit Ratings, Korea Ratings, and Korea Investors Service

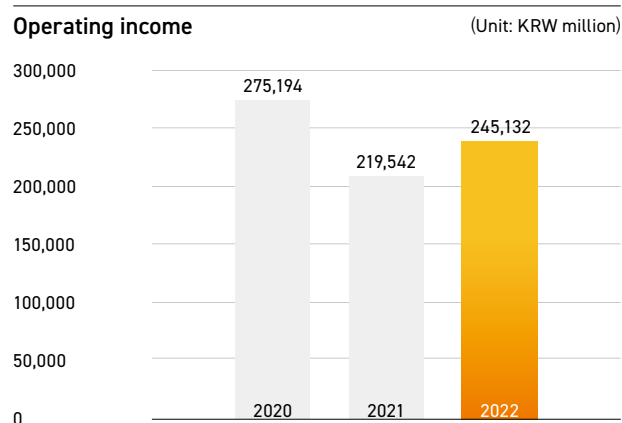
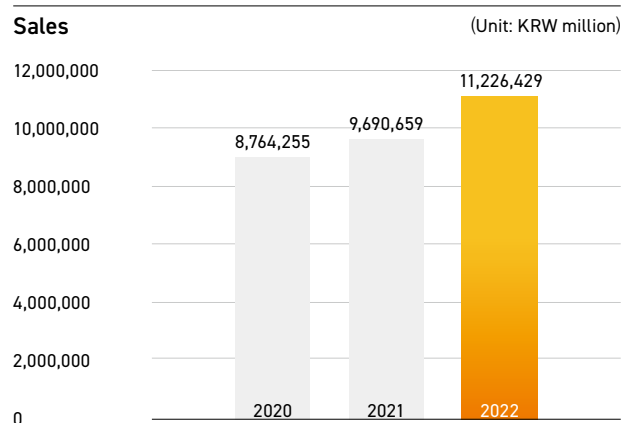
## Business Brochure

### Retail & Service



#### GS Retail

GS Retail was derived from Goldstar and reborn as a mail-order business operator in 2005, providing media products and services. It focuses on the retail distribution business such as GS25, GS THE FRESH, and GS SHOP and prioritize customer satisfaction with the best products and sincere services to provide a better life for its customers. To enhance its product competitiveness, GS Retail founded Fresh Meat specializing in the manufacturing, processing, and distributing of livestock products. To respond to rapidly changing consumption patterns, on the other hand, it is also discussing its new future direction to become an integrated commerce platform company that encompasses online and offline platforms. With its extraordinary organizational capabilities and management, GS Retail will do its best to achieve balanced results and become the company everyone wants to work with.



<b>Date of Establishment</b>	January 1971
<b>Major Industry</b>	Retail distribution
<b>CEO</b>	Yeon-Soo Huh, Ho-Sung Kim
<b>Head Office Address</b>	508, Nonhyeon-ro, Gangnam-gu, Seoul, Republic of Korea
<b>Number of Employees</b>	7,814
<b>Listed/Unlisted</b>	Listed
<b>Credit Rating</b>	Corporate bond AA (June 2022) Commercial paper A1 (December 2021)

\* Based on NICE Credit Ratings, Korea Ratings, and Korea Investors Service

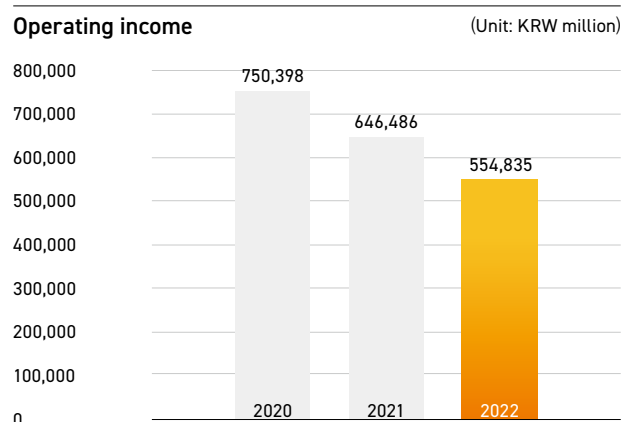
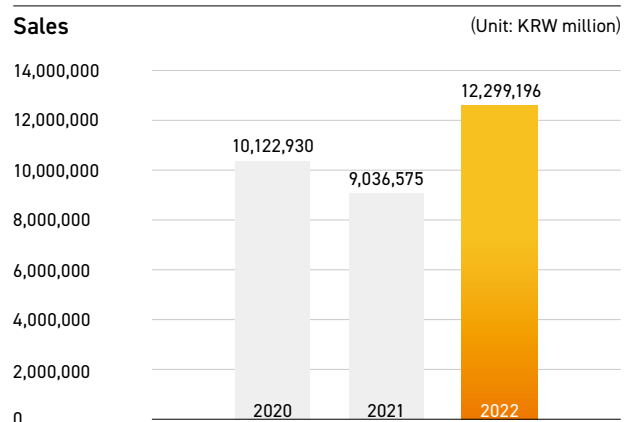
## Business Brochure

### Construction & Infrastructure



#### GS E&C

GS E&C was founded on December 19, 1969, under the name Lakhee Development and reborn as GS E&C in March 2005. As a leader in the construction industry leading the Fourth Industrial Revolution era, it tries to build sustainable values with an innovative challenge spirit and passion. GS E&C has leaped to a global top construction company as an ESG-leading company promoting sustainable values to the world and has provided the best value to its customers. The best premium apartment brand in Korea, Xi, is leading Korea's housing culture, and it has achieved remarkable results, such as being included in the DJSI Asia/Pacific for 12 consecutive years and winning overseas construction awards.



<b>Date of Establishment</b>	December 1969
<b>Major Industry</b>	Construction & housing
<b>CEO</b>	Byeong-Yong Lim
<b>Head Office Address</b>	33, Jong-ro, Jongno-gu, Seoul, Republic of Korea
<b>Number of Employees</b>	5,422
<b>Listed/Unlisted</b>	Listed
<b>Credit Rating</b>	Corporate bond A+ (June 2022) Commercial paper A2+ (December 2022)

\* Based on NICE Credit Ratings, Korea Ratings, and Korea Investors Service

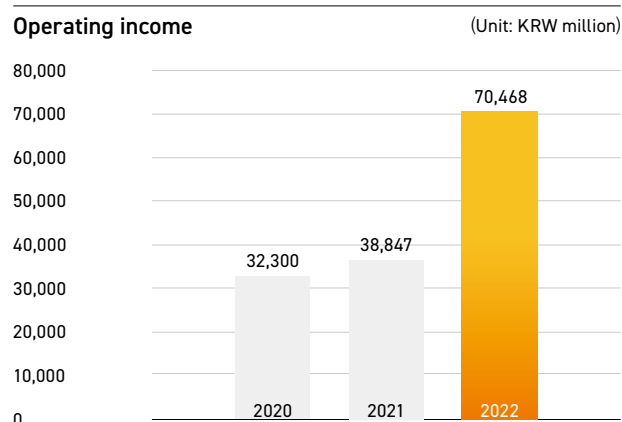
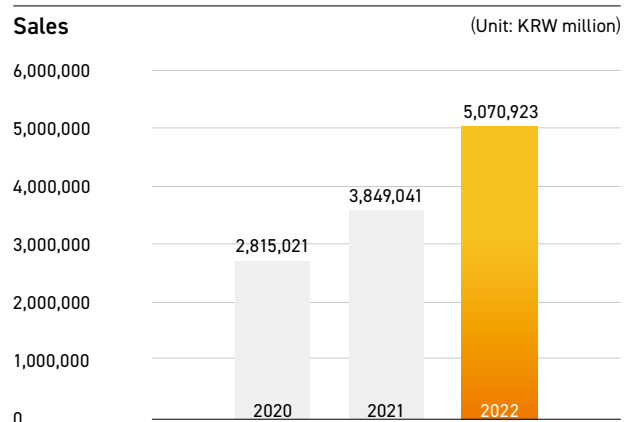
## Business Brochure

### Construction & Infrastructure



#### GS Global

GS Global actively and creatively responds to customer needs and provides the most suitable solutions based on its international network, including inspection and transportation of imported cars as well as commodity trading of steel, petrochemicals, and resources. In addition, we are preparing for a sustainable future by jumping into new businesses such as EV, recycling, and healthcare. GS Global will expand its role in various projects to create the best value that contributes to the development of the global society beyond the interests of its stakeholders, including its Korean and overseas customers and business partners.



<b>Date of Establishment</b>	1954
<b>Major Industry</b>	General trading company
<b>CEO</b>	Young-Hwan Lee
<b>Head Office Address</b>	508, Nonhyeon-ro, Gangnam-gu, Seoul, Republic of Korea
<b>Number of Employees</b>	252
<b>Listed/Unlisted</b>	Listed
<b>Credit Rating</b>	Corporate bond A (June 2022)

\* Based on NICE Credit Ratings, Korea Ratings, and Korea Investors Service

# 02



# ESG Strategy

ESG Future Direction  
 ESG Management System

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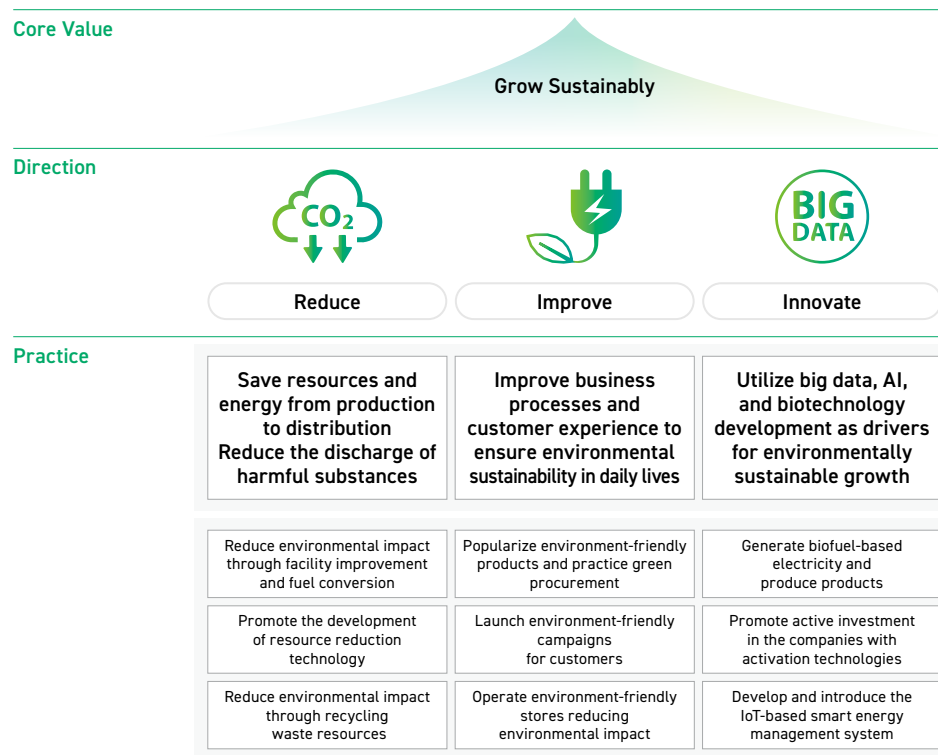
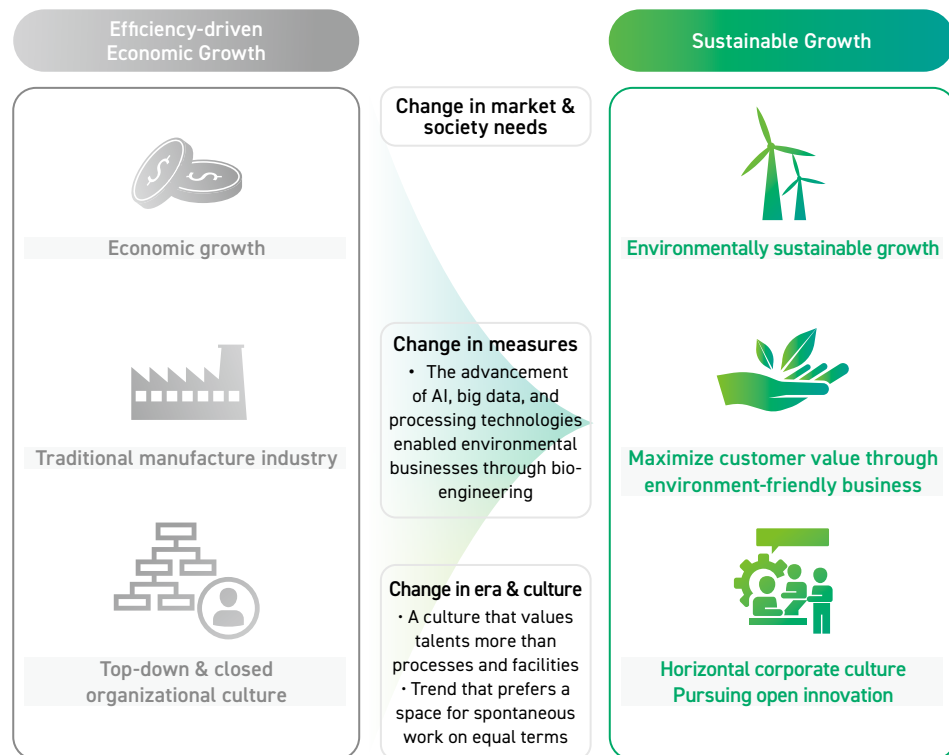
ESG Activities  
 Materiality Assessment

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# ESG Future Direction

Today, society and customers expect sustainable growth from businesses, and this voice of change is emphasized as climate change becomes more severe. To meet the needs, the vision of GS has shifted from 'maximizing profits' to 'maximizing customer value and pursuing profits by promoting environment-friendly business,' and the system has been reorganized to pursue its sustainability. To achieve sustainable and shared growth, GS conducts its unique sustainable management in three directions: reduction, improvement, and innovation. As for this strategy, we make the existing projects environment-friendly and change the portfolio in line with sustainable growth through digital transformation utilizing technology innovation using bioengineering and digital technology, AI, and big data processing technology.

## GS' Sustainable Strategy

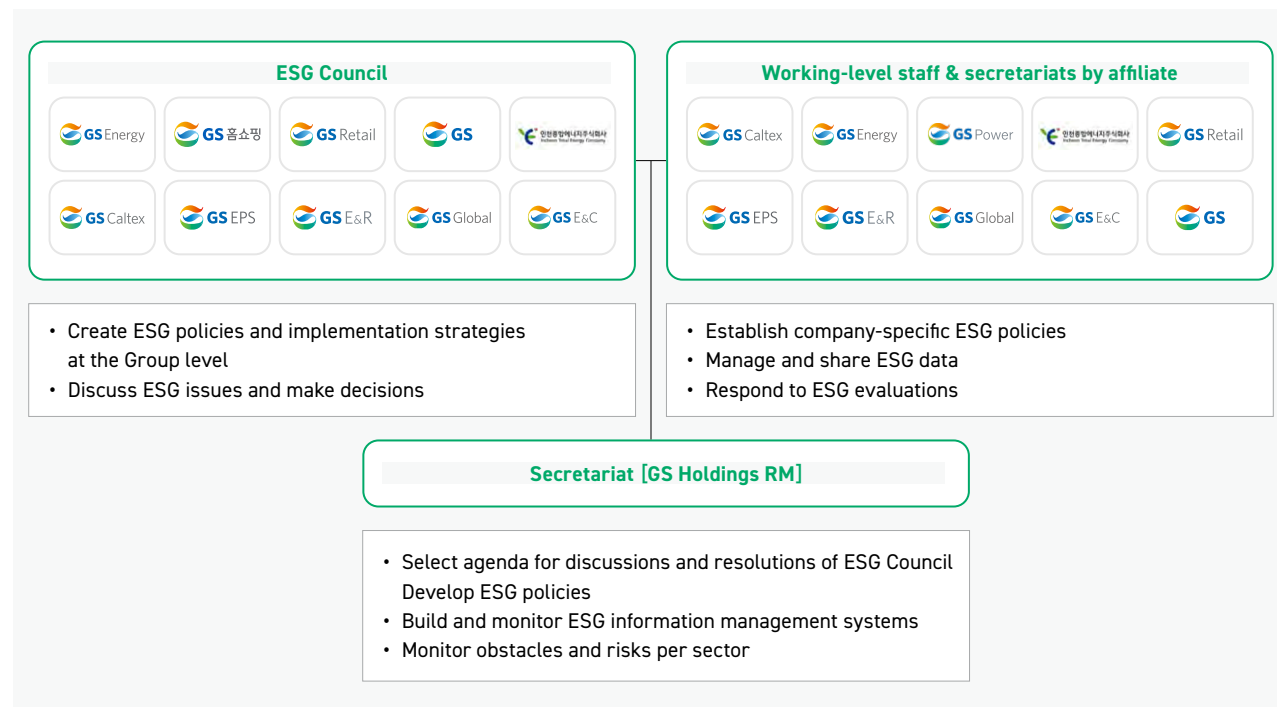


# ESG Management System

## ESG Council

In 2022, GS created the ESG Council by integrating the ESG and SHE subcommittees of the Environment Council, which had been operated by the Chief Green Officer (CGO) of each affiliate, to meet the growing demand for ESG management. As the highest decision-making body for ESG management, the ESG Council discusses wide range of ESG issues namely response to climate change, carbon emission management, energy saving, waste and pollutant reduction, SHE including serious disaster prevention, social contribution, mutual growth, and ESG management. In addition, we seek to strengthen partnerships between affiliates and create synergies in line with consistent stand by implementing ESG strategies and developing standard policies at the Group level.

### ESG Council's Organization Chart



### ESG Council Agenda 2022

Category	Description
1st	Share GS Holding's ESG strategic tasks <ul style="list-style-type: none"> <li>– Quick-Win tasks</li> <li>– Medium and long-term tasks</li> </ul>
	<b>Group's common policies</b> <ul style="list-style-type: none"> <li>– nvironmental management policy</li> <li>– Human Rights Charter</li> <li>– Suppliers Code of Conduct</li> <li>– Independence and Diversity Policy of Independent Directors</li> </ul>
	Discuss carbon neutrality implementation trend and our plan in response
2nd	Share carbon credits market and carbon neutral solutions
	Share the current carbon emissions and carbon neutral implementation plan of each company
3rd	<b>Introduce the trend of the Serious Accident Punishment Act and investigation status</b> <ul style="list-style-type: none"> <li>– The status of investigations related to the Serious Accident Punishment Act and its issues/cases</li> <li>– The trend of the Serious Accident Punishment Act and new enforcement ordinances</li> </ul>
	<b>Share precautions of each company against the Serious Accident Punishment Act</b> <ul style="list-style-type: none"> <li>– Safety and health management system status</li> <li>– Semiannual implementation inspection results and follow-up of each company</li> </ul>

## ESG Activities

To report the ESG management achievements of the holding company and its affiliates thoroughly, GS Holdings has responded to ESG evaluations and conducted communication activities. After strengthening ESG management, we received A for integrated ESG grade from KCGS and have been recognized as an exemplary group. On the other hand, to enhance the cooperation for ESG and show our support, GS Holdings continues various activities such as participating in external councils and supporting initiatives.

### ESG Evaluation Analysis

The Group's holding company, GS Holdings, listens to external stakeholders and manages external ESG evaluations to improve responsiveness to the rapidly changing global market. The Korean Institute of Corporate Governance and Sustainability(KCGS)'s evaluation showed steady improvement, and we have continuously achieved A for integrated ESG grade since 2021. GS Holdings is a pure holding company. Considering the fact that the evaluation of its subsidiaries is also reflected, these are the accomplishments achieved by all GS affiliates and the results of making changes under the "environment-friendly future growth" strategy. In addition, we also refer to MSCI ratings, which is the investment standard for global funds, and monitor the trend constantly.

GS E&C achieved the outstanding feat of receiving a Grand Prize at the Korea Green Construction Awards 2022. This Korea's most prestigious construction sector event, hosted by Seoul Shinmun and sponsored by the Ministry of Land, Infrastructure and Transport, selects and awards the construction companies that take the lead in environment protection and practice green technologies in the green construction industry. GS E&C's Environment-friendly Green Management in the ESG Era Project was awarded the Minister of Land, Infrastructure and Transport Grand Prize, and its green construction capabilities were recognized. GS E&C is actively responding to external ESG evaluations to enhance global competitiveness through qualitative growth resulting from environment-friendly management beyond quantitative growth. This effort resulted in the Green Construction Grand Prize and the A rating from KCGS for three consecutive years.

### ESG Communication Enhancement

The Hydrogen Council is a CEO council founded by private companies in recognition of the need for cooperation to revitalize the hydrogen economy and realize carbon neutrality. This Council holds regular meetings to discuss hydrogen-related technologies, policies, and joint tasks. It also holds the Investor Day for global investment institutions in the first half of each year to promote the investment relevant to hydrogen. GS Energy shared the status and vision of the ADNOC blue ammonia production project on Investor Day in 2022. It is an environment-friendly future energy produced by synthesizing hydrogen and nitrogen and has very low carbon emissions. GS participated in the project through equity participation and secured 200,000 tons of clean ammonia annually. We are actively discussing supply and infrastructure construction projects to create synergies with GS' other core assets and projects by introducing pure hydrogen and ammonia into Korea and supplying them stably to customers.

GS Retail pursues sustainable growth with its customers as a comprehensive online and offline distribution company. We are making efforts to practice environmental management and social responsibilities. As part of the efforts, GS Retail continues ESG-related activities through external initiatives and business agreements. The company has joined the UNGC and integrated the UNGC's ten principles in human rights, labor, environment, and anti-corruption into its business strategies and activities. In 2022, it also made the declaration against corruption with the UNGC. On the other hand, GS Retail joined the Korean Business and Biodiversity Initiative (BNBP) and signed a business agreement with the Polar Research Institute to perform biodiversity preservation activities. In addition, we signed an agreement with the Ministry of Environment on promoting green consumption and environmental education and carried out joint campaigns.



This is our **Communication on Progress** in implementing the Ten Principles of the **United Nations Global Compact** and supporting broader UN goals.

We welcome feedback on its contents.

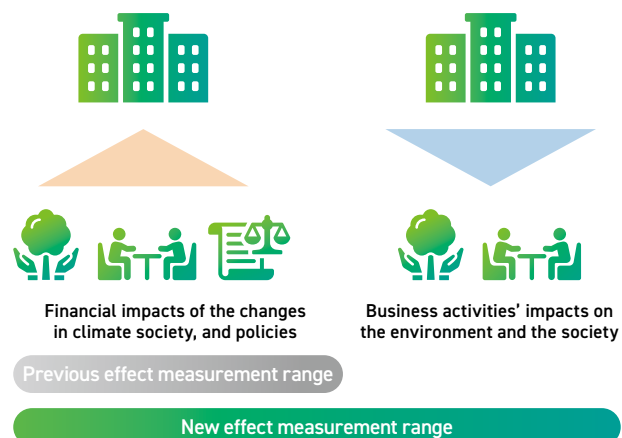


**BNBP** 기업과 생물다양성 플랫폼  
Biz N Biodiversity Platform

# Materiality Assessment

To set sustainable management goals and analyze the factors that have a significant impact on management, GS Holdings conducts an annual materiality assessment. The assessment was used to measure the financial effects of external factors on the company, but the latest assessment introduced the double materiality assessment to evaluate the impact of the corporate activities on the external environment and society.

