

GROW SUSTAINABLY

GS HOLDINGS 2023 SUSTAINABILITY REPORT



ABOUT THIS REPORT



Overview

GS Holdings publishes an annual sustainability report to share relevant activities and performances with its stakeholders. It discloses information about the environment, society, and governance following the ESG taxonomy while reporting the administrative approaches of GS Holdings and its affiliates on critical issues that have a high business impact and social interest.

Reporting Scope and Period

This report presents activities and performance from January 1, 2023, to December 31, 2023, and it partly contains essential achievements in the first half of 2024. For quantitative performances, three-year data from 2021 to 2023 are presented to read the trends. Its scope includes the activities of GS Holdings and its affiliates.

※ Reporting Scope: GS Holdings, GS Energy, GS Power, GS Caltex, GS EPS, GS E&R, Incheon Total Energy Company, GS Retail, GS Global

Standards and Reliability

This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards 2021 and meets the four AA1000APs (Inclusivity, Materiality, Responsiveness, and Impact). The 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. This report underwent independent assurance by an independent specialist (Korea Management Registrar) to ensure the reporting process's fairness and the content's reliability.

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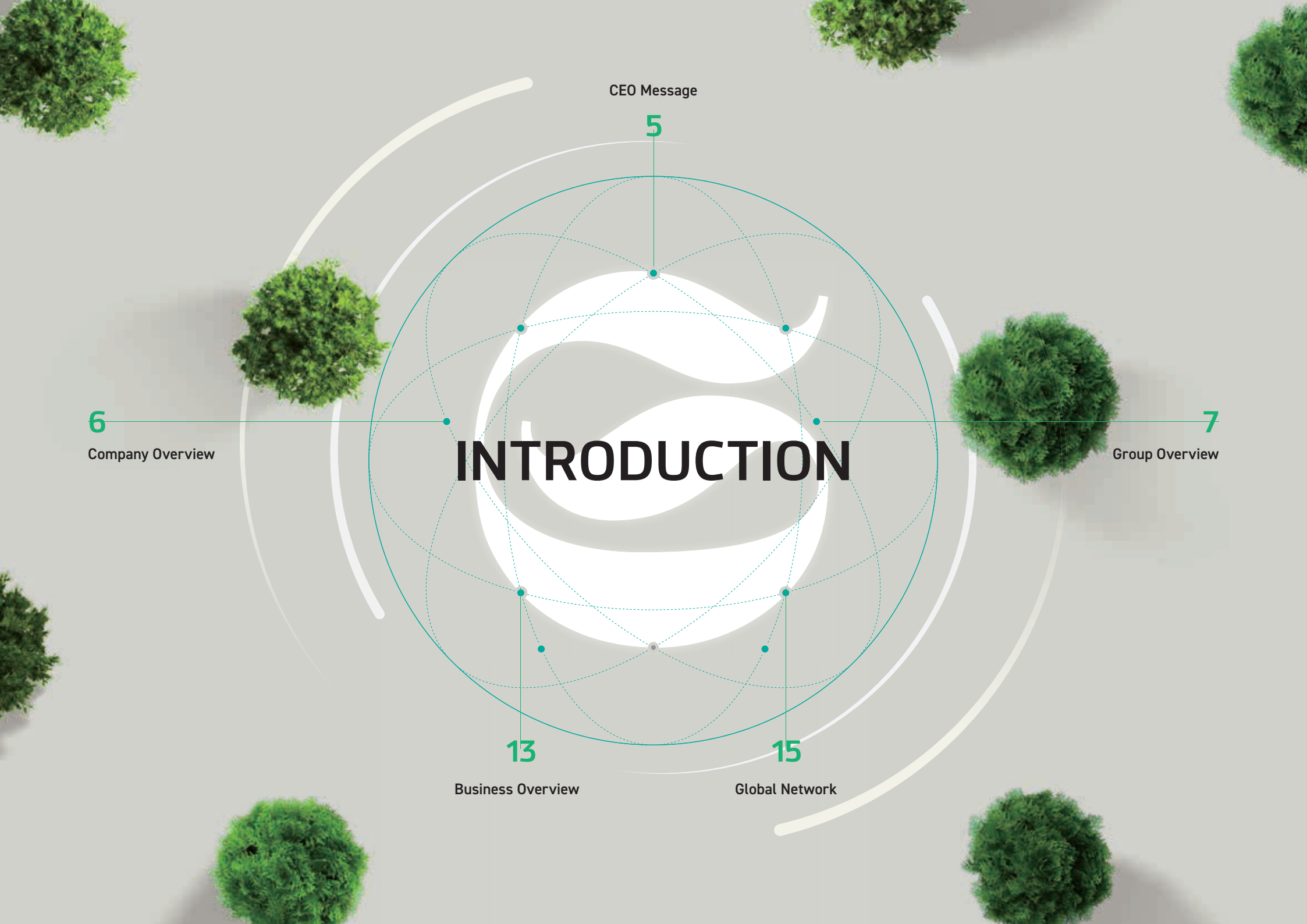
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Global Network



CEO Message



Dear Stakeholders,

I want to express my sincere appreciation for your support and interest in GS Holdings.

In 2024, our company is facing a challenging environment due to fluctuating exchange rates, oil prices, and raw material costs driven by geopolitical instability. To overcome these challenges, we strive to establish a foundation for sustainable future growth by strengthening our digital capabilities and implementing eco-friendly management.

GS has consistently invested in digital innovation and new future business projects. We have made significant strides in industrial biotechnology, the circular economy, and electric vehicle charging.

In industrial biotechnology, alongside our biofuel initiatives, we have expanded our biotechnology-based cosmetics raw materials business. A notable achievement is our agreement to supply 2,3-butanediol to the global cosmetics giant, L'Oréal Group. In the circular economy, our focus has been on battery and plastic recycling, as well as biofuels.

In particular, GS Energy has made substantial advancements in battery recycling, improving the entire value chain from material preparation to upstream and

downstream processes. Additionally, we integrated our relevant subsidiaries into GS CHARGEV and became a leading player in the electric vehicle charging market, capturing approximately 20% of the market share in Korea.

Commercializing new technologies and industries, such as virtual power plants (VPP) and carbon capture and storage (CCUS), remains challenging at this early stage. Nonetheless, we continue to seek opportunities in these areas by leveraging venture companies and investment funds. In 2024, we will strive to ensure that our investments in digital innovation and new future businesses yield tangible results.

Success in these new projects, driven by interconnection and growth, requires an active and creative organizational culture. We aim to innovate our working methods using generative AI and promote a culture where employees collaborate creatively and voluntarily.

GS Holdings is dedicated to fostering ESG management, with a strong focus on our ESG Committee and ESG Council. Our ESG activities and performance will be transparently shared through our annual sustainability report. We call on your continued support and interest in GS Holdings' efforts for sustainable growth.

Sincerely, Hong Soon-ky

Company Overview



GS Holdings

Introduction

As a holding company, we have subsidiaries including GS Energy, GS Retail, GS Sports, GS EPS, GS Global, GS E&R, and GS Ventures. In this changing era, we have pursued continued innovation and became Korea's leading company. From energy services that drives industries to retail that enriches daily life and sports that provide enjoyment to customers, we strive to achieve the highest level of customer satisfaction.

Business Areas



Energy & Power

Technical innovation of GS that produces eco-friendly fuel and power makes the eco-friendly future earlier.

GS Energy	GS Donghae Electric Power
GS Power	GS Wind Power
Boryeong LNG Terminal	GS EPS
Incheon Total Energy Company	GS Pocheon Green Energy
GS E&R	

Oil Refinery & Chemical Business

Our robust investment and technical innovation equip global competitiveness in the oil refining, petrochemical, and lubricant business.

GS Caltex
GS Mbiz
GS Bio
GS EcoMetal
InnoPolytech
Sangji Shipping

Retail & Services

Our nationwide convenience store network and online connect capability provide a convenient customer experience.

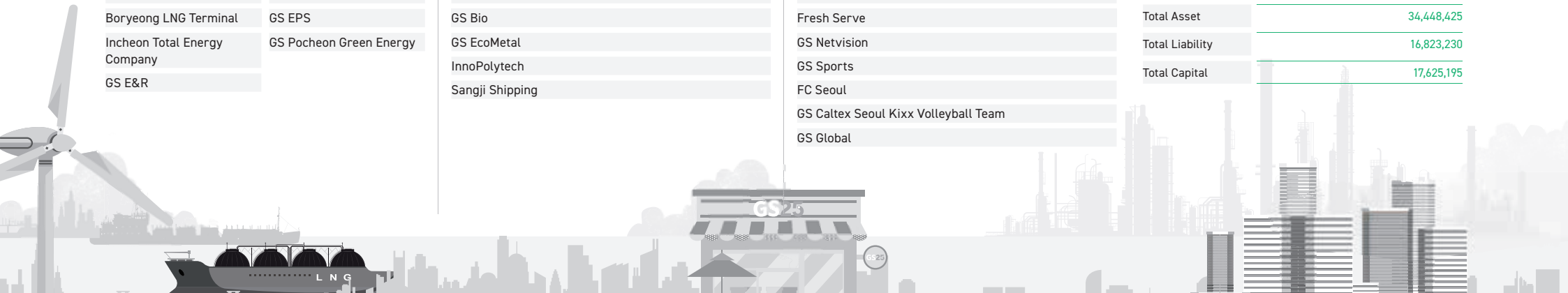
GS Retail
Parnas Hotel
Fresh Serve
GS Netvision
GS Sports
FC Seoul
GS Caltex Seoul Kixx Volleyball Team
GS Global

Overview

Category	Description
Name	GS Holdings Corp
Head Office	GS Tower, 508, Nonhyeon-ro, Gangnam-gu, Seoul, Republic of Korea
Date of Establishment	July 1, 2004
Business Type	Holding company
CEO	Huh Tae-soo, Hong Soon-ky
Number of Employees	87
Credit Rating	A1
ESG Rating	B

Financial Performance (Unit: KRW million)

Category	Description
Sales	25,978,494
Business Income (Loss)	3,721,802
Net Income (Loss)	1,578,711
Total Asset	34,448,425
Total Liability	16,823,230
Total Capital	17,625,195



Group Overview



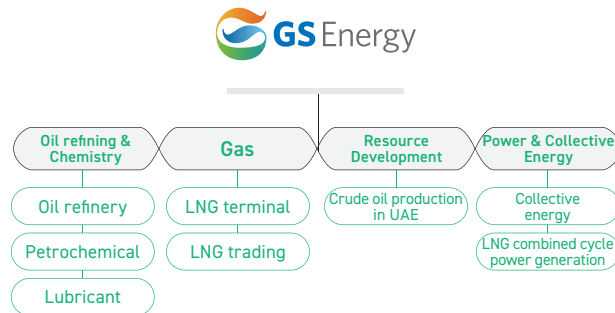
GS Energy

Introduction

As GS Group's energy-specified holding company, GS Energy presents the future direction of its subsidiaries and investment companies and supports the implementation of projects. This total energy solution company that leads an energy paradigm shift encompasses the traditional energy areas, including oil refining, chemicals, power, collective energy, and gas, and new eco-friendly businesses, creating synergy through expanding its business portfolio. Considering the future energy trend, it also created a new growth portfolio acquisition strategy, Beyond Strategy, in four chapters: leading the smart power solution market, establishing circular resources ecosystem, expanding green power generation portfolio, and reorganizing clean hydrogen economic infrastructure. In line with the strategy, GS Energy is laying a foundation for new businesses in preparation for sustainable growth and changes in the energy market.



Business Area



Overview

Category	Description
Head Office	GS Tower, 508, Nonhyeon-ro, Gangnam-gu, Seoul, Republic of Korea
Date of Establishment	January 3, 2012
Business Type	Holding company
CEO	Huh Yong-soo
Number of Employees	196
Credit Rating	AA corporate bond (May 2023), A1 commercial paper (December 2023)

Financial Performance

(Unit: KRW million)

Category	Description
Sales	6,519,023
Business Income (Loss)	2,641,487
Net Income (Loss)	1,014,223
Total Asset	15,821,280
Total Liability	6,173,306
Total Equity	9,647,974

Business Issue #Joint Project of Northeast Asian LNG Hub Terminal

GS Energy signed a shareholder agreement with Hanyang for the joint construction of the Northeast Asia LNG Hub Terminal in Myodo, Yeosu-si, South Korea. This agreement aims to successfully build an LNG hub terminal by building facilities necessary for the production, storage, and distribution of LNG and sharing the technology and experience required for operation. Starting with this project, the LNG hub terminal will be developed into a renewable energy hub in the future, focusing on CCUS, ammonia, district energy, and other renewable energies, establishing itself as a center for clean energy.

Business Issue #Mutual Cooperation in Eco-friendly EV Ecosystem

GS Energy signed an MOU with Kumho Tire in October 2023 to support the eco-friendly electric vehicle ecosystem. This agreement is for building electric vehicle charger infrastructure. GS Energy builds charger platforms in the Tire Pro shops, and joint marketing will be undertaken on online and offline platforms. As global mobility partners, both companies will cooperate to build an eco-friendly EV ecosystem and take their responsibilities to become leading companies in the electric vehicle market.

Business Issue #GS Energy's Carbon Credit Business

GS Energy plans to establish a joint venture, NEXT Carbon Solutions (NCS), in partnership with Suppro and start a carbon credit business utilizing nature-based solutions. The business trades the carbon credits acquired utilizing GS Energy's network.

Group Overview

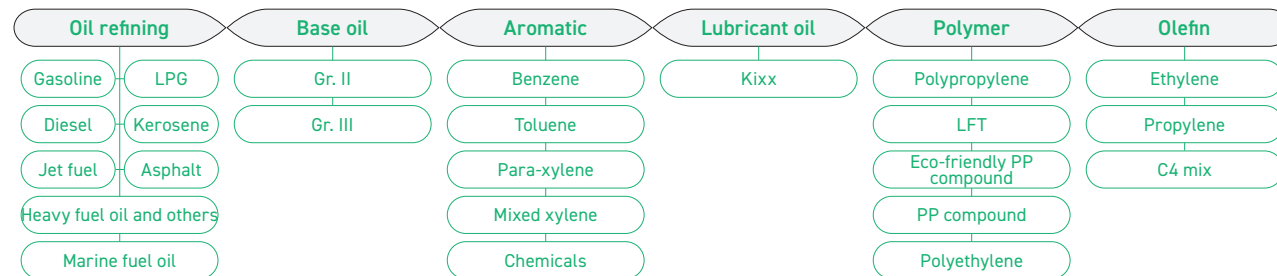


GS Caltex

Introduction

GS Caltex is the first private oil company in Korea. It has facilities to refine and process 800,000 barrels of crude oil per day while manufacturing 2.8 million tons of aromatic products, including 1.35 million tons of para-xylene and 930,000 tons of benzene. Furthermore, with robust investment and technology innovation, it has diversified its business portfolio into the oil refining, lubricants, and petrochemical industries and provided differentiated products and services in Korea and foreign countries. In the existing business areas, the company realizes a low-carbon refinery by reducing carbon emissions. At the same time, it also expanded its presence to new low-carbon energy transition businesses based on stable profits, such as hydrogen/CCUS, biotechnology, and waste plastic recycling, with active investment. Through this, GS Caltex aims to grow into a comprehensive energy company based on industry-leading competitiveness in the energy and chemical fields and create sustainable value.

Business Area



Overview

Category	Description
Head Office	GS Tower, 508, Nonhyeon-ro, Gangnam-gu, Seoul, Republic of Korea
Date of Establishment	May 19, 1967
Business Type	Manufacture and sales of refined oil, petrochemical products, and lubricant oil
CEO	Hur Sae-hong
Number of Employees	3,242
Credit Rating	AA+ corporate bond (June 2023), A1 commercial paper (November 2023)

Financial Performance

Category	Description
Sales	48,607,546
Business Income (Loss)	1,683,792
Net Income (Loss)	1,152,731
Total Asset	24,321,822
Total Liability	10,822,887
Total Equity	13,498,935

(Unit: KRW million)

Business Issue #Bio Fuel Business

GS Caltex is committed to reducing GHG emissions by expanding its biofuel business. Biofuels are produced from biomass, a sustainable raw material, and help decrease the use of fossil fuels. In 2023, GS Caltex and POSCO International agreed to jointly invest in AGPA Refinery Complex (ARC), a corporation established in Indonesia to refine biological raw materials. This facility will produce 500,000 tons of biological raw materials and edible oil annually. Through such an initiative, GS Caltex aims to build a foundation for expanding the biological fuel business and establish a value chain for raw materials and products. In addition, GS Caltex participated in research on bio-jet fuel, which can reduce GHG emissions by about 80% compared to fossil fuels and signed an agreement with Korean Air to conduct verification of this technology. In September 2023, GS Caltex, in cooperation with Neste, a bio-jet fuel supplier, successfully conducted the first pilot flight powered by bio-jet fuels in Korea, followed by five additional successful flights. Furthermore, in September 2023, it became the first Korean oil company to complete a pilot shipping voyage powered by biofuels successfully and began production and sales of the fuel. GS Caltex has achieved ISCC certification, which recognizes its carbon emission-reducing effect. By supplying certified fuels, the oil company contributes to carbon emission reduction.

Business Issue #Life Cycle Assessment (LCA)

GS Caltex introduced the life cycle assessment (LCA), which measures the GHG generated during the product life cycle from raw material collection to production, to evaluate each product's impact on climate change. Based on ISO 14040, 14044, and 14067, the company conducted the LCA on its petroleum, petrochemical products, and waste plastic recycled products, GS Bio's biodiesel, InnoPolytech's composite resin, and GS EcoMetal's molybdenum and vanadium, using the independent methodology established in collaboration with external professional institutions.

Group Overview



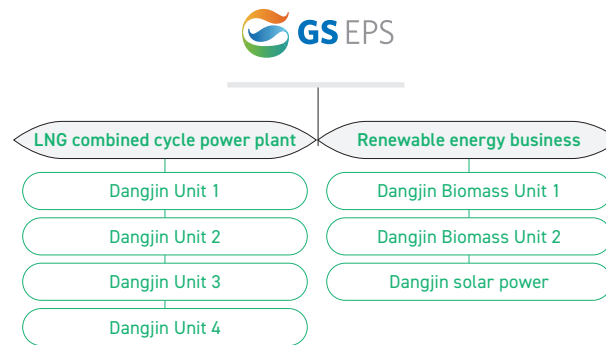
GS EPS

Introduction

GS EPS is Korea's first independent power generation company, established in 1996 under the government's basic plan for private power generation projects. It is an eco-friendly energy company that generates and supplies electricity from LNG and biomass. GS EPS operates an LNG combined cycle power plant and a biomass power plant in Dangjin, Korea, contributing to the stable electricity supply. The company will not only continuously focus on discovering new businesses, such as new power generation and renewable energy projects, but also become a company that creates a bright and clean world with eco-friendly energy under the vision, value no. 1 clean energy company for a better world.



Business Area



Business Issue # Joint Biomass Energy Business

GS EPS agreed with LG Chem to establish TW Biomass Energy, a biomass power plant. The biomass power plant utilizes waste wood to generate industrial steam and electricity. The waste wood discarded from homes and industrial sites is recycled into wood chips, which are used as raw materials for electricity generation. Waste wood is not a forest resource but a non-recyclable resource recognized as a sustainable raw biomass material in Korea and the European Union. Based on its business capabilities and know-how in eco-friendly energy and power generation, GS EPS is expected to contribute to stable operation and carbon reduction resulting from fuel conversion.

Overview

Category	Description
Head Office	241, Bugokgongdan-ro, Songak-eup, Dangjin-si, Chungcheongnam-do, Republic of Korea
Date of Establishment	October 9, 1996
Business Type	Generation and sales of electricity
CEO	Chung Chan-soo
Number of Employees	294
Credit Rating	AA corporate bond (June 2023)

Financial Performance

(Unit: KRW million)

Category	Description
Sales	1,984,279
Business Income (Loss)	459,228
Net Income (Loss)	349,810
Total Asset	2,533,237
Total Liability	1,166,641
Total Equity	1,366,596

Business Issue # Smart Power Plant

GS EPS operates the DX Promotion Office, a team dedicated to performing a digital transformation (DX) with the aim of establishing a smart environment, analyzing big data, and enhancing digital capabilities. GS EPS introduced a total facility management system and 5G-dedicated networks to build a smart environment. In addition, it also introduced an AI-powered facility failure detection system in partnership with Korea Electric Power Corporation's researchers. With such initiatives, the power generation company strives to secure big data analysis capabilities, which are the most essential factor in smart power plants. Based on these efforts, GS EPS establishes smart power plants and improves facility stability and work efficiency.