## Double Materiality Assessment Range



## Double Materiality Assessment Procedure

Analyze issues and build an issue pool	Analyze effects and collect opinions		Select important issues
	Analyze financial effects	Analyze social & environmental effects	
<p><b>Analysis of sustainable management global initiatives and standards</b></p> <ul style="list-style-type: none"> <li>Select 59 issues considered important by the same industry and related industries based on GRI, KCGS, DJSI, TCFD, SASB, WEF, and MSCI</li> </ul> <p>- Analyze significant issues of the GS affiliates and previous year issues of GS Holdings and the GS affiliates</p>	<p><b>Internal stakeholder survey</b></p> <ul style="list-style-type: none"> <li>Collect opinions through surveys of internal stakeholders including employees</li> </ul> <p><b>Expert evaluation</b></p> <ul style="list-style-type: none"> <li>Select the issues considered to have a significant impact on GS Holdings' sustainable management among the issues selected by the initiative and standard analysis</li> </ul> <p><small>* Stakeholder survey period (March 9, 2023 – March 17, 2023)</small></p>	<p><b>External stakeholder survey</b></p> <ul style="list-style-type: none"> <li>Collect external stakeholders' opinions through surveys of customers, suppliers, local communities and NGOs, and academic &amp; research institutes</li> </ul> <p><b>Benchmarking</b></p> <ul style="list-style-type: none"> <li>Identify major issues selected by Korean companies in the same industry</li> </ul> <p><b>Media research</b></p> <ul style="list-style-type: none"> <li>Analyze the articles related to GS Holdings published in 2022</li> </ul>	<p><b>Core issue selection</b></p> <ul style="list-style-type: none"> <li>Identify the issues that may have a significant impact on GS Holdings considering discussions of internal people in charge of ESG and feedback from stakeholders</li> </ul>

Target	Communication channel	Collected opinion & issue	Feedback and result
Customer	Website, app, social network	Customer value creation and customer satisfaction Best products and services Customer information and interest protection	Hearing complaints and suggestions through social network channels and applications and improvements made accordingly
Supplier	Website	Transparent and fair trade Mutual trust and cooperation for mutual growth	Unfair and Corruption Monitoring
Employee	Groupware & workplace	Trust and respect Opportunities for growth and development Fair treatment and performance evaluation	Human rights management establishment and advancement Training and Open Innovation Fair performance evaluation system establishment

Target	Communication channel	Collected opinion & issue	Feedback and result
Shareholder & Investor	Shareholder meeting, management disclosure, other IR activities	Improving business value Efficient and transparent management Timely provision of management information	Identifying new green business areas for sustainable growth Report on business performance through disclosure
Government	Website, management disclosure, government agency meeting	Policy and legal compliance Distribution of economic value such as tax payment	Enactment of ethics regulations and operation of reporting channels Financial Supervisory Service, Fair Trade Commission announcement Communication activities between the government and related organizations
Local Community	Website press release	to community development Creating social values Minimize environmental impact	Social contribution activities such as donations Establishment and implementation of environmental management policies

# Materiality Assessment

Priority	Issue	Priority	Issue
1	Expanding the new environment-friendly business portfolio	19	Complying with product responsibility (managing qualities and stability)
2	Core manpower retention and development	20	Strengthening mutual growth policies and activities
3	Strengthening the governance transparency	21	Improving customer satisfaction
4	Managing and responding to climate change risks	22	Information security and personal data protection
5	Contributing to the development of local communities (promoting the local economy)	23	Waste management and circular economy
6	Energy management (saving energy and using renewable energy)	24	Supplying sustainable raw materials
7	Managing and reducing greenhouse gas emissions	25	Performing human rights abuse prevention activities related to operating projects
8	Integrated risk management	26	Strengthening digital innovation competence
9	Discovering new businesses and diversifying businesses	27	Strengthening sustainable management issue management by the board of directors
10	Spreading the safety culture in workplaces	28	Water resource management (use and reuse of water)
11	Prohibiting discrimination (gender, age, minority, race, etc.) and respecting diversity	29	Complying with environmental laws and responding to regulations
12	Strengthening employees' safety health management system	30	Protecting biodiversity around the workplaces
13	Reinforcing employees' welfare system	31	Managing tax risks of the domestic and overseas offices
14	Increasing economic income	32	Fair performance evaluation and reward
15	Strengthening the ethical management system and complying with rules	33	Strengthening handling and management of hazardous chemicals
16	Prohibiting unfair trades and performing antitrust and anti-corruption activities	34	Building a creative corporate culture
17	Selecting and evaluating suppliers fairly	35	Protecting shareholders' rights and expanding values
18	Establishing human rights management and policy	36	Complying with laws and regulations relevant to advertisement and marketing

Key issue	Issue impact		Response to key issue	UN SDGs	Reference
	Impact on business	Interest of stakeholder			
Expanding the new environment-friendly business portfolio	●●●●●○	●●●●●●●	GS aims to revamp the present business structure gravitating toward oil, gas, and power businesses and expand environment-friendly renewable business activities. We are diversifying power sources from fossil fuels to wind, solar, and biomass and increasing direct and indirect investment in green businesses such as climate tech, energy conversion and circular economy to diversify our business portfolio further.		p. 24-32
	●●●●●●●	●●●●●●●			
	●●●●●○	●●●●●●●			
	●●●●●○	●●●●●●●			
Core manpower retention and development	●●●●●●●	●●●●●●●	GS keeps and attracts the core workforce using the Open Innovation program to discover innovative solutions, various training programs to reinforce employees' competence, and work approach innovation for a non-authoritarian and horizontal organizational culture.		p. 45-47
Strengthening the governance transparency	●●●●●○	●●●●●●●	There are increasing demands from stakeholders for advanced governance for sustainable management. Our affiliates established the Corporate Governance Charter as the guide to building sound governance, pursuing fair and transparent business activities, and continuing to promote the rights and interests of all stakeholders, including shareholders, customers, and employees.		p. 64-69
Climate change risk management and response	●●●●●●●	●●●●●●●	GS develops products for resource recycling, invests in pollutant and energy use reductions, and invests in new green businesses to solve environmental challenges and make a better future. Also, our affiliates' CGOs meet at the Environment Council to discuss the status and improvement measures.		p. 33-37
Contributing to the development of local communities	●●●●●○	●●●●●○	Given increases in the demands for corporate social responsibility, GS performs various social responsibility activities such as education, scholarship, support of culture and art, and infrastructure construction.		p. 48-51

# 03



# Environmental

Expanding Green Business Ecosystem  
Response to Climate Change

024  
033

Environmental Management System  
Environmental Impact Management

038  
040

# Expanding Green Business Ecosystem\*





\* Corresponds to the 5 core issues identified through materiality assessment

Climate change is a global crisis faced by all people of this era. Not only the global society but also companies, governments, and civic groups are confronting this challenge and making their utmost efforts for a sustainable future. To participate in this effort, GS Holdings perform activities to reduce resources utilized for business and environmental impacts. Its affiliates are also expanding the environment-friendly business portfolio related to their major business sectors to participate in the effort actively.

## Future Direction of New Business

### New Business Investment Strategy

GS Group systematically composes its investment portfolio by selecting major investment subjects and creating an investment-specialized organization under GS Holdings for new capabilities and opportunities for sustainable growth and future businesses. Now, we are carrying out various environment-friendly new businesses related to four investment strategies: biotechnology, climate technology, enabling technology, and circular economy. In addition, the investment activities include venture and fund investment, value creation activities, partnerships, networking, and M&A. The investment subjects are GS Ventures, which focuses on technology companies in Korea, Israel, and Southeast Asia, GS Futures in Silicon Valley, which focuses on the North American and European markets, and GS holdings. We discover and invest in startups that lead future businesses through innovative technologies and make an effort to create new synergy with them.

Grow Sustainably				
Investment subject	GS	GS Ventures	gsfutures	
<b>Sector</b>	 <p><b>Bio</b></p> <ul style="list-style-type: none"> <li>• SynBio-Based Material</li> <li>• Therapeutics</li> <li>• Bio Manufacturing</li> </ul>	 <p><b>Climate Tech.</b></p> <ul style="list-style-type: none"> <li>• New Renewable</li> <li>• CCUS</li> <li>• EV/Battery</li> </ul>	 <p><b>Enabling Tech.</b></p> <ul style="list-style-type: none"> <li>• AI, IoT</li> <li>• Robotics/Drone</li> <li>• Blockchain</li> <li>• AR/VR</li> </ul>	 <p><b>Circular Economy</b></p> <ul style="list-style-type: none"> <li>• Battery Recycling</li> <li>• Plastic Recycling</li> </ul>
<b>Existing projects</b>	<p><b>GS Caltex</b> White biotechnology</p>	<p><b>GS Caltex</b> Hydrogen project</p> <p><b>GS Energy</b> New renewable energy</p> <p><b>GS Global</b> Electric car sales</p>	<p><b>GS Retail</b> AI-based distribution center automation</p> <p><b>GS Retail</b> Blockchain-based log management</p> <p><b>GS E&amp;C</b> ConTech</p>	<p><b>GS Caltex</b> Waste plastic recycling</p> <p><b>GS Energy</b> Waste battery recycling</p> <p><b>GS Global</b> Waste resource recycling</p>

### New Business Strategy Briefing Session

GS held a briefing session to share major affiliates' new business strategies under the theme of 'business environment change and GS' future growth.' The executives responsible for new businesses gathered together in the new business strategy briefing session in 2022 to share each affiliate's new business strategies, their implementation, and the current status of M&A, partnership, and venture capital. The first briefing session was held exclusively on new businesses, unlike previous ones covered only business strategies and performances. In particular, this briefing covered the new business sectors GS has selected, including biotechnology, circular economy, energy transition, the technologies and business models of the companies it has invested in, and cooperation opportunities with GS. This session further clarifies GS' commitment to future growth.



# Expanding Green Business Ecosystem\*

\* Corresponds to the 5 core issues identified through materiality assessment

## Future Direction of New Business

### Investment in New Green Business

#### Environmental Sustainability



#### GS Ventures

#### gsfutures

##### #Case reco

Reco is a company that provides waste management solutions with a mission of minimizing resource waste while maximizing the lifespan of resources with data and logistics innovation. The company provides total solutions including waste discharge and transportation, emissions, and fare and carbon emission management. Like this, Reco contributes to reducing social costs and greenhouse gas emissions for customers.

##### #Case AETECH

AETECH develops technologies for the environment using advanced IT technologies and pursues environmental circulation beyond resource circulation. The company not only selects and collects resources but also establishes a procedure for resource circulation to create a cycle where resources are converted into something necessary in daily life. GS invests in companies that produce and sell deep-learning AI robots that automate the sorting process in recycling. At the same time, it supports enabling technologies that reduce human intervention and increase work efficiency.

##### #Case Heirloom

GS Futures introduced Heirloom, a carbon capture solution provider. Heirloom has the technology to capture carbon from the air using limestone, one of the most abundant and inexpensive minerals on the planet, and it also operates the only direct air capture facility in America. Based on the investment in Heirloom's low-cost modular carbon capture technology, AiFi's AI-based logistics automation technology, and Boston Materials, which produces Z-axis-oriented fiber based on synthetic biology, GS Futures is trying to achieve GS' environmental sustainability.



# Expanding Green Business Ecosystem\*

\* Corresponds to the 5 core issues identified through materiality assessment

## Future Direction of New Business

### The GS Challenge

The GS Challenge is an open innovation and accelerating program that aims to discover and promote innovative startups. It is hosted by GS Holdings in cooperation with the tech-edge startup accelerator, Bluepoint Partners, and participated by the GS Group's affiliates. After the first and second programs for biotechnology and energy technology startups, the third GS Challenge was held this year for the startups that provide environment-friendly mobility solutions. Selected startups are supported by the accelerating program operated for five months. They can take advantage of Bluepoint's Product Market Fit (PMF) curriculum and the Proof of Concept (PoC) of energy industry specialists and the GS Energy affiliates.

#### Benefit

Accelerating	Mentoring	GS Energy Infra	
PMF (Product Market Fit) training program with experts in each sector	Dedicated mentoring support considering each team's characteristic	Hypothesis validation and prototype production Providing energy infrastructure testbeds	
Startup Camp	Experts from GS Energy affiliates	Lab Scale Facility	Bench Scale Facility
Group Session	Analysts from BluePoint	GS Power	GS 커넥트
Office Hour		한국에너지기술연구원	한대교
		보령에너지타워	애움
Network	Funding	Public Relation	
Networking with GS Energy and its affiliates	Opportunity of the investment from GS Energy and BluePoint during the accelerating program	Media advertisement	

#### #Case SCALAR

GS has invested KRW 3 billion in Scalar Data, a data company that operates an electric vehicle charging infrastructure platform, Charging for All. Scalar Data is one of three companies selected out of 55 that applied for the 3rd GS Challenge Future Energy. Considering the difficulties customers face while using electric vehicle charging stations, it provides customer-oriented charging solutions through data analysis. We are currently discussing additional investment in anticipation of synergy with the charging business, which is expected to be the future growth engine of GS Group.



#### #Case ECO RnS

ECO RnS was selected for the 2nd GS Challenge program, which recycles waste batteries in an environment-friendly way. It has the technology to recycle waste batteries without discharging pollutants by recycling organic metals such as lithium from waste Li-ion batteries with a dry method. GS believes these core competencies would create synergy with GS' battery circulation ecosystem and its CCU business in cooperation with GS power plants in the future, so we invested KRW 1.2 billion in the company.



# Expanding Green Business Ecosystem\*

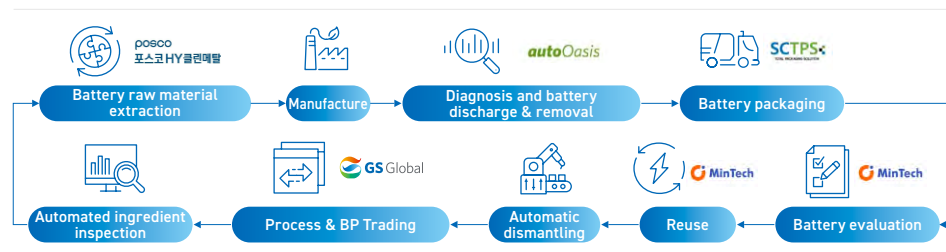
\* Corresponds to the 5 core issues identified through materiality assessment

## Major Green Business

### [GS Energy] Smart Power Solution and Circulation Resource Ecosystem

In the mobility industry, GS Energy discovered the possibility of the charging infrastructure business, which is essential for the electric vehicle (EV) ecosystem, and founded GS connect, set up with Gntell in August 2021. Through the acquisition of ChargEV last November, we secured an unrivaled market share by operating 36,590 chargers in Korea and plan to consolidate the market dominance by expanding EV charging infrastructure in apartment houses and office buildings in the future. GS Energy is also seeking business opportunities in the recycling of electric vehicle batteries. We are discussing the battery recycling business in connection with the electric vehicle battery service (BaaS), which extracts lithium, nickel, cobalt, and manganese and supplies them back as cathode materials. GS Energy has invested in Eco RnS, which has the dry lithium recovery technology, and EVCC, which has the black powder (BP) production capacity and a waste battery material network. In December 2022, we also founded a joint venture, POSCO-GS Eco Materials, to create a closed loop of the battery recycling business. In addition, we have participated in developing small modular reactors (SMR) and invested in NuScale Power, which has cutting-edge SMR technology, to secure exclusive business rights in Korea.

### [GS Energy] Battery Circulation Ecosystem



### [GS Power] Lower Carbon Power Generation

GS Power pursues sustainable development by overcoming the climate crisis and performing environment-friendly management to meet the recent new renewable energy expansion policy. Specifically, we are actively doing various new renewable businesses such as solar power generation, fuel cell power generation, small hydro and wind power generation, and energy storage systems (ESS). GS Power's Anyang CHP Plant has an ESS of 500kWh(PCS)/1,000kWh(Battery) to manage power demand during peak hours. In addition, the Bucheon CHP Plant operates a facility capacity of 500kWh(PCS)/2,500kWh(Battery), while the Cheonbook Wind Power's ESS operates 1,000kWh(PCS)/3,000kWh(Battery) for its facilities in connection with a wind power plant. On the other hand, the Anyang and Bucheon CHP Plants have fuel cells of 4.8MW and 10.5MW, respectively, which use a high-efficiency and environment-friendly generation system that converts the chemical energy of hydrogen and oxygen into electrical energy through an electrochemical reaction. These fuel cells generate energy without fuel combustion, so they rarely generate environmental pollutants (NOx, SOx) and noise, unlike conventional internal combustion engines. GS Power spares no effort to increase the penetration rate of new renewable energy in Korea by supplying solar power-generated and small hydro- and wind power-generated electricity.

### [GS Power] New Renewable Energy Business in 2022

Power generation source	Location	Performance
Solar	Gongju Wolmi, Jinju Jeongchon, Sinwon, Siheung, Byeongjeom	Total power generation of 6,885 MW Total production of 9,657 REC
Fuel cell	Anyang, Bucheon	Total power generation of 103,882 MW Total production of 207,765 REC
ESS	Anyang, Bucheon	KRW 128 million saved

## Expanding Green Business Ecosystem\*

\* Corresponds to the 5 core issues identified through materiality assessment

### Major Green Business

#### [GS EPS] Lower Carbon Power Generation

After the Paris Agreement, GS EPS is working on new businesses that can utilize its core competencies to actively respond to climate change by raising the greenhouse gas reduction target, working towards net zero emissions, and participating in the government's new renewable energy expansion policy. Now, renewable energy generation, including biomass energy, is operated in Dangjin, Chungcheongnam-do, and the fuel conversion is reviewed for the currently operating LNG combined thermal power plant. In addition, we signed agreements with local governments for greenhouse gas reduction and hydrogen economy vitalization. Like this, we are discovering and promoting new businesses to become a sustainable company.

#### [GS EPS] Biomass Power Plant



#### [GS E&R] Wind and Solar Power Generation

GS Windpower, GS E&R's subsidiary, has a wind power station of 84MW and a station of 42MW under construction in Yeongyang-gun, Gyeongsangbuk-do. It also has the world's largest wind power-linked ESS facility with a capacity of about 74.4MWh. In addition, an 80MW-sized power station will be constructed in Yeongduk-gun, and multiple development projects are undergoing in Gyeongsangbuk-do and Jeonlabuk-do. In particular, we recently obtained a patent for advanced wind power generation prediction technology using AI and digital technologies to utilize wind resources in Korea efficiently. In the case of solar power generation, GS Donghae Electric Power, a subsidiary of GS E&R, has a solar power station with a total capacity of 18.1MW in Gyeonggi-do, Gangwon-do, and Jeonlanam-do and works on many development projects in Korea. GS E&R will continue accelerating the development of renewable energy businesses to produce economic and environment-friendly energy and become Korea's largest renewable energy power company.

#### [GS Yeongyang Windpower] Power Generator and [GS Donghae Electric Power] Solar Farm



## Expanding Green Business Ecosystem\*

\* Corresponds to the 5 core issues identified through materiality assessment

### Major Green Business

#### [GS Caltex] Hydrogen Business

GS Caltex is actively promoting the hydrogen production and supply business to commercialize high-efficient clean hydrogen energy. To lead the hydrogen mobility market in Korea, we work on a hydrogen charging station construction project nationwide, such as the hydrogen charging convergence energy station jointly built with Hyundai Motor Company. In addition, based on the business agreement for liquefied hydrogen production and supply with Korea Gas Corporation, the establishment of liquefied hydrogen plant and liquefied hydrogen charging station utilizing vaporization processes is underway. Also, we carry out the CCUS business, which converts previously used byproduct hydrogen into clean and economical blue hydrogen, and perform activities as a member of Korea H2 Business Summit, a hydrogen company council. GS Caltex will strive to vitalize the hydrogen economy and low-carbon circular economy.







#### [GS Caltex] Waste Plastic Recycling

To solve the waste resource problem, GS Caltex expands the waste plastic recycling business and establishes a circular economy to create sustainable values. Plastic recycling is divided into mechanical, chemical, and thermal recycling, depending on the treatment method. GS Caltex implemented the mechanical and chemical recycling methods. To expand the mechanical recycling (MR) business, we decided to invest in Eco G&R's processing facilities, a plastic recycling company. As a result, GS Caltex acquired the Global Recycled Standard (GRS) for recycled composite resin products for the first time among Korean oil companies. GRS is particularly credible among environment-friendly certification systems and is used to prove whether recycled raw materials are used for products. In addition, we are developing a waste plastic pyrolysis oil business using CR technology. In December 2021, we conducted a demonstration project to use waste plastic pyrolysis oil of 50 tons for the first upgrading complex in Korea. With the goal of operating in 2025, we are building a waste plastic pyrolysis oil plant with an annual capacity of 50,000 tons and plan to expand it to 1 million tons in the future.

#### [GS Caltex] White Biotechnology

GS Caltex's white biotechnology business can contribute to reducing dependence on fossil fuels and carbon emissions by producing biochemicals and materials from biomass. GS Caltex developed the microbial and biotechnology processing technology capable of the mass production of 2,3-butanediol and started its production in the world's first demonstration plant. In March 2020, we launched GreenDiol, Diol's brand for raw materials for cosmetics, which products are now supplied to Korean and overseas famous cosmetic companies. After signing a joint development agreement for the production technology of 3-HP (3-Hydroxypropionic) with LG Chem, we also plan to build a demonstration plant to verify 3-HP mass production technology by the end of 2023. 3-HP is one of 12 major platform chemicals selected by the United States Department of Energy. This environment-friendly material can be converted into major products such as acrylic acid, acrylonitrile, and poly lactate hydrate (PLH).

#### Certification and awards related to 2,3-butanediol

	Organic cosmetics certification system		Official certification granted by Vegan Korea
	Unites States Department of Agriculture's eco-friendly product certification system		Awards given by Ministry of Science and ICT

## Expanding Green Business Ecosystem\*

\* Corresponds to the 5 core issues identified through materiality assessment

### Major Green Business

#### [GS Global] E-mobility

As global climate change becomes more severe and the transportation paradigm rapidly changes, GS Global discovered a new sustainable e-mobility business utilizing its overseas network and PDI business know-how. As a Korean importer of BYD, GS Global is in charge of importing and selling electric vehicles. Related to this, we are discovering and discussing various future growth engines, such as making electric port equipment and developing e-bikes in cooperation with Daedong. About 200 electric buses were purchased by bus transportation companies and public institutions, and you can find most of them on the roads in metropolitan areas. T4K developed in collaboration with BYD attained the 1-ton electric truck certification for the first time in Korea in early 2023. We will expand the sales area beyond the metropolitan area and cooperate with manufacturers to develop wide-area buses, limousine buses, and school buses to participate in the transition to electric buses.

#### [GS Global] e-mobility products



#### [GS Global] Solar Power Generation Equipment

GS Global found that the transition to new renewable energy is inevitable in line with severe environmental pollution caused by carbon energy sources and strengthening environmental regulations, so it discovered solar power generation as its new business. In partnership with top global solar equipment manufacturers, we create and supply packages of high-output solar modules, inverters, and structures to Korea and foreign countries. GS Global is actively discussing strategies to source equipment and materials not only from Korea but also from foreign countries including China. We expand the size every year through the supply of equipment and materials and aim to secure future growth engines by building pipelines with excellent manufacturers considering new technology trends.

#### [GS Global] Solar Inverter



#### [GS Global] Resource Recycling

Considering the connection with the existing e-mobility and biofuel projects, GS Global selected resource recycling as a sustainable business item. Now, we supply the BP (black powder) and rare metal extracted from waste batteries and CR/MR PET sourced from waste plastic. We source BP from secondary battery processing companies in Europe, America, and Asia. After the first supply of 3-ton CR-PET recycled from waste plastic, its sales continuously increased. GS Global is discussing purchasing manufacturing scraps with a battery manufacturer to manufacture BP in cooperation with a Korean processing company invested by GS. In addition, we are making efforts to become competitive and stable by purchasing recall batteries from global automakers through PLS's PDI services. Regarding waste plastics, we are discussing plans to expand the volume by continuously proposing CR-PET offers to global beverage manufacturers utilizing our overseas network.

## Expanding Green Business Ecosystem\*

\* Corresponds to the 5 core issues identified through materiality assessment

### Major Green Business

#### [GS E&C] Environment-friendly Technology Business

GS E&C is expanding the environment-friendly technology business, such as new renewable energy development, waste treatment, and water treatment facility, to respond to a growing new renewable business worldwide proactively. We run the new renewable energy generation business, including the operation of a solar farm with a capacity of 24MW in Ukraine as the first Korean company. As for the waste treatment business, in particular, we successfully operated the Jeju Environmental Resources Recycling Center based on the nation's best technological capabilities. Moreover, GS E&C has expanded the water treatment facility business, such as the construction of industrial waterworks in Daesan Coastal Industrial Zone, which is expected to be built by August 2024. Based on this experience and know-how, we plan to expand the environment-friendly technology business continuously.



Solar farm in Ukraine

SWRO Construction in  
Daesan Imhae Industrial Park

Eumseong GPC roof-type  
solar farm

Jeju Environmental  
Resources Recycling Center

#### [GS E&C] Modular Biogas Facility

The modularization of the GS biogas facility is in the empirical research stage. The key facility is modularized to produce and manage biogas most efficiently for various organic waste resources such as food waste, sludge, night soil, agricultural and fishery waste, livestock processing waste, and food processing waste. The GS biogas modules are developing systems to provide demand-tailored energy differentiated from the previous biogas technology. The site selection and the key module engineering are in progress to apply them to the integrated waste and water treatment area. The Korean government has set the biogas facility supply project's GHG reduction target as 1.5 million tCO<sub>2</sub>e by 2030. We expect the modularization would contribute to achieving the target after the empirical research.