Group Overview



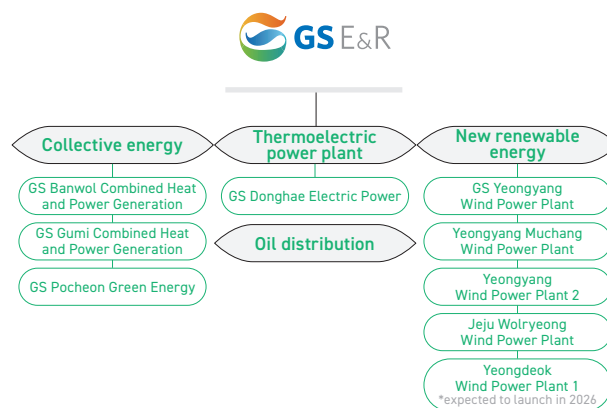
GS E&R

Introduction

Since 1990, GS E&R has run a collective energy business in the Banwol and Gumi National Industrial Complexes. The company sells the heat and electricity generated using the CHP method. Based on 25 years of experience, it built the first private baseload thermal power plant in Donghae in 2018 and a CHP plant in Pocheon in 2019. GS E&R considers renewable energy to be a new growth engine. This approach led it to develop onshore wind farms with a total capacity of 127.6 MW in Yeongyang-gun, Gyeongsangbook-do and in the Jeju area. GS E&R proactively identifies changes from various perspectives to respond to decarbonization and eco-friendly changes. It not only reviews the transition to eco-friendly fuel but also makes an effort for low-carbon development, including ammonia blending and carbon capture. GS E&R expanded its business to wind power generation, growing into an eco-friendly comprehensive power generation company.



Business Area



Business Issue #GS E&R's 42MW Yeongyang Wind Power Plant

In May 2023, GS E&R invested KRW 120 billion in a 42MW wind power project. The onshore wind farm has 10 turbines with a generating capacity of 4.2MW each. It produces enough power to supply 24,000 four-person households per year. In addition to the Yeongyang Wind Power Plant (59.4MW), Muchang Wind Power Plant (24.2MW), and Jeju Wind Power Plant (2MW), GS E&R operates four wind farms with a generating capacity of up to 127.6MW. The Korean government continuously increases the share of renewable energy through the RPS system and plans to increase the share of wind power in the renewable energy by 34% in 2034. The competitiveness of wind power business has risen compared to fossil fuels due to the mass production of turbines and technology development. Leveraging the development and operation experience in Jeju and Yeongyang, GS E&R will actively expand its wind power business, which will become its new growth engine.

Business Issue #Review of Replacing Coal-fired Combined Heat and Power Plant with LNG Plant

Since the foundation of the coal-fired combined heat and power plant in 1992, GS E&R has generated and provided the heat necessary for manufacturing in about 50 companies in the Gumi National Industrial Complex. It produces about 2.15 million tons of thermal energy and provides them at low prices, supporting the companies to increase their competitiveness. In line with changes in the global market, the Gumi National Industrial Complex is in the discussion of transforming into an LNG combined heat and power plant to meet companies' needs. The Complex is comprised of exporting companies, and they are required to measure and report carbon emissions during the product manufacturing process. GS E&R will make continuous effort to convert the fuel of power generation facilities that have traditionally supplied steam based on coal to support the decarbonization of the companies and, furthermore, the industrial sector.

Overview

Category	Description
Head Office	404, Haean-ro, Danwon-gu, Ansan-si, Gyeonggi-do, Republic of Korea
Date of Establishment	January 15, 2002
Business Type	Collective energy
CEO	Kim Seok-hwan
Number of Employees	329
Credit Rating	A+ Corporate bond (June 2023)

Financial Performance

(Unit: KRW million)

Category	Description
Sales	1,920,060
Business Income (Loss)	173,474
Net Income (Loss)	93,052
Total Asset	3,183,589
Total Liability	2,186,349
Total Equity	997,239

Group Overview



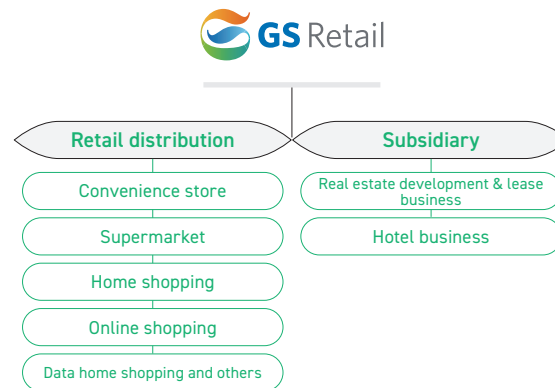
GS Retail

Introduction

GS Retail is Korea's representative online and offline distribution company and operates various platforms that lead customers' lifestyles. Its retail business encompasses convenience stores, GS25, supermarkets, GS THE FRESH, and GS SHOP home shopping. The company also runs a real estate development business. It also provides various and enjoyable experiences through Parnas Hotel's hotel and lease businesses. GS Retail strives to enhance its product power to achieve sustainable growth, which is the basis of the retail business. Its mobile app, Our Neighborhood GS, has multiple functions, including storage, payment, delivery, and pickup, to achieve sustainable growth. GS Retail performs sustainable management to empathize with the society in the long term and to create continuous values. With its differentiated products and services, the company will make the utmost effort to become a beloved company.



Business Area



Overview

Category	Description
Head Office	GS Tower, 508, Nonhyeon-ro, Gangnam-gu, Seoul, Republic of Korea
Date of Establishment	February 13, 1971
Business Type	Retail distribution
CEO	Huh Yeon-soo
Number of Employees	7,370
Credit Rating	AA corporate bond (June 2023), A1 commercial paper (December 2023)

Financial Performance

(Unit: KRW million)

Category	Description
Sales	11,612,547
Business Income (Loss)	393,955
Net Income (Loss)	22,147
Total Asset	10,042,015
Total Liability	5,608,276
Total Equity	4,433,740

*Effective March 21, 2024, GS Retail transitioned to a sole CEO.

Business Issue #GS25's Differentiated Products and Customer Experience

To attract the attention of Gen Z, GS25 held a contest for differentiated products among its employees born in the 1990s. It also launched desserts such as tanghulu, yagwa, and canned cake in a timely manner and presented differentiated products in partnership with popular restaurants. In addition, the retail company provides Our Neighborhood GS to connect online and offline customer experiences. As the number of delivery and pickup orders increased, the O4O strategy was enhanced through quick commerce, including storage services for giveaways. Furthermore, the company is actively working on various types of sharing stores to support the independence of the socially disadvantaged.

Business Issue #GS The Fresh's Chain Operation

GS THE FRESH, celebrating its 50th anniversary in 2024, introduced the chain operation optimized for the supermarket business to maximize sales efficiency. It also actively expands its franchises by utilizing GS25's franchise business know-how. In addition, the company has enhanced its O4O services, which intergrating mobile and quick commerce. Quick commerce supports products for single-person households in line with the trend of small and frequent purchases in addition to daily life-related products such as fresh food, milk, and tofu, following the changing consumption trends.

Business Issue #GS Home Shopping for Changing Media Environment

GS Home Shopping has introduced Short Pick, a series of one-minute commercial videos, to align with the latest trends in mobile content. In this way, the company is leveraging its experience as Korea's first TV home shopping company to adapt to the evolving media landscape. In addition, following the end of the pandemic, GS Home Shopping has successfully developed popular products that align with current consumption trends, such as enhancing its travel products and selling underwear in smaller quantities.

Group Overview

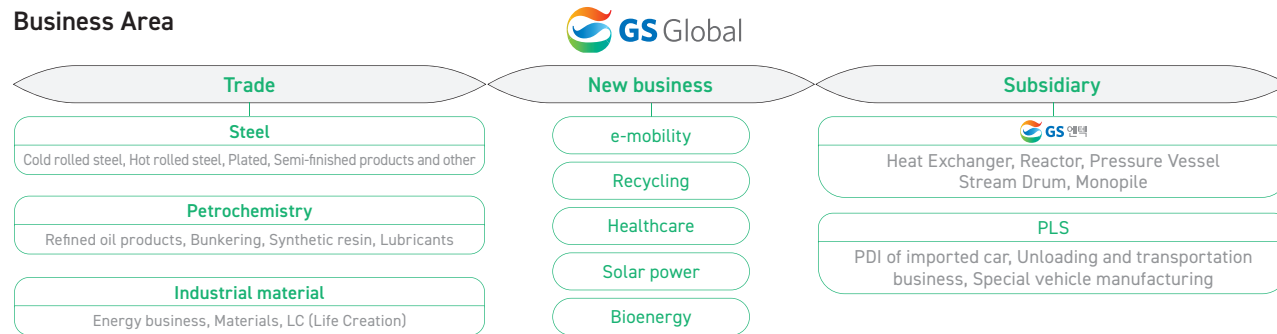


GS Global

Introduction

Since its establishment in 1954, GS Global has expanded its business areas from trilateral trade and the import and export of steel, coal, biomass, petroleum, chemical products, machinery, and materials to the recent import of automobile logistics. In 2009, this general trading company was incorporated into GS Group and reached a turning point as the "Value No.1 Solution Provider." With decades of business experience and a network spanning over 30 countries, GS Global has tirelessly strives to provide optimal solutions for customer needs worldwide. The company will strengthen its competitiveness and discover a next-generation growth engine to realize the benefits to customers and business partners and contribute to the development of global society.

Business Area



Overview

Category	Description
Head Office	GS Tower, 508, Nonhyeon-ro, Gangnam-gu, Seoul, Republic of Korea
Date of Establishment	July 31, 1954
Business Type	General trading company
CEO	Lee Young-hwan
Number of Employees	270
Credit Rating	Corporate bond A0 (May 2023)

Financial Performance

(Unit: KRW million)

Category	Description
Sales	3,916,492
Business Income (Loss)	76,519
Net Income (Loss)	26,078
Total Asset	1,401,098
Total Liability	953,110
Total Equity	447,988

Business Issue #1-ton Electric Truck T4K Showroom

GS Global opened a showroom in Gwangju, Jeollanam-do, in partnership with Aseung Automotive, an official dealer of T4K, the 1-ton electric truck. GS Global launched T4K in collaboration with BYD, to address the needs of Korean consumers. Customers can experience and purchase the vehicle in the showroom. In addition, the showroom has a dedicated repair center and a waiting room, which allows customers to leave their cars for repairs and wait in a comfortable environment. The showroom also provides various emergency repairs with a hoist crane installed on the ceiling while customers enjoy food and drinks in the waiting room.

Business Issue #Smart Pad and Network

To increase customer convenience, GS Global signed an telecommunications agreement with LG Uplus to provide WiFi to T4K. This 1-ton electric truck has default navigation and AI assistant apps, but customers had to share internet from a mobile phone to a car to use them. With LG Uplus' IoT service, T4K's unique infotainment system became stronger, which enable drivers to use voice recognition system for navigation and weather forecast. In addition, the truck provides high-quality mobile services. For example, if you use the Vehicle-to-Load (V2L), which allows the batteries in electric vehicles to power external devices you can utilize a vehicle as a unique space for work, leisure, and convenience room. Although the charging time of electric vehicles is inevitable, GS Global is preparing to enable its customers to utilize T4K in more diverse ways.

Business Overview



Energy & Power Generation

Energy & Power Generation Industry Characteristics

The energy and power generation business is a key industry that produces a basic energy source essential for national industrial activities and the basic life of the people. It is a highly business-critical industry that provides heat and electricity to a large number of users, is of great importance to national policy, and is characterized by changing demand due to fluctuations in people's living standards, economic conditions, and seasons. As the Ukraine-Russia war persist market risks continue, which significantly impacting the global economy with unstable fuel supply and demand and inflation. Additionally, financial market instability, such as consecutive rate rises, could hurt business operations.



Energy & Power Generation Business Status

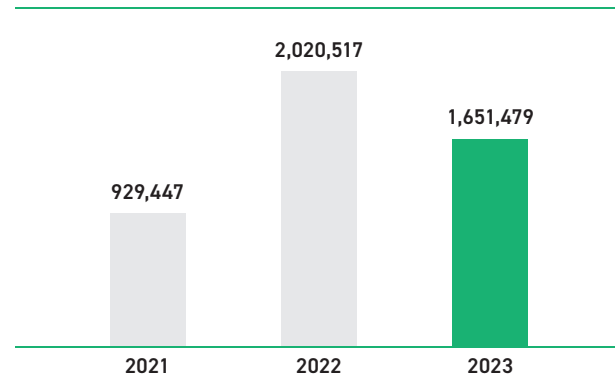
GS Power exclusively supplies district heating to approximately 400,000 households in Anyang and Bucheon. The fuel cost indexation system is applied to LNG prices, which determine heat rates. This allows the company to adjust heat rates six times a year, manage financial risks caused by changes in fuel costs, and operate its business stably.

GS EPS is Korea's first private power plant and operates LNG combined cycle and biomass power plants. To secure the LNG combined cycle system's competitiveness, the company reviews measures to maintain a high facility utilization rate, such as an individual fuel system and direct import.

GS E&R stably provides steam at low prices to companies in industrial complexes. In addition, it produces and sells electricity, being recognized for excellence in energy use efficiency. GS E&R efficiently manages air pollutants and GHG emissions through a real-time monitoring system and optimal prevention facilities, increasing the effectiveness of the collective energy business.

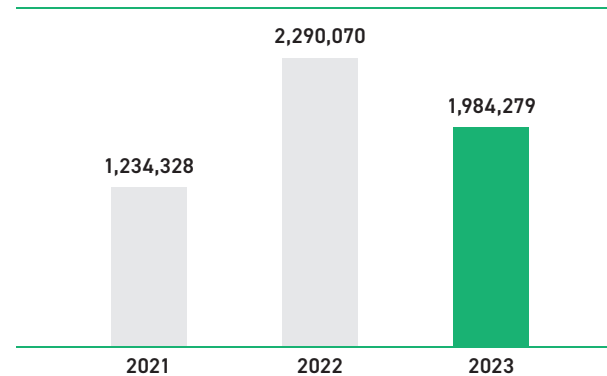
GS Power Sales 2021-2023

(Unit: KRW million)



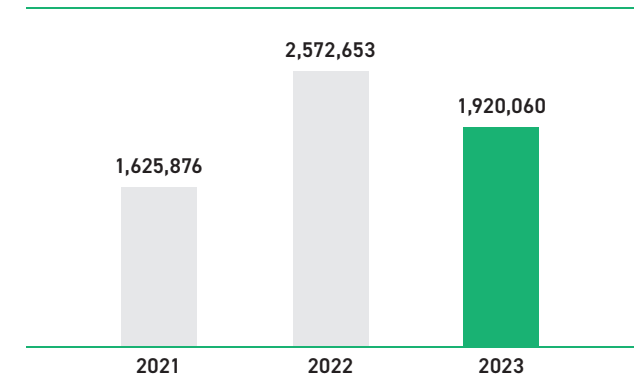
GS EPS Sales 2021-2023

(Unit: KRW million)



GS E&R Sales 2021-2023

(Unit: KRW million)



Business Overview



Retail & Trade

Retail Industry Characteristics

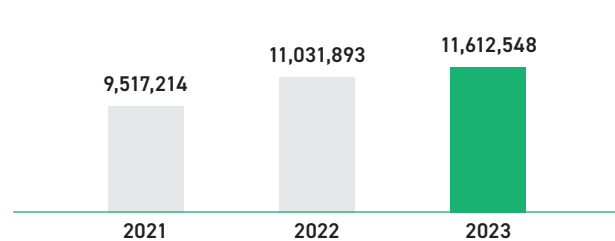
In the retail industry, it is most important to provide products that customers want at competitive prices. The industry is influenced by economic fluctuations and the market conditions of raw materials and products. Although the decrease in consumption caused by high inflation may impact on the industry, GS Retail strives to achieve sustainable growth with differentiated products and services to respond to rapidly changing customer needs and market conditions.

Retail Business Status

To respond to the market changes, **GS Retail** opened agricultural product-focused convenience stores in residential areas and deli counter-type convenience stores in urban areas. **GS THE FRESH** employs its unique, differentiated strategies with quick commerce services utilizing offline stores and **Our Neighborhood GS**. Considering the decline in TV viewership, the TV home shopping business strengthened customer communication through mobile devices and expanded customized curation.

GS Retail Sales 2021-2023

(Unit: KRW million)



Trading Industry Characteristics

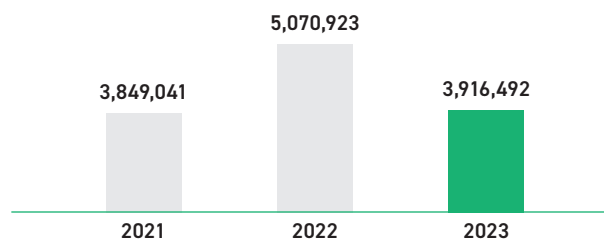
The trading business makes profits by selling products through intermediary between clients and manufacturers. However, GS Global's role is shrinking significantly as major domestic companies expand their export capabilities and utilize less trade finance. GS Global responds to this challenge by pioneering new markets and business opportunities. Based on its network and risk management capabilities built through past trade, the company discovers new business opportunities and develops new growth engines.

Trade Business Status

Beyond the role as an intermediary, **GS Global** is creating added value as a trading company through an extended value chain, including investing in businesses, expanding manufacturing and processing facilities, and enhancing logistics. In the imported vehicle PDI service sector, the company has a competitive edge in both personnel and facilities by establishing the largest PDI center in Korea and building a new parking tower capable of accommodating 2,000 vehicles. Additionally, GS Global has ventured the EV mobility, recycling, and healthcare sectors to discover new sources of revenue.

GS Global Sales 2021-2023

(Unit: KRW million)



Oil Refining & Chemistry

Petrochemical Industry Characteristics

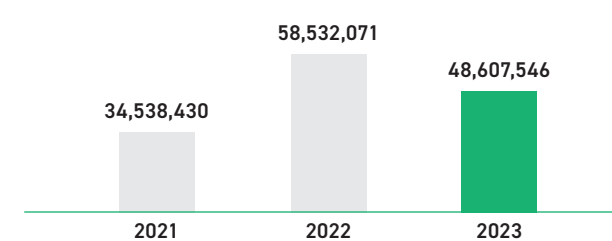
The oil refining and chemical industry has seen favorable oil prices and refining margins due to global supply chain issues stemming from geopolitical instability. However, it is expected that future oil prices and margins will be driven more by demand than supply. Given the industry's characteristic emphasis on economies of scale, GS Caltex, which has completed large-scale investments, is anticipated to consistently demonstrate stable profitability.

Oil Refining & Chemistry Business Status

GS Caltex operates a crude oil refining facility with a daily refining capacity of 800,000 barrels and a heavy oil upgrading facility with a capacity of 275,000 barrels. Through the successful operation of the MFC (Mixed Feed Cracker) and HDPE (High-Density Polyethylene) plants, the company produces high-quality petroleum products, aromatics, lubricants, olefins, and polymers, demonstrating competitive strength and technological expertise. Based on stable profits, GS Caltex is expanding its portfolio into new low-carbon businesses, including hydrogen, CCUS, biotechnology, and waste plastic recycling.