#### [GS E&C] Construction Site Water Reduction Technology

GS E&C researched the reuse of groundwater in the construction site and found that the wastewater can be reused to remove fine dust. Assuming that 60 m<sup>3</sup>/day is required per site, greenhouse gases of 4.8 tCO<sub>2</sub>-eq can be reduced, and about 400 tCO<sub>2</sub>-eq can be reduced every year if applied to all sites. Moreover, Seoul has cut water bills by up to 50% since January 1, 2022, for those who use groundwater runoff, so we can save the site operation costs if the technology is applied to the Seoul site. This technology was applied to the construction sites of Northern Suwon Xi Rexvia, Icheon Xi The Park, and Incheon Subway Line 1 extension last year. This year, its application will be expanded to Wirye A2-7 Block Apartment and Yeosu Station Xi Heritage.

#### [GS E&C] Environment-friendly Seawater Desalination

GS E&C designated the project of the Ministry of Land, Infrastructure and Transport, the Development of Seawater Desalination Plant Energy Recovery Technology Using PRO, as a new construction technology, which will be applied to Singapore where the proportion of the use of seawater desalination is high. To this end, we are currently conducting international joint research with Singapore's National Water Agency, PUB, on how to recover energy from seawater desalination and water reuse plants. Thanks to this technology, the energy recovery rate from salinity difference is expected to increase by about 0.5kWh/m<sup>3</sup> and reduce the operation costs by 10%. For this research, we have installed and operated a pilot plant with a size of 240m<sup>3</sup>/d in CWR (Changi Water Reclamation Plant) in Singapore.

## Expanding Green Business Ecosystem\*

\* Corresponds to the 5 core issues identified through materiality assessment

### Major Green Business

#### [GS Retail] Certification-based Sustainable Product Management

As resource depletion and environmental pollution intensify on the planet, social demands for sustainable products are rapidly increasing. To minimize environmental pollution throughout the entire process, including production and distribution, GS Retail defines a sustainable product as its product whose properties or packaging satisfies the sustainability standard and has obtained third-party certification. We systematically manage the products with the eco-certification product management system by classifying them by their types and applying reputable eco-certification in Korea and foreign countries with top priority.

#### Certification-based Environment-friendly Product Management System

Category	Certification	
Product	Ministry of Agriculture and Food	Organic, pesticide-free, and antibiotic-free certifications, etc.
	Ministry of Environment	Green certification, eco label, low-carbon certification, etc.
	Ministry of Maritime Affairs and Fisheries	Marine organic, processed organic, and antibiotic-free certifications, etc.
	Overseas	FSC, MSA, ASC, and EU Ecolabel, etc.
Package	Eco label, Green certification, and low-carbon product certification, etc.	

#### [GS Retail] EV Charging Station

As the demand for environment-friendly vehicles increases, the importance of EV charging station expansion is also growing. GS Retail has contributed to the construction of charging stations by installing and operating EV charging stations in supermarkets and convenience stores in various regions in Gangwon and Jeju. As of 2022, we have EV charging stations in 55 places. GS Retail plans to continue expanding EV charging stations by building rapid and slow charging stations.

#### [GS Retail] Battery Swapping Station

Using its nationwide network, GS Retail provides battery swapping stations to enable electric bike users to change batteries easily. In 2022, we conducted a pilot test by installing a battery swapping station (BSS\*) in GS25 Yeoksam Hongin branch. GS Retail plans to expand the number of battery swapping stations to make up for electric bikes' disadvantages of long battery charging time and contribute to the delivery culture innovation and the clean air environment.

\* Battery Swapping Station



# Response to Climate Change\*

\* Corresponds to the 5 core issues identified through materiality assessment

GS performs various activities such as impact management through the strategies to realize carbon neutrality and the establishment of climate change indicators to respond to climate change problems actively. We respond to climate change by focusing on reducing environmental impacts and replacing the factors causing environmental impacts. We will introduce cleaner and more effective response activities through additional developments and discussions.

## Carbon Neutrality Strategy

### [GS Energy] Carbon Neutrality Strategy Direction

As an energy company, GS Energy is actively acting to implement carbon neutrality with responsibility. Based on the BEYOND strategy framework, we are discussing the advancement of six new business models of new renewable, hydrogen, SMR, VPP, EV charging, and battery recycling and their implementation plan. It is promoted in line with the four goals of creating a green development portfolio, leading the shift to clean hydrogen economy infrastructures, leading the smart power solution market, and establishing a circulation resource ecosystem. We actively work on the business in practical ways, such as participating in the development through equity investment, building infrastructures, and business agreements.

### [GS Energy] Beyond Strategy



### [GS Caltex] Approach to Carbon Neutrality

GS Caltex is reducing direct and indirect greenhouse gas emissions (Scope 1, 2) in the sites based on the low-carbon energy transition, such as making the production process efficient to reduce carbon emissions, which make a direct impact on climate change. We plan to reduce carbon more actively by expanding the management target to other indirect greenhouse gas emissions (Scope 3). Carbon neutrality is divided into reduction, replacement, and offset areas, and we are preparing approach methods and implementation strategies for each of them. In particular, we consider the analysis of the impact of carbon emissions per production process, discovering greenhouse reduction methods, reduction goal and its management, and quantifying the carbon reduction effect of new low-carbon businesses.

### [GS Caltex] Carbon Neutrality Strategy System

Reduction Energy efficiency improvement, CCUS <sup>1)</sup>	Replacement Renewable energy, Low carbon steam	Offset SDM <sup>2)</sup> , VCM <sup>3)</sup>
Directly reduce CO generated in the process through energy efficiency improvement or technology introduction in the sites	The existing electricity is replaced with new renewable energy such as solar power, wind power, and biomass energy, or the purchased steam is converted into a low-carbon source	GHG emissions are offset by offset credits obtained through environment-friendly activities outside the sites or overseas carbon reduction projects

### [GS EPS] Carbon Emissions Reduction Activity

GS EPS performs various activities for carbon reduction in response to the demands of global investment institutions and government agencies for carbon neutrality and integrated business strategies. In addition to increasing the environment-friendly portion of the business portfolio by running the new renewable energy business, such as biomass power generation, the fuel conversion mixing hydrogen with the fuel in the LNG combined cycle power plant is under review. We will pursue more diverse and broader activities to reduce direct and indirect greenhouse gas emissions generated by our management activities.

### [GS EPS] Carbon Reduction Activity

Category	Major carbon reduction activity	
Scope 1	Energy efficiency improvement	Improve efficiency through the improvement of facility and operation and DX
	Process fuel conversion	Hydrogen-fueled gas turbine - Review hydrogen co-firing through turbine remodeling
	Carbon reduction technology introduction	Review the application of CCUS
	Hydrogen complete combustion	Review transitioning to hydrogen enriched combustion or hydrogen complete combustion at the end of life of a LNG combined cycle power plant
Scope 2	Use new & renewable energy	Actively discover new & renewable energy

1) Carbon Capture-Utilization-Storage  
2) Sustainable Development Mechanism  
3) Voluntary Carbon Market

# Response to Climate Change\*

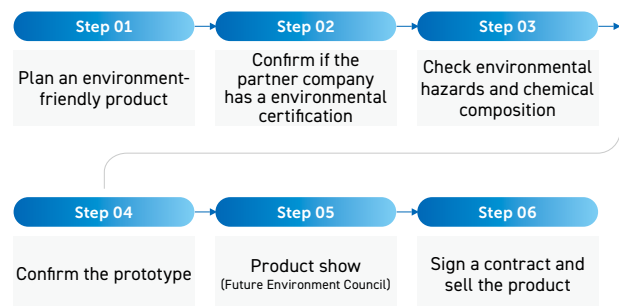
\* Corresponds to the 5 core issues identified through materiality assessment

## Climate Change Response Strategy

### [GS Retail] Green Product

GS Retail makes an effort to save resources, reduce environmental pollution and promote green consumption that does not have an impact on human bodies. We define a sustainable product depending on whether the product obtains a third-party certification based on the external sustainable standard of product characteristics and package. The environment-friendly certifications recognized by relevant laws are prioritized. We use authoritative overseas certifications as well as Eco-Label and carbon footprint certifications, which are Korea's representative environment-friendly certifications, as a standard of sustainable products. Also, we signed a business agreement with the Ministry of Environment to conduct the annual green consumption promotion campaign.

### Sustainable Product Development Process



### [GS Retail] Green Store

GS Retail operates the Green Store, an environment-friendly store, to reduce its stores' environmental impact. After its first store opened in 2021, 27 stores are operating as the Ministry of Environment-certified green stores. In addition, we installed SEMS (smart energy management system) in 12,218 stores to manage energy efficiently. Some green stores obtained environment-friendly building certifications to consider the environmental impact caused by their operation.

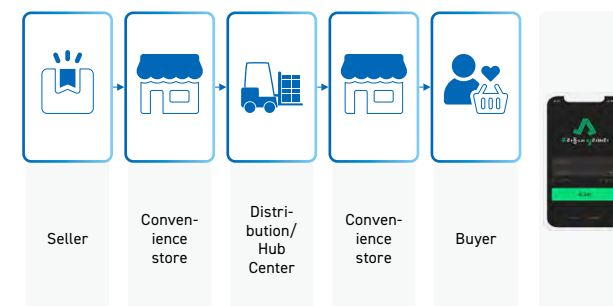
### Three Themes of Environment-friendly Stores



### [GS Retail] Green ValueChain

GS Retail promotes its customers' environment-friendly lifestyle by providing various services to reduce carbon emissions in the value chain. We tried to reduce vehicle operation through the Half-price Shipping service, which secures loading facilities by utilizing empty vehicles after delivery and simplifying the delivery process. The delivery efficiency also has been improved. We suggest the optimal route by foot or bicycle and operate the My Village Delivery service, which provides the delivery service for other companies' products.

### Process of Half-price Shipping



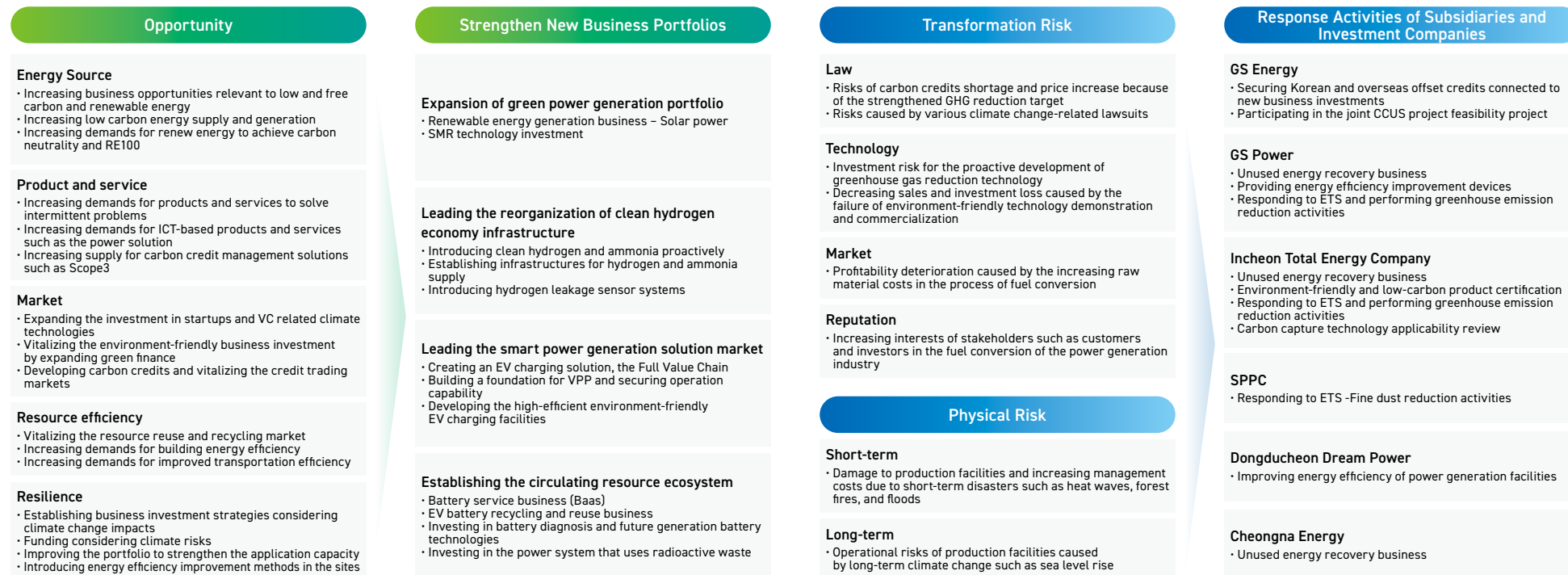
# Response to Climate Change\*

\* Corresponds to the 5 core issues identified through materiality assessment

## Climate Change Risk and Opportunity

### [GS Energy] Climate Change Risk and Opportunity Analysis

GS Energy recognizes the close connection between the power generation and energy business and climate change and analyzes its opportunity and risk factors. In particular, we seek to pioneer a new market in preparation for the carbon-neutral era in 2050 in four key areas: green development portfolio, clean hydrogen economy infrastructure, smart power solution, and circulating resource ecosystem. In addition, our major subsidiaries, GS Power and Incheon Total Energy Company, are actively responding to the risks related to climate change by recovering unused energy, distributing energy efficiency improvement devices, reviewing the introduction of CCUS technology, and reducing greenhouse gas emissions.



# Response to Climate Change\*

\* Corresponds to the 5 core issues identified through materiality assessment

## Climate Change Risk and Opportunity

### [GS E&C] Climate Change Scenario Analysis

GS E&C analyzes the climate change risks and opportunities in the sites, upstream, downstream, and new business areas by dividing the climate change risks into transition risks and physical risks and the opportunities into resource efficiency, product and services, energy mix, and the market. We consider an analysis based on RCP 6.0, IEA 2DS (2°C Scenario), and NDC (Nationally Determined Contribution) scenarios appropriate for the industry system, so a scenario analysis was conducted based on these. According to this, we analyzed the short-, medium-, and long-term risks and opportunities and established and implemented action plans. In addition, we are analyzing the scenario based on the IEA NetZero by 2050, equivalent to limiting global warming to 1.5°C. The following climate change strategies will be disclosed according to the results.

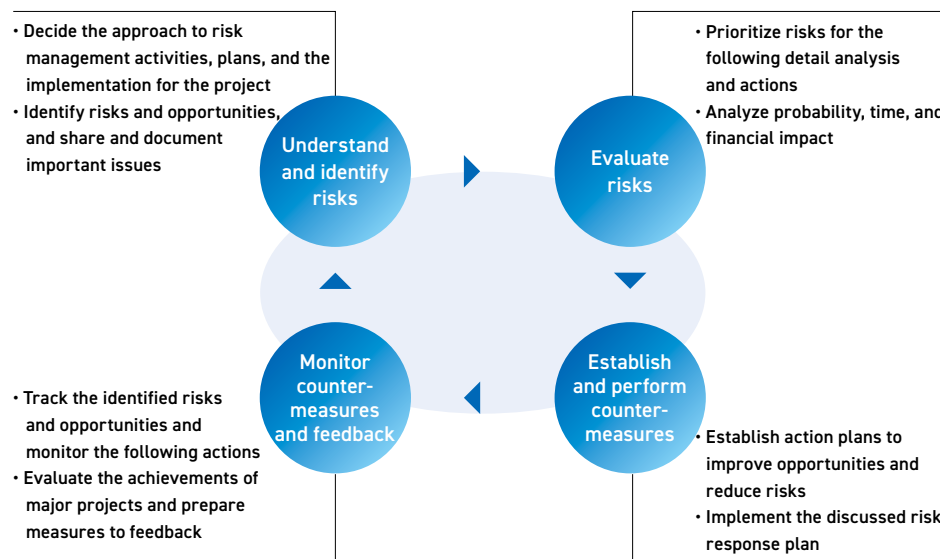
### [GS E&C] Climate Change Risk and Opportunity Analysis

Category	Sym- bol	Type	Risk & opportunity factor	Financial impact (million won)	Response
Physical risk	P1	Suddenness	Reduced production capacity on site due to typhoon	8,039	- Installing and operating the climate monitoring system on site - Conducting a quarterly typhoon mock drill by site - Including construction delay provisions for abnormal weather in contracts
Transition Risk	T1	Policy	Increasing costs to comply with the stronger carbon emission regulations	1,149	- Planning the establishment of carbon neutrality and climate change response strategies - Expanding the new and renewable energy investment portfolio and the technology investment in environmental R&D - Strengthening strategies to respond to the emissions trading scheme and monitoring activities
	T2	Law	Increasing costs due to the increasing raw material costs	72,381	- Monitoring the raw material market and diversifying supply channels - Strengthening housing businesses to manage debt ratio
Climate change risk response cost				<b>81,569</b>	
Opportunity	01	Resource efficiency	Increasing sales thanks to business expansion such as waste recycling	6,400	- Seeking businesses related to waste resource recycling, such as a biogasification facility, a waste sorting facility, and an emulsification facility
	02	Energy source (energy MIX)	Stronger competitiveness and increasing sales thanks to the growing new and renewable energy business	100,769	- Investing in developments related to new and renewable energy and monitoring policies - Expanding new and renewable energy development businesses utilizing farmland and building roofs
	03	Market	Increasing sales by launching the new and renewable energy businesses in emerging countries	244,696	- Entering emerging countries considering business expansion and profitability - Making the operation stable and localized by finding business partners
	04		Increasing sales thanks to the bigger value chain of the new environment-friendly business		- Developing low-carbon technologies such as clean hydrogen-based hydrogen power generation and seeking commercialization opportunities - R&D and business development to start the hydrogen fuel cell business and expand the new business model into the value chain across the hydrogen and ammonia industry
Climate change's opportunity-creating effect				<b>351,865</b>	

### [GS E&C] Risk Management Process

The risk management of GS E&C is divided into business risk management and management environment risk management. Climate change is an important risk that applies to both management areas. Each Business Support, Business Division RM Organization, and Green Environment Team are conducting climate change risk management at the company level. GS E&C follows the risk management procedure and the risk process cycle of identification, evaluation, response, and monitoring. The monitoring result is regularly reported to the CEO, while material risks are reported to the ESG Committee to review their financial and non-financial impacts.

### [GS E&C] Risk Management Process



## Response to Climate Change\*

\* Corresponds to the 5 core issues identified through materiality assessment

### Climate Change Index Management

#### [GS Energy] Energy Consumption and GHG Emissions

According to the law, GS Energy has participated in the emissions trading system and complied with its reduction obligations. Its greenhouse gas emissions and energy consumption are annually verified by external organizations and submitted to the government. We also conduct the emissions plan advancement project every year to increase the accuracy of emissions measurement. In addition, we continuously monitor the status through the application and advancement of the BM value in the emissions trading scheme. Based on these efforts, we not only maximize profits by selling a surplus of emission allowances but also purchase them in preparation for the increasing supply to respond to the ETS efficiently.

#### [GS Energy] GHG Emissions and Energy Consumption

Category	Unit	GS Power			Incheon Total Energy Company		
		2020	2021	2022	2020	2021	2022
GHG emissions		1,953,049	2,198,430	2,987,955	323,596	382,327	373,840
Direct emissions (Scope1)	tCO <sub>2</sub> eq	1,931,348	2,174,034	2,967,293	319,988	379,251	370,696
Indirect emissions (Scope2)		21,704	24,403	20,662	3,608	3,076	3,145
Category	Unit	GS Power			Incheon Total Energy Company		
		2020	2021	2022	2020	2021	2022
Energy consumption		37,296	42,045	58,360	6,414	7,578	7,496
Fuel energy consumption		36,852	41,536	57,821	6,340	7,513	7,344
Electric energy consumption	TJ	444	509	405	74	64	65
Steam energy consumption		-	-	135	-	-	86

#### [GS Caltex] Derivation of MACC

GS Caltex derived the marginal abatement cost curve (MACC) to set GHG reduction strategies and secure execution power. The MACC schematizes all GHG reduction opportunities, and this graph is used to analyze the financial impact and the relationship between raw materials, energy, and carbon prices. As a result, it is utilized to play data base role in the GHG reduction business and support making decisions. GS Caltex's MACC reflects not only the energy efficiency business but also various reduction businesses, such as securing new and renewable energy and CCUS. Relevant departments understand and inspect technologies and business conditions for these GHG-reduction businesses. They can also understand the impact of external market changes, such as energy price changing, on businesses with regular management.

#### [GS Caltex] GHG Emissions and Energy Consumption

Category	Unit	2020	2021	2022
GHG emissions		7,788,771	8,456,158	9,057,099
Direct emissions (Scope1)	tCO <sub>2</sub> eq	6,100,541	6,545,310	7,151,506
Indirect emissions (Scope2)		1,688,245	1,910,848	1,905,607
Category	Unit	2020	2021	2022
Energy consumption		101,519	116,029	126,241
Fuel energy consumption		67,857	77,537	86,896
Electric energy consumption	TJ	25,089	27,750	30,459
Steam energy consumption		8,583	10,757	8,897

#### [GS Retail] SEMS

GS Retail operates the Smart Store Energy Management System, SEMS. SEMS manages electrical equipment and devices using IoT technology, and the power consumption can be easily and conveniently managed using the main server and a smartphone. It has a function that analyzes each store's energy consumption and suggests the optimal consumption. With this support, each store can efficiently implement environmental management. In 2022, we strengthened the remote operation function to recognize a problem and take action proactively, which notifies the abnormal temperature using a temperature sensor. As of the end of December, the SEMS is installed and managed in 12,218 stores, and its introduction will be expanded continuously.

#### [GS Retail] GHG Emissions and Energy Consumption

Category	Unit	2020	2021	2022
GHG emissions		560,698	579,256	585,608
Direct emissions (Scope1)		867	1,482	3,429
Indirect emissions (Scope2)	tCO <sub>2</sub> eq	60,757	63,499	68,296
Indirect emissions(Scope3)		499,074	514,275	513,883
Category	Unit	2020	2021	2022
Energy consumption		1,286	1,355	1,466
Fuel energy consumption	TJ	17	28	39
Electric energy consumption		1,270	1,327	1,427

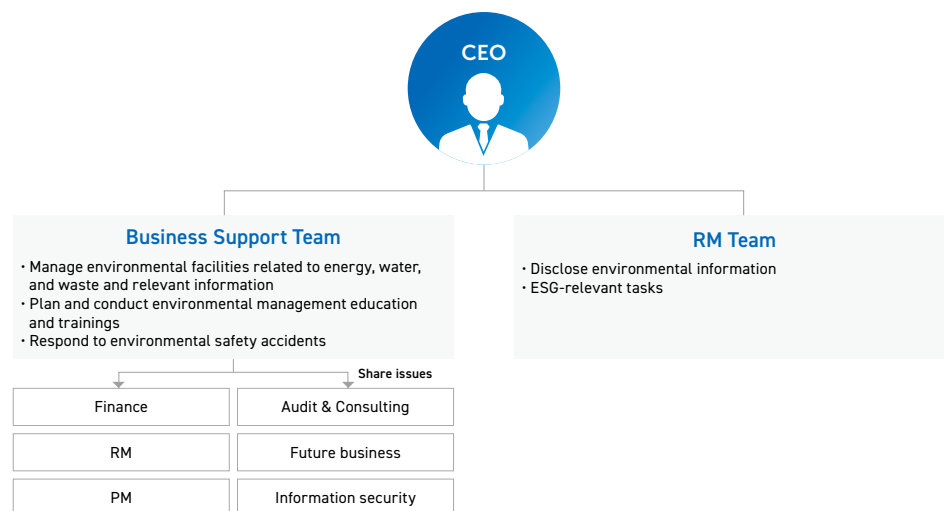
\* As emission inventory are built, emissions revised from previous disclosures

# Environmental Management System

We at GS recognize that environmental sustainability is an essential value for customers' lives and a major issue for the whole world and pursue environmental preservation and improvement for sustainable management. To realize this, we have established environmental management policies in compliance with the policy goals of 10 sectors, and environmental management activities have been performed based on these policies. The affiliates are recommended to implement the policies within the scope of their autonomy to establish the environmental management systems that reflect the nature of their businesses. Relevant departments perform all related activities including environmental information management, and an emergency contact network is created to respond to environmental safety accidents.