GS Caltex Sales 2021-2023

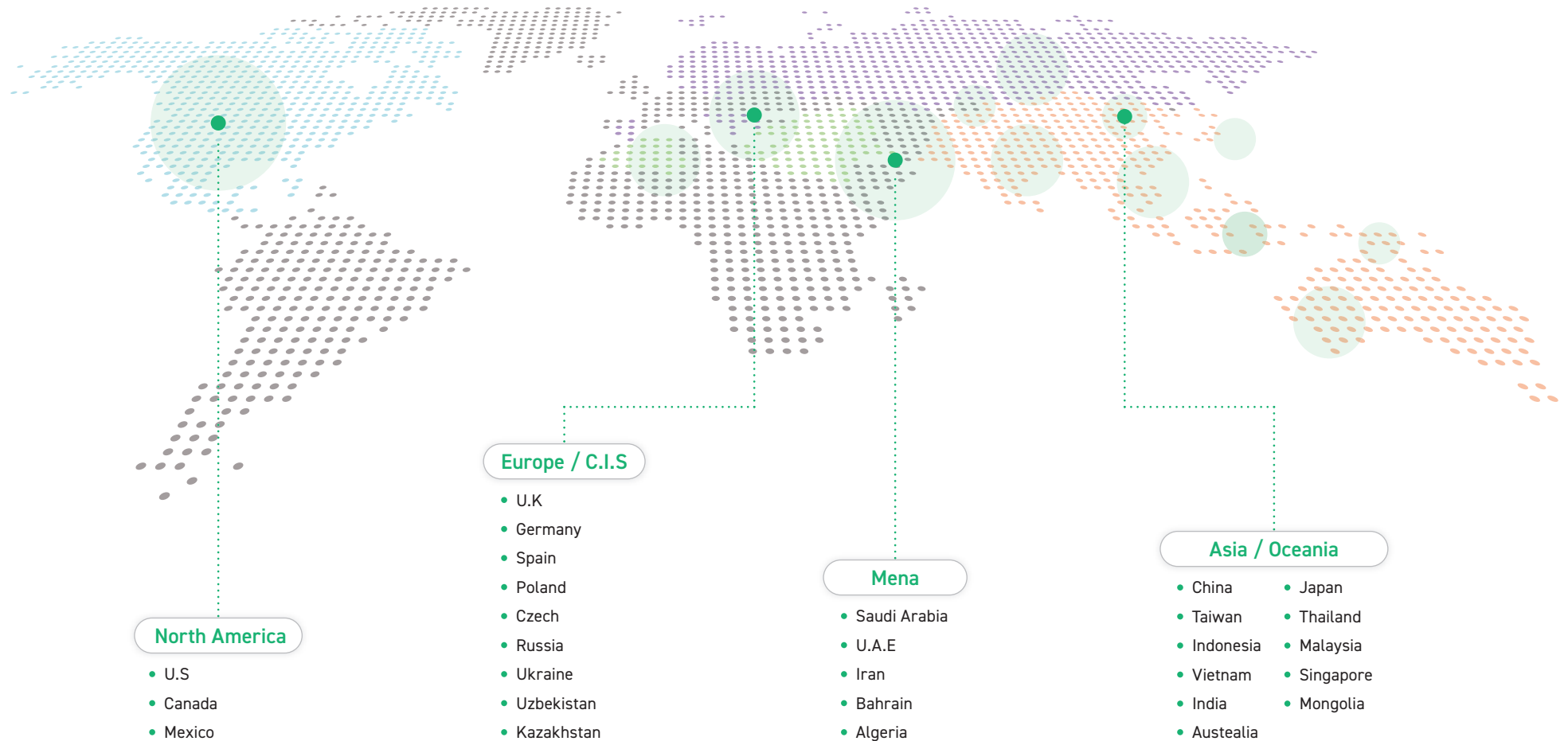
(Unit: KRW million)



Global Network



As of June 2024, we provide top-quality products and services through our global network of 88 offices in 27 countries, including 14 of GS Caltex, 8 of GS Energy, 5 of GS Retail, 1 of GS EPS, 1 of GS E&R, and 22 of GS Global.





GS SUSTAINABILITY

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Stakeholder Engagement & Communication



ESG Management System



ESG Vision

GS ESG Vision

Climate change is a global issue and environmental sustainability is crucial to customers. GS Group is committed to conducting corporate activities for a sustainable future. With this commitment, we set Grow Sustainably as our core management value. Under three directions for sustainable growth: Reduce, Improve, and Innovate, we aim to enable eco-friendly sustainability through investment strategies in digital technology and biotechnology.

GS Sustainable Strategy

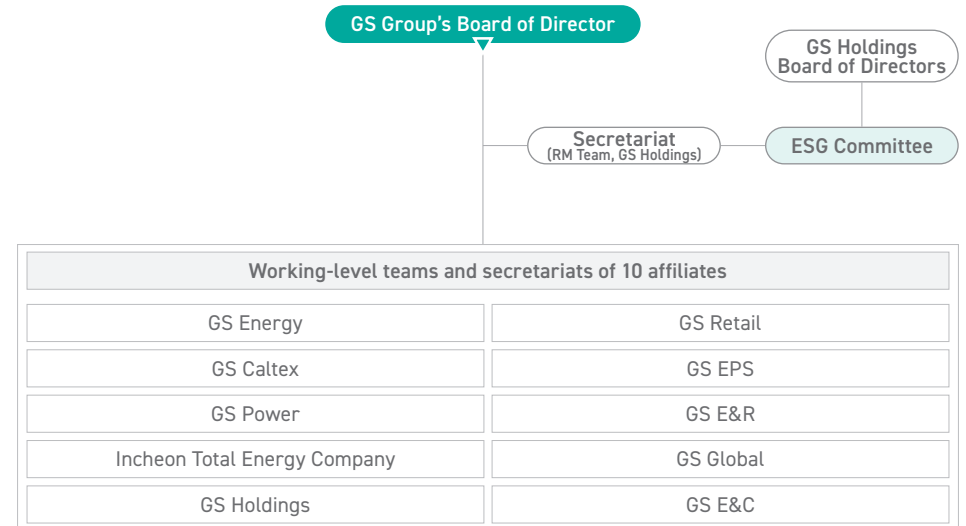
Core Value	Grow Sustainably		
Approach	<p>Reduce</p>	<p>Improve</p>	<p>Innovate</p>
Practice	Save resources and energy from production to distribution, Reduce the discharge of harmful substances	Improve business processes and customer experience to ensure environmental sustainability in daily lives substances	Utilize big data, AI, and biotechnology development as drivers for environmentally sustainable growth
	Develop bioprocess technology for mass production of eco-friendly raw materials	GS Retail's establishment of Korea's first convenience stores with a smart energy management system	GS Caltex's future-oriented eco-friendly gas station, Energy Plus Hub
	GS Wind's eco-friendly power generation	Parnas Hotel's Green Engage Environment Monitoring Program	GS EPS' smart power plants
Enabler	Digital Technology for Accelerating Innovation		Biotechnology for Environmentally Sustainable Solutions

ESG Governance

GS Group's ESG Council

To address to society's demands for ESG management, GS Group is operating the ESG Council, composed of 10 major affiliates' executives in charge of ESG and SHE. The Council is the highest decision-making body for GS Group's ESG management. It discusses and makes decisions on agendas related to ESG strategies, such as climate change response, carbon emission management, energy saving, waste and pollutant reduction social contribution, mutual growth, and disaster prevention. Additionally, the ESG Council implements ESG strategies at the Group level and develops shared policies. Through such approaches, it enhances cooperation between affiliates and seek to achieve synergies under a consistent goal. Under the ESG Council, there are working-level teams and secretariats for each affiliate to promote effective ESG management through close consultation among the working-level staff. Each affiliate's working-level teams and secretariats conduct ESG-related activities, share achievements, manage ESG data, and respond to ESG evaluations.

GS Group's ESG Council



ESG Management System



ESG Governance

GS Energy's ESG Governance

GS Energy participates in the GS Group ESG Council, reporting on ESG issues within the power generation and energy sectors, including major subsidiaries. Additionally, to manage the increasing number of subsidiaries and affiliates, the company has established the 'GS Energy ESG Council,' composed of GS Energy and its main subsidiaries, to lead and support subsidiary ESG management. The council includes four companies: GS Energy, GS Power, Incheon Total Energy, and Boryeong LNG Terminal, and consists of an Executive Council and working-level meetings. The Executive Council is attended by each company's ESG-responsible executives. They develop implementation plans for critical ESG issues and report them to the CEO. The working-level meetings are held monthly, while the Executive Council meets quarterly, with additional meetings scheduled as needed for urgent issues. The first ESG Council meeting took place in March 2023, and more subsidiaries are expected to join the Council in the future.

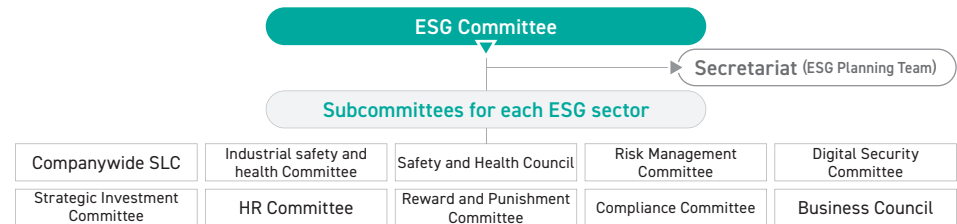
GS Energy's ESG Council



GS Caltex's ESG Governance

GS Caltex holds the ESG Committee meetings under the CEO's leadership four times a year to make decisions on major ESG issues at the company level. The Committee determines tasks related to ESG management strategies and carbon reduction, and makes decisions for ESG disclosures. Additionally, GS Caltex has established for each ESG sector to discuss relevant ESG issues more in greater detail. In 2024, the company newly established Business Council for emerging businesses in five sectors to make decisions related to climate change and energy transition.

GS Caltex's ESG Organization



GS Caltex's ESG Strategy

Goal	Sustainable and Profitable Growth		
ESG Target and Activities	Environmental	Respond to climate change through lower carbon businesses and activities	<ul style="list-style-type: none"> Enhance GHG reduction businesses and activities Launch new low-carbon businesses Continue environmental impact reduction efforts
	Social	Sustainable growth for people and society	<ul style="list-style-type: none"> Strengthen safety and health management Expand ESG management for the supply chain Implement human rights management
	Governance	Establish sound and responsible governance	<ul style="list-style-type: none"> Hold the ESG Committee and the subcommittees for each sector Advance ethical and compliance management Strengthen digital security
Enabler	Deep Transformation Fundamental innovations to achieve sustainable performance in a rapidly changing business environment, including climate change and energy transition		<ul style="list-style-type: none"> Business Transformation Digital Transformation Green Transformation

ESG Management System



ESG Governance

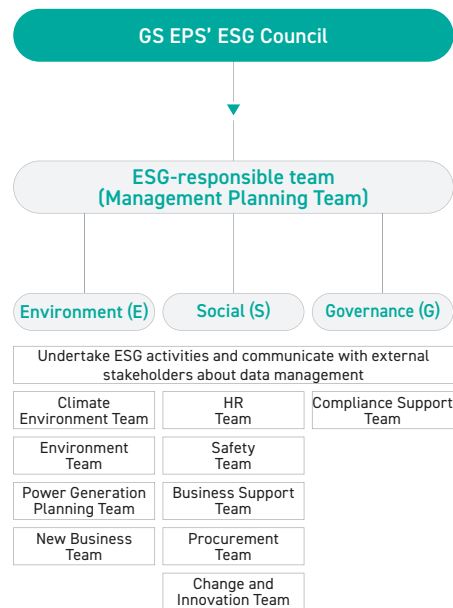
GS EPS' ESG Governance

GS EPS recognizes the importance of sustainable management and has actively participated in GS Group's ESG Council since 2021. GS EPS established an in-house ESG Council to publish ESG reports report and to regularly review and share its ESG task progress. In addition, it shares GS Group's shared policies and strategic tasks to meet ESG management requirements and enhances the foundation for sustainable growth. Additionally, GS EPS annually acquires international-level environmental, safety, health, and quality certifications, managing relevant risks effectively.

GS E&R's ESG Governance

GS E&R recognizes the importance of sustainable management in business operations and participates in the GS Group ESG Council. In addition, it established an ESG-dedicated department to identify ESG tasks and publish the sustainability reports. The company selected five areas: environment, human rights, suppliers, social contribution, and ethics and compliance, and designated a responsible department for each area to manage ESG activities and data. Recognizing Quality, Environment, Safety, and Health (QESH) management based on human respect, environmental preservation, and customer focus as a core values, GS E&R created QESH guidelines and continuously seeks improvements. The company established detailed guidelines for each QESH sector to achieve zero accidents, create new environmental values, and realize sustainable development.

GS EPS' ESG Council



GS EPS EHSQ Certifications



GS E&R's ESG Organization



GS E&R's QESH Management Guidelines

Quality, Environment, Safety, Health

- We supply the highest quality energy through rigorous quality control of our energy production activities and maximize customer satisfaction through flawless post-management operations.
- We comply with all regulations, agreements, and other requirements related to quality, environment, safety, and health, and establish and adhere to internal standards.
- We set goals for continuous performance improvement to minimize environmental impact and risks in all management activities and achieve these goals through active and creative initiatives.
- To achieve quality, environmental, safety, and health management objectives and raise awareness, we appropriately allocate resources and continuously provide education. All employees must thoroughly understand the quality, environmental, safety, and health policies and actively fulfill their roles and responsibilities.

ESG Management System



ESG Governance

GS Retail's ESG Governance

In GS Retail, the ESG Self-directed Research Group, comprised of working-level staffs and the ESG Committee under the Board of Directors, the highest decision-making body, systematically implement sustainable management. Working-level staffs from each business unit attend the ESG Self-directed Research Group, which is held monthly to identify and address ESG tasks. Additionally, the ESG Working-level Consultative Body, composed of C-level executives and strategic officers, collects and forwards those tasks to the ESG General Secretariat and shares decisions made by the ESG Committee and GS Group's ESG Council with working-level departments. The ESG General Secretariat communicates with GS Group's ESG Council, submits agenda items to the ESG Implementation Council and ESG Committee, and shares decisions with the ESG Working-level Consultative Body. The ESG Implementation Council, led by the CEO and attended by senior executives, discusses ESG issues, reports to the ESG Committee, and receives approvals.

GS Retail's ESG Organization



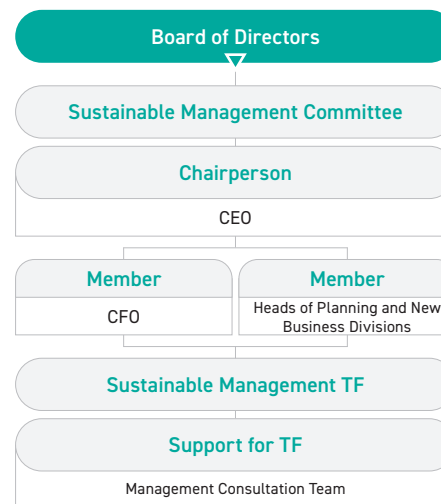
GS Retail's Mid- to Long-term ESG Strategy



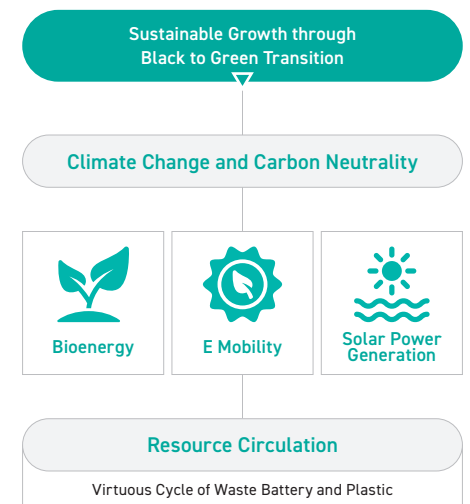
GS Global's ESG Governance

GS Global is driving sustainable growth by improving governance and creating environmental and social value while also expanding existing businesses and implementing strategies to develop new one. To this end, GS Global created Sustainable Management TF. It executes for decisions made by the Board of Directors and the Sustainable Management Committee and manages a working-level consultative body composed of employees from relevant departments. The Sustainable Management Committee, which consists of the CEO, the CFO, and the heads of the Planning and New Business divisions, is responsible for making decisions regarding ESG policies. The Board reviews and grants final approval to these policies and regulations.

GS Global's ESG Organization



GS Global's ESG Activities



ESG Council Activity



Responding to Disclosure Rule

GS Group's Action to Disclosure Rule

To respond to increasingly stringent external disclosure regulations, GS held ESG councils in February and July 2023, focusing on ESG disclosure rules. The Council, attended by each affiliate's executives responsible for ESG, reviewed the overall trend of mandatory ESG reporting and conducted case studies by sharing the response status of each affiliate. Moving forward, the group plans to continue discussing the direction of group-level responses to mandatory disclosures, considering both internal and external circumstances.

ESG Council Agenda 2023

Agenda	Description
The 1st ESG Council	
ESG Council Operation Plan 2023	2023 ESG Council Schedule and Agendas
Establishing an integrated ESG management system	Establish GS Group's integrated ESG management system - Introduction and implementation direction
Response status to mandatory ESG disclosure	Review the overall preparations of affiliates and share cases for each sector - GSR, GS E&R, GSC, GS E&C
The 2nd ESG Council	
The trend of disclosure rules and case study	Introduce the ISSB disclosure standards and the trend of disclosure rules - Introduce the ISSB disclosure standards and its implications - Share the trend of other disclosure rules
	Share the results of GSC's mandatory ESG disclosure response project
Establishing an integrated ESG management system	Establish an integrated ESG management system in the second half of the year - Discuss a detailed action plan
Follow-up measures	Discuss GS Group's action following mandatory disclosure rules

Developing ESG Database

Purpose of ESG Database

To respond to ESG disclosure rules, establish efficient strategies, and set a goals, we are creating an ESG database. As ESG disclosure rules have become stronger, there is a need to expand the scope of data management and unify management standards. To fulfill enormous requirements for disclosure efficiently, we designed the database focusing on accuracy, efficiency, and consistency. In addition, the ESG database is expected to support the work of relevant employees efficiently and increase the reliability of decisions related to sustainability management strategies and targets. We monitor our sustainable management efforts and actively address potential risks.

ESG Database Design Principles

Accuracy	<ul style="list-style-type: none"> Utilize definitions and formulas that meet external requirements Utilize it as a sustainability management rating tool
Efficiency	<ul style="list-style-type: none"> Improve data management efficiency of persons in charge Improve the efficiency of decision-making related to management strategies
Consistency	<ul style="list-style-type: none"> Unify calculation formula for internal data Unify the time of data entry

ESG Database Design Process

Design	<ul style="list-style-type: none"> Analyze requirements of global ESG rating and disclosure initiatives Identify data sets for quantitative management
Establishment	<ul style="list-style-type: none"> Collect data as a pilot test to identify problems Review data reliability and unify the input standard
Enhancement	<ul style="list-style-type: none"> Review data reliability and correct the database Establish a short-, mid-, and long-term data indicator management roadmap

Mid-to-long Term Utilization of ESG Database

We strive to improve the internal data management system to prevent disclosure risks and increase data transparency.

Mid-to-long Term Utilization

1. Expand the scope of data management

- Expand the scope to mid-to-long term management indicators

2. Expand the subjects of data management

- Include all affiliates and overseas offices in the management target
- Including global overseas subsidiaries

3. Advance the data management system

- Automate based on systems
- Analyze and predict ESG data through advancement

Progress of ESG Database

We collect indicators required by external ESG data disclosure rules and global ESG rating systems and identify data points that need to be managed. To encourage all affiliates to be engaged, we determine the level and status of their ESG data management. Based on the results, we determined a goal for database design based on the result. Following the identification of data sets that need to be managed, we conducted a pilot collection to receive feedback from working-level employees and corrected problems. Our 707 management items are divided into short-term and mid-to-long term management indicators. The short-term is under control, and the mid-to-long term indicators will be managed within three to five years. We will further enhance the sustainable management system through integrated data management.







ESG Database Indicators

Category	Area	Number of Indicators
Environment	Data and environmental management	24
	Climate change	92
	Environmental impact management	93
Social	Data management	3
	HR development and management	244
	Human rights management	58
	Social contribution	20
	Safety and health	37
Governance	Ethical management	44
	Shareholders and Board of Directors	40
	General management	52
	Information protection	8

Stakeholder Engagement & Communication



Considering the characteristics and issues of the energy industry, we divide stakeholders into six groups: customer, employee, supplier, local community, government, and shareholders/investors. We operate various communication channels tailored to their interests and expectations. These communications allow us to incorporate their opinions into the management decision-making process, while also identifying and preventing potential negative impacts.

Stakeholder Group	Communication Channel	Opinion & Issue	Feedback & Result
 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
 Customer	Website, app, SNS	Customer value creation and customer satisfaction Best products and services Customer information and interest protection	Listening to complaints and suggestions through social network channels and incorporating them accordingly
 Supplier	Website	Transparent and fair trade Trust and cooperation for mutual growth	Unfair and corruption monitoring
 Shareholder/investor	General shareholders' meeting, management disclosure, other IR activities	Improving business value Efficient and transparent management Providing management information timely	Identifying new eco-friendly businesses for sustainable growth Reporting business performance through disclosure
 Government	Website, management disclosure, government agency meeting	Policy and legal compliance Distribution of economic value and tax payment	Enacting ethical regulations and operating reporting channels Financial Supervisory Service's and Fair Trade Commission's announcement Communication activities with the government and related organizations
 Local community	Website, press release	Contributing to community development Creating social values Minimizing environmental impacts	Donation and other social contribution activities Establishing and following environmental management policies

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New Eco-friendly Business

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Response to Climate Change

ENVIRONMENTAL

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Environmental Impact Management

New Eco-friendly Business



New Eco-friendly Business Investment Governance

Governance

Investment System

We invest in new eco-friendly businesses to actively respond to global technology trends and ESG risks. The affiliates' CEOs and executives in charge of ESG establish investment strategies and share issues together. In 2020, GS declared 'future growth with startups' as our investment strategy for new businesses. Since then, we have been actively investing in new venture companies and finding opportunities for new businesses in connection with the existing business areas. For active investments, we established GS Futures and GS Ventures, which are corporate venture capital foundations. In partnership with GS Holdings, they invested in more than 130 portfolios, discovering new growth engines.

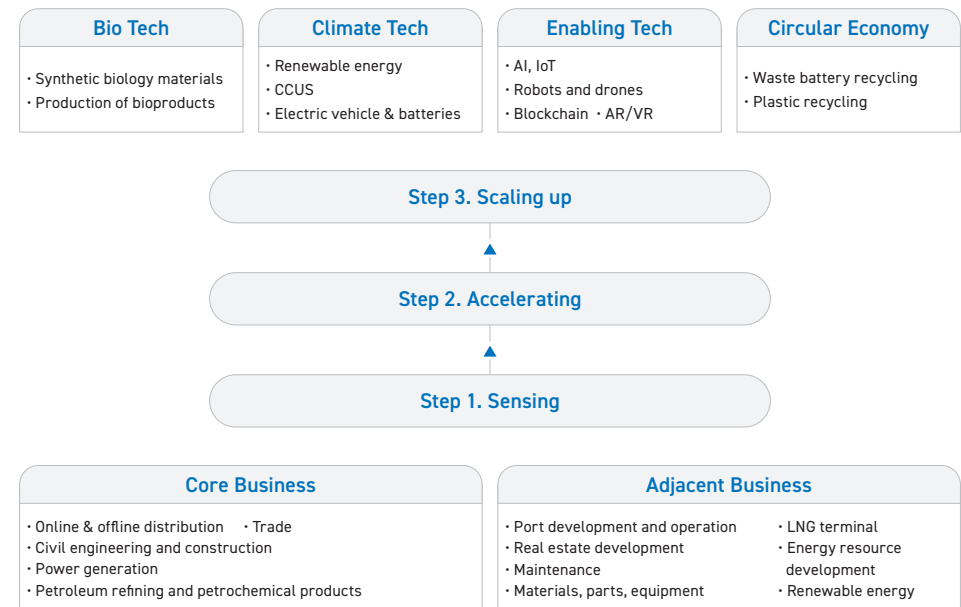
Core Management Value	Grow Sustainably			
Investor	GS Holdings	GS futures	GS Ventures	
Affiliates' Investment Status	GS Caltex Waste plastic and biotechnology	GS Energy Waste battery and renewable energy	GS Retail AI logistics center and blockchain records management	GS Global EV sales and waste resource recycling

New Eco-friendly Business Investment Strategy

Strategy

Investment Strategy

GS is pursuing a future innovation ecosystem that encompasses various businesses enabling climate technology, biotechnology, enabling technology, and circular economy. The company has achieved significant success in the energy, retail, and construction sectors over the past fifty years, establishing itself as a leading company in Korea. Leveraging these accomplishments, GS aims to develop sustainable future businesses by utilizing the capabilities it has cultivated in its core businesses and related industries. We plan to systematically expand into new businesses by following investment steps: sensing, accelerating, and scaling up.



New Eco-friendly Business



Investment in Eco-friendly Businesses

GS Holdings

Under the theme of resource circulation, GS Holdings has set waste recycling as the major business target and actively reviewed investments in various portfolios that may synergize with it. GS Holdings invested in Triple W, an Israeli climate technology startup. This company, with expertise in biochemical fermentation and recovery, waste purification, and microbial industrialization, also has the technology to produce lactic acid and bioplastic polylactic acid (PLA) from waste. The production of PLA polymer requires 60% less energy and reduces GHG emissions by close to 70%, attracting attention as a next-generation alternative plastic.



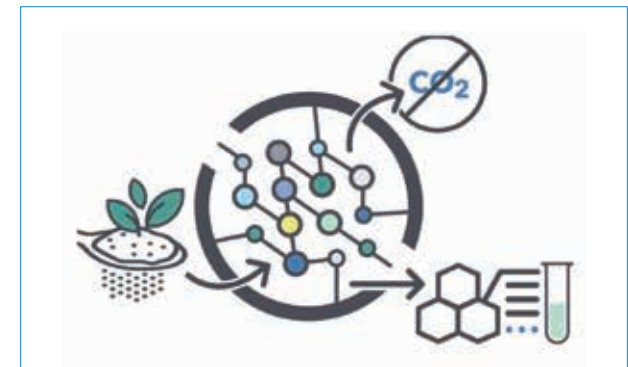
GS Ventures

GS Ventures makes investments focusing on Korean companies in biotechnology, climate change response, resource circulation, and new energy areas. In 2023, it made an investment in The Greet in partnership with GS Retail. The Greet has been recognized for its strong business prospects and technological excellence. The reusable containers, along with its total solution such as six types of container collecting boxes using IoT, automatic washing station, and ordering platform, have been recognized as a business potential. AI-powered robots in the sorting plant automatically sort various materials, including PET, PP, PS, and PE, thereby increasing the operational efficiency and sustainability of sorting plants in Korea.



GS futures

Since its foundation in 2020, GS Futures has explored and made investments in new technologies, mainly in North America, including Silicon Valley. Last October, the company additionally invested in ZymoChem, a white biotech company in America. ZymoChem has a technology that optimizes biochemical production and metabolism. White biotechnology converts organic matter obtained from plants or microorganisms into materials for various energy and chemical products through biological processes. According to research, the market is expected to grow at an average annual rate of 11.5% from 2021 to 2027, reaching KRW 479.9 billion.



New Eco-friendly Business



Affiliates' Investment in New Eco-friendly Businesses

The GS Challenge Future Energy

GS Energy has selected six startups to participate in the 4th GS Challenge Future Energy in partnership with Blue Point Partners. This program, launched in 2021, aims to discover and support startups with potential in the energy sector. A total of 127 teams applied for the program, resulting in a highly competitive selection process with a ratio of 21 to 1. The final six teams receive a comprehensive five-month acceleration program supported by GS Energy and Blue Point Partners, including opportunities for proof of concept (PoC) development and potential investment. In addition to the infrastructure previously provided by GS Energy, the program participants can benefit from AWS, the Seoul Business Agency (SBA), and the Korea Institute of Energy Research (KIER). GS Energy will actively support selected startups with the aim of fostering sustained growth and strive to create an exemplary mutual growth case.

GS Caltex

GS Caltex is committed to achieving "Sustainable and Profitable Growth." The company has established strategy and investment principles for the low-carbon business areas to benefit its employees, shareholders, customers, and society. Its portfolio includes hydrogen, CCUS, and EV charging energy business, biofuel and white biotechnology business, and physical and chemical waste plastic recycling business. In 2023, GS Caltex successfully demonstrated bio-jet fuel and bio-marine oil, making biofuel more commercially viable. Additionally, the company continues to research low-carbon products, invest in facilities, obtain low-carbon certification, and develop technologies to enhance product reliability.



Response to Climate Change



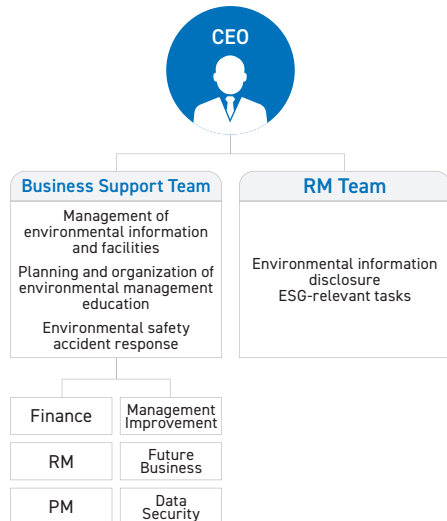
Climate Change Response Governance

Governance

Board of Directors

In order to reduce the environmental impact of our corporate activities, we implement environmental management practices in collaboration with relevant departments. The Business Support Team handles environmental information management, plans and organizes environmental education, and responds to environmental safety incidents. The RM Team is responsible for disclosing environmental information and addressing general ESG-related tasks. Together, they work to implement environmental management practices to adapt to climate change.

GS Holding's Environmental Management Governance



Strategies for Climate Change Adaptation

Strategy

Environmental Management Policy

We have declared and adopted an environmental management policy to ensure corporate sustainability. This policy aims to preserve environmental values from the perspective of supplier evaluation and management, and to oversee the entire process from production activities to product development, distribution, and waste management. We encourage GS Holdings' employees and affiliates to uphold this policy while respecting their autonomy in management.

GS Environmental Management Policy

Product activities	• Minimize environmental pollution arising from production activities
Product 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

Expansion of Environmental Management

We conduct various eco-friendly campaigns to promote environmental management and encourage daily environmental protection practices. Since 2021, we have introduced reusable cups at Yeoksam GS Tower, reducing both disposable product use and costs. Used reusable cups are returned to a collection box, collected by a rental company, and then washed and reused. In 2023, we ordered 210,148 reusable cups. Additionally, we introduced Eco Day in April 2022, offering eco-friendly dishes with a higher proportion of vegetables and a lower portion of meat. Eco Days are designated on four random days each month. We collaborated with vegan product providers and organized a menu contest for our employees.



GS Retail's Employee-engaged Campaign

In 2023, GS Retail participated in the companion beach program and cleaned beaches four times. This activity usually involves cleaning fishing waste and tourists' waste, and the company plans and conducts campaigns such as marine environment protection at least once a year. GS Retail will continue conducting environmental protection activities with its employees to raise environmental awareness.

The 'companion beach' is a private sector-engaged beach management initiative created by the Ministry of Oceans and Fisheries and the Korea Marine Environment Corporation. GS Retail has selected Iho Tewoo Beach on Jeju Island to undertake marine ecosystem preservation activities.

In addition, it designates one day each month as GS Earth Day to encourage the use of reusable cups. On this day, employees who bring a mug can receive free coffee.



Response to Climate Change



Climate Change Risk Management

Risk Management

GS Energy's 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. The company recognizes a business opportunity in the renewable energy area, and it seeks 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.

GS Energy's Opportunities Regarding Climate Change

Energy source	· Increasing demand for low-carbon and renewable energy following the energy transition
Product and service	· Increasing demand for products and services for renewable energy intermittency
Market	· Brisk investment in eco-friendly businesses following the expansion of green finance
Resource efficiency	· Revitalizing energy efficiency and resource reuse/recycling markets
Resilience	· Portfolio update to enhance climate change adaptability

GS Energy's Response

Expansion of green power generation portfolio	· Expanding renewable energy generation businesses and investing in SMR technologies · Providing solar-based RE100 solutions
Leading the reorganization of clean hydrogen economy infrastructure	· Introducing clean hydrogen and ammonia and establishing supply infrastructure · Investing in a hydrogen leakage detection system
Leading the smart power generation solution market	· Securing full value chain of electric vehicle charging solution · Securing virtual power plant (VPP) base and operational capabilities
Establishing the circulating resource ecosystem	· Running electric vehicle battery service (Baas) business · Running electric vehicle battery recycling and reuse businesses · Investing in a power system that reuses radioactive waste

GS Energy's Risks Regarding Climate Change

Transition risk	Law	· Risk of carbon credits shortage and climate change-related lawsuits
	Technology	· Investment loss caused by the failure of environment-friendly technology demonstration and commercialization
	Market	· Profitability deterioration caused by the increasing raw material costs
	Reputation	· Increasing interests of stakeholders in the fuel conversion of the power generation industry
Physical risk	Short-term	· Damage to production facilities and increasing management costs due to forest fires and floods
	Long-term	· Operational risk of production facilities caused by sea level rise

GS Energy's Response

GS Energy	· Securing Korean and overseas offset credits connected to new business investments · Participating in the joint CCUS feasibility project
GS Power	· Importing LNG directly to reduce fuel costs · Running energy efficiency and unused energy recovery businesses
Incheon Total Energy Company	· Running unused energy recovery business and obtaining low-carbon product certification · Responding to ETS and reducing GHG emissions
SPPC	· Importing LNG directly to reduce fuel costs · Reducing fine dust · Responding to ETS
Dongducheon Dream Power	· Improving energy efficiency of power generation facilities
Cheongna Energy	· Running unused energy recovery businesses

Response to Climate Change

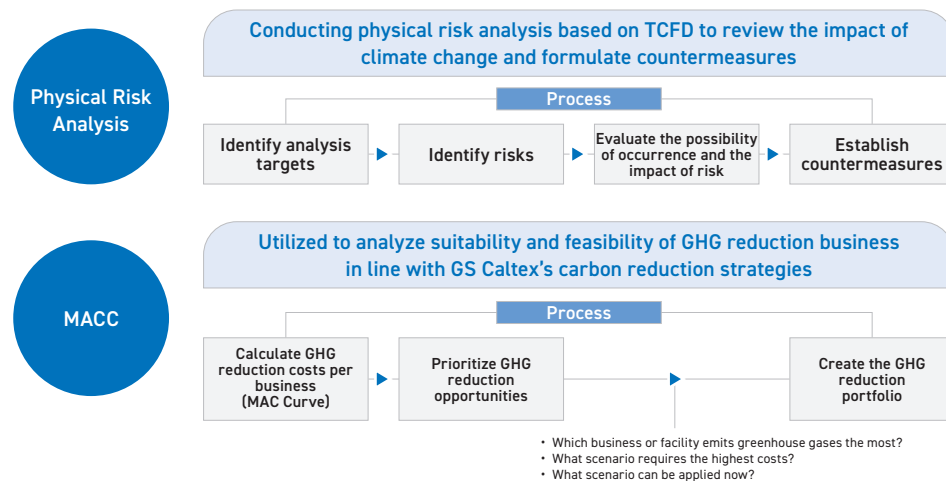


Climate Change Risk Management

GS Caltex's Climate Change Risk Analysis

GS Caltex regularly identifies risks and opportunities related to climate change and conducts research on climate-related regulations and policies in Korea and other countries to minimize the negative impacts of climate change. For instance, the company has made efforts to reduce greenhouse gas (GHG) emissions. The results of these efforts are shared with relevant organizations to facilitate discussions on subsequent steps. The company also reports these results to management, which makes decisions based on the report. In 2023, GS Caltex conducted a physical risk analysis based on TCFD. It analyzed risks using the marginal abatement cost curve (MACC)¹⁾, assessed the impact of climate change, and evaluated business suitability and feasibility to determine priorities. Subsequently, the company establishes response strategies for each risk, carries out relevant activities, and continues to monitor and manage performance.

GS Caltex's Physical Risk Analysis Using MACC

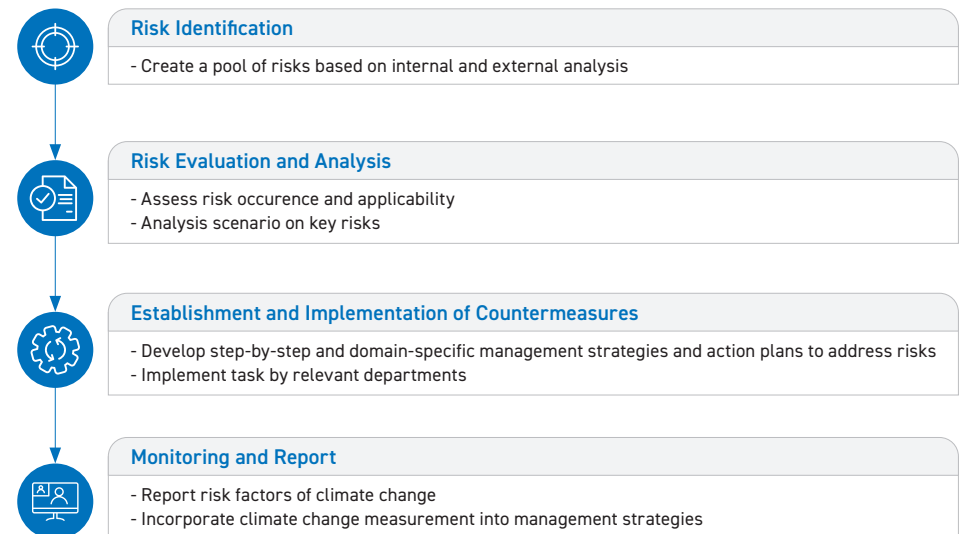


1) Marginal Abatement Cost Curve (MACC): Visualize the marginal abatement cost, which is the cost of reducing one ton of greenhouse gases, for each project in a single graph. This allows for the prioritization of the most effective reduction projects within limited resources.

GS Retail's Risk Response Process

GS Retail identifies major climate change issues in the distribution industry and evaluates the their likelihood to assess critical risks. The company conducts a climate change scenario analysis on the identified risks to determine their financial impacts. GS Retail also strives to establish strategies to further refine the analysis.

GS Retail's Climate Change Risk Management Process



Response to Climate Change



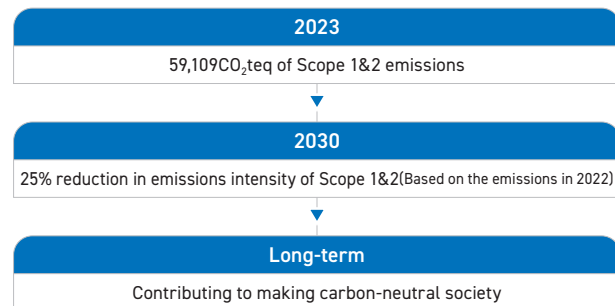
Climate Change Response Goal

Metrics Measure

GS Retail's GHG Emission Reduction Target

GS Retail recognizes its responsibility for climate change and is committed to efforts to mitigate it. The company voluntarily disclosed its GHG emissions and established a reduction target to manage them. GS Retail aims to reduce Scope 1 and 2 emissions intensity by 3% every year and undertakes various reduction activities to achieve this target.

GS Retail's Reduction Target

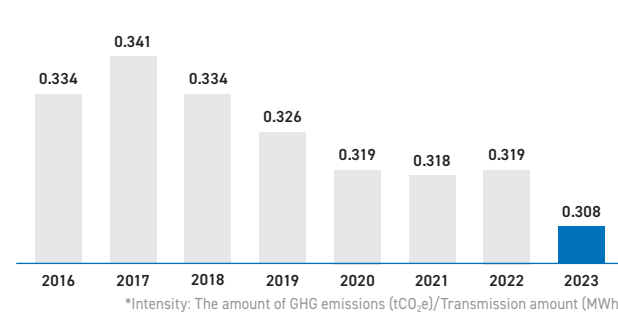


Climate Change Indicator Management

GS EPS' GHG Emissions Management

The Ministry of Environment has designated GS EPS as a company subject to the greenhouse gas (GHG) emissions trading system. External institutions review the company's annual GHG emissions and energy consumption. GS EPS has created a GHG inventory to monitor emissions. At the same time, the company is committed to the government's GHG reduction efforts and is striving to lower emissions. To increase measurement accuracy, GS EPS has been improving the emission calculation plan annually to systematically define the parameters measurement and data collection methods.

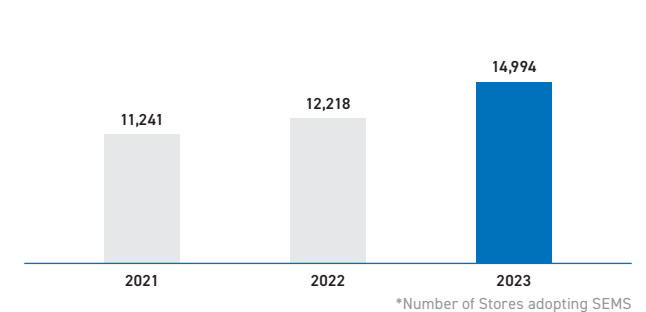
GS EPS' GHG Emissions Intensity



GS Retail Smart Energy Management System

GS Retail efficiently manages energy use in its stores by utilizing SEMS, an IoT-based energy management system. By connecting in-store electrical equipment to the headquarters' main server, the company remotely monitors store power consumption and prevents excessive power use of heating and cooling systems through peak control functions. Additionally, store owners and employees can easily manage equipment such as heating and cooling systems and indoor lighting via smartphones. In the future, GS Retail plans to develop functions to maintain refrigeration equipment at optimal temperatures and identify malfunctioning equipment to prevent power waste. Since implementing SEMS, the average monthly electricity bill per store has decreased by about 13.5%, and GS Retail aims to install SEMS in all stores by 2024.

GS Retail's SEMS Adoption



Response to Climate Change



Climate Change Indicator Management

GS E&R's GHG Emissions Management

GS E&R manages GHG emissions to contribute to global GHG reduction efforts. The company achieved energy efficiency by selling waste heat, installing and operating heat storage tanks, and reducing fuel consumption due to the increased water supply temperature. Additionally it continuously strives to reduce GHG emissions while securing overseas carbon credits through a cook stove business.

GS Power's GHG Emissions Management

Every year, GS Power has submitted verified GHG emissions statements and carbon credits to the Ministry of Environment since it was subject to the emissions trading system in 2015. The company hires an external institution to create the annual emission calculation plan to increase accuracy and systematize the measures of activity data and parameters. In line with this effort to prepare for the verification, GS Power established a GHG inventory to calculate Scope 1 and 2 and manage the amount of emissions.