## Environmental Management Governance

GS Holdings has no independent environmental management organization, but relevant departments work on the tasks depending on their responsibilities. The Business Support Team is responsible for environment-related information management and the planning and conducting of relevant education. RM Team works on ESG-related tasks, including disclosing environmental information and sharing the environmental management responsibility with the Business Support Team. If an environmental safety accident occurs, the Business Support Team shares the issues with senior managers and members of each department using the emergency communications network.



## Affiliates Governance

GS E&C created the ESG Team to implement environmental management efficiently, establish climate change strategies considering challenges and opportunities caused by climate change, and report them to the ESG Committee. The Green Environment Team in the CSO Division plays a key role in systematically operating environmental management activities such as environmental management system certification, environmental performance management, and networking.



## Environmental Management System

### Environmental Management Implementation

#### Environmental Management Policy

GS declared its environmental management policy in March 2022 and made efforts to realize environmental sustainability essential to customers' lives. The environmental management policy was established to preserve environmental values from the supplier evaluation and management perspective as well as to manage the whole process from the production activity to the development, distribution, and discharge of products. GS Holdings' employees and the GS affiliates are recommended to implement the policy within the scope of not harming their autonomous management.

#### GS Environmental Management Policy

Sector	Description
Production activities	Minimize environmental pollution arising from production activities
Production and service development	Develop products and services that minimize environmental impact
Logistics and distribution	Minimize pollution arising from the transportation
Waste management	Manage waste treatment, collection, storage, and disposal
Supplier evaluation	Evaluate their environmental management when selecting suppliers
New projects	Analyze new projects' environmental impact
Due diligence for M&A	Identify environmental risks through due diligence
Compliance	Comply with international agreements and laws related to environment and energy
Disclosure	Disclose the accomplishments of environment-friendly business activities
Responsible organization-Council	Organize the supreme decision maker and dedicated organizations

#### GS Caltex

GS Caltex established the safety, health, and environment (SHE) working principle that shows its commitment to the world and local environment preservation through reducing pollutant emissions and greenhouse gas and developing environment-friendly products. Also, its primary business site, the Yeosu Plant, has obtained ISO 14001 and ISO 50001 and manages these certifications every year, while the Incheon Lubricant Plant has also acquired ISO 14001. Furthermore, GS Caltex has established and managed the SHE Information System to inspire its employees to comply with the SHE laws and regulations in Korean and foreign countries. It is an integrated system to manage each sector systematically. The SHE Information System systemized all environment-relevant tasks, including air pollution, water pollution, hazardous substances, waste, soil pollution, marine, pest control, and ISO environmental management. Relevant departments also use the system to share and utilize the management status, and transparency and work efficiency has improved.

#### GS Retail

In May 2021, GS Retail acquired ISO 14001, the international criteria for an environmental management system and manages the environmental impact factors generated across the company-wide value chain. Also, we train internal auditors and make an examination every year to review implementation plans and actions related to the environment and maintain the environmental management system systematically. In accordance with the ISO 14001 environmental management system, we conduct an annual internal audit to review and improve the system. GS Retail connects the KPI of C-level executives related to the environment to the evaluation levels of the environment sector to lead environmental management activities.

#### GS Retail ISO 14001



## Environmental Impact Management

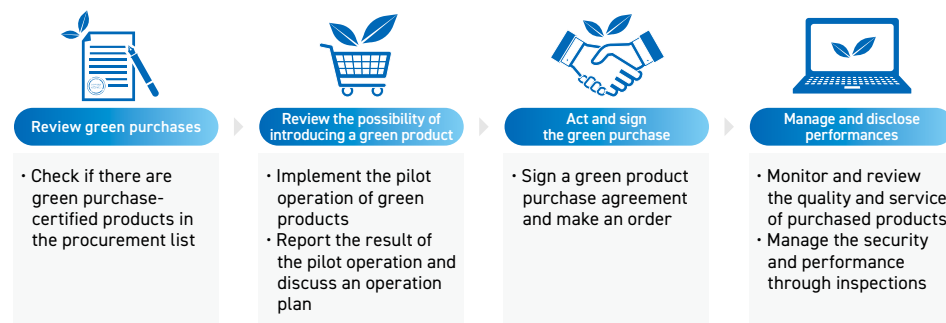
It is essential to control environmental impact factors during business operations to create a sustainable environment. To respond to the environmental risks we face, GS Holdings and GS affiliates companies make an effort to minimize environmental impacts generated in the value chain. We actively perform activities to hand over the clean natural environment to the next generation through energy efficiency improvement, low-carbon energy conversion, resource reduction, reuse and recycling, and hazardous material management.

### Raw Material Management

#### [GS Retail] Green Purchase

As a lifestyle platform that combines online and offline, GS Retail establishes and complies with the sustainable purchase policy to fulfill its social responsibility in the raw material procurement process, including purchasing consumer goods. This effort encourage green purchases and raise sustainability awareness among its partners and suppliers. In addition, we create, follow, and regularly monitor an independent process from the review of green purchase to the implementation and performances to improve and complement the policy and bring practical results. GS Retail is actively trying to make a better society and a healthier environment.

#### [GS Retail] Sustainable Purchase Process



#### [GS E&C] Green Purchase

GS E&C purchases products and materials through green purchases to contribute to the environment-friendly product promotion policy. We discover the materials replaced with green products and purchase green products first. In particular, the Green Purchase System manages certification status, including environment labels, HB certification, and energy consumption efficiency certifications, for each company. We calculate and monitor the environment-friendly green purchase through product code management, and the green purchase rate reached 8.04%, a total of KRW 101.1 billion, in 2022. In addition, we declare the green purchase on the purchase system to perform environmental management. Suppliers and new partner companies that have an environmental certification or supply environment-friendly products receive an incentive.

#### [GS E&C] Green Purchase Amount

(Unit: KRW million)

Category	2020	2021	2022
Environment-friendly construction materials (HB certification)	12,916	4,289	6,899
High-efficiency energy equipment	854	25,866	25,687
Energy consumption efficiency grade 1 to grade 2	23,670	23,157	40,854
Environment label	45,995	35,793	23,727
Others	325	2,010	3,919
<b>Total</b>	<b>83,760</b>	<b>93,815</b>	<b>101,087</b>

# Environmental Impact Management

## Water Resource Management

### [GS Caltex] Water Pollutant Management

GS Caltex efficiently manages water resources by monitoring water usage in all plants in real-time. The water resource usage is also optimized by adjusting the workload depending on the demands. Membrane bioreactors (MBR) are installed in the existing activated sludge wastewater treatment facilities to improve efficiency, while the advanced oxidation process (AOP) is introduced to the physical and chemical wastewater treatment facilities. In addition, the treated wastewater is monitored using the telemonitoring system (TMS), an automatic wastewater pollutant measuring machine, before it is charged into the ocean. We manage major pollutant indicators, SS (suspended solids), TOC (total organic carbon), and the pH scale with an additional analyzer. In 2022, additional analyzers were installed to manage TN (total nitrogen), and TP (total phosphate).

### [GS EPS] Wastewater Reuse

GS EPS recycles wastewater to increase the efficiency of water resource utilization. In 2022, we reuse 45.7%\*\* of the total water usage\* (about 880,000 tons). The company saves 25,000 tons every year by discovering ways to reuse wastewater as both raw and process water.

\* Water Usage = Water Withdrawal + Reuse  
 \*\* Reuse Rate = Reuse / Water Usage

### [GS EPS] Wastewater Reuse Process



## Waste Treatment

### [GS Power] Management based on Waste Information Treatment System

GS Power transparently manages the entire process from waste generation to the final treatment using the waste information treatment system operated by K-eco. We save resources and improve recycling to minimize waste and treat all waste through legal treatment companies. We have separate collection boxes on the sites to increase the recycling rate. In particular, every waste fluorescent lamps are recycled through the Korea Lighting Recycling Corporation to minimize waste.

### [GS Retail] Waste Reduction and Reuse

GS Retail established a virtuous resource cycle by signing a business agreement with K-eco and e-Cycle Governance to collect and recycle electronic waste generated by its stores. In 2022, we saved a total of KRW 7.13 billion by recycling refrigerators after the closure of businesses. Also, we installed unmanned bottle collection machines in the stores, and over 90% of waste cooking oil is recycled through waste collection companies. In addition, we sell about 16,000 food products of near-expiration date at low prices and install environment-friendly food processors to reduce food waste by more than 85%.

### Food waste reduction effect



### Waste cooking oil recycling rate



## Environmental Impact Management

### Air Pollution Management

#### [GS Power] Air Pollution Reduction

GS Power installs and operates air pollution prevention facilities, such as low NOx burners and SCR, to reduce air pollutant emissions and respond to air volume regulation. We reduced nitrogen oxide emissions by 13.3% compared to 2021 through regular facility inspections and process improvements. In addition, air pollutants are monitored 24/7 using the automatic chimney monitoring system to enhance transparency in air quality management. The Bucheon Power Plant developed a metal SCR that improved the disadvantages of existing catalysts. It applied the SCR and mitigated the difficulty in reducing NOx. Based on these achievements, GS Power continuously contributes to improving the atmospheric environment.

#### [GS Power] Air Pollutants (NOx) Emissions

(Unit : ton)

2020	2021	2022
549	680	589

#### [GS E&C] Scattering Dust and Fine Dust Reduction Measures

GS E&C not only complies with the environmental laws to solve fine and scattering dust in the field but also publishes scattering dust management case studies with a sense of responsibility for environmental issues. In addition, we developed and utilized rapid ventilation and mobile dust collector technology to address the fine and scattering dust problem raised in the construction. This technology effectively vacuums the construction dust, mixes it with the water, and discharges the mixture in the form of soil. Using this technology, we can effectively prevent dust from spreading into the air. In addition, we minimize air pollution in construction sites by installing dust-proof covers.

#### [GS E&C] Hazardous Chemical Detection System

GS E&C created a chemical detection system to manage hazardous substances. We can determine whether hazardous chemical substances exceed the standard through the MSDS (Material Safety Data Sheet) information and the CAS (Chemical Abstract Service) numbers in the system. Using this, we can prevent accidents that may occur when handling chemicals.

### Hazardous Chemical Management

#### [GS Caltex] Hazardous Chemical Management System

GS Caltex strictly manages hazardous chemicals through a thorough chemical management system. Based on the chemical accident prevention and management plan, we evaluate the hazardous chemicals' impact range outside the company and accident scenarios to secure safety in the handling facilities while establishing an emergency response system to minimize damage in the event of an accident. We also annually notify the summary of chemical accident risks and emergency plans to the local communities. In 2013, GS Caltex created an emergency response team with the companies in the Yeosu Industrial Complex and conducted joint training every year to prevent the spread of pollution damages through early response. We prepare for hazardous chemical leakage accidents by placing detection facilities, protective equipment, and other relevant equipment around each hazardous chemical storage and manufacturing facility. Safety council meetings are held quarterly to conduct safety inspections and training for the suppliers that use these hazardous chemicals. On the other hand, GS Caltex utilizes the Chemical Material Portal (CMP) to confirm the import and purchase of chemicals and relevant regulations before developing new products. The Material Safety Data Sheet (MSDS) updates are regularly monitored to update the Portal with the latest information.

# Environmental Impact Management

## Biodiversity Conservation

### [GS Power] Environmental Impact Assessment

GS Power conducts an environmental impact assessment (EIA) to predict and minimize the impact that the construction and operation of the power plant may have on the surrounding area and the ecosystem. Before starting the construction, we investigate the current status to predict its impacts and conduct an EIA to find ways to minimize the environmental effects. After building the power plant, the impacts of its operation are monitored. Projects that previously conducted EIA are also continuously monitored and managed. GS Power conducts an EIA for new projects and business expansions. The Environmental Impact Assessment Team is organized following the EIA guideline and fills the EIA checklist for each process. The results are classified according to the degree of impact and registered in the environmental impact register. Then, we establish an implementation plan and manage the impacts.

### [GS Power] Environmental Impact Assessment Types

Name of EIA	Period	Target
EIA around the power generation	At construction	Article 24 of the Environmental Impact Assessment Act
Post-EIA	From the beginning of construction to 5 years after the construction	Article 36 of the Environmental Impact Assessment Act
Noise impact assessment around the power generation	Frequently	Noise
EIA according to ISO14001	Frequently	Processes, products, services
Pre-environmental impact assessment system	Preventive maintenance, building extension, the beginning of new projects	Constructions, processes

### [GS E&C] Endangered Species Protection

GS E&C focuses on protecting the ecosystem and endangered species around the sites during the construction project. We conduct an EIA to predict environmental impacts on the construction planning step and take action. In addition, plant transplantation, ecological corridors and fences, and low-noise and low-vibration methods are used to protect the ecosystem. GS E&C also has the air bubble barrier technology, an aquatic ecosystem protection technology for preservation. This technology interrupts the movement of marine life or reduces underwater noise during construction. It is used to prevent the inflow of harmful organisms and preserve the aquatic ecosystem from underwater noise.

### [GS E&C] Ecological Environment Protection in Project Sites

1) Natural monument, 2) Endangered species level 1, 3) Endangered species level 2, 4) Endangered species level 3

Environmental Impact Assessment Target (Major Ecosystem)						Preservation activities
Con-struction site	Birds	Mammal	Fish	Amphibians & reptiles	Amphibians & reptiles	
Changnyeong Miryang Highway	Red-bellied, Hawk <sup>1)</sup> , Kestrel <sup>1)</sup> , Mandarin duck, White-throated, Plover <sup>2)</sup>	Otter <sup>3)</sup> , Leopard cat <sup>3)</sup>	Stone moroko, Zacco platypus	Takydromus wolteri, Steppe rat snake	-	- Build ecological corridors and install fences - Install escape routes - Buys and suspended-load reduction management
Gwangju Outer Circulation Highway	Kestrel <sup>1)</sup> , White-throated Plover <sup>3)</sup> , Scourge <sup>1)</sup>	Otter <sup>3)</sup> , Leopard cat <sup>3)</sup> , Mole, Water deer	Zacco platypus, Bluegill	-	Pine tree, Chestnut tree, False acacia	- Build ecological corridors and install fences - Install escape routes - Adjust tightening angles - Move trees (359 trees) - Buys, diversion water way, grit chamber
Global Industrial Complex (Busan)	Kestrel <sup>1)</sup> , Woodpecker, Varied tit	Otter <sup>3)</sup> , Leopard cat <sup>3)</sup> , Mole, Water deer	Chinese minnow, Bond loach, Rhinogobius brunneus	Pelophylax nigromaculatus, Mamushi, American bullfrog	Pine tree	- Move trees (1442 pine trees) - Treat pine wilt disease - Rubble and tree stump - Build ecological corridors and install fences - Install escape routes - Current (suspended load reduction management, grit chamber) - Install artificial bird houses
Icheon Osan Highway Site	Kestrel <sup>1)</sup> , Eurasian sparrowhawk <sup>4)</sup> , Mandarin duck	Mole, Raccoon, Water deer	Zacco platypus, Chinese minnow	elophylax nigromaculatus, Oocatochus rufodorsatus	Pine tree, Chestnut tree, Korean Pine	- Build ecological corridors and install fences - Install escape routes - Current (suspended-load reduction management)

# 04



# Social

A Workplace for Growth  
 CSR Activities  
 Personnel Management

045 Human Rights Charter  
 048 Safety and Health  
 052 Supply Chain

054 Product Responsibility  
 056  
 058

061

# A Workplace for Growth\*

\* Corresponds to the 5 core issues identified through materiality assessment

GS understands that corporate value comes from the commitment and contribution of its employees, so it operates competency development programs to build a competent workforce and keep them from leaving. In addition to the Open Innovation GS (52g) that discovers innovative solutions beyond the border between companies, we operate the Career Development Path program to develop work competencies and provide digital and AI education. We actively support our employees by providing a work environment encouraging innovation.

## GS Group's Competence Enhancement System

### 52g(Open Innovation GS)

GS grows its valued employees who take creative and prompt action for the future and seeks to settle the open innovation culture in cooperation with external parties. To this end, we have run an open innovation community called "52g (5pen 2nnovation GS)" since 2020. It builds a workforce capable of coping with changes for the sustainable future of GS and creates new digital values. Any GS employee can raise a problem, and we solve it together. This fosters a high-level innovation culture in GS.

#### Training

To build an excellent workforce, GS conducts education programs to nurture catalysts and facilitators in cooperation with each affiliate's education team and leading institutions worldwide. The educated catalysts identify problems in the field and suggest and implement solutions. On the other hand, programs nurture facilitators with problem-solving skills on top of the values mentioned above. In 2022, we created 161 catalysts and 38 facilitators through 17 educations.

Education Conductor	Education Subjects
GS Holdings	Program for GS Group's new executives, 52g catalysts and facilitators program, Program for GS Group's new employees
E&C & Global	Design Thinking education for new employees
Caltex's Production Headquarters	Design Thinking education for maintenance departments
Retail	Design Thinking education for platform BU MD



GS Holdings created the 52g Studio (11 people), a professional coaching group consisting of project coaches and IT experts, to support the 52g project and the efficient competence development of its members. In addition, we made a collaboration space and an online platform to ensure that the employees communicate and cooperate at any time.

#### Enabling

Trained employees identify and address problems in the field through the enabling process. Various projects are conducted through the enabling course to enhance field employees' response capabilities to changes. This enabled all affiliates to communicate and discuss together to find new solutions. In 2022, we handled 21 projects and nurtured 22 52g Crews to be sent to each company.

Company	Project
Retail	Develop new business services, establish a customer-oriented digital culture, etc.
Retail-Caltex-M&M	Create a place and services through analyzing customer experiences
Caltex's Production Headquarters	Mitigate sample handling process inefficiency
Boryeong LNG	Work on the resource usage optimization project in cooperation with DX Lab

[52g Studio](#)

[Link-us](#)

[keeet](#)

## A Workplace for Growth\*

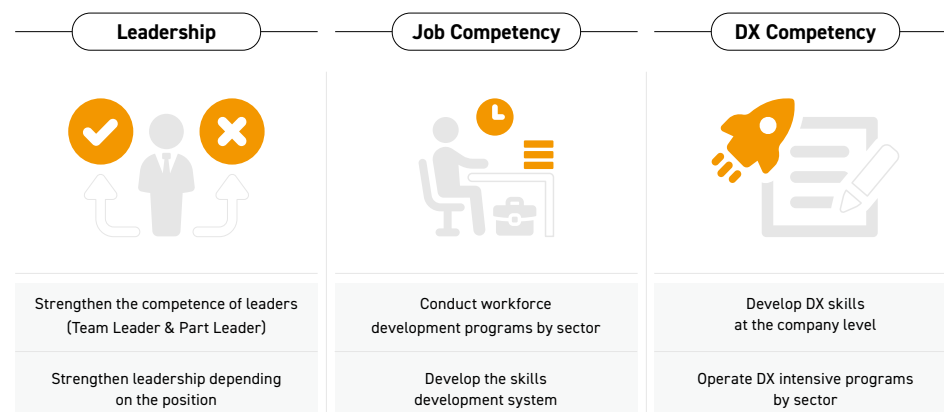
\* Corresponds to the 5 core issues identified through materiality assessment

### Capacity Building Activity

#### [GS EPS] Workforce Development

GS EPS operates various workforce development programs to enhance its employees' job competence. Those who pass the HR Committee review take long-term training benefits such as an MBA and energy degree program in outstanding universities in Korea and receive dedicated technology training in Korea and foreign countries to build job skills from the medium- and long-term perspective. In addition, we develop and operate leadership programs depending on the position and DX Intensive programs by sector to develop DX skills at the company level.

#### [GS EPS] Workforce Development Activity Direction



#### [GS Retail] Career Development Path

GS Retail created and operated a service that conducts curriculums appropriate to its employees, provides education guidelines, and runs a Q&A session to encourage spontaneous participation in education. In addition, we established the Career Development Path for professional fields such as MD and RFD to make them recognize the identity of jobs and develop the necessary skills depending on their roles.

#### [GS Retail] Workforce Development Programs

Competency	Program
Basic Competency	<ul style="list-style-type: none"> <li>GS Way Development Training</li> <li>Education for new hires and persons with experience</li> </ul>
Job Competency	<ul style="list-style-type: none"> <li>Job training held by the Operation Division</li> </ul>
Leadership Competency	<ul style="list-style-type: none"> <li>Leaders On</li> <li>Education for Team Leaders</li> <li>Manager Leadership Training</li> </ul>
DX Competency	<ul style="list-style-type: none"> <li>Digital and data competency education</li> </ul>
Others	<ul style="list-style-type: none"> <li>Self-directed learning</li> <li>Innovation education</li> <li>Humanities education</li> <li>Legal compulsory education</li> <li>Foreign language learning, etc.</li> </ul>

# A Workplace for Growth\*

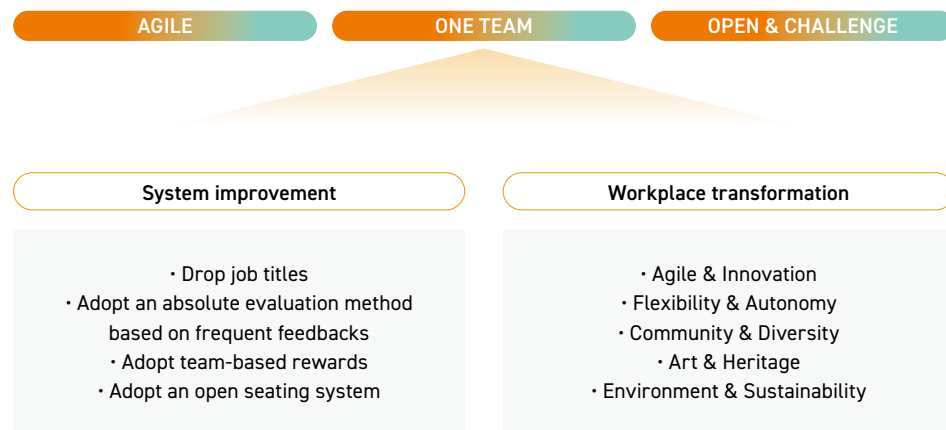
\* Corresponds to the 5 core issues identified through materiality assessment

## Change in Work Style

### [GS Energy] Work Style Innovation

To make a horizontal corporate culture, GS Energy added “manager” to the end of every employee's name to replace existing job titles. The new evaluation method introduced an absolute evaluation system to evaluate the employees based on their performances and compensated each group of people based on the combined contribution. In addition, the workplace has changed under the theme of “Agile & Innovation, Flexibility & Autonomy, Community & Diversity, Art & Heritage, and Environment & Sustainability.” We promote official and casual interactions at the same time to encourage the creativity of individuals and the community. The new community space implemented an open seating system. With these efforts, GS Energy is changing the work style of its employees.

### [GS Energy] Work Style Innovation



### [GS Caltex] Scorpions

GS Caltex's Scorpions is a performance advancement program that identifies tasks yearly, takes action, and achieves results. The Scorpions, founded to strengthen competitiveness, seek to make new advancement opportunities from the digital perspective and changes in work style since 2022. In particular, the program pursues 'a challenging goal', 'the expansion of cooperation between departments', 'systematic work based on systems', and 'good risk taking' to secure the industry's best profitability and competitiveness. This also allows its employees to share their successful experiences and spread the changing and innovative corporate culture. To succeed the Scorpions and settle down the program in the company, we reflected it in GS Caltex's key performance indicator and improved the competence of employees through separate job competence tasks.

### [GS Caltex] Scorpions Direction

Scorpions' work style			
Challenging goals	Working based on systems	Cooperation between department and sectors	Good Risk Taking
Realize maximum potential and set challenging goals with a non-judgmental attitude	Manage and work on improvement tasks at the company level based on a system to improve the transparency of job innovation activities and implementing powers	Expand the cooperation between organizations, sectors, and companies to secure an opportunity and derive solutions from various angles	Pursue high profits and prompt implementation by determining if the risk is manageable
		Establish an implementation system to make a prompt decision and have the power to implement the plan in the cross-functional area	Encourage an organizational culture that tolerates failure and enables challenge

# CSR Activities\*

\* Corresponds to the 5 core issues identified through materiality assessment

As society's interest in sustainable management increases, the demand for corporate social responsibilities and obligations is increasing. To meet these social needs, GS and its affiliates have designated 'social companionship for mutual prosperity' as the orientation of GS' sustainable management. We practice CSR activities in various areas such as education and scholarship and support projects for the underprivileged, culture and art, and public facilities.

## GS CSR Direction

### Core Value and Implementation Areas of CSR

GS pursues to create social values through companionship with society. With its core value, a safe and inclusive workplace, respectful companionship for mutual prosperity, and sharing for mutual happiness, it performs CSR activities in various areas.



## CSR System

### [GS Retail] Social Contribution Review Committee

When taking social responsibility, GS Retail follows an approval procedure for all donation activities in Korea and foreign countries to improve transparency and rationality. Under the approval system, we review all social contribution projects' charity characteristics and public interests. The projects that require a donation of KRW 300 million need to receive approvals from the ESG Committee. In addition, the Chair of the Social Contribution Review Committee is supposed to report the annual project plan and the performance and result of the previous year at the beginning of the year for transparent budget execution.

### [GS Retail] CSR Project Approval Process



### [GS E&C] Improvement of Kids' Environment

GS E&C runs the 'Playground of Dream and Hope,' a play environment improvement project to guarantee children's right to play, and the 'Study Room of Dream and Hope,' a renovation project to provide safe study spaces for children. Starting with its first playground built in 2011, the project has continued utilizing the capability of GS E&C. Under the leadership of GS E&C and the participation of its employees, the projects created an environment where economically disadvantaged children can play and study in safe places. Including four playgrounds supported in 2022, we built a total of 42 playgrounds so far. The 'Playground for Dream and Hope' project will be continued in the future.

### [GS E&C] Study Room & Playground for Dream and Hope



## CSR Activities\*

\* Corresponds to the 5 core issues identified through materiality assessment

### GS CSR Activities

#### [GS Energy] Donation

GS Energy aims to contribute to the development of local societies with its capabilities and resources and become a corporate citizen who take its social responsibility. Since 2021, GS Energy has sponsored the '815 Run' campaign to remember the meaning of Liberation Day and independence patriots. Inheriting the tradition of the GS Group which supported the independence movement, the activity honors the spirit of the independence movement and the dedication of the independence patriots and conveys a positive message, 'it will be all right, Korea!' On the other hand, the donations were used for housing improvement projects for the descendants of the independence patriots. In addition, we made a donation to support the victims of the forest fire in March, which destroyed 4,000 hectares of the forest in Donghae-si. A total of KRW 8.15 million and KRW 100 million was donated for the 815 Run in 2022 and the Donghae-si forest fire respectively. In addition to these donations, we donated a total of KRW 193 million for the National Assembly Climate Change Forum and the National Museum of Modern and Contemporary Art.



#### [GS Power] Aged-out Orphan Support

GS Power has the independence camp in collaboration with a specialized social enterprise for supporting the self-sufficiency of youth transitioning out of child protection centers such as orphanages. It aims to assist young adults who are no longer under protection to settle as healthy members of society. Targeting high school students in grade 2-3 in Anyang and Bucheon, it provides practical information and supports their independence through education and meetings with those who had previously left orphanages and succeeded to fend for themselves so that they stand on their own feet and achieve their dreams. GS Power emphasizes Pilsindong(必信同), meaning necessary power plant, trusted company, and harmonious community, as its brand value and strives to fulfill its social responsibility through mutual growth with local communities. In 2022, the three-day independence support camp was participated by ten youths.



#### [GS Caltex] Art and Culture Support

GS Caltex created 'Yeulmaru,' a culture and art complex, around Mangma Mountain and Jang island in Yeosu-si to build cultural and artistic infrastructures in the host city of the World Expo. GS Caltex provided more than KRW 150 billion for the construction and operation of facilities such as Yeoulmaru Mangma Theater and Exhibition Center, which opened in May 2012; Jangdo, an island of art, which opened in 2019; and Mangma Mountain Observatory and Promenade, which was completed in 2021. In 2022, it held various performances, exhibitions, and education with the theme of environment celebrating its 10th anniversary. It organized various performances, exhibitions, and educational programs including indoor and outdoor exhibitions with environment-friendly concepts, the 'Green Art Picnic' art education festival, and the 'G Festival' which used wasted plastics as tickets. Since its opening, Yeoulmaru has been presenting high-quality performances and exhibitions, attracting a cumulative 1.2 million visitors as of December 2022, making it a cultural landmark representing the South Coast.



## CSR Activities\*

\* Corresponds to the 5 core issues identified through materiality assessment

### GS CSR Activities

#### [GS EPS] Social Safety Net Establishment

GS EPS signed a business agreement to establish a 'social safety net' with the Dangjin Police Station and the Dangjin Welfare Foundation for the safety of the local community. To improve the safety of vulnerable families in the security blind spot, we annually support crime prevention facility items worth KRW 15 million, and the items are delivered through the Dangjin Welfare Foundation. Solar-powered security cameras, smart doorbells, door locks, security screens, and fluorescent paint have been provided for the studios and multi-household houses vulnerable to crimes. We expect these would also prevent general crimes. In addition, in 2022, we provided financial support of KRW 50 million to establish a social safety net for young carers. The financial aid is used to support the living expenses of young carers, prevent crimes, career development, and other various purposes.



#### [GS Retail] Eco Creator

GS Retail's Eco Creator project is a campaign to improve environmental awareness and promote environmental problems by producing videos. Since 2019, GS Retail has cooperated with the Korea Environment Foundation to nurture Eco Creators for the implementation of environmental management. The Eco Creators receive financial support for producing environmental films, environmental education, and film production training programs to become next-generation green leaders. We seek to create a place for communication by raising awareness about environmental issues and creating environmental content.



#### [GS Retail] Social Contribution Store

GS Retail runs 6 types of social contribution stores to create jobs for vulnerable groups. In cooperation with the Korea Labor Force Department Institute for the Aged, we operate 35 senior stores to create jobs for older people while running two Youth Dream Stores to provide an opportunity to start a business for young people under 39. We also have four Neulbom Stores to support the economic and social independence of people with disabilities. In addition, we operate 105 Tomorrow Stores, which hire people from vulnerable groups in cooperation with the Korea Development Institute for Self Sufficiency and Welfare, while operating 12 self-support convenience stores to create jobs for the vulnerable groups and support their economic independence, including Goodwill Store to create jobs for people with disabilities. In 2022, we have a total of 158 stores. GS Retail will continue to open new Tomorrow Stores in cooperation with local institutes.



## CSR Activities\*

\* Corresponds to the 5 core issues identified through materiality assessment

### GS CSR Activities

#### [GS E&R] Scholarship Program for Local Students

GS E&R continuously runs education and social welfare support projects for the children and youth in the local communities around the headquarters and its subsidiaries. In particular, GS E&R's subsidiary, GS Donghae Electric Power, has provided scholarships worth about KRW 1.5 billion to more than 3,000 students in the site area for 10 years since 2013 to develop human resources in the local community. In addition, we have supported the installation of beam projectors, screens, and LED signboards in neighboring schools and practiced activities to advance the education environment for the local students. We annually sponsor on-site experience activities and job training programs for children from vulnerable groups and strive to become a local company in harmony with the local people. In 2022, GS Donghae Electric Power provided a scholarship worth about KRW 115 million to 237 students.



#### [GS Global] Soccer Program for Youth from Multicultural Families

GS Global conducts a youth soccer program for children from multicultural families to ensure they do not lose their dreams and hopes despite the difficult family environment and unfamiliar cultures. This support aims to develop their social skills and physical ability and help them become human resources necessary to society in the future. Furthermore, considering the return to normal life after COVID-19, we plan to hold various special events, such as watching an FC Seoul match in the home stadium and a soccer program with FC Seoul players, to give them various memories. In 2022, we sponsored KRW 10 million for the operation of the soccer program, and the lesson fees and supplies were provided for 13 children from multicultural families.



# Personnel Management

GS pursues a fair and transparent personnel system that rewards the dedication of its employees. We are doing our best to become a sustainable company by listening to the employees' voices through active labor-management communication and operating various welfare programs to support good work-life balance.

## Personnel System and Policy

### [GS Energy] Performance Evaluation and Reward

GS Energy's performance evaluation system pursues the organization's and its members' mutual growth. Personal goals are set based on the organization's goals and are reviewed by supervisors and colleagues when completed. The compensations, including promotion, are determined based on an absolute evaluation at the end of the year, considering objective performances and expectations compared to individual capabilities. In addition to the bonus at the company level, GS Energy has incentive programs considering cooperation and organization-based rewards, such as an individual performance-based bonus, a team performance-based bonus, and One Team Present.

### [GS Energy] Performance Evaluation and Reward Program



### [GS E&C] Discrimination-free Reward

GS E&C operates a reasonable and fair performance evaluation system and provides fair compensation to its employees. Individual performance is reflected in salaries to motivate them, and feedback is provided to help advance competence. Moreover, if an organization achieves an outstanding performance, its members receive additional rewards considering the organization's performance as well as personal performance. GS E&C does not discriminate against gender and race when evaluating performances. Only personal and organizational performances are considered to strengthen social equity.

### [GS E&C] Gender Pay Gap Situation\*

Category	Unit	2020	2021	2022
Administrative position (basic salary)		91	88	88
Administrative position (basic salary+bonus)	%	82	81	79
Non-administrative position		87	71	75

\*salary ratio of women to men

### [GS Retail] Corporate Culture Diagnosis and Improvement

GS Retail conducts an annual survey, 'making a healthy corporate culture,' to establish a sound culture. This makes employees respect each other, practice the GS values and work style, comply with its behavior rules, and participate in the corporate culture that prohibits bullying in the workplace. This annual anonymous diagnosis consists of questions to check whether the GS Value, GS Way, and behavior rules, workplace bullying laws are satisfied. The diagnosis content and scope will be advanced and expanded to build a healthy corporate culture and keep the employees happy.

# Personnel Management

## Welfare Program

### GS Energy

GS Energy is preparing various welfare programs to improve the quality of life for its employees. We invest in efficient work conditions and create programs to support the employees' happy family life. GS Energy offers the benefits of medical checkups, medical expense support, and parental leave for its employees.

#### [GS Energy] Welfare Program

##### Flexible working hours

- Allow the employees to set work hours every month freely within the statutory working hours

##### Retirement fund

- Accumulate compound savings based on DB or DC plans
- Support an individual retirement fund and help save tax through the DC plan

##### Long Service Awards & retirement celebration

- Provide congratulatory money and vacation to recognize long-serving employees

##### Optional welfare programs

- Operate the Welfare Mall and the welfare point program to support the employees' self-development, leisure activities, and healthcare

##### Vacation support

- Provide resorts in Korea at discounted prices
- Provide some resorts in winter and summer at free

##### Health support

- Support medical expenses for the employees and their spouses and children
- Offer health insurance and medical checkups for the employees and their spouses

##### Life support(mortgage support, etc.)

- Provide low-interest loans for house purchase, marriage, and living stabilization
- Operate a childcare center and support the cost of educating the employees' children

#### GS Energy's Childcare Leave Status

Category		Unit	2020	2021	2022
Employee on childcare leave	Male	Person	3	1	1
	Female		0	0	2
Return to work after childcare leave	Male	Person	2	0	1
	Female		1	0	0
Rate of returning to work after childcare leave		%	75	-	100
Rate of retaining childcare leave		%	100	100	100

### GS Retail

GS Retail provides various welfare programs to recover the employees' work-life balance and keep them engaged. We support the employees' happy lives not only by offering welfare programs such as language education, cultural life support, and medical service support, but also by providing benefits for the employees' families.

#### [GS Retail] Welfare Program

##### Flexible working hours

- Shut the employees' computers automatically after working hours and implement a flexible work policy

##### Language education

- Support the registration fees of language proficiency tests and the costs of learning a new language

##### Shuttle services

- Provide employee shuttle services for the employees working in GS Tower

##### Sports tickets

- Support tickets for FC Seoul and LG Tweens games

##### Medical checkups and medical expense

- Support basic medical checkups for all employees
- Support comprehensive medical checkups for the employees and their spouses depending on their working years
- Support medical expenses of the employees and their spouses

##### Congratulations and condolences program

- Conduct a congratulations and condolences program for the employees' or their families' marriage and death

##### Corporate childcare center

- Operate a childcare center for the employees' children

##### Children education costs

- Support the admission fees and tuition for the employees' children depending on their working years

##### Resort

- Provide resorts in Korea at discounted prices

## Human Rights Charter

GS strictly oppose the infringement of natural rights inherent to all human beings and established the human rights management system to avoid this infringement related to its business areas. As the demand for ESG management increases, we continuously track relevant trends to enhance the internal standard in line with the stronger human rights management and listen to external stakeholders such as suppliers and customers to make a respectful company.

### GS Human Rights Charter Establishment

#### Human Rights Management Implementation System

GS prepared and followed the human rights charter focusing on the human rights of GS members, consumers, suppliers, and local residents to protect human rights and fulfill corporate social responsibility in corporate management. All employees of GS Holdings and the GS affiliates are advised to positively embrace this policy to the extent that their autonomy in management remains unharmed. We are guided by international standards and guidelines on human rights and labor, including but not limited to the Universal Declaration of Human Rights, the UN Guiding Principles on Business and Human Rights, the International Labor Organization's core conventions, and the OECD Due Diligence for Responsible Business Conduct. If any of the provisions herein conflict with a local law or regulation, that local law or regulation shall prevail.

#### GS Human Right Charter's Basic Principle



#### Human Rights Risk Management System

GS identifies potential human rights risks in the business and regularly evaluates them to prevent and mitigate them. The results are shared with all stakeholders in the form of the implementation status of human rights through the channel accessible by them. We designate a person or a team in person to establish human risks management system.

#### GS Human Rights Risk Management System



# Human Rights Charter

## Human Rights Risk Management

### [GS Energy] Grievance Handling Channel

GS Energy handles complaints using the 2Track Grievance Handling Procedure. The employees can report complaints using the grievance counseling directly connected to the persons in charge and the Grievance Handling Committee. In addition to these official channels, we have prepared unofficial channels, including meetings, GSE Rounds, emails, calls, and written letters. The report is directly investigated and handled promptly. The violations not solved by the Grievance Handling Committee are handled following the company rules through the human resource committee and the disciplinary committee. In particular, workplace sexual harassment and bullying cases are handled under strict security and guidelines.

### [GS Energy] Grievance Handling Results

Category	Unit	2020	2021	2022
Reported complaints	Case	0	0	0
Handled complaints		0	0	0

### [GS EPS] Human Rights Education

GS EPS practices human rights management to respect the dignity and values of all stakeholders. Based on GS Group's human rights charter, we are guided by the Universal Declaration of Human Rights, the UN Guiding Principles on Business and Human Rights, the International Labor Organization's core conventions, and the OECD Due Diligence for Responsible Business Conduct and practice the policies actively. GS EPS conducts human rights education to prevent potential violations during management activities and promote human rights among all employees. These include sexual harassment, disabilities, and workplace bullying education, and we conduct the education programs once a year.

### [GS EPS] Human Rights Education Status

Category		2020	2021	2022
Sexual harassment education, disability-inclusive education, and workplace bullying education	Number of trainee	250	256	285
	Education completion rate (%)	100	100	100
	Education hours	3	3	3

### [GS E&C] Human Rights Impact Assessment

GS E&C reviews human rights practices and conducts a human rights impact assessment annually to prevent human rights violations. The investigation and assessment of the employees of GS E&C, its subsidiaries, and suppliers aim to research the status of the problems that may be raised in the workplace and to find solutions. In 2022, the investigation was conducted for 253 people on 12 human rights issues. According to the analysis of the risks that have a high possibility of infringement, the average was 4.6%, slightly increased compared to the last year (4.0%)

### [GS E&C] Human Rights Risk Analysis Result in 2022



## Safety and Health

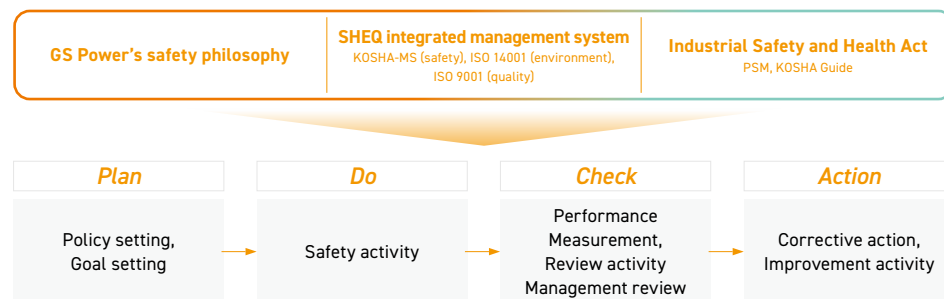
GS believed that safety and health management is the top priority in the management activities and established the action principles to guarantee industrial safety. We have established a safety management system even stronger than the relevant law and realized safety health management to create a workplace where everyone is happy and to keep pace with the purpose of the law before the enactment of the Serious Accident Punishment Act.

### GS Safety and Health System

#### [GS Power] Safety and Health Management System

GS Power recognizes safety and health management as key management factors. Accordingly, we set management factors and operation procedures under the SHEQ integrated management policy to satisfy requirements relevant to safety and health. In addition, we are continuously improving our safety and health performance, reflecting reviews and decisions from the management, to achieve zero safety and health incidents. We set a health and safety goal and regularly inspect for continuous and thorough management. Based on the ideology of human respect, GS Power operates a systematic management system following PSM (Process Safety Management) and KOSHA.

#### [GS Power] Safety and Health Management System



#### [GS EPS] Work Process

GS EPS operates the Permit For Work (PFW) to guarantee safety for all tasks in the workplace. The PFW is applied to all power generation equipment, facilities, and the fields operating these facilities. It prevents safety incidents by separating facilities with risks using a lock. After completing tasks, it is unlocked after a double inspection by a safety expert and a field supervisor. This system minimizes the possibility of human error and prioritizes the safety of workers. Not only this PFW, but we also train safety experts continuously to strengthen safety on the sites.

#### [GS EPS] Permit For Work



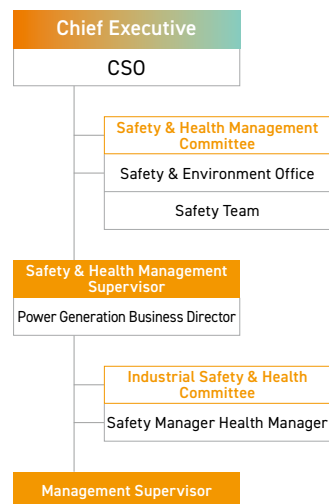
# Safety and Health

## Implementation of Safety and Health

### [GS EPS] Safety and Health Governance and Safety Strengthening Activity

GS EPS defined key factors of management activities as environment, health, safety, and quality and established the EHSQ management policy. The policy is shared with all company members. We organized a safety and health-dedicated organization to advance the management system by improving the expertise in the safety and health areas. In January 2022, the CSO was designated, and the Safety and Health Management Committee and the Industrial Safety and Health Committee were assigned to him. The Safety and Health Management Committee is a decision-making body that deliberates and decides on important issues such as budget, human resource management, and punishments and rewards related to safety and health. The Industrial Safety and Health Committee was organized according to the Occupational Safety and Health Act. The Power Plant Chair takes the role of the Committee Chair, and the Committee creates industrial accident prevention plans, inspects and improves working environments, and manages employee safety and health education.

### [GS EPS] Safety and Health Organization

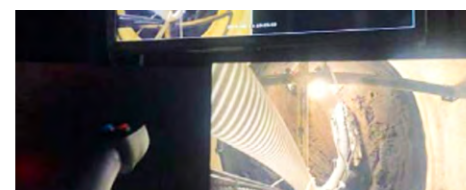


### [GS EPS] Site Safety Strengthening Activity

Category	Description
Permit for Work (PFW)	• Isolate facilities using locks for the tasks with a permit for work
Analyzing risks and identifying hazardous factors	• Analyze risks depending on the task process and take an improvement action
Establishing and training emergency response system	• Conduct a regular emergency response training • Categorize emergency cases, establish the emergency response system depending on the case type, and conduct a training • Conduct joint emergency response training with firefighters and rescue teams
Conducting a safety inspection	• Conduct a regular safety inspection • Identify and evaluate risk factors in the workplaces of each organization, establish action plans, check whether the safety management plan is implemented, and take administrative actions depending on the results
Managing employee health	• Offer regular health checkups for employees in the departments handling harmful factors such as noise, dust, and chemicals
Strengthening suppliers' safety management	• Support environmental safety modeling according to the operation of the Safety and Health Council and implement work environment improvement activities • Conduct expert lectures, share excellent innovation and near-miss cases, and operate the reward system and the Safety Report Box

### [GS Caltex] Safety Environment Advancement

GS Caltex advances safety to prevent serious incidents and increase the efficiency of the operation. We utilize the OTS (Operation Training Simulator) to conduct training in a virtual process where the driving and control systems are identical to the actual ones. We also use a self-developed AI model that can predict abnormalities in the process and their causes in real-time. In addition, we introduced robots and drones to the catalyst replacement in nitrogen medium and the flare stack inspection to ensure workers' safety and efficiency of costs and time. Moreover, the Yeosu Plant applies smart safety equipment to prevent a collision between a forklift and a worker when moving polypropylene and polyethylene products. When a worker and a forklift get closer to a certain distance in dead ground, a device makes a vibration and sound alarm to alert them, and an AI camera is installed in the back of forklifts to flash a light and display a safety distance.



Introduce a robot to the high-risk nitrogen task



Education using the 3D OTS equipment



Apply smart safety equipment to forklifts



# Supply Chain

GS realizes that risk management throughout the value chain is necessary to become a sustainable company and performs activities to manage it. We select and evaluate suppliers based on transparent and fair standards and set behavior rules for them to realize sustainable future values together. In addition, we manage the origin and log of raw materials delivered by GS Group companies, expand the procurement of certified raw materials, and try to use sustainable raw materials.

## Suppliers Code of Conduct

### Goal and Principle of Suppliers Code of Conduct

GS recognizes the importance of sustainable management principles and philosophies for sustainable growth, so we established code of conduct to be practiced during the work. We believe that the understanding and practices are more meaningful when the suppliers, or our mutual growth partners, participate together. Therefore, the suppliers are recommended to implement the code of conduct within the scope of their autonomy to follow GS' sustainable management principles and philosophies. All suppliers need to follow GS' code of conduct regardless of their projects and locations. GS affiliates are also advised to embrace these code to the extent that their autonomy in management remains unaffected.

### GS Suppliers Code of Conduct



#### Respect for workers' basic rights

- Prohibition of forced labor
- Protection for minor workers and the vulnerable workers
- Observance of working hours
- Wages and welfare
- Privacy and humane treatment
- Anti-discrimination
- Procedures for human rights violation prevention



#### Workplace safety and health

- Occupational safety
- Occupational accident and disease control
- Occupational hygiene and health



#### Management system

- Identifying risks
- Compliance
- Education and communications
- Business partner (supplier) management



#### Business ethics

- Fairness and integrity at work
- Anti-bribery and anti-corruption
- Privacy protection
- Mutual growth with suppliers
- Contribution to local communities



#### Environment

- Environmental law compliance
- Waste reduction and efficient use of resources
- Pollution prevention

## Supply Chain Risk Management

### [GS Caltex] Supply Chain ESG Management

GS Caltex understands the need for ESG management to be implemented throughout the entire value chain related to creating values, so it strives to fulfill its social responsibility by supporting suppliers' online self-assessment and ESG management consulting. The ESG assessment includes questions about employees' human rights, safety/health, environment, and business ethics. GS Caltex provide detailed feedback to the suppliers, and those with low scores in the ESG assessment are supported with field inspections and consulting services to accurately diagnose the ESG status and identify improvement tasks for each supplier.

### [GS Caltex] Supply Chain ESG Assessment Process

#### 1. Improve suppliers' understanding

- Receive the compliance with the Code of Conduct from suppliers
- Add ESG compliance to business contracts and support ESG management education

#### 2. Conduct a self-ESG assessment

- Conduct a self-ESG assessment for key suppliers
- Distribute the results of online self-assessment

#### 3. Conduct a field inspection and verification

- Inspect the field to confirm the information provided by suppliers
- Share excellent ESG management cases and conduct education to improve acknowledgment

#### 4. Identify and evaluate risk factors in the supply chain

- Identify tasks that need to be improved according to the results of field inspections (based on the reliability of suppliers' reports and ESG management levels)

#### 5. Establish improvement plans and take follow up actions

- Identify issues about suppliers' human rights and business ethics
- Ask for corrective actions

## Supply Chain

### Supply Chain Risk Management

#### [GS E&C] ESG Risk Management and Supplier Incentives

GS E&C fully supports its suppliers to encourage them to manage ESG risks and voluntarily establish a sustainable management system. When registering a company as GS E&C's supplier, we proactively identify its potential risks in the economy, environment, and society areas considering its occupational accident rates as well as its financial indicators such as credit rating and financial health. Even after the registration, we regularly monitor and evaluate the supplier. It receives a warning if it does not satisfy the requirements according to GS' internal regulations. Those who do not correct are purged from GS E&C's supplier list. We evaluate the suppliers' general administrative activities, such as administrative status, quality, environment, safety, and construction management, and select excellent suppliers. They receive some benefits, including financial rewards and bid invitations. Like this, we are trying to spread sustainable management culture.