GS Caltex's Carbon Reduction through Energy Efficiency

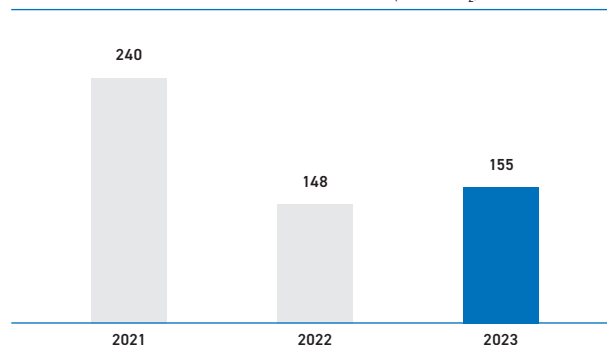
Since 2021, GS Caltex has been actively engaging in energy-saving and greenhouse gas emission reduction activities through its Scorpions program, which is aimed at improving performance. In 2023, the company tackled approximately 109 energy-saving tasks, including enhancing the heat efficiency facilities. These efforts resulted in saving an estimated energy cost of KRW 20.9 billion and reducing greenhouse gas emissions of 79,000 tCO₂eq. Furthermore, GS Caltex actively sought input from its employees to identify energy-saving and emission-reducing tasks, while also conducting energy diagnostics for all its processes. The company plans to initiate an energy efficiency improvement program based on the priorities determined by the marginal abatement cost curve.

GS E&R's GHG Emissions in Major Workplaces

Category	Unit	2021	2022	2023
Total GHG Emissions	tCO ₂ e	2,100,344	2,070,165	1,946,209
Workplace	Banwol	979,011	966,291	887,504
	Gumi	1,121,333	1,103,874	1,058,705
Direct Emissions (Scope1)	tCO ₂ e	2,100,038	2,069,916	1,945,900
Workplace	Banwol	978,884	966,144	887,364
	Gumi	1,121,154	1,103,772	1,058,536
Indirect Emissions (Scope2)	tCO ₂ e	306	249	309
Workplace	Banwol	127	148	140
	Gumi	180	102	169

GS Power's GHG Emissions Intensity

(Unit: tCO₂/KRW 100 million)



GS Caltex's Energy Efficiency Activity

Activities (2023)	Energy Savings (TJ/year)	GHG Reduction (ktCO ₂ eq/year)	Cost Savings (KRW 100 million/year)
Fuel Saving	275	18.0	49
Heater fuel savings through heat exchanger replacement			
Steam Saving	871	60.5	159
Turbine power savings through the operational optimization of rotating machines			
Power Saving	4	0.5	1
Motor power savings through the operational optimization of rotating machines			

*Measurement standard: Calculated the amount of reduction utilizing each energy source's emission factors before and after improving energy efficiency

Environmental Impact Management



Water Resource Management

GS Power's Water Resource Management

GS Power introduced a facility to maximize the recycling of cooling water and wastewater reuse in power plants. Its combined heat and power plant produces and supplies electricity and heat using the power of steam. The company introduced the water treatment facility to reuse water, maximized the water recycling rate, and designed the optimal operation to minimize wastewater.

GS E&R's Water Use Management

GS E&R consumed 6,840,627 tons of water in 2023. The company tirelessly strives to save water. In 2023, the Banwol Plant and the Gumi Plant increased their water reuse by 2.92% and 13.10%, respectively, compared to 2022.

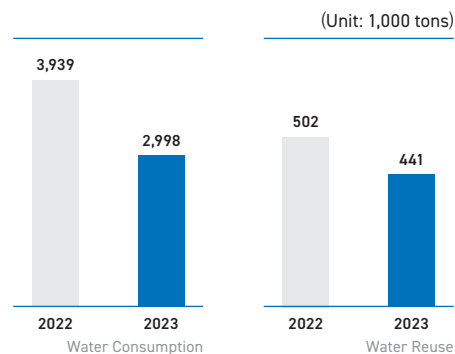
GS Caltex's Water Resource Risk Management

To optimize water consumption, GS Caltex adjusts the volumes of each process according to demand fluctuations. The Yeosu Plant monitors industrial water consumption in real time to manage water resources efficiently. In addition, the Plant recycles the water discharged from the company as raw water or cooling water. In addition to the recycling initiative, GS Caltex introduced the treated sewage water reuse program of Yeosu City, diversifying water resource suppliers.

GS EPS' Water Resource Management

To address water scarcity resulting from climate change, GS EPS has implemented measures to reduce water consumption and enhance water reuse initiatives. In particular, the company discovered an additional method to repurpose wastewater, utilizing it not only as raw water but also as process water. This advancement enabled GS EPS to recycle 44% (approximately 400,000 tons) of its total raw water consumption in 2022 and 39% (approximately 470,000 tons) in 2023.

GS Power's Water Consumption



GS E&R's Water Use

Category	Unit	2021	2022	2023	
Total Water Use	ton	6,828,410	6,614,758	6,840,627	
Workplace	Banwol	ton	3,627,678	3,226,254	2,282,723
	Gumi	ton	3,200,732	3,388,504	3,957,904

*Water use = Intake volume - Discharge volume + Reuse volume

Environmental Impact Management

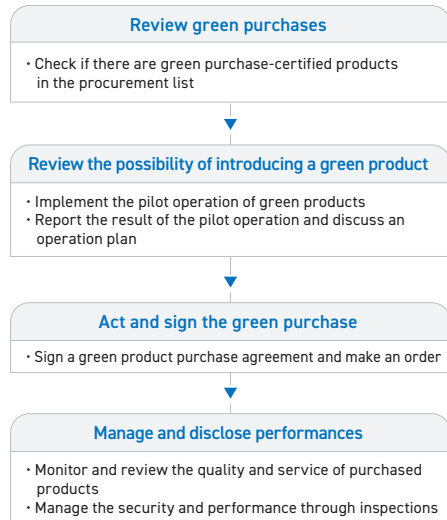


Raw Material Management

GS Retail's Green Purchase

GS Retail is an online and offline lifestyle platform. The company established and applied sustainable purchasing policies to reduce environmental impact and fulfill social responsibility in the consumable purchasing, raw material distribution, and procurement processes. GS Retail also established and operated an internal process to purchase raw materials that satisfy organic, pesticide-free, and animal welfare requirements.

GS Retail Procurement Process



Waste Management

GS Caltex's Waste Management

GS Caltex monitors waste reduction by sharing all data from waste generation in the production field to waste storage and processing through the SHE information system. To increase waste recycling, the company sorts waste from the generation. In addition, GS Caltex has jointly developed technologies to recycle waste oil, catalysts, synthetic resins, tank sludge, and wood with recycling companies while striving to find customers. Since 2024, the logistics center plans to install additional spill containment berms under armroll boxes to prevent leachate leak. On the other hand, GS Caltex installed automatic fire extinguishing equipment in waste storage facilities and created a safe waste management environment to prepare for fires.

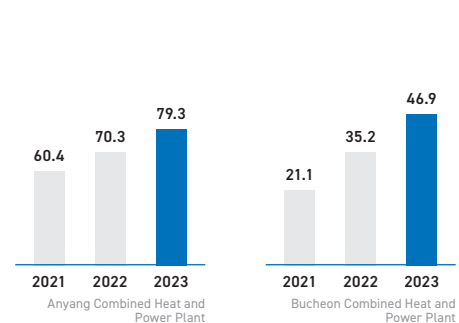
GS Power's Waste Management

GS Power transparently manages waste through the Allbaro system operated jointly by the Korea Environment Corporation and the Ministry of Environment. The company allocated personnel in charge of waste in each power plant in Anyang and Bucheon to monitor the management in real time. Furthermore, GS Power finds and introduces measures to reduce waste by saving resources and maximizing recycling. All of waste is legitimately processed by external waste companies.

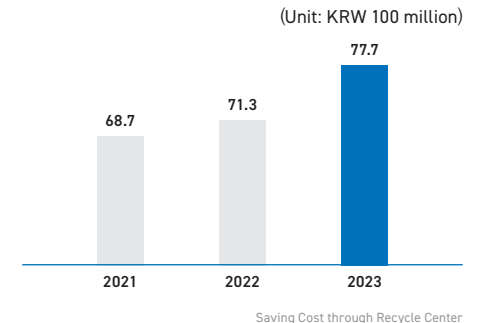
GS Retail's Resource Circulation

GS Retail makes various efforts to reduce waste landfills and incineration and achieve a circular economy. The company conducted tests to reuse synthetic resin waste as factory fuel and established a process to use synthetic resin waste as fuel in cement factories through crushing and grinding. In addition, GS Retail established an efficient recycling process to demolish, maintain, and deliver equipment in closing stores.

GS Power's Waste Recycling Rate



GS Retail's Operation of Recycle Center



Environmental Impact Management



Water Pollutant Management

GS Caltex's Wastewater and Water Pollutant Monitoring

GS Caltex uses physical, chemical, and biological wastewater treatment facilities to reduce water pollutants in the wastewater process and minimize environmental impacts on the aquatic ecosystem. The company updated the existing physical and chemical wastewater treatment facilities and introduced the Advanced Oxidation Process (AOP). It is also replacing the old induced air floatation facilities with the dissolved air floatation ones. In addition, GS Caltex installed a membrane bioreactor (MBR) for high-concentration wastewater treatment to improve the efficiency of the existing biological treatment facilities using the conventional activated sludge process.

GS Power's Water Pollutant Management

GS Power processes wastewater physically and chemically in the comprehensive wastewater treatment plant before discharging it. The treatment process consists of neutralization, coagulation, sedimentation, filtration, and adsorption. The treated wastewater is discharged into nearby sewage treatment plants. GS Power conducts regular environmental inspections to manage water pollutants, applying stricter policies than legal regulations.

GS E&R Water Pollutant Management

GS E&R manages water pollutant indicators, including COD, TOC, and SS. The Banwol Power Plant voluntarily participated in a pilot program in 2015. After one and a half years of preparation, the company was authorized as the first integrated management system workplace according to the Act on the Integrated Management of Environmental Pollutants in March 2018. The integrated management system integrated permits that were previously managed in nine areas, including air quality, water quality, noise, vibration, and soil, at a single business workplace level. With such system, the Banwol Power Plant is conducting physical and chemical wastewater treatment and monitoring (self-measurement of water pollutants).



Environmental Impact Management



Air Pollution Management

GS Power's Air Pollution Reduction Facilities

GS Power has installed optimal air pollution prevention facilities, including low NOx burners and selective catalytic reduction (SCR), to efficiently respond to air volume regulations. Additionally, the company has implemented an automatic chimney monitoring system to monitor air pollutants 24/7 continuously. The monitoring results are sent to the air pollution management system in real-time, and the monitoring system is operated transparently. GS Power has also established and adopted stricter in-house standards for air pollutant emissions compared to legal regulations.

GS Power's Air Pollution Management Awards

Grand Prize for Best Practices in Total Air Volume Management in the Metropolitan Area (2016)	Excellence Award for Voluntary Implementation of Total Air Pollutants Management Agreement (2016)
Excellence Award for Metropolitan Air Quality Management Office CoP Contest (2016)	Grand Award for Metropolitan Air Quality Management Office CoP Contest (2017)
Grand Award for Voluntary Implementation of Total Air Pollutants Management Agreement (2020)	Excellence Award for Voluntary Implementation of Total Air Pollutants Management Agreement (2021)

GS Caltex's Air Pollution Emissions Monitoring

GS Caltex installed a tele-monitoring system (TMS) in major chimneys to reduce nitrogen oxides and sulfur oxides, which measures the concentration of air pollutants such as nitrogen oxides, sulfur oxides, and dust in real time. As of April 2024, the Yeosu plant had 67 chimneys with TMS, and the company plans to install the TMS in an additional chimney by the end of 2025. Moreover, the plant's operation monitoring system (OMS) sounds an alarm if the pollutant emission concentration exceeds the standard, and the cause is directly analyzed and addressed. Its logistics center makes an effort to measure and manage air pollution by monitoring gas emissions through the VRU facility in real time. On the other hand, the Incheon grease plant plans to monitor air pollution in real time by applying IoT to small-sized buildings.

Hazardous Chemical Management

GS Caltex's Hazardous Chemical Management

GS Caltex complies with the standards for handling hazardous chemicals and facilities in accordance with the Chemical Substances Control Act. The company is well-prepared for potential hazardous chemical leaks, with detection and alarm equipment, protective equipment, and emergency response gear placed around its storage and manufacturing facilities. Based on the chemical accident prevention and management plan, GS Caltex evaluates the impact range of hazardous chemicals 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. In addition, the company notifies the local communities of the summary of chemical accident risks and emergency plans to prevent and respond to accidents annually. Moreover, GS Caltex has formed emergency response teams with nearby workplaces and established a joint disaster control plan to conduct joint hazardous chemical spill training regularly. The company's hazardous chemical handling suppliers undergo quarterly inspections and training through the Safety Council to ensure safety.

GS Caltex's Hazardous Chemical Management Training

Category	Training Name	2021	2022	2023	Category	Training Name	2021	2022	2023
GS Caltex's employees	Hazardous chemical outsourcing training for ordering team	78	52	63	GS Caltex's employees	Hazardous chemical worker training	250	289	225
	Hazardous chemical manager training	89	120	96	Suppliers	Hazardous chemical outsourcing training for suppliers	155 from about 40 companies	125 from about 40 companies	127 from about 40 companies
	Hazardous chemical handling training	505	1,136	472					

GS Power Chemical Management

GS Power has implemented optimal chemical management practices to reduce and manage the use of chemicals. As a result, in 2019, the government recognized the company's effort by not classifying it as a hazardous chemical handling company. Despite not being classified a hazardous chemical emitter, GS Power actively supports safety management measures in small and medium-sized enterprises through the Large and Small Business Chemical Safety Community Agreement. Moreover, the company participates in national drills to respond to crises, aiming to operate a combined heat and power plant in the metropolitan area with the high trust of local residents.



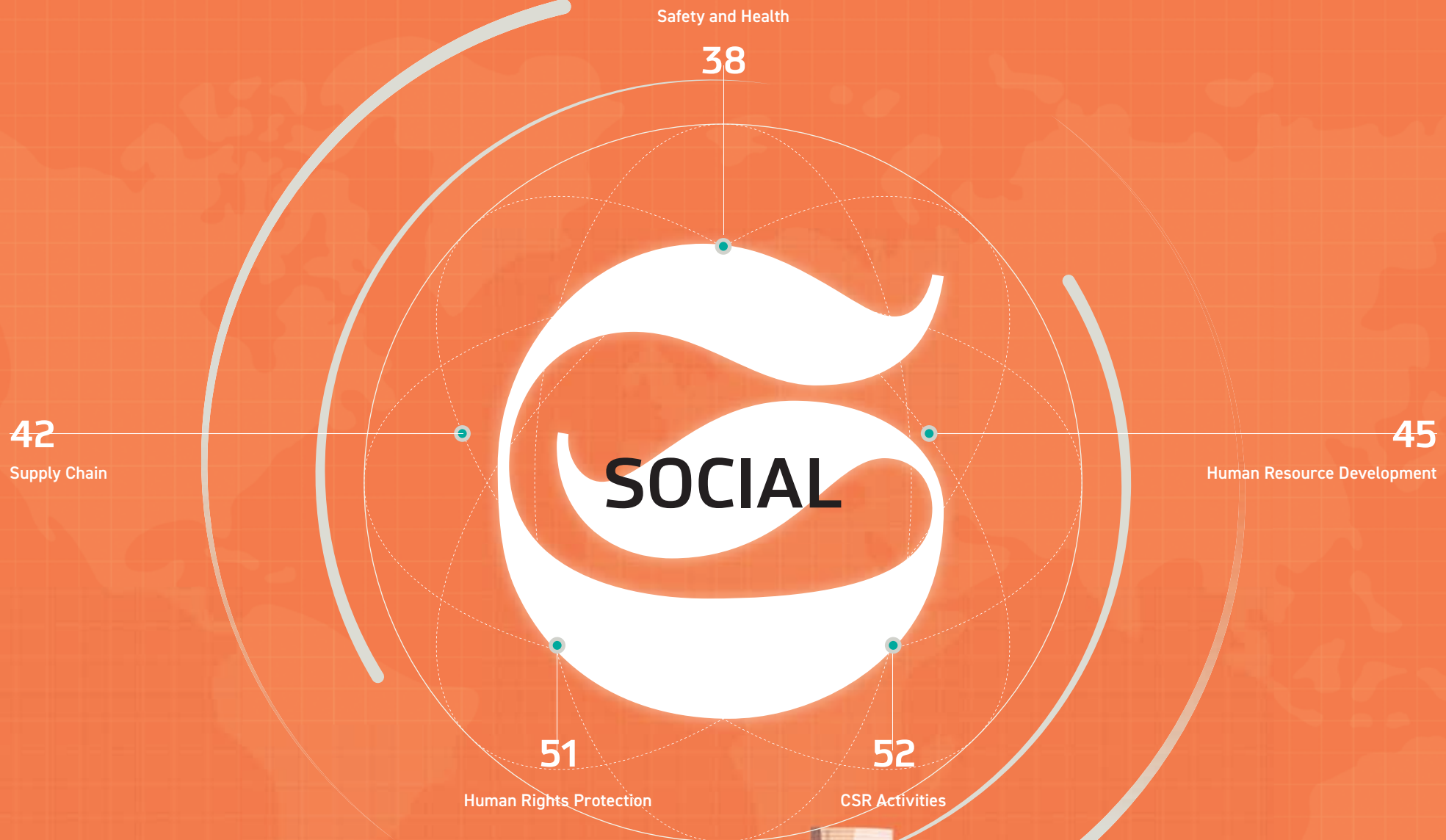
Left: Official Letter accepting Business Closure of Hazardous Chemical Selling Company
Right: Chemical Safety Community Agreement

Environmental Impact Management



GS EPS Hazardous Chemical Management

According to the Chemical Substances Control Act, GS EPS regularly undergoes facility inspections by professional institutions to maintain accident-free operations in the workplaces handling hazardous chemicals. Regular inspections of lifespan and performance management are conducted annually, and safety diagnoses are performed once every four years. The company also conducts training for various scenarios including fires, explosions, and leakages to prevent chemical accidents. In addition, GS EPS submits a chemical accident prevention management plan to relevant institutions, establishing an emergency response system to minimize damage in the event of an accident. The company also provides information about its facilities and disaster prevention equipment to strengthen cooperation with local communities.



Safety and Health



Safety and Health Governance

Governance

GS Caltex's Safety and Health Organizations

GS Caltex appointed the Chief Safety & Environment Officer (CSEO) to operate an organization dedicated to safety and health and report relevant issues to the Board of Directors. Safety and health-specialized employees are assigned to each essential business division to ensure the organization's independence.

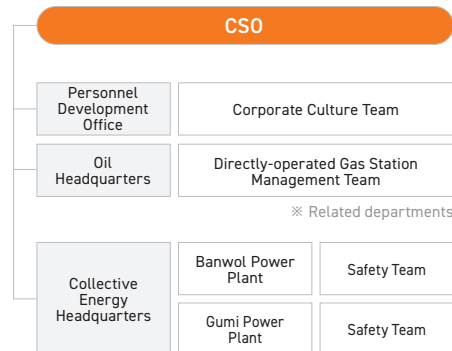
GS Caltex's Safety and Health Management Organizational Chart



GS E&R's Safety and Health Organization

GS E&R's Safety Management Office is a dedicated organization directly under the CEO, which oversees work related to safety and health. In support of the CEO, the Safety Management Office establishes safety and health management systems and prevents serious disasters. It collects and reports the implementation results of safety and health requirements and inspects workplace safety and health measures. Each workplace manages the implementation of detailed safety and health measures. In addition, GS E&R operates Occupational Safety and Health Committees for each plant. According to the Occupational Safety and Health Act, committee members of up to 10 employees and employers make decisions related to safety and health. The Occupational Safety and Health Committees are held quarterly.

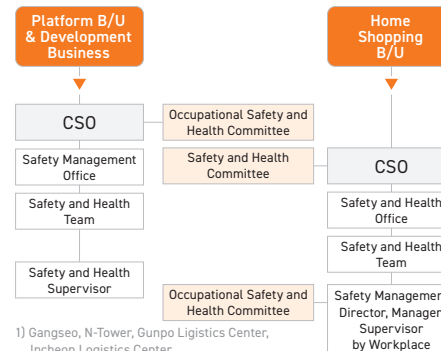
GS E&R's Safety and Health Management Organizational Chart



GS Retail's Safety and Health Organization

In GS Retail, the Chief Safety Officer (CSO) oversees safety and health in home shopping and offline stores. The company also operates the Safety and Health Office directly under the CSO. In addition, each workplace has a Safety and Health Manager and their safety and health organizations. The logistics Center hired a specialized institution to manage safety and health. The Occupational Safety and Health Committee consists of five executives and five employees. These ten committee members conduct activities focusing on employee accident prevention. In addition, the CSO established and holds the Home Shopping Business Unit Safety and Health Committee in the home shopping business unit to strengthen relevant activities.