#### [GS E&C] Risky Suppliers Rate(2022)

(Unit: companies, %)

Category	Economy (including finance)	Environment	Society
Number of suppliers	8	0	0
Rate of suppliers	1.0	0.0	0.0

### Supply Network Strengthening

#### [GS Retail] Social Responsibility of Supply Chain

GS Retail has a mutual growth vision, Together with Partners. Based on this vision, we support the mutual growth of various stakeholders in the value chain while operating practical mutual growth programs. In particular, we have many programs to encourage partner companies to fulfill their social responsibilities and strengthen their competitiveness.

#### [GS Retail] Social Responsibility Strengthening Program for Suppliers

Program	Description
HACCP Certification	<ul style="list-style-type: none"> <li>Provide technical support and verify improvements for the fields and documents of partner companies based on the HACCP checklist</li> <li>In 2022, 11 plants of the subsidiaries and Fresh Food partners received a 'qualified' score in the HACCP recertification and post-inspections</li> </ul>
ISO certification	<ul style="list-style-type: none"> <li>Support the partner companies of private branded products to obtain ISO9001/14001</li> <li>- In 2022, 10 partner companies have been supported</li> </ul>
Environment Label Certification	<ul style="list-style-type: none"> <li>Conduct education to obtain the Environmental Label for suppliers, provide consulting services, and finance their certification fee</li> <li>- In 2022, 5 companies were supported</li> </ul>
CCM certification	<ul style="list-style-type: none"> <li>Support small and medium-sized partner companies to obtain a CCM certification</li> <li>- A total of 3 partner companies are selected and receive support every year</li> </ul>
Other consulting services	<ul style="list-style-type: none"> <li>Provide consulting services and support facilities to develop new products</li> <li>Provide consulting services to prevent missing parts</li> </ul>
Smart learning (online)	<ul style="list-style-type: none"> <li>Support education such as ESG education for small and medium-sized partner companies' employees</li> </ul>
Environment-friendly wastewater treatment facility	<ul style="list-style-type: none"> <li>Reduce food waste sludge by supporting the introduction of environment-friendly water treatment facilities</li> </ul>
Environment-friendly package	<ul style="list-style-type: none"> <li>Product prototypes and support consulting services to help partner companies develop environment-friendly packages</li> </ul>

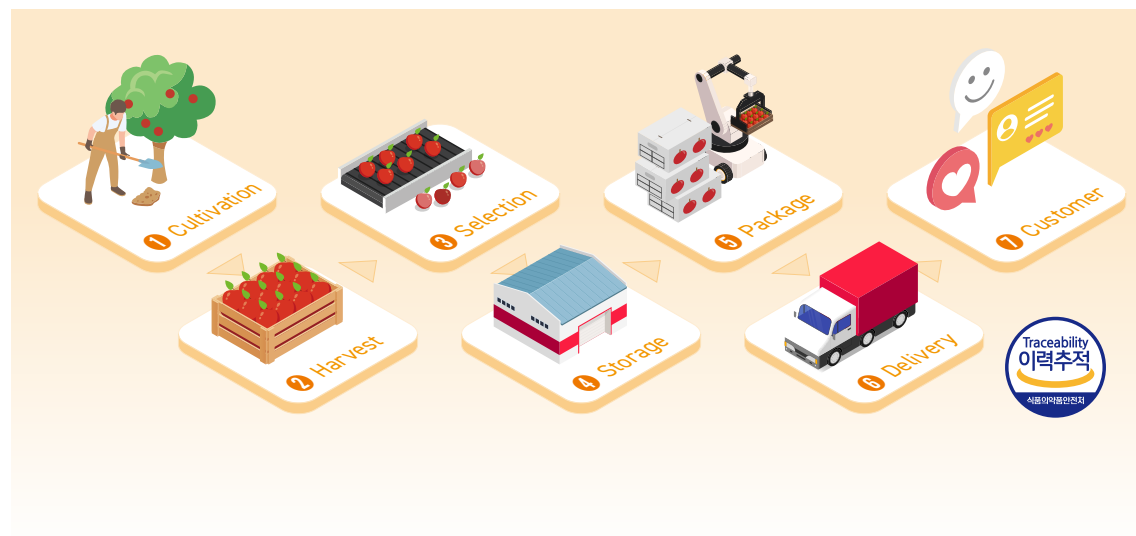
## Supply Chain

### Supply Network Strengthening

#### [GS Retail] Block Chain-based Agricultural Product History Management

GS Retail applied blockchain technology to the agricultural product to manage all processes from production to warehousing, packaging, and shipping systematically for the first time in the distribution industry. Utilizing the advantages of blockchain, such as the unfalsification of records and traceability, guarantees the authenticity of origin to consumers and provides transparent information on the entire supply chain process. The agricultural product information, such as the origin, livestock traceability number, HACCP certification, and processing company information, is transparently provided to stakeholders, while the traceability system is also applied to aquatic products. In addition, the IoT facilities installed in large cold warehouses automatically send the local temperature and humidity information in QR codes. This prevents the fabrication of product origins and counterfeit goods production and provides a safe shopping environment. Some livestock and aquatic products are also applied to the traceability system.

#### [GS Retail] Sanjiae Apple's Production and Distribution Process



#### [GS Retail] Due Diligence on Origin of Mass-market Products

The products whose sales exceed KRW 5 billion are classified as mass-market products. GS Retail inspects mass-market product producers in Korea and foreign countries. We used to contract with local inspection agencies to inspect clothing and miscellaneous goods. Health functional foods' raw materials are also inspected for the safety of consumers. Since 2021, a remote inspection has been conducted because of COVID-19, but the authenticity of raw material-producing areas, contamination possibilities of the cultivation environments, and production processes were thoroughly reviewed. In addition, we conduct additional inspections on third-party certifications and evolution results. To guarantee the quality and safety of raw materials, we consider the possibility of counterfeit certification and evaluation results and inspect the fields to confirm their reliability.

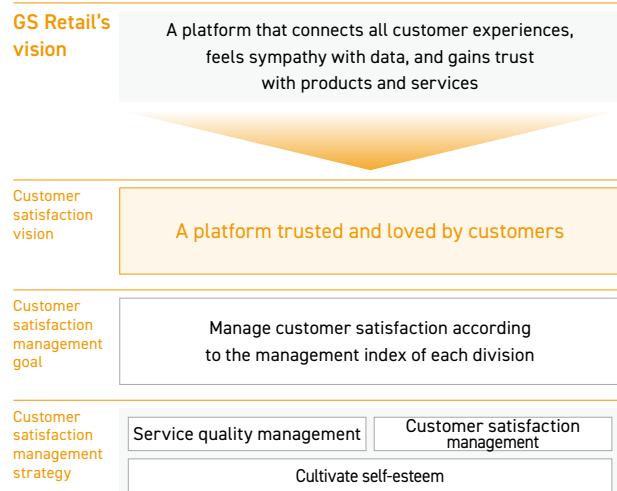
# Product Responsibility

GS listens to the voice of customers to make continuous development. We conduct regular customer satisfaction research and perform active VOC activities to realize customer satisfaction, the top priority of corporate management.

## [GS Retail] Customer Satisfaction and Quality Safety Strengthening

### Customer Satisfaction Management Goal and Strategy

GS Retail created customer panel diagnosis items customized to the characteristics of each division. The items allow us to understand customers' needs, preferences, and satisfactions and continuously improve products and services. Customer satisfaction is also managed systematically in connection with the executive KPI.



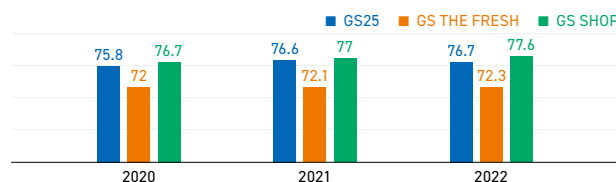
### Customer Satisfaction Research

GS Retail strengthens its competitiveness by researching consumers' perceptions and experiences of using its services and products and listening to a voice of the customers. In particular, we plan to expand the customer panel surveys in offline stores and advance the evaluation items to conduct an advanced customer satisfaction survey. GS Retail aims to improve its service quality by strengthening customer service in the stores.

### [GS Retail] Customer Satisfaction Research Activities

Channel	Research method	Description
Offline store	Customer panel research	Customer service satisfaction evaluation for general purchasing customers
	CS monitoring	Service quality evaluation by monitoring professionals
Home shopping	Mobile survey	CSP-based customer satisfaction research for general purchasing customers
	Focus group interview	Usability test in the TV viewing environment and in-depth evaluation of products and service experiences

### [GS Retail] Customer Satisfaction Research Result



### Customer Satisfaction Activities

GS Retail obtained the CCM (Consumer Centered Management) certification to realize customer-oriented management. This strengthened the role and responsibility of the CCO, and the CCM Operation Office plays the control power role. Also, we created the VOC management indicators to monitor customer satisfaction and make improvements. We classify core VOC and screen and manage them thoroughly.

### [GS Retail] VOC Status\*

Category	2020	2021	2022
Core VOC	Convenience store (VOC per store)**	1,747(0.11)	1,838(0.11)
	Supermarket (VOC per store)**	49(0.14)	79(0.20)
	GS Fresh Mall	6	37
	Home shopping	1,202	848

\*The figures in 2021 were adjusted because the calculation criteria have changed  
\*\* Core VOC identified by each business sector (e.g. food complaints)

# Product Responsibility

## [GS E&C] Strengthening Customer Satisfaction and Quality Safety

### AI Platform-based Service Advancement

GS E&C built the Xi AI platform to improve the residents' satisfaction, which is utilized to link to the home network system. The Xi AI platform is an integrated AI platform based on big data. It collects and analyzes information generated in Xi and applies the information to the GS SPACE app used by the residents. In the first half of 2022, we applied the 'Safe Care Service' that analyzes residents' life patterns and sends a message to a guardian in the event of an emergency. Following the introduction, the 'Customized Indoor Environment Service' has been introduced in the second half of the year to analyze the indoor air quality and maintain a pleasant indoor environment. In the first half of 2023, we launched the 'Preferred Parking Location' service that analyzes the residents' preferred parking locations and guides them to the optimal place to park. In addition, we cooperate with AI speaker(SKT/KT/Kakao) and IoT companies(LG Electronics, Coway, Philips Hue, etc.) to

expand the scope of services we can provide to the residents. All communication intervals and databases apply the financial sector-level security systems based on PKI authentication to protect customer data.

### [GS E&C] AI-based service, 'GS SPACE' and 'Safe Care Service'



### Continuous Customer Satisfaction Monitoring

GS E&C conducts annual customer satisfaction surveys to collect opinions and build improvement plans. We conducted project client satisfaction research on 13 items\* in project management, human resource, and communication. According to the research in 2022, the total satisfaction score was 8.27. Although we received negative comments on the finishing work, we continuously analyzed customer feedback using social networks. Future residents can request repairs through the 'Xi App,' and the repair

status is shared with individual residents. With these efforts, we will become a company that tirelessly grows with its customers.

### [GS E&C] Client Satisfaction Research (Unit: points, out of 10)

Category	2020	2021	2022
Project management	8.5	8.7	8.2
Human resources	8.9	8.7	8.3
Communication	8.8	8.9	8.3
Total satisfaction	8.74	8.84	8.27

\* Increased from 12 items in 2021 to 13 items in 2022

# 05



# Governance

Strengthening Governance Transparency  
Shareholder-friendly Management

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Ethics and Compliance Management

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## Strengthening Governance Transparency\*

\* Corresponds to the 5 core issues identified through materiality assessment

GS Holdings strives to establish a sound governance based on transparency and expertise to realize sustainable growth. To improve the efficiency of corporate operation and the rights and interests of stakeholders, the board of directors are composed of those who meet the standards required by the commercial law and the qualifications required by GS Holdings' constitution.

### Board of Directors

#### Board Members

GS Holdings' board of directors is organized and transparently operated according to the legal procedure. The board of directors is composed of the directors appointed at shareholders' meetings. In March 2023, we have 2 executive directors, 1 non-executive director, and 4 independent directors. As an important decision-making body, the board of directors is the subject that realizes responsible management. To this end, GS Holdings appoint the CEOs of GS Holdings and its affiliates as the executive directors. We also satisfy the rate of independent directors according to Article 542-8 of the Commercial Act to secure independence and professionalism.

#### GS Holdings' Board Members

Name	Gender	Position	Career highlight	Field of expertise	Appointment date	Term expiration date	Relationship with the largest shareholder
Tae-Soo Huh	Male	Chairman/CEO (Board chairperson)	MBA, The George Washington University CEO, GS Home Shopping	Business management	March 27, 2020	March 28, 2026	Family
Soon-Ky Hong	Male	President/CEO (Independent Director Recommendation Committee Member) (ESG Committee Member)	Economics, YonSei University Vice President GS Holdings Finance Team	Business management	March 27, 2020	March 28, 2026	Affiliate's executive
Yeon-Soo Huh	Male	Non-executive director	Electrical Engineering, Korea University CEO, GS Retail	Business management	March 27, 2020	March 28, 2026	Family Affiliate's executive
Jin-Hyun Han	Male	Independent Director (Audit Committee Member) (Independent Director Recommendation Committee Member)	Economics, The University of Kansas Second Deputy Minister of Trade, Industry and Energy	Business management	March 29, 2021	March 29, 2024	-
Oh-Seok Hyun	Male	Independent Director (Audit Committee Member) (ESG Committee Member)	Business, Seoul National University Deputy Prime Minister and Minister of Economy and Finance	Business management	March 23, 2018	March 28, 2024	-
Hyo-Eun Moon	Female	Independent Director (ESG Committee Member)	Computer & Information Technology Korea University Vice President, Daum Communications (Kakao)	Business management	March 28, 2022	March 28, 2025	-
Deuck-Churl Han	Male	Independent Director (Audit Committee Chair) (Independent Director Recommendation Committee Member)	Business, Korea University Vice President, Samll PWC Accountings	Accounting/Audit (Certified public accountant)	March 29, 2023	March 29, 2026	-

\* On March 29, 2023, the general shareholders' meeting nominated Deok-Churl Han, an independent director, to replace Seung-Woo Yang, who resigned owing to the end of his term.

#### BOD Appointment Procedure and Term

Considering their vision and leadership, we appoint the most suitable persons with expertise as executive director candidates. The selected candidates by the Personnel Committee are verified by the board of directors and finally appointed at a shareholders' meeting. In the case of independent director appointment, the Independent Director Recommendation Committee, composed of a majority of independent directors, nominates candidates through a separate decision-making process to review the nomination more thoroughly and objectively. The term of appointed directors is limited to 3 years to keep independence from internal and external interests.

## Strengthening Governance Transparency\*

\* Corresponds to the 5 core issues identified through materiality assessment

### Board of Directors

#### BOD Independence and Concurrent Office Restriction

GS Holdings establishes strict independence requirements stronger than the global standards, including the Commercial Law, and the board of directors selects director candidates based on these requirements. In addition, we stipulate and follow the provisions for considering whether an independent director has significant interests in the company.

#### GS Holdings' Independent Directors Concurrent Office

Name	Term	Current position	Concurrent position		
			Organization	Position	Term of office
Oh-Seok Hyun	March 2018 - March 2024	-	-	-	-
Jin-Hyun Han	March 2021 - March 2024	Advisor, Lee & Ko	-	-	-
Hyo-Eun Moon	March 2022 - March 2025	-	KyoBo Life Insurance	Independent Director	March 2022 - Present
Deuck-Churl Han	March 2023 - March 2026	Advisor, ShinJung Accounting Corporation	-	-	-

\* Concurrent Organization includes NGOs, foundations, etc.

#### BOD Diversity

GS Holdings established and followed a policy on the diversity of board members to manage the company from a broader perspective. GS Holdings' first female independent director, Hyo-Eun Moon, is an experienced expert in the IT sector and start-ups. GS Holdings will continuously try to secure a competitive governance structure by securing diversity not limited to age, gender, nationality, and experience.

### BOD Operation

#### BOD Activities

The board members gather for ordinary board meetings held once a quarter and extraordinary board meetings held occasionally. It is a principle that the chairperson organizes board meetings, but the board members may exercise the proxy right to hold a meeting in an order made by the board if necessary. The ordinary meetings usually cover the approvals of quarterly financial statements, and resolutions are passed with the attendance of a majority of directors and the consent of a majority of attending directors.

#### GS Holdings' BOD Operation and Performance

Category	2020	2021	2022
Number of meetings	7	8	9
Number of agenda	21	25	27
Average attendance rate	95%	98.4%	100%

#### BOD Agendas related to Sustainability in 2022

Meeting date	Agenda
February 10, 2022	The adoption of the electronic voting system to shareholders' meetings Appointment of compliance officer
March 10, 2022	Internal accounting management system report in 2021 Internal accounting management system evaluation in 2021
March 28, 2022	Appointment of ESG Committee member
May 12, 2022	Revision of the ESG Committee Regulations Resolutions of the ESG Committee Revision of the executive personnel management policy
August 18, 2022	Large-scale internal transactions with affiliates and transactions with stakeholders such as major shareholders Publication of 2021 Sustainability Report
October 4, 2022	Appointment of compliance officer
November 10, 2022	Large-scale internal transactions with affiliates and transactions with stakeholders such as major shareholders
November 30, 2022	Promotion of executive officers

Average attendance rate

100%

Average attendance rate of independent directors

100%

Average attendance rate of executive directors

100%

## Strengthening Governance Transparency\*

\* Corresponds to the 5 core issues identified through materiality assessment

### BOD Operation

#### BOD Expertise Improvement

GS Holdings organized a board of directors with persons who have expertise in management, finance, energy, and the trade industry to respond to all issues related to corporate management insightfully. In addition, we conduct training for independent directors to respond to the rapidly changing global economy and markets. In 2022, we provided education about ESG reporting under the CSRD and the internal accounting control system.

#### GS Holdings Education for BOD

Date	Major subject	Host	Attending directors
May 12, 2022	- Understanding an ESG disclosure - Strengthening ESG disclosure requirements of each country - ESG disclosure standardization in international society	ESG reporting	All independent directors
August 18, 2022	- Roles of the Audit Committee in the operation of the internal accounting control system	Samll PWC Accountings	Seung-Woo Yang, Oh-Seok Hyun, Jin-Hyun Han

### Remuneration of BOD Members

#### Remuneration Standards for Directors and Executives

GS Holdings concerns the decreasing independence if directors receive rewards depending on their evaluation results, so the independent director evaluation does not affect the rewards they receive. Independent directors are not given stock options; their rewards are limited to basic salary and work-related expenses. The remunerations are continuously reviewed to determine appropriate salary ranges considering the duties, risks, and working hours. With this effort, we are establishing sound governance.

#### Remuneration of the BOD Members

Category	Unit	2020	2021	2022
Number of directors	Person	10	7	7
Total remuneration	KRW million	20,906	4,320	9,691
Average remuneration per director	KRW million	2,091	617	1,384

Category	Unit	2020	2021	2022
Registered directors (excluding independent directors and audit committee members)	Number of directors	Person	6	3
	Total remuneration	KRW million	20,618	4,032
	Average remuneration per director	KRW million	3,436	1,344
Independent directors (excluding audit committee members)	Number of directors	Person	1	1
	Total remuneration	KRW million	72	72
	Average remuneration per director	KRW million	72	72
Audit committee members	Number of directors	Person	3	3
	Total remuneration	KRW million	216	216
	Average remuneration per director	KRW million	72	72

## Strengthening Governance Transparency\*

\* Corresponds to the 5 core issues identified through materiality assessment

### BOD Function

#### Compliance Management

GS Holdings has introduced a compliance support system since 2012 according to Article 542-13 of the Commercial Law to prevent potential legal risks during management activities. We appoint compliance officers with legal qualifications to confirm whether the compliance standard is satisfied, and the result is published in the annual report. The compliance officers monitor employee compliance and the legality of management activities while supporting GS Holdings' organizations and businesses through various compliance activities. In addition, they are required to attend the board of directors and report the result of the activities in the meetings.

#### Ethical Management

In October 2021, GS Holdings presented the business decision-making and workplace standard by establishing the Code of Ethics. It consists of "respect for executives and employees," "transparency of work," "prohibition of conflict of interest," "external communication," "information protection and security," and "mutually beneficial cooperation and fair trade." All employees of GS Holdings strive to internalize ethical management and fulfill their social responsibility.

#### Internal Accounting Management

GS Holdings improves the reliability of financial statements by operating the internal accounting management system in accordance with Korean laws. The CEO reviews the effectiveness of the internal accounting management system every year and reports the results to the Audit Committee, the board of directors, and shareholders' meetings. As the Act on External Audit of Stock Companies has been fully revised, GS Holdings has amended its internal accounting management regulations and organized a department responsible for inspecting its implementation. The internal accounting management regulation also includes the basis of the establishment.



## Strengthening Governance Transparency\*

\* Corresponds to the 5 core issues identified through materiality assessment

### Committee under BOD

#### Audit Committee

The Audit Committee audits GS Holdings' accounting and business. Based on the auditing experience and results, the committee creates reports to prevent accounting distortions and mismeasurements. The audit report includes the committee's opinion on the balance sheet, profit and loss statement, financial condition, and business performance. According to the internal audit regulations, we have a working-level organization to assist the Audit Committee. In 2022, we conducted education on ESG disclosures and the Audit Committee's role for all committee members to strengthen their professionalism in auditing.

#### Members of the Audit Committee

Name	Position	Accounting & finance expertise			Transaction with GS Holdings	Relationship with the largest shareholder	Term
		Yes/No	Professional occupation	Related experience			
Deuck-Churl Han	Independent director	Yes	Accountant	Vice president, Samll PWC Accountings (1984-2021)	N/A	N/A	March 2026
Oh-Seok Hyun	Independent director	-	-	-	N/A	N/A	March 2024
Jin-Hyun Han	Independent director	-	-	-	N/A	N/A	March 2024

\* On March 29, 2023, the general shareholders' meeting nominated Deuck-Churl Han, an independent director, to replace Seung-Woo Yang who resigned owing to the end of his term.

#### Non-audit Services

Business year	Contract date	Service	Service period	Price
19th (current)	February 28, 2022	Tax reconciliation	February 28, 2022-March 28, 2022	9,000,000
18th (previous)	February 24, 2021	Tax reconciliation	February 24, 2021-March 29, 2021	8,500,000
17th (previous)	January 15, 2020	Tax reconciliation	March 2, 2020-March 30, 2020	8,480,000

#### Independent Director Recommendation Committee

The Independent Director Recommendation Committee consists of the majority of independent directors to fulfill relevant laws and secure independence and fairness in the director negotiation and appointment procedure. In the disclosure period from 2022 to the first half of 2023, the Independent Director Recommendation Committee was held twice, and Hyo-Eun Moon and Deuck-Churl Han were appointed as independent directors in the 18th and 19th general stockholder meetings, respectively, through a fair nomination process.

#### Members of the Independent Director Recommendation Committee

Name	Position	Appointment	Transaction with GS Holdings	Relationship with the largest shareholder	Term
Soon-Ky Hong	Executive director	Reappointment	N/A	Executive of an affiliate	March 2026
Jin-Hyun Han	Independent director	New appointment	N/A	N/A	March 2024
Deuck-Churl Han	Independent director	New appointment	N/A	N/A	March 2026

\* On March 29, 2023, the general shareholders' meeting nominated Deuck-Churl Han, an independent director, to replace Seung-Woo Yang who resigned owing to the end of his term.

#### Activities of the Independent Director Recommendation Committee

Meeting date	Agenda	Approval	Director name		
			Seung-Woo Yang	Jin-Hyun Han	Soon-Ky Hong
			Agreed/disagreed		
March 3, 2022	Independent director nomination (Hyo-Eun Moon)	Approved	Agreed	Agreed	Agreed
March 2, 2023	Independent director nomination (Deuck-Churl Han)	Approved	Agreed	Agreed	Agreed

## Strengthening Governance Transparency\*

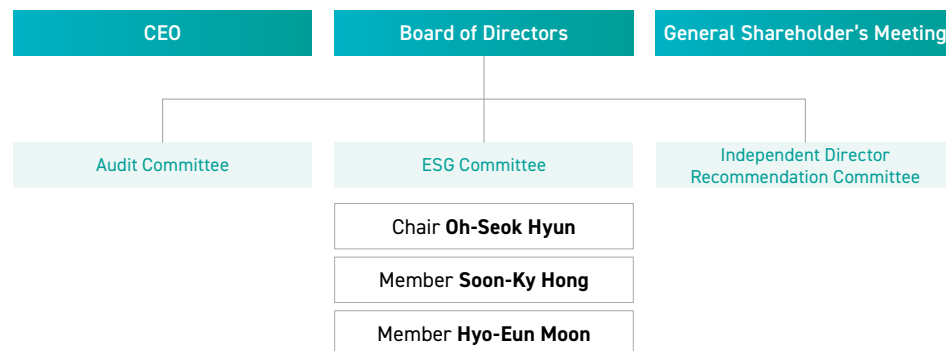
\* Corresponds to the 5 core issues identified through materiality assessment

### Committee under BOD

#### ESG Committee

To practice ESG management, we created the ESG Committee in March 2021. The independent director, Oh-Seok Hyun, holds the chair position, while CEO Soon-Ky Hong and independent director Hyo-Eun Moon participate in the committee as its members. The committee sets the strategies and directions of GS Holdings, deliberates and votes for policies, and manages and supervises the setting of ESG management.

#### ESG Committee



#### ESG Committee Members

Name	Position	Term	Specialty
Soon-Ky Hong	CEO	March 2026	Management, finance
Oh-Seok Hyun	Independent director	March 2024	Economy, finance, risk management
Hyo-Eun Moon	Independent director	March 2025	IT, management

#### ESG Committee's Activities

	Agenda	Approval	Agreement rate	Attendance rate
February 10, 2022	KPC consulting result report	-	-	100%
March 28, 2022	Establishment of major ESG regulation	Approved	100%	100%
	Holding GS Group's 1st ESG Committee in 2022 Sustainability report	-	-	
May 12, 2022	Human rights evaluation and management system report	-	-	100%
June 17, 2022	Sustainability report publication	Approved	100%	100%
	Corporate governance report submitted			
August 18, 2022	The environment disclosure system registration	-	-	100%
	MSCI ESG evaluation			
November 10, 2022	Holding GS Group's 3rd ESG Committee in 2022	-	-	100%

Number of ESG  
Committee meetings

6

ESG Committee  
members' average  
attendance rate

100%

## Shareholder-friendly Management

Shareholder-friendly activities should be performed to improve the reliability between the corporate and its shareholders, maintain long-term stability, and increase the growth probability. GS Holdings prioritizes the interests of its shareholders and practices various shareholder-friendly activities to return profits to them. We introduce multiple voting systems to support the exercise of shareholders' rights as well as to report information to shareholders timely and transparently.

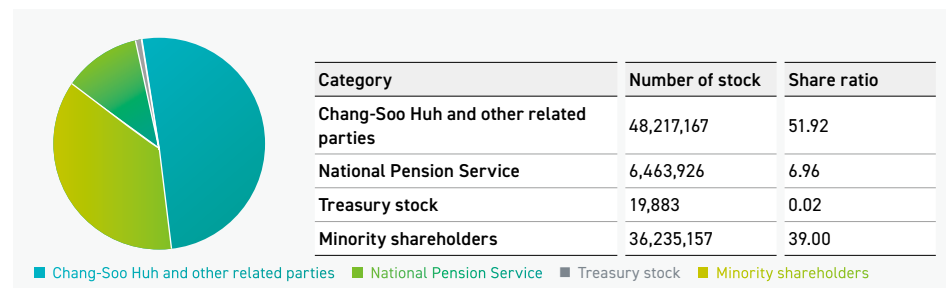
### Stock Issuance

To protect the rights and interests of shareholders, GS Holdings has a general meeting within three months after the end of each business year according to the Korean Commercial Act and the company regulation. To provide the information necessary for exercising shareholders' rights in a timely manner, we notify the time, venue, and purpose of the meeting to the shareholders in writing or electronically two weeks ahead of time. In addition, we aim to hold the meeting on a day other than the day most general meeting takes place to encourage shareholders' participation in the shareholders' meeting. Therefore, the 17th and 18th meetings were held, avoiding the day most general meeting takes place to ensure that more shareholders attended.

#### Stock Issuance

Category	Stock type	Number of stock	Note
Total number of issued stocks	Ordinary shares	92,915,378	-
	Preference shares	1,784,826	-
Number of stocks without voting rights	Ordinary shares	19,883	-
	Preference shares	1,784,826	-
Number of stocks with voting rights	Ordinary shares	92,895,495	-

#### Shareholder Composition



#### Introduction of Voting System

Voting system type	Concentrated vote system	Voting in writing	Electronics voting	Proxy voting system
Introduction	Excluded	Not introduced	Introduced	Introduced
Implementation	-	-	The 17th general meeting of shareholders	The 17th general meeting of shareholders

#### General Shareholders' Meeting Resolutions

Category	Information
Date	March 29, 2023
Venue	Amoris Hall, 508, Nonhyeon-ro, Gangnam-gu, Seoul, Republic of Korea
Purpose of meeting	Audit report
	Report
	Resolution
	Resolution

Category	Information
Report	Sales report
	Operation report of internal accounting management system 2022
	Report on the transaction with the largest shareholder
	The 19th financial statement
Resolution	Partial revisions of the executive severance pay regulation
	Appointment of directors (Tae-Soo Huh, Soon-Ky Hong, Yeon-Soo Huh, and Deok-Churl Han)
	Appointment of a member of the Audit Committee (Deok-Churl Han)
	Directors' remuneration cap

# Shareholder-friendly Management

## Communication with Shareholders

### Transparent Information Disclosure

To provide a performance report timely before submitting an annual, quarterly, and semiannual reports around every February, May, August, and November, GS Holdings uploads its provisional performance report based on consolidated financial statements on the KRX(Korea Exchange) and GS Holdings' official websites. This allows its shareholders to receive corporate information fairly. In addition, we perform IR activities through face-to-face meetings and conference calls and support the shareholders to understand the corporate information completely. In 2022, we had five NDR & conference calls with Korean institutional investors and analysts. In addition, GS Holdings frequently respond to inquiries from individual investors to help them raise awareness.

### IR Activities in 2022

Date	Target	Type
February 15, 2022	Domestic institutional investors	NDR, conference call
May 19-20, 2022	Domestic institutional investors	NDR, conference call
August 19 & 22, 2022	Domestic institutional investors	NDR
November 9, 2022	Equity Analyst	Conference call
November 16-17, 2022	Domestic institutional investors	NDR

## Shareholder Interest Protection

### Shareholder Interest Protection

We control internal transactions and self-dealings to prevent the self-dealings aiming for the personal interests of the management or the significant shareholders. Article 12 of the Board of Directors Regulation stipulates that a transaction between a director and the company should be approved through discussions. We also enhance the control over internal transactions and self-dealing to prevent directors with special interests in resolutions of the board of directors from exercising their voting rights. In addition, if the annual transaction volume with the largest shareholder or other specially related persons exceeds 5% of the asset or if a transaction volume exceeds 1% of the asset, prior approval is required by the board. This system is also applied to transactions between a board and GS Holdings.

## Shareholder Return

### Shareholder Return Policy

In March 2023, GS Holdings announced the mid-to-long-term dividend policy to increase shareholder value. As a holding company, we aim to return more than 40% of its average net profit (excluding one-off non-recurring profit or loss) for the past three years to the shareholders based on stand-alone financial statements. However, the dividend payment guideline is changeable, considering maintaining the soundness of the financial structure and the business environment. We notify the information on dividends to the shareholders through the disclosure of the 'Decision on Cash Dividends and Dividends in Kind' on the day of the discussion of the board of directors, and it is also uploaded on the disclosure systems and GS Holdings' official website.

### Dividends for the Last Five Years

Category		2018	2019	2020	2021	2022
Cash dividend yield (%)	Ordinary shares	3.6	3.6	5.1	4.9	5.4
	Preference shares	5.3	5.1	6.1	5.6	7.1
Share dividend yield (%)	Ordinary shares	-	-	-	-	-
	Preference shares	-	-	-	-	-
Cash dividend per share (KRW)	Ordinary shares	1,900	1,900	1,900	2,000	2,500
	Preference shares	1,950	1,950	1,950	2,050	2,550
Share dividend per share (share)	Ordinary shares	-	-	-	-	-
	Preference shares	-	-	-	-	-

# Ethics and Compliance Management






GS stipulates compliance with laws and ethical standards as the first requirement of corporate management and performs ethics and compliance management continuously by enacting the ethical management charter and inspecting unethical behaviors.

## Ethical Management

### Ethical Management Charter

In October 2021, GS Holdings established the code of ethics as guidelines for business decision-making and executives' and employees' practice. The code of ethics consists of 6 parts: respect for executives and employees, transparency of work, prohibition of conflict of interest, external communications, information protection and security, and mutually beneficial cooperation and fair trade. We at GS Holdings are committed to internalizing it through regular education and audits.

### GS Group's Code of Ethics

	<p><b>Respect for executives and employees</b></p> <ul style="list-style-type: none"> <li>Recognizing and respecting diversity</li> <li>Prohibition of position/authority abuse</li> <li>Making healthy and safe work environments</li> </ul>		<p><b>External communications</b></p> <ul style="list-style-type: none"> <li>Neutrality of executives and employees</li> <li>Work-related communications</li> </ul>
	<p><b>Transparency of work</b></p> <ul style="list-style-type: none"> <li>Prohibition of corporate system abuse and false reporting on performance</li> <li>Corporate asset protection and lawful use</li> <li>Corporate record keeping and management</li> </ul>		<p><b>Information protection and security</b></p> <ul style="list-style-type: none"> <li>Privacy protection and corporate regulation compliance</li> <li>Information security</li> </ul>
	<p><b>Prohibition of conflict of interest</b></p> <ul style="list-style-type: none"> <li>Excluding private relationships from work</li> <li>Avoiding conflict of interest arising from mutually beneficial cooperation and fair trade</li> <li>Prohibition of investment using inside information</li> <li>Prohibition of holding concurrent position</li> </ul>		<p><b>Mutually beneficial cooperation and fair trade</b></p> <ul style="list-style-type: none"> <li>Prohibition of position/authority abuse</li> <li>Trade on equal terms and objective standards</li> <li>Prohibition of imposing unreasonable conditions on business owners</li> <li>Prohibition of offering and/or receiving money, valuables, entertainment, or benefits</li> </ul>

### Unethical Behavior Audit & Report

We have a whistleblowing channel to report executives' and employees' unfair conduct and violations with the intention to strengthen transparency and accountability at work. Complaints and reports include unjustifiable offering and/or solicitation of money, valuables, or entertainment, unfair trade with interested parties, lack of transparency in supplier selection, unfair or illegal use of corporate assets, document falsification and false reporting, and other unethical conducts. Reporters' identities and report contents are kept strictly confidential and will not be disclosed without their consent.

### Unethical Behavior Reporting Process

<p><b>Report received</b></p> <ul style="list-style-type: none"> <li>Send a text message or an e-mail to confirm receipt of a report if the report is made with a real name</li> <li>Guide the principle of protecting the identity of the reporter and the processing schedule</li> </ul>	<p><b>Investigation</b></p> <ul style="list-style-type: none"> <li>Conduct an investigation based on the report</li> <li>Confirm facts and find an objective evidence</li> </ul>
<p><b>Confirmation</b></p> <ul style="list-style-type: none"> <li>Conduct a preliminary review of the report</li> <li>Select investigation targets and scope if the investigation is necessary</li> </ul>	<p><b>Results notified</b></p> <ul style="list-style-type: none"> <li>Take measures according to the investigation results and the internal regulations</li> <li>Inform the results</li> </ul>

### Ethical Management Hotline Reporting

Category	Process	Investigation	Discipline/punishment
Unfair business handling	3	3	-
Unethical behavior	5	5	1
Others	13	13	-
<b>Total</b>	<b>21</b>	<b>21</b>	<b>1</b>

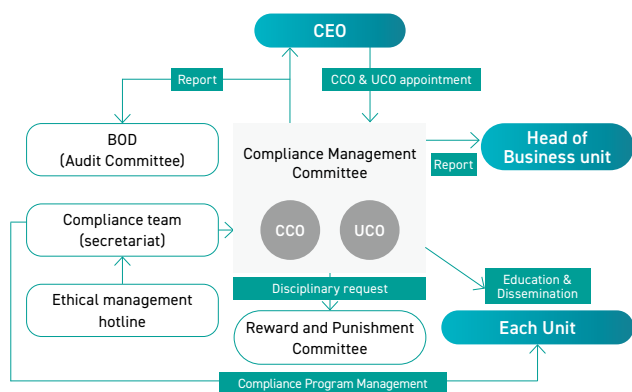
# Ethics and Compliance Management

## Compliance Management

### [GS Caltex] Compliance System

GS Caltex, through its Compliance Management Committee, shares the compliance issues and activities applicable to all employees, such as fair trade and anti-corruption, and inspects the current condition. The committee consists of the corporate compliance officer (CCO), who manages the company-level compliance program, and the unit compliance officers (UCO), who assist the heads of units and perform compliance activities. The compliance team assists the CCO and creates and implements compliance programs. The CCO independently reports these activities to the Audit Committee. GS Caltex obtained ISO 37301 (compliance management system) in 2021 and established a global-level compliance system.

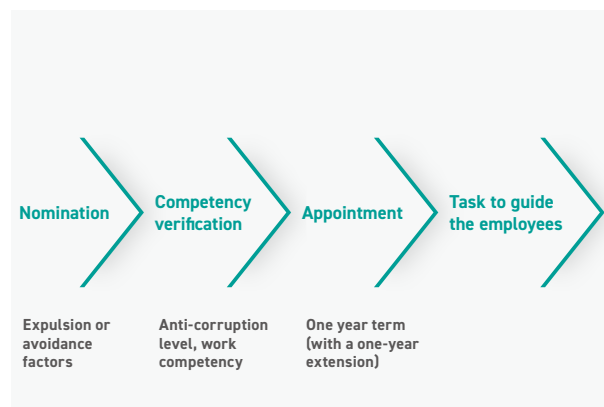
### [GS Caltex] Compliance System



### [GS Retail] Fair Trade Compliance Manager

GS Retail operates a fair trade compliance program to establish and internalize a voluntary fair trade culture. We appoint an executive in charge of external affairs as the fair trade compliance manager, who is entrusted with authority and responsibility from the CEO and plays controls external and internal risks, including fair trade, to supervise and audit the compliance with laws, create a compliance handbook, and manage education on voluntary compliance. The progress and result of these activities are semiannually reported to the board of directors.

### [GS Retail] Appointment of Compliance Manager



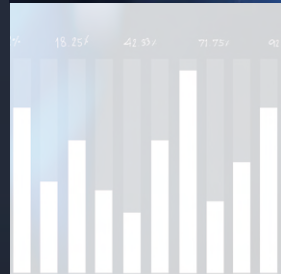
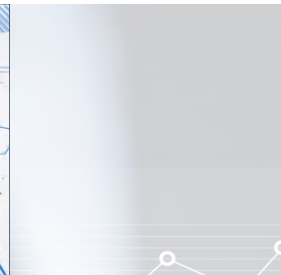
### [GS E&C] Internalization of Fair Trade Compliance

GS E&C introduced the fair trade compliance program, or CP, to establish a fair trade compliance culture. We not only conducted education on its purpose but also received practice pledges from the employees. All company members, from GS E&C's full-time employees and temporary agency workers to professionals and contract workers in the fields, need to sign the pledge of ethical management and fair trade, and we at GS E&C strive to establish the culture. With its measurable goals, index management, CP tasks in the executive KPI evaluation, and the materialization of employee reward and punishment, GS E&C aims to obtain an A grade in the CP evaluation by the Korea Fair Trade Mediation Agency. In addition, we conduct employee education on legal risks and hold a compliance council to build consensus in the CP operation.

### [GS E&C] Important CP Achievements

Time	Achievement
January 2022	• Ethical management and fair trade pledges from all executives and employees
March 2022	• Including fair trade performances in the KPI evaluation for all executives
June 2022	• Online fair trade law education for all employees (completion rate of 96%) and four-time in-depth education by risk sector (until November 2022) * Inspecting and revising the CP operation regulations and process
October 2022	• CEO's re-statement of the will to practice and upload the CP Practice Declaration on the website and EP * Revised the CP Operational regulation and the Voluntary Compliance Handbook (distributed as a guidebook)
December 2022	• Rewarding the CEO of an exemplary CP activity organization and the fair trade compliance manager
Year-round	• Preventive activities against violations of the law through a prior business consultation system (51 activities, including a review of housing display and advertisements)

# 07



# Appendix

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## Financial Performances

### Consolidated Balance Sheet

(Unit: KRW million)

Category	19th (2022)	18th (2021)	17th(2020)
Assets			
Current assets	5,978,612	5,388,853	3,436,836
Cash and cash equivalents	2,331,204	1,204,959	742,809
Other current financial assets	94,451	728,840	619,289
Current financial assets at fair value through profit or loss	82,051	723,465	610,312
Current financial assets at fair value through comprehensive income	142	243	689
Derivative assets	12,258	5,132	8,288
Account receivable & other receivable	2,558,032	2,372,909	1,513,235
Other current assets	258,340	306,317	165,861
Current tax assets	7,059	2,265	7,642
Inventories	712,544	629,020	377,082
Assets held for sale	16,982	144,543	10,918
Non-current assets	27,943,630	25,802,434	21,040,007
Other non-current financial assets	1,117,608	1,082,177	268,723
Non-current financial assets at fair value through profit or loss	642,398	696,541	15,184
Non-current financial assets at fair value through other comprehensive income	469,262	385,259	11,553
Non-current derivative assets	5,948	377	1,326
Investments in subsidiaries, joint ventures and associates	8,690,286	7,037,836	6,689,317
Investment property	1,403,106	1,471,794	1,275,555
Property, plant and equipment	10,866,722	11,228,467	8,439,464
Right-of-use assets	1,874,976	1,515,272	1,636,481
Intangible assets	2,029,233	1,903,021	1,198,045
Long-term trade and other non-current receivables	1,648,339	1,383,645	1,390,810
Other non-current assets	117,766	97,143	76,607
Deferred tax assets	88,915	83,079	65,005
Total assets	33,922,242	31,191,287	24,476,843

Category	19th (2022)	18th (2021)	17th(2020)
Liabilities			
Current liabilities	6,527,808	5,501,784	3,997,764
Trade and other current payables	2,808,341	2,353,654	1,791,050
Other current financial liabilities	2,904,190	2,443,799	1,933,024
Other current liabilities	329,684	264,149	152,062
Current tax payables	392,484	243,727	68,839
Provisions for current liabilities	93,109	113,240	52,789
Short-term miscellaneous other provisions	93,109	113,240	52,789
Liabilities held for sale	0	83,215	0
Non-current liabilities	10,906,624	11,486,559	9,722,534
Long-term trade and other non-current payables	2,415,261	1,920,457	2,014,652
Other non-current financial liabilities	6,807,524	8,001,559	6,692,992
Other non-current liabilities	328,419	315,955	130,752
Deferred tax liabilities	1,232,959	1,137,579	720,437
Retirement benefit liabilities	4,360	-22,056	13,686
Non-current provisions	118,101	133,065	150,015
Total liabilities	17,434,432	16,988,343	13,720,298
Shareholders' equity			
Equity attributable to owners of parent	12,438,586	10,288,563	8,353,750
Capital	473,501	473,501	473,501
Additional paid-in and other capital	1,692,715	1,693,177	1,180,656
Other components of equity	-2,965,224	-2,983,678	-2,977,987
Accumulated other comprehensive income	113,952	-25,734	-157,264
Retained earnings	13,123,642	11,131,297	9,834,844
Non-controlling Invest equity	4,049,224	3,914,381	2,402,795
Total shareholders' equity	16,487,810	14,202,944	10,756,545
Total liabilities and shareholders' equity	33,922,242	31,191,287	24,476,843

## Financial Performances

### Consolidated Income Statement

(Unit: KRW million)

Category	19th (2022)	18th (2021)	17th (2020)
Sales	28,777,048	20,165,049	15,346,150
Cost of sales	20,772,150	15,229,461	12,626,904
Gross profit	8,004,898	4,935,588	2,719,246
Selling and administrative expenses	2,999,771	2,284,242	1,776,050
Operating income	5,005,127	2,651,346	943,196
Other profit	360,710	827,486	229,157
Other loss	420,153	442,717	494,931
Financial income	230,855	184,441	122,486
Financial expense	555,520	367,589	335,587
Income before income tax expense	4,621,024	2,852,967	464,321
Income tax expenses	2,141,935	1,227,116	626,702
Continuing operating profit (loss)	2,479,089	1,625,851	162,381
Discontinued operating income (loss)	3,615	11,169	25,395
Net income (loss)	2,482,704	1,614,682	(187,776)

## Environmental Performances

### GHG Emissions and Energy Use



Category	Unit	2020	2021	2022	
GHG	Direct emissions (Scope 1)	tCO <sub>2</sub> eq	NA	174	193
	Indirect emissions (Scope 2)	tCO <sub>2</sub> eq	NA	252	304
	Total emissions	tCO <sub>2</sub> eq	NA	426	497
	GHG emissions intensity	tCO <sub>2</sub> eq/KRW million	NA	0.00	0.00
Energy	Total energy use	TJ	NA	8	10



Category	Unit	2020	2021	2022	
GHG	Direct emissions (Scope 1)	Banwol	948,938	978,884	966,144
		Gumi	1,107,317	1,121,154	1,103,772
	Indirect emissions (Scope 2)	Banwol	108	127	148
		Gumi	129	180	102
	Total emissions	tCO <sub>2</sub> eq	2,057,228	2,101,054	2,070,867
	GHG emissions intensity	tCO <sub>2</sub> eq/KRW million	1.49	1.29	0.80
Energy	Total energy use	TJ	23,702	24,261	23,895



Category	Unit	2020	2021	2022	
GHG	Direct emissions (Scope 1)	tCO <sub>2</sub> eq	1,931,348	2,174,033	2,967,293
	Indirect emissions (Scope 2)	tCO <sub>2</sub> eq	21,704	24,403	20,662
	Total emissions	tCO <sub>2</sub> eq	1,953,049	2,198,430	2,987,955
	GHG emissions intensity	tCO <sub>2</sub> eq/KRW million	2.66	2.37	1.48
Energy	Total energy use	TJ	37,296	42,045	58,360

\* Differences in GHG-specific emissions and total emissions from the sum of workplace emissions due to aggregation of workplace emissions by business unit



Category	Unit	2020	2021	2022	
GHG	Direct emissions (Scope 1)	tCO <sub>2</sub> eq	2,522,737	3,152,283	3,126,011
	Indirect emissions (Scope 2)	tCO <sub>2</sub> eq	18,593	14,412	12,015
	Total emissions	tCO <sub>2</sub> eq	2,541,330	3,166,695	3,138,025
	GHG emissions intensity	tCO <sub>2</sub> eq/KRW million	3.26	2.57	1.37
Energy	Total energy use	TJ	58,180	72,450	65,946

### Incheon Total Energy Company

Category	Unit	2020	2021	2022	
GHG	Direct emissions (Scope 1)	tCO <sub>2</sub> eq	319,988	379,251	370,696
	Indirect emissions (Scope 2)	tCO <sub>2</sub> eq	3,608	3,076	3,145
	Total emissions	tCO <sub>2</sub> eq	323,596	382,327	373,840
	GHG emissions intensity	tCO <sub>2</sub> eq/KRW million	2.22	2.12	1.28
Energy	Total energy use	TJ	6,414	7,578	7,496

## Environmental Performances

### Water Consumption and Reuse



Category	Unit	2020	2021	2022
Water used*	tons	N/A	4,399	4,744
Water reused	tons	N/A	-	-

\* Water used = Water intake + Water reused



Category	Unit	2020	2021	2022	
Water used*	Banwol	tons	4,105,722	4,300,590	3,192,175
	Gumi	tons	4,022,131	4,176,746	4,517,813
Water reused	tons	1,688,110	1,565,409	1,077,310	

\* Water used = Water intake + Water reused



Category	Unit	2020	2021	2022	
Water used*	Anyang	tons	2,248,442	2,333,124	3,539,454
	Bucheon	tons	214,330	417,039	398,573
Water reused	tons	384,723	392,173	501,615	

\* Water used = Water intake + Water reused



Category	Unit	2020	2021	2022
Water used*	tons	935,049	965,228	880,937
Water reused	tons	409,150	443,184	402,491