GS Retail's Safety and Health Management Organizational Chart



1) Gangseo, N-Tower, Gunpo Logistics Center, Incheon Logistics Center

GS Power's Safety and Health Organization

GS Power has prioritized safety and health by appointing a Chief Safety Officer (CSO) to strengthen its safety and health management system. The CSO is responsible for establishing and implementing the company's overall safety and health policies, ensuring the safety of all employees and stakeholders. Additionally, dedicated safety and health teams operate under the CSO at each business site, enhancing expertise in safety management and promoting systematic management and continuous improvement.

GS Power's Safety and Health Management Organization



Safety and Health



Safety and Health Management System

Strategy

GS Power's SHEQ Management

Since 2004, GS Power integrated and established the safety, health, environment, and quality management system (SHEQ management system). It also has established management system that follows international standards by maintaining ISO9001 (quality) and ISO14001 (environment) certifications in addition to KOSHA-MS, Korea's safety and health management system certification. GS Power created company rules consisting of regulations, procedures, and guidelines managed through the internal computerized system. GS Power has published a safety and health management policy to ensure all employees comply with relevant laws. In addition, the company obtained a KOSHA-MS certification to establish an effective safety and health management system. Additionally, GS Power continues to inspect and make an improvement to ensure that the system is effective in line with revisions and enactment of various relevant policies, including the Serious Accident Punishment Act.

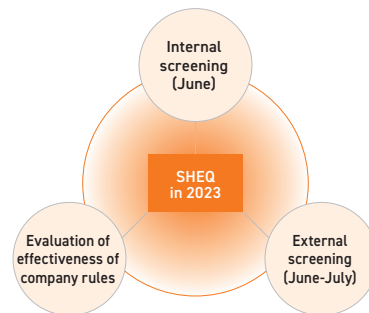
Safety and Health Management System



GS Power's SHEQ Audit

GS Power conducts an integrated SHEQ audit, which is conducted through internal and external screening, system improvement, and effectiveness evaluation. The company conducts mutual screenings by 17 internal examiners and multiple external professional examiners, inspecting the suitability and effectiveness of the SHEQ management system. The internal and external screenings identify matters that need to be corrected, and the examiners publish recommendations or corrective action reports. Also, they report the screenings to the CEO to set continuous improvement goals and take action. With a systematic screening process, GS Power pursues the effective operation and continuous improvement of the SHEQ management system.

SHEQ Audit Process in 2023



Safety and Health Management Diagnosis

Risk Management

GS Retail's Safety and Health Management Diagnosis

GS Retail establish an annual safety and health plan and report it to the Board of Directors. In addition, the KPIs of organization directors are aligned with safety and health indicators to strengthen their roles. The company addresses all issues that require immediate corrective actions identified through risk assessment.

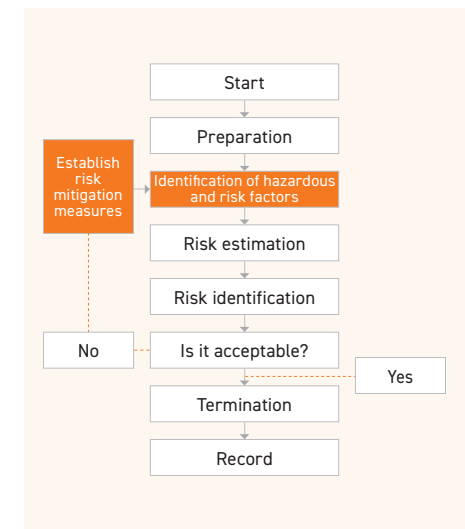
Risk Assessment Result in 2023

Item	Description
Home shopping	<ul style="list-style-type: none"> Conducted risk assessments in Gangseo, N Tower, Gunpom, and Icheon centers Handled 22 risk factors with a risk score of 8 or higher, which required immediate corrective actions
Convenience store and supermarket	<ul style="list-style-type: none"> Evaluated and handled risks that may occur during the unloading, warehousing, cooking, livestock sales, and store display in 206 stores

Safety and Health Management Diagnosis Items in 2023

Item	Description
Safety planning	<ul style="list-style-type: none"> Report the safety and health plan 2023 to the BoD Update the Serious Accident Punishment Act manuals Provide safety and health guidelines for affiliated stores
Occupational safety management	<ul style="list-style-type: none"> Hold the Occupational Safety and Health Committee Prevent industrial accidents in outsourcing workplaces (Council, field inspection) Collect safety and health opinions from suppliers and citizens on the website
Safety inspection	<ul style="list-style-type: none"> Inspect and report obligations under the Serious Accident Punishment Act Conduct safety inspections and handle risk factors in direct-managed and affiliated stores Conduct safety inspections on convenience store and supermarket construction field
Risk assessment	<ul style="list-style-type: none"> Create the risk assessment procedure in 2023 and conduct education Conduct a risk assessment in 2023 (once a year)
Safety education	<ul style="list-style-type: none"> Conduct regular safety and health education for employees (6 hrs/semiannual) Conduct safety and health education for supervisors (16 hrs/annual) Conduct safety and health education for new hires (8hrs)
Other activities	<ul style="list-style-type: none"> Conduct safety management evaluations for organization directors Conduct CPR training for supervisors Share accident cases and take anti-recurrence measures

Risk Assessment Procedure



Safety and Health



Workplace Safety Management

GS Caltex's Safety Environment Advancement

As part of an effort to advance the safety environment, GS Caltex is developing AI models to predict errors in the process and their causes in real time. In 2022, the company created an AI model for the polyethylene (PE) manufacturing process, which was later adapted for the polypropylene (PP) manufacturing process thanks to their similarities. Furthermore, the company developed a deep learning model to monitor errors in the vacuum distillation unit (VDU) in real time. This system prioritizes addressing problems when an error is found and displays optimal operation values to prevent vacuum breakage. Furthermore, GS Caltex employs cutting-edge technologies such as AI cameras and drones to ensure a safer workplace.

GS Caltex's Safety Culture Activity Program

Program	Activity
Safety and Health Environment Audit	<ul style="list-style-type: none"> Confirm whether the workplace complies with relevant laws and inspect it regularly with external consultants to contribute to improving its level. Address issues timely following the inspection and manage the implementation through systems. Every three years, make API¹⁾-certified examiners visit the workplace and conduct safety inspections applying API; and take corrective actions for identified risks.
Safety Culture Enhancement Program	<ul style="list-style-type: none"> Discuss major issues related to the Safety Culture Enhancement Program and make discussions to settle safety culture in the company-wide Safety Leadership Committee (SLC) held by the Chief Safety & Environment Officer (CSEO). Operate detailed programs such as safety monitoring, safety leadership, and safety investigation considering Yeosu Plant and other workplaces' characteristics; and monitor essential implementations of each workplace monthly.
Safety Communication Vitalization	<ul style="list-style-type: none"> Publish the CSEO message and safety card news, a news format with text and images, regularly. Regular on-site visits to enhance communication with field employees. Vitalize safety information and accident case exchanges through the SHE information system Conduct monthly virtual training for logistics center managers (sharing SHE issues)
Identification of Exemplary Safety Environment Case	<ul style="list-style-type: none"> Select exemplary cases applicable company-wide among all workplaces and suppliers' safety environment activities; and award them in the Safety Environment Council and the company-wide SLC.
Right Safe Life Campaign	<ul style="list-style-type: none"> Have run the Right Safe Life Campaign since 2019 to instill safety to the field, all work, and daily life, which is the company's core value for sustainable growth.

1) API : American Petroleum Institute

GS Power's Process Safety Management (PSM)

In accordance with the Occupational Safety and Health Act, GS Power regularly updates process safety materials to prevent accidents that may damage employees and neighbors, such as hazardous substance leaks, fires, and explosions caused by hazardous facilities. In addition, the company conducts an annual internal audit to inspect the suitability and effectiveness of its safety management system. It also operates the PSM task force to identify risk factors and prepare preventive measures. These systematic process safety activities ensure the safety of workers on working sites and local communities. GS Power supports all employees in working with an awareness of safety by providing continuous education and training and creates safe and reliable workplaces.

Process Safety Management

Process safety materials Update and utilize process safety materials practically	Process risk assessment Conduct regular risk assessments through employee participation	Safe operation guidelines Ensure that operators use and comply with safe operation guidelines	Facility inspection, test, maintenance Conduct regular inspections and maintenance depending on the facility risk rate	Safe work permit Establish safety plans and follow procedures for dangerous works	Contractor safety management Conduct safety management and evaluation for contractors
Employee education Establish a PSM education plan for employees and manage its implementation	Inspection before operation Conduct an inspection before operating a facility and correct issues	Change factor management Manage and monitor changes following the inspection	Self-inspection Select self-inspectors and take follow-up measures after an objective audit	Process accident investigation Inspect process accidents including a near miss and establish anti-recurrence measures	Emergency measure Establish emergency action plans based on quantitative accident scenarios and conduct regular drills

Safety and Health



Workplace Safety Enhancement

GS EPS' Permit for Work (PFW)

GS EPS operates a Permit for Work (PFW) system that requires all works in the power plants to receive a safety inspection and a permit. The system is applied to power generators and facilities with potential hazards and all field workers who use them. In 2023, the system issued about 5,800 permits. Through the PFW system, all facilities' risk factors are locked, fundamentally preventing human errors. In addition, a safety specialist and a supervisor cross-check to ensure that the facility is ready to be operated again and unlock the facility. Furthermore, GS EPS continues to develop safety specialists who systematically prevent process accidents to strengthen workplace safety.

GS EPS' Emergency Response System and Drills

GS EPS conducts an annual emergency drill to respond to safety accidents promptly and accurately. Simulating emergency scenarios such as fire, hazardous chemical leak, power outage, earthquake, wind hazard, and flood damage, the company establishes emergency response systems and conducts emergency drills. In addition, GS EPS conducts a joint emergency drill in cooperation with a fire department and a rescue team to improve its emergency response capability.



GS EPS' Safety Management Strengthening for Suppliers

GS EPS operates the Safety and Health Council monthly for the win-win cooperation with suppliers. The Council strives to form a safe work ecosystem by supporting environmental safety modeling, handling highly hazardous chemicals, and performing work environment improvement activities. In addition, the company distributes a code of conduct for suppliers, including safety criteria in supplier selection and evaluation to improve safety. Moreover, GS EPS conducted specialists' lectures for suppliers, shared exemplary and near-miss cases in the safety area, and actively operated the safety monitoring award system. As a result, in 2023, 44 employees from GS EPS and suppliers received safety monitoring awards.

GS EPS Risk Analysis and Hazardous Risk Factor Identification

GS EPS operates the job safety analysis (JSA) system, which analyzes risks at each work stage, identifies hazardous risk factors, and takes corrective measures. In 2023, about 100 daily work risk analyses were conducted, and about 2000 identified risk factors were handled. Among the risk factors reported by surveys, 93% were corrected, and the remaining risks are also planned to be addressed.

GS EPS' Risk Analysis Result in 2023

Category	Number of risks	Number of handled risks	Rate
Daily work risk analysis	116	116	100%
Harmful risk factor identification	2,126	2,126	100%
Risk factor identification and countermeasures(survey)	44	41	93%

Health Management Activity for Employees

GS Power's Health Screening and Follow-up Program

GS Power's employees aged 35 or older benefit from health screening services at designated hospitals. Based on examination results, measures, such as job transfers and PPE provision, are implemented. In addition, the company conducts health inspections through regular field visits from doctors and nurses to monitor and manage the health of employees who need further investigations or have symptoms.

GS Power's Counselling Program

Through psychological support programs, GS Power helps its employees focus on work with healthier mental health. The programs include counseling services in cooperation with specialized institutions to help employees with various problems, such as depression, job stress, and family problems. In addition, GS Power provides mental health-related videos and self-assessment tools for stress for those who do not want face-to-face counseling.

GS Power's Work Environment Measurement

GS Power strives to eradicate damage to workers caused by harmful factors in the workplace. In addition, the company has entrusted the Korea Workers' Compensation and Welfare Services' Incheon Hospital (Bucheon) and Anyangseam Hospital (Anyang) to regularly measure the work environment twice a year. According to the measurement in 2023, noise, acids, alkalis, metals, dust, and other harmful factors were maintained below the exposure standards. Despite the results, the company recognizes that they can develop relevant diseases to workers depending on their physical and work conditions and makes its utmost effort to improve the work environment. You can find warning signs and earplugs in the noisy area. On the other hand, GS Power provides guidelines for local ventilation speed management and gas masks to ensure field workers can work in a safe environment without fear of harmful factors.

Supply Chain



Supply Chain Management Governance Governance

GS Retail's Supply Chain Management Organization

GS Retail engages with multiple suppliers due to the nature of the industry. The company carefully selects and supports these suppliers to handle risks and identify opportunities in the supply chain. Relevant departments are responsible for selecting and evaluating suppliers, as well as monitoring fair trade practices. Additionally, GS Retail supports them to be socially and environmentally sustainable in cooperation with relevant departments.

GS Retail's Supply Chain Sustainability Management Organizational Chart

R&R	Headquarters/Division	Department/Team
Supplier sourcing and contract	MD Divisions of each B/U	MD Department
Supplier support	MD Headquarters	MD Planning Team
	Management Support Headquarters	Finance Team
	Public Affairs Division	Policy Support Team
Quality management	MD Headquarters	Policy Support Team
		Compliance Team
Compliance & fair trade	Public affairs Division	Public Affairs Team
		Compliance Part

Mutual Growth Goal Strategy

GS Retail's Mutual Growth Strategy

GS Retail established four essential strategies with a mutual growth philosophy of win-win, trust, and future-oriented. The first strategy is establishing a fair trade culture. It aims to provide fair trade opportunities to its suppliers by complying with fair trade laws and establishing an unfair trade prevention system. Second, GS Retail is committed to providing practical management support to suppliers, such as early payment, business support, and welfare support. Third, it pursues continuous growth with suppliers and makes an effort for mutual growth by developing products together, supporting brand marketing, and introducing benefit sharing. The last strategy is regular meetings, cultural exchange, and supplier satisfaction surveys for open communication.

GS Retail's Mutual Growth Philosophy

- WIN-WIN** - Establishing a win-win cooperation system rather than sacrificing one for the other
- Trust** - Based on trust through constant communication and listening
- Future-oriented** - Pursuing sustainable growth rather than one-off and short-term performance

GS Power's Fair Trade and Mutual Growth Agreement

GS Power voluntarily signed the Fair Trade and Mutual Growth Agreement to ensure compliance with the Subcontracting Act and the Fair Trade Act and actively engage in government policies.

Fair Trade and Mutual Growth Agreement

Agreement
1. Guarantee of fair trade <ul style="list-style-type: none"> Fair contract guidelines Supplier selection and operation guidelines Unfair trade monitoring system
2. Support for mutual growth <ul style="list-style-type: none"> Financial support (win-win fund) Improvement of payment terms Education, management support, other supports
3. Cooperation for mutual growth <ul style="list-style-type: none"> Good faith in execution of agreements Compliance with ethical standards and practice guidelines Compliance with safe environment and relevant regulations

Action
<ul style="list-style-type: none"> Guarantee fair trade Use the standard subcontract agreements for each access channel's industries Sign confidentiality agreement Improve financial support and payment conditions Operate supplier support programs Comply with agreement standards

Supplier Support

GS Caltex's Supplier Support Program

To support the smooth financial experience of small and medium-sized enterprises (SMEs), GS Caltex established a win-win fund for its main suppliers in collaboration with the financial sector. In 2023, the company provided loans totaling KRW 20.5 billion at preferential rates to 33 suppliers through the fund support program. Furthermore, since 2016, GS Caltex has backed the Go Together program of the Korea Institute of Industrial Technology to assist small suppliers in obtaining the necessary technologies and enhancing their competitiveness. The company has consistently provided practical support to suppliers, including the development of technologies, products, and services that it intends to purchase, in order to enhance their R&D capabilities. Over the past eight years, GS Caltex has supported 72 projects for 66 companies, leading to a sales increase of KRW 61.6 billion and a cost reduction of KRW 24.7 billion. In 2023, the company hosted the Go Together Performance Presentation, sharing the outcomes of the investment in five companies' five projects, resulting in a KRW 1.3 billion increase in sales and a KRW 1.9 billion reduction in costs for the suppliers.

GS Power's Safety and Health Support for Suppliers

GS Power's safety and health win-win cooperation program is a policy program run by the Ministry of Employment and Labor and the Korea Occupational Safety and Health Agency, which aims to bridge the gap with suppliers vulnerable to safety and health management and promote the work environment enhancement and the safety culture where everyone can work safely. GS Power participates in the program and strives to support its suppliers with various measures. They hold an annual zero-accident meeting together to improve safety management awareness. GS Power also provides safety and health products for the summer and winter seasons as well as infectious disease prevention products. In addition, the company supports risk assessments for its suppliers.

Supply Chain



GS Retail's Stronger Social Responsibility Competitiveness

GS Retail supports various programs to enhance small and medium-sized suppliers' social responsibility and help them implement sustainable management.

Supplier Support Program

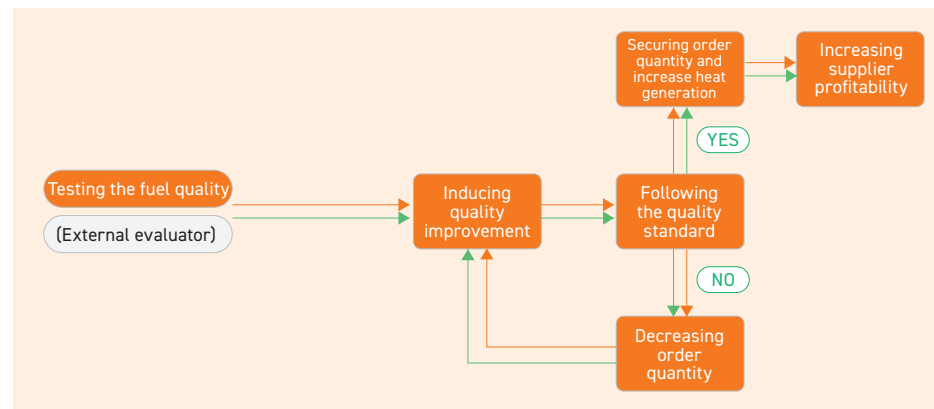
Program	Description
HACCP Certification	Support creating HACCP documents for FF plants and partner companies and verify their improvement
ISO Certification	Support obtaining ISO 9001/14001 certification for PB product suppliers
Environmental Label Certification	Conduct education to obtain the Environmental Label for suppliers, provide consulting services, and finance their certification fee
CCM Certification	Support small and medium-sized partner companies to obtain a CCM certification
Smart Learning	Support education such as ESG and competence development education for small and medium-sized partner companies
Productivity Innovation Partnership	Support the development of new products and the improvement of facilities in partner companies

Stronger Supplier Quality Management

GS EPS' Support for Local Production of Materials

GS EPS discloses spare materials and checks whether materials can be produced in Korea to support suppliers' technology development. The company is focusing on localizing materials suitable for domestic production by verifying that they can be manufactured in Korea by major suppliers or companies with key technologies. GS EPS is also considering support through industry-academia collaboration. Through this approach, suppliers gain opportunities to understand and develop technologies for these materials, while GS EPS ensures timely and cost-effective procurement of materials.

Quality Management Support Process



GS EPS' Production and Quality Management Support

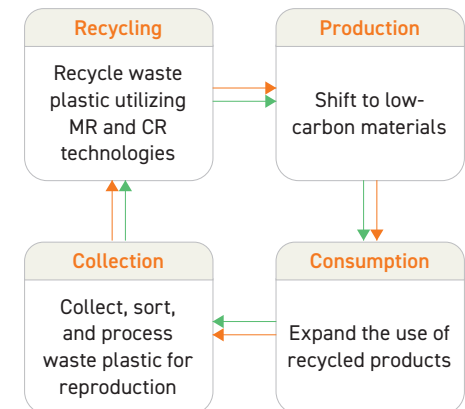
GS EPS provides partners with a quality evaluation report from external accredited institutions to manage the raw material quality of biomass supplied by suppliers. The report is expected to increase biomass's raw material quality and the suppliers' profits. In addition, GS EPS expects to achieve mutual growth with them.