\* Water used = Water intake + Water reused

#### Incheon Total Energy Company

Category	Unit	2020	2021	2022
Water used*	tons	63,762	88,652	74,858
Water reused	tons	9,547	7,829	10,931

\* Water used = Water intake + Water reused

### Waste Discharge and Recycling Rates



Category	Unit	2020	2021	2022	
Total waste discharged	tons	N/A	13	20	
Designated waste	tons	N/A	-	-	
General waste	tons	N/A	13	20	
Waste processed	Landfill	tons	N/A	N/A	N/A
	Incineration	tons	N/A	N/A	N/A
	Recycle	tons	N/A	7	10



Category	Unit	2020	2021	2022		
Total waste discharged	Banwol	tons	67,068	74,093	86,896	
	Gumi	tons	54,670	59,753	64,108	
Designated waste	Banwol	tons	10	6	7	
	Gumi	tons	10	22	13	
General waste	Banwol	tons	67,059	74,087	86,888	
	Gumi	tons	54,660	59,731	64,094	
Waste processed	Landfill	Banwol	tons	-	-	-
		Gumi	tons	26	42	48
	Incineration	Banwol	tons	83	61	92
		Gumi	tons	82	50	65
	Recycle	Banwol	tons	66,985	74,033	86,803
		Gumi	tons	54,562	59,661	64,995



Category	Unit	2020	2021	2022	
Total waste discharged	Anyang	tons	460	449	631
	Bucheon	tons	304	292	394

## Environmental Performances

Category		Unit	2020	2021	2022
Designated waste	Anyang	tons	6	4	4
	Bucheon	tons	9	16	24
General waste	Anyang	tons	454	445	627
	Bucheon	tons	295	277	370
Waste processed	Landfill	Anyang	-	-	-
		Bucheon	-	-	25
	Incineration	Anyang	182	178	187
		Bucheon	168	232	230
	Recycle	Anyang	278	271	444
		Bucheon	136	60	139



Category		Unit	2020	2021	2022
Total waste discharged		tons	38,880	81,952	92,145
Designated waste		tons	37	4,170	19
Construction waste		tons	23	89	58
General waste		tons	38,820	77,693	92,068
Waste processed	Landfill	tons	9	569	450
	Incineration	tons	87	53	103
	Comminution	tons	23	89	58
	Recycle	tons	38,762	81,240	91,535

\* The total waste in 2020 and 2021 has changed as the construction waste is included

### Incheon Total Energy Company

Category		Unit	2020	2021	2022
Total waste discharged		tons	22	42	14
Designated waste		tons	13	24	4
General waste		tons	9	18	10
Waste processed	Landfill	tons	-	4	-
	Incineration	tons	5	10	10
	Recycle	tons	17	27	4

\* The total waste in 2020 and 2021 has changed as the construction waste is excluded

## Air Pollutant Discharge



Category		Unit	2020	2021	2022
SOx		tons	N/A	N/A	N/A
NOx		tons	N/A	N/A	N/A
Dust		tons	N/A	N/A	N/A



Category		Unit	2020	2021	2022
SOx	Banwol	tons	256	146	166
	Gumi	tons	214	210	201
NOx	Banwol	tons	563	402	497
	Gumi	tons	611	594	487
Dust	Banwol	tons	15	17	13
	Gumi	tons	8	8	11



Category		Unit	2020	2021	2022
SOx*	Anyang	tons	N/A	N/A	N/A
	Bucheon	tons	N/A	N/A	N/A
NOx	Anyang	tons	258	321	243
	Bucheon	tons	291	359	346
Dust*	Anyang	tons	N/A	N/A	N/A
	Bucheon	tons	N/A	N/A	N/A

\*Not measured as it is not subject to report



Category		Unit	2020	2021	2022
SOx		tons	41	62	78
Nox		tons	625	975	1,067
Dust		tons	11	12	6

## Environmental Performances

### Incheon Total Energy Company

Category	Unit	2020	2021	2022
SOx	tons	-	-	-
Nox	tons	75	67	60
Dust	tons	-	-	-

### Wastewater and Water Pollutant Discharge



Category	Unit	2020	2021	2022
Wastewater discharge	tons	N/A	N/A	N/A
Water pollutant discharge concentration	BOD	ppm	N/A	N/A
	COD	ppm	N/A	N/A
	SS	ppm	N/A	N/A



Category	Unit	2020	2021	2022	2022	
Wastewater discharge	Banwol	tons	622,727	743,357	483,074	
	Gumi	tons	612,858	672,350	797,633	
Water pollutant discharge concentration	BOD	Banwol	ppm	1.4	2.5	0.4
		Gumi	ppm	1.3	2.0	1.2
	COD	Banwol	ppm	9	10	5
		Gumi	ppm	9	10	6
	SS	Banwol	ppm	5	6	10
		Gumi	ppm	5	6	2



Category	Unit	2020	2021	2022		
Wastewater discharge	Anyang	tons	158,084	164,168	161,899	
	Bucheon	tons	73,286	102,448	82,394	
Water pollutant discharge concentration	BOD*	Anyang	ppm	N/A	N/A	N/A
		Bucheon	ppm	N/A	N/A	N/A
	COD	Anyang	ppm	3	3	2
		Bucheon	ppm	4	4	5
	SS	Anyang	ppm	1	1	1
		Bucheon	ppm	1	2	4

\*Not measured as it is not subject to report



Category	Unit	2020	2021	2022	
Wastewater discharge	tons	368,975	324,067	261,889	
Water pollutant discharge concentration	BOD	ppm	1	1	2
	COD	ppm	4	5	4
	SS	ppm	4	-	1

### Incheon Total Energy Company

Category	Unit	2020	2021	2022	
Wastewater discharge	tons	18,351	23,759	19,130	
Water pollutant discharge concentration	BOD*	ppm	N/A	N/A	
	COD	ppm	5	4	2
	SS	ppm	-	1	1

\*Not measured as it is not subject to report

## Environmental Performances

### Violations of Environmental Laws and Regulations



Category	Unit	2020	2021	2022
No. of legal obligations/regulatory violated	case	-	-	-
Total fine	KRW thousand	-	-	-



Category	Unit	2020	2021	2022
No. of legal obligations/regulatory violated	case	-	2	1
Total fine	KRW thousand	-	9,386	1,600



Category	Unit	2020	2021	2022
No. of legal obligations/regulatory violated	case	-	1	-
Total fine	KRW thousand	-	5,000	-



Category	Unit	2020	2021	2022
No. of legal obligations/regulatory violated	case	3	-	-
Total fine	KRW thousand	5,800	-	-

### Incheon Total Energy Company

Category	Unit	2020	2021	2022
No. of legal obligations/regulatory violated	case	-	-	-
Total fine	KRW thousand	-	-	-

## Social Performance

### Employees and Executives



Category	Unit	2020	2021	2022	
Total number of employees	Employees	persons	45	61	69
	Executives	persons	2	2	2
Employment type	Permanent	persons	42	50	58
	Temporary	persons	5	13	13
Gender	Female	persons	9	15	20
	Male	persons	36	48	51
Age	30 or under	persons	1	3	6
	31-50	persons	38	50	55
	51 or above	persons	8	10	10



Category	Unit	2020	2021	2022	
Total number of employees	Employees	persons	348	334	317
	Executives	persons	6	6	3
Employment type	Permanent	persons	347	325	311
	Temporary	persons	7	9	9
Gender	Female	persons	33	32	36
	Male	persons	321	308	284
Age	30 or under	persons	40	36	44
	31-50	persons	213	216	187
	51 or above	persons	101	88	79



Category	Unit	2020	2021	2022	
Total number of employees	Employees	persons	316	294	300
	Executives	persons	7	6	5

## Social Performance

Category		Unit	2020	2021	2022
Employment type	Permanent	persons	282	292	296
	Temporary	persons	34	2	9
Gender	Female	persons	29	28	30
	Male	persons	294	272	275
Age	30 or under	persons	36	40	47
	31-50	persons	192	145	139
	51 or above	persons	95	115	119

Category		Unit	2020	2021	2022
Gender	Female	persons	6	7	8
	Male	persons	73	78	79
Age	30 or under	persons	7	13	15
	31-50	persons	61	55	48
	51 or above	persons	11	17	24



Category		Unit	2020	2021	2022
Total number of employees	Employees	persons	247	266	282
	Executives	persons	3	3	3
Employment type	Permanent	persons	234	263	275
	Temporary	persons	16	6	10
Gender	Female	persons	20	18	24
	Male	persons	230	251	261
Age	30 or under	persons	142	142	110
	31-50	persons	77	96	148
	51 or above	persons	31	31	27

\* The employee status in 2020 and 2021 has changed as executives are categorized as employees

### Incheon Total Energy Company

Category		Unit	2020	2021	2022
Total number of employees	Employees	persons	77	83	85
	Executives	persons	2	2	2
Employment type	Permanent	persons	79	84	86
	Temporary	persons	-	1	1

## Employee Training in GS Holdings

Category	Unit	2020	2021	2022
Total training hours	Hours	3,224	3,055	2,545
Average training hours per employee	Hours per person	72	50	36
Total training cost	KRW million	68	60	53
Average training cost per employee	KRW /person	1,501,135	977,472	740,790

## Workforce Diversity



Category	Unit	2020	2021	2022
Number of Employees with disabilities	persons	-	-	-
Ratio of employees with disabilities	%	-	-	-
Number of female directors*	persons	6	-	-
Ratio of female directors	%	17	-	-

\* No separate director classification in 2021 due to consolidated position (manager)

## Social Performance



Category	Unit	2020	2021	2022
Number of Employees with disabilities	persons	6	4	5
Ratio of employees with disabilities	%	1.7	1.2	1.6
Number of female directors	Persons	-	-	-
Ratio of female directors	%	-	-	-



Category	Unit	2020	2021	2022
Number of Employees with disabilities	persons	8	8	7
Ratio of employees with disabilities	%	2.5	2.7	2.3
Number of female directors	persons	16	16	17
Ratio of female directors	%	5	6	6



Category	Unit	2020	2021	2022
Number of Employees with disabilities	persons	1	1	-
Ratio of employees with disabilities	%	0.4	0.4	-
Number of female directors	persons	-	1	1
Ratio of female directors	%	-	3	3

### Incheon Total Energy Company

Category	Unit	2020	2021	2022
Number of Employees with disabilities	persons	1	2	2
Ratio of employees with disabilities	%	1.3	3.7	3.6
Number of female directors	persons	1	1	1
Ratio of female directors	%	7	7	7

## Recruitment Status (full-time)



Category	Unit	2020	2021	2022	
Number of new employees	persons	12	19	22	
Gender	Male	persons	8	14	16
	Female	persons	4	5	6



Category	Unit	2020	2021	2022	
Number of new employees	persons	22	13	33	
Gender	Male	persons	20	11	25
	Female	persons	2	2	8



Category	Unit	2020	2021	2022	
Number of new employees	persons	23	20	32	
Gender	Male	persons	19	18	26
	Female	persons	4	2	6



Category	Unit	2020	2021	2022	
Number of new employees	persons	22	39	35	
Gender	Male	persons	19	35	30
	Female	persons	3	4	5

### Incheon Total Energy Company

Category	Unit	2020	2021	2022	
Number of new employees	persons	5	5	5	
Gender	Male	persons	5	5	4
	Female	persons	-	-	1

## Governance

### Shareholding

Category		Unit	2020	2021	2022
Affiliated persons	Number of shares	Share	48,424,175	48,742,590	48,217,167
	Share ratio	%	52.12	52.46	51.92
Government institution and minority shareholders	Number of shares	Share	46,427,397	45,517,980	42,699,083
	Share ratio	%	49.97	48.99	45.96
Treasury stock	Number of shares	Share	19,883	19,883	19,883
	Share ratio	%	0.02	0.02	0.02
Total	Number of shares	Share	92,915,378	92,915,378	92,915,378
	Share ratio	%	100*	100*	100*

\*Total deduction of duplicate calculation of minority shareholders for National Pension Service small accounts

## Stakeholders

### Financial Performance and Distribution

Category		Unit	2020	2021	2022
Employees and executives	Wages and bonuses, post-employment benefits and welfare*	KRW million	14,421	21,292	27,392
			Shareholders	Dividend	179,972
	Dividend payout ratio	%	-337.7	63.2	53.2
Investors	Interest on bonds, interest on bank loans, etc.		308,933	323,969	374,584
Local community	Social contribution costs	KRW million	7,782	8,926	16,767
Government	Tax expense		618,594	1,223,175	2,143,095

\* Based on 'employee salary' in financial statements

\* Non-consolidated net income in 2022: KRW 445 billion

### Associations and Initiatives

FKI (The Federation of Korean Industries)

KLCA (The Korea Listed Companies Association)

KCCI (The Korea Chamber of Commerce and Industry)

# GRI Standards Index

## Universal Standards

GRI 2: General Disclosure 2021				
Classification	Disclosur	Disclosure name	Page	Note
The organization and its reporting practices	2-1	Organizational details	p.6	
	2-2	Entities included in the organization's sustainability reporting	p.88	
	2-3	Reporting period, frequency and contact point	p.89	
	2-4	Restatements of information	Mark each page separately if applicable p.86-87	
	2-5	External assurance	p.86-87	
Activities and workers	2-6	Activities, value chain and other business relationships	p.8	
	2-7	Employees	p. 80-82	
	2-8	Workers who are not employees	p. 80-81	
Governance	2-9	Governance structure and composition	p. 64	
	2-10	Nomination and selection of the highest governance body	p. 64	
	2-11	Chair of the highest governance body	p. 64	
	2-12	Role of the highest governance body in overseeing the management of impacts	p. 65, 69	
	2-13	Delegation of responsibility for managing impacts	p. 56-57	
	2-14	Role of the highest governance body in sustainability reporting	p. 64-65, 69	
	2-15	Conflicts of interest	p. 65	
	2-16	Communication of critical concerns	p. 65, 69	
	2-17	Collective knowledge of the highest governance body	p. 66	
	2-18	Evaluation of the performance of the highest governance body	p. 66	
	2-19	Remuneration policies	p. 66	
Strategy, policies and practices	2-20	Process to determine remuneration	p. 66	
	2-22	Statement on sustainable development strategy	p. 18	
	2-23	Policy commitments	p. 18, 54	
	2-24	Embedding policy commitments	p. 19-20	
	2-25	Processes to remediate negative impacts	p. 55	
	2-26	Mechanisms for seeking advice and raising concerns	p. 51, 72	
	2-27	Compliance with laws and regulations	p. 67, 81	

GRI 2: General Disclosure 2021				
Classification	Disclosur	Disclosure name	Page	Note
Strategy, policies and practices	2-28	Membership associations	p. 83	
	2-29	Approach to stakeholder engagement	p. 21	

GRI 3: Material Topics				
Classification	Disclosur	Disclosure name	Page	Note
Material topics disclosure	3-1	Process to determine material topics	p. 21	
	3-2	List of material topics	p. 22	
	3-3	Management of material topics	p. 22	

## Topic-specific Standards

GRI 200: Economic Performance				
Classification	Disclosur	Disclosure name	Page	Note
Economic performance	201-1	Direct economic value generated and distributed	p. 6, 75-76	
	201-2	Financial implications and other risks and opportunities due to climate change	p. 33-37	
	201-3	Defined benefit plan obligations and other retirement plans	-	Disclosed in the business report
	201-4	Financial assistance received from government	-	N/A
Indirect economic impacts	203-1	Infrastructure investments and services supported	p. 48-51	
	203-2	Significant indirect economic impacts	p. 48-51	
Anti-corruption	205-2	Communication and training about anti-corruption policies and procedures	p. 72-73	

## GRI Standards Index

GRI 300: Environmental Performance				
Classification	Disclosur	Disclosure name	Page	Note
Energy	302-1	Energy consumption within the organization	p. 76	
	303-2	Management of water discharge-related impacts	p. 41	
Water and effluents	303-4	Water discharge	p. 79	
	303-5	Water consumption	p. 77	
Biodiversity	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	p. 43	
	304-3	Habitats protected or restored	p. 43	
Emissions	305-1	Direct GHG emissions (Scope 1)	p. 76	
	305-2	Indirect GHG emissions (Scope 2)	p. 76	
	305-3	Other indirect GHG emissions (Scope 3)	-	Not established other indirect GHG emission calculation systems
	305-4	GHG emissions intensity	p. 76	
	305-6	Emissions of ozone-depleting substances (ODS)	-	Low industry relevance
	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	p. 78-79	
	306-1	Waste generation and significant waste related impacts	p. 41	
Waste	306-2	Management of significant waste related impacts	p. 41, 77-78	
	306-3	Waste generated	p. 77-78	
	306-4	Waste diverted from disposal	p. 41, 77-78	
	306-5	Waste directed to disposal	p. 41, 77-78	
Supplier environmental assessment	308-2	Negative environmental impacts in the supply chain and actions taken	p. 59	

GRI 400: Social Performance				
Classification	Disclosur	Disclosure name	Page	Note
Employment	401-1	New employee hires and employee turnover	p. 82	
	401-2	Compensation for full-time employees that is not provided to temporary or part-time employees	p. 53	
	401-3	Parental leave	p. 53	
Occupational health and safety	403-1	Occupational health and safety management system	p. 56-57	
	403-2	Hazard identification, risk assessment, and incident investigation	p. 56-57	
	403-4	Worker participation, consultation, and communication on occupational health and safety	p. 56-57	
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked to business relationships	p. 56-57	
Training and education	403-9	Work-related injuries	p. 57	
	404-1	Average hours of training per year per employee	p. 81	
	404-2	Programs for upgrading employee skills and transition assistance programs	p. 45-47	
Diversity and equal opportunity	404-3	Percentage of employees receiving regular performance and career development reviews	-	TBA
	405-1	Diversity of governance bodies and employees	p. 64-65	
Non-discrimination	405-2	Basic salary and compensation ratio of women to men	p. 52	
	406-1	Discrimination incidents and corrective actions	p. 72	
Local community	413-1	Operations with local community engagement, impact assessments, and development programs	p. 48-51	
	413-2	Operations with significant actual and potential negative impacts on local communities	-	N/A
Supplier social assessment	414-1	New suppliers screened by social criteria	p. 59	
	414-2	Negative social impacts in the supply chain and actions taken	p. 59	

## Independent Assurance Statement

### To readers of GS Holdings 2022 Sustainability Report

#### ▶ Introduction

Korea Management Registrar (KMR) was commissioned by GS Holdings to conduct an independent assurance of its 2022 Sustainability Report (the "Report"). The data and its presentation in the Report is the sole responsibility of the management of GS Holdings. KMR's responsibility is to perform an assurance engagement as agreed upon in our agreement with GS Holdings and issue an assurance statement.

#### ▶ Scope and Standards

GS Holdings described its sustainability performance and activities in the Report. Our Assurance Team carried out an assurance engagement in accordance with the AA1000AS v3 and KMR's assurance standard SRV1000. We are providing a Type 2, moderate level assurance. We evaluated the adherence to the AA1000AP (2018) principles of inclusivity, materiality, responsiveness and impact, and the reliability of the information and data provided using the Global Reporting Initiative (GRI) Index provided below. The opinion expressed in the Assurance Statement has been formed at the materiality of the professional judgment of our Assurance Team.

Confirmation that the Report was prepared in accordance with GRI standards 2021 was included in the scope of the assurance. We have reviewed the topic-specific disclosures of standards which were identified in the materiality assessment process.

- GRI Sustainability Reporting Standards 2021
- Universal standards
- Topic specific standards
  - GRI 201: Economic Performance
  - GRI 305: Emissions
  - GRI 306: Waste
  - GRI 401: Employment
  - GRI 404: Training and Education
  - GRI 413: Local Communities

As for the reporting boundary, the engagement excludes the data and information of GS Holdings' partners, suppliers and any third parties.

#### ▶ KMR's Approach

To perform an assurance engagement within an agreed scope of assessment using the standards outlined above, our Assurance Team undertook the following activities as part of the engagement:

- reviewed the overall Report;
- reviewed materiality assessment methodology and the assessment report;
- evaluated sustainability strategies, performance data management system, and processes;
- interviewed people in charge of preparing the Report;
- reviewed the reliability of the Report's performance data and conducted data sampling;
- assessed the reliability of information using independent external sources such as Financial Supervisory Service's DART and public databases.

#### ▶ Limitations and Recommendations

KMR's assurance engagement is based on the assumption that the data and information provided by GS Holdings to us as part of our review are provided in good faith. Limited depth of evidence gathering including inquiry and analytical procedures and limited sampling at lower levels in the organization were applied. To address this, we referred to independent external sources such as DART and National Greenhouse Gas Management System (NGMS) and public databases to challenge the quality and reliability of the information provided.

#### ▶ Conclusion and Opinion

Based on the document reviews and interviews, we had several discussions with GS Holdings on the revision of the Report. We reviewed the Report's final version in order to make sure that our recommendations for improvement and revision have been reflected. Based on the

## Independent Assurance Statement

work performed, it is our opinion that the Report applied the GRI Standards. Nothing comes to our attention to suggest that the Report was not prepared in accordance with the AA1000AP (2018) principles.

### Inclusivity

GS Holdings has developed and maintained different stakeholder communication channels at all levels to announce and fulfill its responsibilities to the stakeholders. Nothing comes to our attention to suggest that there is a key stakeholder group left out in the process. The organization makes efforts to properly reflect opinions and expectations into its strategies.

### Materiality

GS Holdings has a unique materiality assessment process to decide the impact of issues identified on its sustainability performance. We have not found any material topics left out in the process.

### Responsiveness

GS Holdings prioritized material issues to provide a comprehensive, balanced report of performance, responses, and future plans regarding them. We did not find anything to suggest that data and information disclosed in the Report do not give a fair representation of GS Holdings' actions.

### Impact

GS Holdings identifies and monitors the direct and indirect impacts of material topics found through the materiality assessment, and quantifies such impacts as much as possible.

### ► Reliability of Specific Sustainability Performance Information

In addition to the adherence to AA1000AP (2018) principles, we have assessed the reliability of economic, environmental, and social performance data related to sustainability performance.

We interviewed the in-charge persons and reviewed information on a sampling basis and supporting documents as well as external sources and public databases to confirm that the disclosed data is reliable. Any intentional error or misstatement is not noted from the data and information disclosed in the Report.

### ► Competence and Independence

KMR maintains a comprehensive system of quality control including documented policies and procedures in accordance with ISO/IEC 17021:2015 - Requirements for bodies providing audit and certification of management systems. This engagement was carried out by an independent team of sustainability assurance professionals. KMR has no other contract with GS Holdings and did not provide any services to GS Holdings that could compromise the independence of our work.



June 2023 Seoul, Korea

CEO *E. J. Hwang*

# ABOUT THIS REPORT

## Overview

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GS Holdings publishes the second sustainability report this year with the aim to share sustainable management activities and achievements with various stakeholders. We follow the ESG taxonomy to ensure the transparent disclosure of our company's environment, social, and governance aspects. In particular, we report on our company and affiliates' management approach (MA) to major issues identified based on our impact on business and social interest. We plan to publish annual sustainability reports as a channel for continuous communication with our stakeholder.

## Standards and Reliability

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This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards' Core Option and meets the four AA1000APs (Inclusivity, Materiality, Responsiveness, and Impact). Financial information presented is based on consolidated financial statements, and nonfinancial information has been prepared based on the company's disclosure system applicable to the financial year. Notable particulars are noted as appropriate, and details on energy use and greenhouse gas emissions are based on the emissions verification results. To ensure the fairness of the reporting process and the reliability of the content, this report underwent independent assurance by an independent specialist (Korea Management Registrar). The Independent Assurance Statement can be found from the appendices.

## Reporting Scope

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The scope of this report includes the activities of GS Holdings and its affiliates. The performance of major energy affiliates, such as GS Energy, GS Power, GS EPS, GS E&R, and Incheon Total Energy Company in this report. In regard of some special issues, the report includes the achievements of GS Caltex, GS Retail, and GS E&C considering the direct and indirect influence of GS affiliates.

## Reporting Period

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This document reports on activities from January 1 to December 31 2022, and it partly contains issues in the first half of 2023 concerning major activities and achievements. For quantitative performances, three-year data from 2020 to 2022 are presented to read the trends.

## Contact

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If you have questions or need further information about this report, please contact us using the contact information provided below. We are eager to hear your feedback.



# GS HOLDINGS 2022 SUSTAINABILITY REPORT

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[www.gs.co.kr](http://www.gs.co.kr)



GS is creating new life experiences and planning a better future for our customers.

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