Procurement of Sustainable Raw Materials

GS Caltex's Waste Plastic Recycling Project

In an environment where the transition to a carbon-neutral society is accelerating, GS Caltex contributes to establishing a circular economy with a waste plastic recycling project. In 2023, to achieve the circular economy, the company invested in ECO G&R, a Korean company recycling vehicle waste plastics, and G.E.T, a Japanese company recycling home appliance waste plastics.

Circular Economy Using Waste Plastic



Supply Chain



Establishment of Code of Conduct for Suppliers

Risk Management

Code of Conduct for GS Suppliers

Recognizing the importance of sustainable management principles and ideology, we established a Code of Conduct to practice during work. We also understand that it is even more meaningful when our suppliers engage in it, so we recommend they follow the Code to satisfy our sustainable management principles and ideology without interfering with their autonomy and independence. Regardless of project type and place, the Code applies to every supplier, and GS affiliates are recommended to actively practice it to the extent that it does not interrupt their autonomous management.

GS Suppliers Code of Conduct

Respect for workers' basic rights

Workplace safety and health

Environment

Business ethics

Management system

Supply Chain ESG Evaluation

GS Retail's Supplier Evaluation

GS Retail annually inspects suppliers who supply products or are willing to for violations of laws related to hygiene, country of origin, HACCP certification, and sanitary products. When issues are identified, the company requests corrective actions from the suppliers. In 2023, GS Retail inspected 207 companies and found problems in seven of them. These companies agreed to implement corrective measures. GS Retail uses a grading system (S, A, B, C, and D). If a company receives a grade of C or lower, it must undergo a sanitary inspection within two months. If the company receives a C or lower grade in two consecutive inspections, its business transaction with GS Retail is terminated. These systematic supplier evaluation procedures aim to create a sustainable supply chain. In 2023, the Home Shopping Business Unit (BU) assessed the ESG implementation status of 1,469 suppliers, which accounts for 97% of a total of 1,518 suppliers. Additionally, the BU plans to evaluate every new supplier since 2024 to check their ESG implementation systematically. Companies with poor ESG evaluation results can sell their products at GS Retail only with the approval of each Head of Division. Suppliers with excellent ESG implementation are selected as exemplary suppliers and receive various benefits, including a cash prize.

GS Caltex's Supply Chain ESG Evaluation

In 2023, GS Caltex conducted an ESG evaluation for 163 key suppliers. The supply chain ESG evaluation used to focus on the material and service procurement areas, but it extended the evaluation scope to overseas offices and subsidiaries with production facilities. In 2023, as the first oil company in Korea, the company conducted an ESG evaluation related to human rights, labor, environment, safety, health, and supply chain for crude oil suppliers. In addition, to identify compliance issues in advance, GS Caltex conducted a Customer Information Identification Survey for suppliers with a certain amount of transactions in line with a field inspection initiative.

Supply Chain ESG Evaluation Process

1. Support suppliers' awareness and management entrenchment

2. Conduct an ESG self-inspection

3. Conduct a field visit and verification

4. Identify and evaluate risk factors in the supply chain

5. Practice a risk mitigation plan and follow-up measures

Human Resource Development

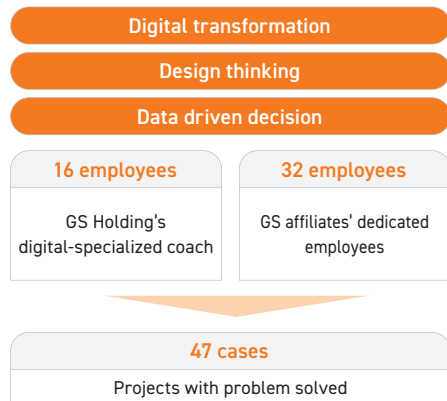


GS Capability Strengthening System

52g (Open Innovation GS)

GS nurtures its creative and agile talents 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 (Open Innovation GS). 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.

52g System Map



52g Problem Solving Project

Experience in problem-solving methods based on customer, data and digital approach in various fields.

Digital specialists cooperate to solve problems promptly in the field. They introduce new tools and measures to accelerate the digital transition. The group supported an investment portfolio company to grow its business capabilities, focusing on customers and data.

A culture where field employees proactively raise problems and perform corrective measures has spread.

The proportion of cases of problems raised in the field led to work projects has increased. More and more employees voluntarily share lessons they apply in the field.

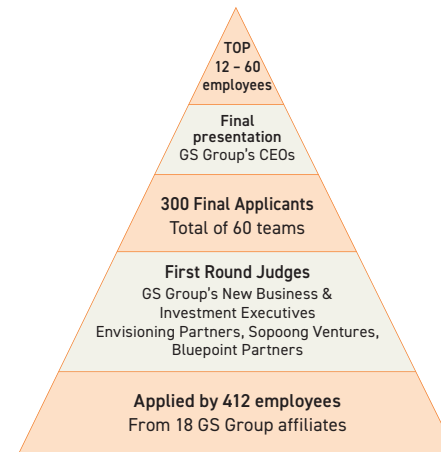
Digital execution capabilities have been strengthened.

With experiences with 52g in the field, dedicated employees became proficient in using collaboration tools and no-code programs. The digital capabilities of 52g-dedicated employees were also enhanced, allowing them to create prototypes based on the no-code program. The development capabilities of small-sized DX organizations have been improved, allowing developers trained in the DX Bootcamp to participate in projects.



GS Group Hackathon

In the GS Group Hackathon, employees experience overcoming industry boundaries through collaboration and problem-solving within a short period, which is challenging to attempt in their regular work. While brainstorming ideas that apply digital solutions and creating prototypes, they enhance their digital capabilities, which are applicable to their work. This Hackathon's theme was "Break the Wall," where employees collectively discovered groundbreaking new business ideas or ideas that challenge entrenched methods and thinking.



52g Innovation Facilitator

We selected 26 employees as the 4th year of facilitators to develop innovation leaders who can actively solve problems and communicate in the field.

They completed the Stanford Center for Professional Development (SCPD) at Stanford University and strengthened their foundation skills in design thinking. They received coaching in workshop design and facilitation, as well as individual growth management, to ensure they lead change even after returning to their regular duties. Through participation in the 52g, they gained experience implementing change and developed their capabilities as facilitators.

Total	26 employees
6 from GS E&C	3 from GS Power
5 from GS Retail	3 from GS E&R & Donghae Electric Power
3 from GS Caltex	1 from GS Energy
3 from GS EPS	1 from GS Global
1 from Incheon Total Energy Company	



Human Resource Development



GS Group's Workforce Development Program

GS conducts fundamental training, leadership training, and job competency training for each position, from new hires to senior executives. The fundamental training includes the digital area (service implementation and data analysis) and design thinking, while the leadership training aims to nurture facilitators who lead the success of organization. The job competency training include general works such as HR, marketing, legal, and policies and specialized jobs that are fostered depending on affiliates.

Program Overview

Type	Fundamental		Leadership
	Digital	Design Thinking	
Senior executive	- Inspiration Hunt	- Design thinking W/S based on scenarios	- Leadership discussion - Management issues
New executive	- DX technology - Application case	- Decision making W/S based on design thinking	- Leadership discussion - Management issue
New employee	- Digital service - Data foundation	- Design thinking mindset and cases - Business field trip	

2023 FLY GS : Find Learn Yourself in GS

We hired 407 new employees and provided business, network, and digital education. Each program module is divided into lectures/learning and experiences/activities, allowing them to understand GS Group's business fields, build networks with colleagues, and strengthen their digital transition capabilities. During the onboarding process, our new employees had the opportunity to visit a diverse range of locations, including the GS Seoul World Cup Stadium, GS Caltex's Lubricant Plant, GS Retail's Prime Center, and GS Tower. These visits provided them with a comprehensive understanding of GS Group's present and future, and allowed them to gain insights from a customer's perspective, shaping their future direction. Afterward, they had time to work on missions with their team members and enhance their network. In addition, in the digital transformation (DX) lectures, they experienced efficient information exchange and cooperation using Notion, Workplace, Padlet, and Mentimeter, as well as the importance of prompt communication.

FLY GS Program Module

Business GS Group's present and future, Field trip, Business quiz contest	Network First impression keywords and conversation, Mission and autonomous networking, Team building game
Digital Class52 (DX + Design thinking), Future work + Group DX development, Notion-Workplace-Mentimeter-QuizN	

2023 N.E.W Course for New Executives

GS' executives are divided into new and senior executives and receive education to enhance fundamental and leadership capabilities. New executives receive fundamental education to learn their roles and influences, business environment insights, design thinking from a customer's perspective, as well as the leadership strengthening education to act as facilitators. We launched the N.E.W course for new executives in 2023, and 23 GS Group executives completed the course.

Education Subject

- 1. Roles and influence of executives**
 Understand executives' anticipated roles and the impact on the organization
- 2. Insight into changes in business environment**
 Develop insights into the business environment and changes to lead the organization's growth
- 3. Customer-oriented design thinking**
 Understand problems from a customer perspective and learn decision-making measures by applying design thinking
- 4. DX experience from a business perspective**
 Monitor and experience the business innovation field through digital technology
- 5. Group synergy**
 Establish a cooperative network for group synergy

2023 GS Course for Senior Executives

We provided education for senior executives with the aim of imparting global insights and fostering agile responses for open innovation. The course took place in Korea, focusing on the theme of leadership and management issue response. Subsequently, participants visited innovative companies abroad and gained insights into future business and technology.

Human Resource Development



Affiliates' Competence Enhancement Activity

GS Energy's Job Training & Reverse Mentoring

Job Training

GS Energy has various and diversifying business portfolio, so it allocates budgets to each department to support various education for job competency training programs. The basic energy course is regularly conducted to allow its employees to take classes when they need to.

Reverse Mentoring

GS Energy operates the Reverse Mentoring program, which matches executives with new employees. It helps executives to understand and communicate with the new generation, while providing new employees with opportunities to gain knowledge and build networks within the company. Through irregular annual training sessions, the program offers a variety of educational content based on roles, career journeys, and the latest trends.

GS Retail's Self-directed Learning System

GS Retail has self-directed learning programs for its employees and supports the self-directed learning systems of each business unit. Self-directed learning is a system in which employees voluntarily create a learning atmosphere and improve competitiveness. The programs consist of Tomorrow On, Link On, Class On, and Leaders On. In addition, the company annually provides a 30-hour voluntary learning program for employees of the Platform Business Unit and Support Departments. Home Shopping Business Unit employees are encouraged to take external job-related education.

Voluntary Learning Program

Program	Type	Frequency
Tomorrow On	Mobile & e-learning content strengthening education	Year-round
Link On	Talent sharing education between employees	Quarterly
Class On	Lectures that fit employees' needs (Short-form content, food industry trends, etc.)	More than six classes per year
Leaders On	Knowledge Letter and special lectures to develop leaders (Management topics and social trends)	·Weekly Knowledge Letter ·Quarterly special lecture

GS EPS' Workforce Development Program

Excellent & Professional Workforce Development

GS EPS offers a range of workforce development programs aimed at enhancing job competency. The company provides financial support for long-term programs such as MBA program and energy-related degree, for which candidates are selected by the Human Resource Committee. Additionally, GS EPS offers mid-term technical training courses in collaboration with leading global companies to improve engineers' competence from a mid- to long-term perspective. The company also supports its employees' participation in various programs, including professional training and global conferences, to enhance their professional competence and motivation.

Stronger Digital Capabilities

GS EPS conducts DX-specialized education programs to enhance its employees' digital capabilities and lead practical changes amid rapidly changing internal and external environments. The company provides DX Promotion Office members with a data analysis intensive course to develop professional data analysts in the SQL, Python, and AI modeling areas. Relevant employees were also provided with an analysis and visualization intensive course based on problem solving. In addition, GS EPS invited external experts to conduct big data and AI trend lectures for all employees.

GS Caltex's Workforce Development Program

GS Caltex systematically manages employee education programs to develop an excellent workforce. The company provides training by employment year, external degree program, job competency development program, and coaching and mentoring program.

Unretirement Program

Program	Description
Excellent workforce development	· Degree program · SDL (Self-Designed Learning) · Leadership process

Program	Description
Coaching & mentoring	· External coaching program · Internal coaching program · Mentoring program
Leadership development	· EDP for heads of organizations (executives & team leaders), new team leader course, etc. · Future leader course for team members, etc.
Job competency development	· Common job competency improvement courses such as accounting basics and financial statement analysis · Job basic and advanced course according to job-specific education system · Digital capability improvement course through the Digital Academy
Re-employment after retirement	· Career planning including change management and life design · Lifetime financial planning, understanding of pension system

Human Resource Development



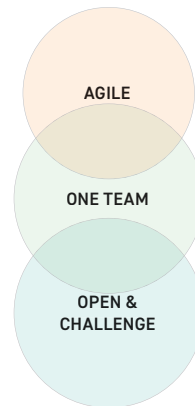
Change in Way of Working

GS Energy's Innovation in ways of working

GS Energy's ways of working is summarized as 'Agile,' 'Open & Challenge,' and 'One Team.' The company sensitively responds to business changes to identify issues, defines problems appropriately from the customer's perspective, and solves problems by rapid and iterative verification. It also enhances practical expertise and influence by taking on unprecedented challenges and experiencing various areas and roles. The energy company pursues an environment where an organization and individuals develop together by cooperating as a team for a common goal and making continuous innovation.

To this end, GS Energy made detailed changes to space and performance management and supported change management at a team level, attempting improvement from various perspectives. To spread horizontal cultures, the company unified the title of members to Manager and introduced absolute evaluation based on regular feedback and collective compensation for cooperation. On the other hand, GS Energy transformed the existing uniform offices into various concepts of casual spaces, increasing employees' creativity. It also adopted the division-based autonomous seat system to manage performance based on a team level.

New way of Working



GS EPS Open Mind Open Communication

GS EPS performs various activities to entrench and practice the Open Mind Open Communication (OMOC), which is one of its core values. It conducts organizational culture surveys for all employees six times a year. In 2023, the company also ran three employee positive experience programs to provide positive experience in the workplace. Furthermore, GS EPS implemented the LIVELY, a hobby- and experience-based organizational culture activity, to encourage communication between colleagues and spread an open and flexible communication culture.

Employee Positive Experience Program

Category	Program
Employee positive experience	<ul style="list-style-type: none"> Networking for junior employees at Dangjin Power Plant Family Day for married employees who live separately from their families due to work Improving interaction among colleagues separated by Office Layout

Category	Program
LIVELY	<ul style="list-style-type: none"> Indoor paragliding experience Customizing sneakers Fencing one-day class

GS Caltex's 'Scorpions' for Performance Improvement

GS Caltex operates a performance improvement program, Scorpions, to enhance competitiveness, which allows the company to identify and work on tasks across the value chain. Since 2023, it has reviewed improvement opportunities utilizing the digital lever and established a mid- to long-term roadmap in five areas for digital transformation, focusing on the Yeosu Plant. In addition, GS Caltex opened a digital academy to secure its employees' digital capabilities. With such initiatives, Scorpions play a role that enhances competitiveness in core areas and accelerates the change in working methods.

Scorpions Direction

Challenging goals <ul style="list-style-type: none"> Realize maximum potential and set challenging goals with a non-judgmental attitude. 	System-based execution of work <ul style="list-style-type: none"> Manage and work on improvement tasks at the company level based on a single system to improve the transparency of job innovation activities and effectiveness
Cooperation between departments and sectors <ul style="list-style-type: none"> Expand the cooperation between organizations, sectors, and companies to secure an opportunity and derive solutions from various angles. Establish an implementation system to make a prompt decision and have the power to implement the plan in the cross-functional area. 	Good Risk Taking <ul style="list-style-type: none"> Pursue high profits and prompt implementation by determining if the risk is manageable. Encourage an organizational culture that tolerates failure and enables challenge.

GS Retail's Organizational Culture Diagnosis

Organizational Culture Diagnosis Plan

GS Retail planned the Gathering with the CEO. The program selects teams that practice the GS Value & GS Way and provides various experiences and a communication session with the CEO, establishing the GS organizational culture. In 2023, the program, which used to be run in the metropolitan area, was also performed in regional areas to strengthen communication between employees and the CEO, which was participated in by 17 teams and fostered their pride. GS Retail will continue to plan various programs to form an environment where its employees can feel the organizational culture in their daily lives and enhance the communication between the CEO and employees in the field.

Establishing a healthy organization culture (annually)

Leadership diagnosis (annually)

Diagnosis target
<ul style="list-style-type: none"> Practice the GS Value Practice the GS Way Comply with the Code of Conduct Comply with workplace bullying laws

Human Resource Development



Fair Recruitment and Performance Evaluation

GS Caltex's Reasonable Employment

To hire appropriate talents, GS Caltex openly hires employees by evaluating their abilities without limiting gender, major, region, age, or academic background. The evaluation considers not only basic work skills but also digital literacy, which helps understand and utilize digital technologies and tools. The company actively uses AI and deep learning technologies to improve the fairness and accuracy of recruitment evaluations. To recruit excellent human resources, GS Caltex implemented various methods such as rolling recruitment, general and global internship programs, and engineer leadership programs. Additionally, the company provides an opportunity to learn practical knowledge and know-how in the industrial field by conducting education courses in partnership with four universities. The engineer leadership program, which allows communication with current employees, is also used to foster talents.

GS Energy's Performance and Rewards

GS Energy's performance evaluation system pursues the organization's and its members' mutual growth. The company evaluates and rewards employees' performance using absolute evaluation based on year-round, multi-rater, and observant evaluations rather than relative valuation. Personal goals are annually established based on the organization's goal. When the goal is terminated, employees record reviews from their bosses and colleagues. Fundamentally, evaluation and rewards are decoupled; promotion and rewards are determined based on end-of-year absolute evaluation considering the objective performance and the expected personal competence. In addition, GS Energy provides individual performance-based bonuses besides company-level bonuses, considering the cooperation and organizational rewards. There are also other incentive systems, such as team performance-based bonuses and One Team Present.

Performance Management - Reward Program



Vitalization of Labor-Management Communication

GS Energy's Effective Employee Communication

GSE Round (Labor-Management Council)

GS Energy communicates and builds consensus on various issues through the GSE Round. In this Labor-Management Council, executives and employees exchange opinions on various agendas, such as management status, working environment, and system improvement. It contributes to the company's healthy development and communication.

Ground Rule

GS Energy quarterly selects team leaders, who establish the details of the Code of Conduct to encourage proactive working methods and change rules and agendas for each period. In this way, GS Energy is making efforts to form a proactive organizational culture.

Conversation with Management

GS Energy shares its future direction and performance in the annual management status meeting. In addition, the company provides an opportunity to freely communicate with organization leaders and the CEO.

We Are Meeting You

GS Energy holds monthly sessions where about 10 members, including the CEO, gather to understand each other and share opinions on various topics.

GS Caltex's Various Communication Channels

GS Caltex shares company-wide management policies and statuses through various communication channels and vitalizes communication between executives and employees. Kick-off meetings and management status presentations are held utilizing digital platforms and technologies. The company launched the Jium Academy and the Leader Insight Forum (LIF), in which employees take classes about various subjects and share opinions. On the other hand, the internal social network Workplace is utilized to share GS Caltex's news and information about relevant industries. In addition, GS Caltex has an anonymous forum with no restrictions on topics to encourage participation by protecting anonymity. As of 2023, 134 opinions were posted on the forum, of which 64 were reviewed and reflected in management activities.

GS Caltex's Cooperative Labor-Management Relations

Since announcing the Labor-Management Harmony Declaration and Charter in 2005, GS Caltex's management and labor have performed joint safety and organizational culture activities. They also actively participate in volunteer activities in local communities. GS Caltex operates the Labor-Management Council and other joint task forces to realize the vision of productive labor-management relations, allowing them to build consensus and communicate on various issues. In addition, they maintain and develop working conditions through the collective agreement. In addition, the company operates the Occupational Safety and Health Committee to prioritize employees' safety and health, establishing mutually-cooperative labor-management relations.

Human Resource Development



Welfare Program

GS Energy's Welfare Program

GS Energy provides various welfare programs to improve the quality of employees' lives, including life stabilization, self-development, health care, and leisure activity support programs. Its employees can freely decide their working hours monthly within the legal working hours. Furthermore, the company operates an online welfare store and a welfare point system for self-development, leisure activity, and health. It also provides condos in various regions at lower prices or free to support their vacations. GS Energy offers loans at lower interest to help its employees purchase houses, get married, and stabilize their lives. The in-house daycare center near the GS Tower alleviates the burden of raising children for its employees. The company also provides congratulatory incentives when their children enter elementary, middle, and high schools, as well as the university. Additionally, it provides education subsidies for preschool children for a certain period of time. The retirement pension system is based on DB and DC types and uses compound interests based on years of service. The company also supports the IRP using the matching grant method. Additionally, GS Energy introduced the DC-type management performance bonus payment system to help its employees save taxes.

Welfare Program Status

Category	Unit	2021	2022	2023
Welfare program execution costs	KRW million	6,100	3,336	3,862

GS Retail's Welfare System

To support the new life after retirement, GS Retail operates a start-up support system for retirees and the unretirement system. Our unwavering commitment to improve employee experience, and our efforts to break away from the previous corporate-centered and manager-centered systems, have led to our achievement of the GPTW Korea's Great Place To Work in Korea certification in 2023. GS Retail operates a family-friendly system to foster a pleasurable workplace where employees can relieve the burden of childbirth and childcare and focus on work. The system's excellence was recognized by obtaining the Family-friendly Company certification.

Family-friendly System



Benefit	Family-friendly System
Parenting support	Support for childcare expenses and kindergarten subsidies
Medical expense support	Support for spouse's medical expenses
Maternity support	Multi-child birth support
Leave support system	Parental leave system
Purni Daycare Center	In-house daycare center

Start-up Support System for Retirees

Support	Description
Support for start-up costs	Support costs to open an affiliated store for the first time after retirement
Support for children's tuitions	Support tuitions while employed regardless of the number of children
Interest support for start-up	Support loan interest when opening an affiliated store after retirement
Support for entrepreneurship education	Provide field experience and training courses for up to one year to retiree-to-be who wish to open an affiliated store but have no field experience

Unretirement System

Support	Description
Re-employment target	Retirees
Re-employment jobs	<ul style="list-style-type: none"> If special skills and expertise are temporarily required for the business If a network is temporarily needed for the business If know-how is temporarily needed for the business Other cases deemed necessary
Conditions after re-employment	Drafted upon agreement in accordance with separate criteria
Re-employment period	Up to one year
Type of employment	Contract

GS EPS' Work-Life Balance

GS EPS improves the quality of employees' lives and leads to a high level of job satisfaction and work engagement through various welfare programs. To achieve a work-family balance, the company adopted the PC-off system and flexible work hours based on the principle of a 40-hour work week. In the summer, GS EPS pilots a workcation system to ensure that employees can work independently and responsibly regardless of their location. Furthermore, it supports other welfare benefits such as housing, tuition, leisure activities, and vacation support. In particular, as the importance of family-friendly and maternal protection welfare increases, the company created a break room for female employees at each business site and supported paid leave for pregnancy check-ups and paid breaks for breastfeeding. With such initiatives, GS EPS strives to make a safe and comfortable environment where employees can balance work and family after childbirth.

Support Policy by Childcare Period

Pregnancy & Childbirth	Childcare	Childcare & Growth
<ul style="list-style-type: none"> No overtime work during pregnancy Paid leave for regular check-up Infertility leave for 3 days Reduced workday by 2 hours Shared parental leave for 10 days 	<ul style="list-style-type: none"> Paid breaks for breastfeeding for one hour per day Shorter working hours during the childcare period 	<ul style="list-style-type: none"> Flexible work system

Human Rights Protection



Establishment of Human Rights Charter

GS Human Rights Charter

In order to actively implement human rights management and minimize and prevent human rights violations during corporate activities, we have established the Human Rights Charter. This charter covers the human rights of both internal and external stakeholders, including our employees, consumers, suppliers, and local residents. It is in compliance with international standards and guidelines, such as the Universal Declaration of Human Rights, the UN Guiding Principles on Business and Human Rights, the ILO core conventions, and the OECD Due Diligence for Responsible Business Conduct. Employees of GS Holdings and affiliates of GS Group are expected to uphold the charter without compromising their autonomy. In cases where there is a conflict between local laws and the charter, the local laws take precedence.

Human Rights Charter's Basic Principle

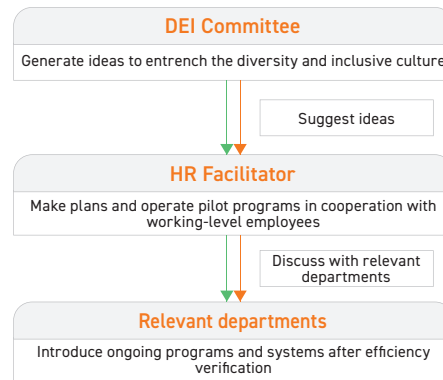
- 1
Anti-discrimination
- 2
Observance of terms and conditions of employment
- 3
Humane treatment
- 4
Freedom of association and collective bargaining
- 5
Prohibition of forced and child labor
- 6
Industrial security
- 7
Responsible supply chain management
- 8
Protection of local residents' human rights
- 9
Protection of customers' human rights

Human Rights Risks Management

GS Retail's DEI Committee

GS Retail created the DEI(Diversity, Equity, Inclusion) Committee, in which its employees participate, to foster a diversity-embracing culture and support a pleasant work life. The Committee proposes and promotes the improvement of systems and awareness from the DEI perspective and education, which allows employees to find solutions from various perspectives in a creative culture.

DEI Committee's Idea Execution Process



GS Caltex's Human Rights Education

GS Caltex's annual compliance courses include education to improve human rights sensitivity and awareness of all stakeholders, including employees, subsidiaries, and suppliers. The company seeks to prevent workplace human rights violations by mandating human rights education that covers personal data protection, respect for human rights, anti-discrimination, sexual harassment prevention, disability awareness, and workplace harassment. In addition, GS Caltex has defined workplace harassment and has established relevant guidelines to encourage all stakeholders to follow the regulations voluntarily.

GS Caltex's Human Rights Education Results

Category	2021	2022	2023
Number of trainee (persons)	3,259	3,291	3,242
Education completion rate (%)	100	100	100

GS Energy's Grievance Handling Process

GS Energy has a two-track grievance-handling process. It includes a hotline connecting directly to a grievance-handling professional and a grievance report to the Grievance Committee Members selected among employees. Additionally, the company utilizes irregular processes such as small CEO meetings, GSE Round, emails, phone calls, and letters. Reported grievances are promptly investigated. If a grievance is not settled by the Grievance Committee, it is handled following GS Energy's regulations by the HR Committee and the Disciplinary Committee. In particular, for workplace sexual harassment and bullying cases, GS Energy responds with thorough security, a sound process, and strict policies. Furthermore, the company's Employee Assistance Program (EAP) diagnoses employees' psychology and provides various psychological counseling to help them maintain a healthy mindset and grow alongside the company.

GS Energy's Grievance Handling Results

Category	Unit	2021	2022	2023
Reported complaints	Case	0	0	0
Handled complaints	Case	0	0	0

CSR Activities



GS CSR System

GS CSR System

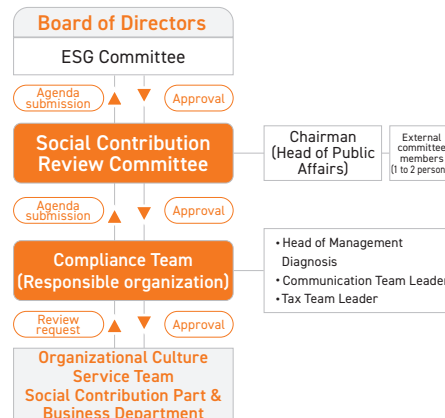
Today, CSR activities are essential not only for improving brand reputation but also in terms of social responsibilities for mutual growth with local communities. These initiatives should be strategically executed with a clear goal of creating value for both the beneficiaries and the investors. We strive to create social value through social companionship, guided by our core values of sharing for mutual happiness, respectful companionship for mutual prosperity, and a safe and inclusive workplace. We engage in CSR activities across various areas to achieve this.

Orientation	Social companionship for mutual prosperity		
Core Values	Safe and inclusive workplace	Respectful companion for mutual prosperity	Sharing for mutual happiness
Areas	Education & scholarship programs	Joint technical & product development	
	Support for the underprivileged	Innovation and education	
	Cultural & art support	Market development	
	Public facility support	Joint safety checkups	
	Establishing and implementing human rights management systems		
Management	ESG Council		
Roles	Sharing affiliates' current state of affairs	Discussing support measures	
	Discussing improvement and future plans		

GS Retail's CSR Execution System

GS Retail transparently executes all donations both domestically and internationally in accordance with clear and reasonable standards and procedures. To this end, the company operates the Social Contribution Review Committee under the ESG Committee in the Board of Directors. The Committee reviews the charity and public interest of all CSR activities. In particular, in the case of a donation exceeding KRW 300 million per year for an institution, the project should gain the approval of the ESG Committee. The Chairman of the Social Contribution Committee reports the CSR plan at the beginning of the year and the result at the end of the year to the ESG Committee to execute and supervise more systematically.

GS Retail's CSR Governance



GS Retail's Employee Engagement

Purpose	Engagement Boost Program
Encouraging the engagement in social contribution activities	<ul style="list-style-type: none"> Participating in the GS Nanumi volunteer activities with leaders Awards for excellent volunteers and volunteer groups Rewards for participation in the Book Dream Campaign Rewards for participation in the blood donation campaign
Raising self-esteem	<ul style="list-style-type: none"> Praising for good deeds in the Employee Introduction Board Promoting participants on internal forums and websites Introducing Hidden Sharing Angels and promote them through articles Giving the CEO's appreciation gift to those who participated in volunteer activities at least six times a year

GS Retail's Major Partner Organizations

Purpose	Purpose
Korea Food for the Hungry International	Conduct a cultural and emotional program for children from low-income families and support music education for them
Korea Social Enterprise Promotion Agency	Expand sales channels for social economy enterprises through the fourth agreement
Happy Narae	
Beautiful Store Foundation	
Seoul Fire and Disaster Headquarters	Produce the firefighter calendar and donate all sales profits
Hallym Burn Foundation	
Good Neighbors	Protect children through the GS25 Child Safety Guard and support counseling services for abused children, children from low-income families, and their families

GS Power's CSR Network

GS Power has established CSR networks to develop the CSR system and improve the overall expertise of relevant activities. The company has formed an advisory committee composed of social welfare experts and professors to consider members' suggestions on our activities and review their feasibility. Additionally, GS Power has created a volunteer group with college students from local universities to enable them to express themselves and demonstrate their talents.

GS Caltex's Communication with Local Community

GS Caltex regularly holds meetings with people living near the Yeosu Plant, where its major process facilities are located. In the meetings, the company transparently discloses unusual cases caused by plant operations. This improves trust and cooperative relationships with the local people. It shows GS Caltex's efforts to solve problems and make development in local communities. In particular, the company continuously communicates with welfare organizations and civic groups in Yeosu and reflects their opinions on major projects. GS Caltex will continue to communicate with various stakeholders in the local community.

CSR Activities



CSR Activities

GS Energy's Wise Low-carbon Life Campaign

GS Energy conducted the Green Step Challenge with the slogan "Creating a Warm-hearted Future with Green Step for the Earth." This initiative aimed to encourage employees to save energy and promote carbon neutrality by choosing to walk instead of using public transportation or elevators. If the total number of steps taken by employees exceeded 15 million, the company pledged to donate KRW 20 million to the Seoul Energy Welfare Citizens. The program saw participation from 114 employees who collectively achieved a total of 27 million steps, surpassing the goal by 136%. The donation was used to improve housing energy efficiency, support renewable energy, provide assistance during heat waves and cold waves, and fund an upcycling project for energy vulnerable individuals.



Energy Bill Donation Ceremony

GS Power's College Student Youth Volunteer Program

With the College Student Youth Volunteer Program, GS Power provides an opportunity to demonstrate college students' new ideas and differentiated passions. This young talent development program allows the participants to volunteer in local communities, aiming to make them responsible leaders. A total of 25 students from five universities, Daelim University and Sungkyul University in Anyang, Yuhan University, Bucheon National University, and Seoul Theological University in Bucheon, participated in social contribution activities focusing on ESG based on the understanding of local communities. In addition, GS Power holds a college student social contribution idea contest every year. Social contribution activities are planned and implemented based on the awarded ideas. This year, in collaboration with local welfare centers, the company conducted the Young Trip to strengthen the ESG capabilities of local communities by promoting cultural assets in Anyang and Bucheon.



Inauguration Ceremony of the 3rd Year of College Student Youth Volunteer Group

GS Caltex's Culture and Arts Support

In May 2012, GS Caltex opened GS Caltex Yeulmaru, taking into consideration the environmental and social impacts on local communities as well as their needs. This site is the most prominent cultural and arts venue on the southern coast of Korea. As of December 2023, it had hosted approximately 1.29 million performance and exhibition attendees. Additionally, the number of visitors to Jangdo, known as the "Island of Art," was 1.56 million. Since GS Caltex began construction in 2006, the total investment in Yeulmaru has reached KRW 146.3 billion. Yeulmaru was the only location in Jeollanam-do to be selected as one of the 52 Korean Unique Venues by the Ministry of Culture, Sports, and Tourism and the Korea Tourism Organization, making it a beloved landmark not only among Korean citizens but also internationally. The large-scale musicals, Broadway's "42nd Street" and "Mamma Mia," hosted at Yeulmaru, attracted the largest number of audiences during their national tour. Furthermore, it successfully hosted the National Geographic Exhibition in Jangdo, showcasing its excellence.



Yeulmaru

GS EPS' Big Walk Fund Donation

Since 2022, GS EPS has run the Go Together Campaign twice a year. This employee engagement program turns walking steps into donations for local communities and the environment. In the campaign, employees fundraise with their walking steps in the form of matching grants. The fund was used to support health checkups, housing environment improvement, and eco-friendly boiler replacements for the vulnerable. In addition, the company also supported old roof and kitchen maintenance for low-income families with people with disabilities. These initiatives are expected to secure socially vulnerable individuals' safety against disasters. Furthermore, GS EPS annually conducts the FC Brand Day and the Environment Love Art Contest to support the cultural experience of local children.



Housing Environment Improvement Fund Donation for the Underprivileged

CSR Activities



CSR Activities

GS E&R's Local Community Support & Exchange Project

GS E&R continuously runs education, scholarship, and social welfare projects focusing on nearby local communities. The company operates programs under agreements with local communities, such as talent nurture foundations, and donates to local customer unions. With such contributions, GS E&R is willing to contribute to supporting vulnerable and disadvantaged groups. In addition, the company seeks unique opportunities to build cooperative and win-win relationships with clients, such as inviting them to FC Seoul's games, stadium tours, and player escort experiences. Furthermore, its customized social welfare projects donated necessary goods and equipment to local social welfare facilities to enable local people to receive practical help.



Gumi Power Plant's Comduri Volunteer Group

GS Retail's GS Nanumi Volunteer Group & Eco Social Impact Project

GS Nanumi Volunteer Group is performing at 72 volunteer centers on a monthly basis. In 2023, 3,861 volunteers performed a total of 8,586 hours. Since 2006, the cumulative number of volunteers has been around 78,000 including the CEOs, bringing the cumulative volunteer hours to about 200,000. In addition, the CEO regularly participates in volunteer activities to encourage employees' active engagement. GS Retail plans various activities such as supporting networking, play, and meals for the elderly, children, and the disabled living alone, cleaning welfare centers, caring for abandoned dogs, and cleaning shelters. GS Retail identifies start-ups and supports development programs for their commercialization to grow social ventures in sustainable and environmental areas. For six years, the company donated a total of KRW 1.85 billion and provided professional education, prototype production support, and mentoring programs to 57 start-ups less than three years old. These initiatives contributed to defining the small-sized eco-friendly manufacturers' brand identities and expanding their line-ups.



Eco Social Impact Project's Final Performance Presentation

GS Global's Youth Soccer Class for Multicultural Families

GS Global has annually provided children from multicultural families with youth soccer classes to help them have dreams even in difficult family situations and unfamiliar cultures. In this opportunity, children from many countries enjoy playing soccer, understand each other, and cooperate together. Moreover, the class develops their social skills and healthy physicals, making them necessary human resources in our society. Additionally, GS Global runs various special events, such as watching FC Seoul's matches at the stadium and taking soccer classes with FC Seoul players. In 2023, the company donated KRW 10 million to the soccer class and provided soccer class fees and supplies to 13 children from multicultural families.



Multicultural Soccer Class Donation Ceremony

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Board of Directors

GOVERNANCE

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Risk Management



Board of Directors



Board of Directors

Composition

GS Holding's Board of Directors was created by legal procedures, and its operations are conducted transparently. The Board of Directors is the essential decision-making body that determines the future direction of corporate management as the subject of responsible management. To this end, we appointed the CEOs of GS Holdings and its affiliates as the executive directors. Now, we have two executive directors, a non-executive director, and four independent directors, which satisfies the rate of independent directors according to Article 542.8 of the Commercial Act and secures independence and professionalism.

Board Members

Type	Name	Gender	Position	Career Highlight	Appointment Date
Executive Director	Huh Tae-soo	Male	CEO, Board Chairperson	CEO, GS Home Shopping	March 27, 2020
	Hong Soon-ky	Male	President/CEO, Member of the Independent Director Recommendation Committee, Member of the ESG Committee	GS Holdings' Finance Team President	March 27, 2020
Non-executive Director	Huh Yeon-soo	CEO of the Holding Company	-	CEO, GS Retail	March 27, 2020
Independent Director	Han Jin-hyun	Male	Chairperson of the ESG Committee, Chairperson of the Independent Director Recommendation Committee	Second Deputy Minister of Trade, Industry and Energy	March 29, 2021
	Lee Chang-jae	Male	Member of the Audit Committee	Kim&Chang Law Firm Tax and Criminal Integrated Response Team Leader	March 28, 2024
	Moon Hyo-eun	Female	Member of the ESG Committee, Member of the Audit Committee	Vice President, Daum Communications (Currently Kakao)	March 28, 2022
	Han Deuck-churl	Male	Chairperson of the Audit Committee, Member of the Independent Director Recommendation Committee	Vice President, Samil PWC Accountings	March 29, 2023

*On March 28, 2024, Lee Chang-jae was appointed as an independent director in the general shareholders' meeting to replace Hyun Oh-seok who resigned due to the end of his term.

Appointment Procedure and Term

When appointing a new executive director, we consider comprehensive factors, including candidates' vision and leadership, and select the most appropriate person through the HR Committee. The Board verifies the chosen candidates, and the final appointment is made at a shareholders' meeting. To appoint an independent director, 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 three years to keep independence from internal and external interests.

Diversity Enhancement

To promote diverse perspectives on business management, we aim to diversify the board by seeking candidates without gender or age barriers. This is ensured by independent director independence and diversity policies.

Expertise Enhancement

We composed the Board of Directors with executives with expertise in various fields, such as management, finance, energy, and trade, to respond to business management issues with insights. In addition, we conduct education for independent directors to respond effectively to the rapidly changing global economy and market. In 2023, we provided education about internal accounting control systems and business status.

Board Skill Matrix

Skill	Huh Tae-soo	Hong Soon-ky	Huh Yeon-soo	Han Deuck-churl	Han Jin-hyun	Lee Chang-jae	Moon Hyo-eun
Leadership	●	●	●	●	●	●	●
Industrial Expertise	●	●	●		●		
Finance/Accounting/Banking	●	●	●	●			
Legal/Policy	●				●	●	
Venture/Investment	●						●
ESG/Climate Change					●		●

Education for the Board

Date	Description	Education Conductor	Participants
2023. 05. 11	Internal accounting control systems and the role of the Audit Committee	Samil PWC Accountings	All members of the Audit Committee
2023. 11. 02	GS Group's business status and business presentation	RM Team	Han Deuck-churl, Han Jin-hyun

Board of Directors



Operation of the Board

Operation Principles

As per the Board of Directors' Rules, regular board meetings are held quarterly, with additional meetings scheduled as needed. The Chairperson is responsible for presiding over the meetings, but the Vice Chairperson and the President, in that order, may act as proxies if required. In 2023, there were a total of eight board meetings, with an average attendance rate of 100%.

Function

The Board of Directors is responsible for not only management matters, such as strategies and new projects, but also financial matters, such as large-scale facility investment, general shareholders' meetings matters, including financial statement approval, internal accounting management system, and issues related to Directors.

Remuneration

Our compensation for independent directors is limited to the base salary and work-related expenses. We regularly assess the appropriateness of remuneration, taking into account the responsibilities, risks, and time commitment.

Evaluation

In the first board meeting of 2024, GS approved the introduction of a board evaluation system. This system evaluates the efficiency of board operations, board performance, committee activities, and individual independent directors. The evaluation is conducted annually in the form of a self-assessment survey, and the results are used to identify areas for improvement in board operations. The 2023 board evaluation was conducted after the first board meeting in 2024, and the results were reported at the second board meeting.

Remuneration of the Board of Directors Board of Directors Evaluation Result

Category	Unit	2021	2022	2023	Evaluation	Result	Participants
Number of Directors	Person	7	7	7	The Board's Performance	4.7/5.0	All board members (7 persons)
					The Board's Operational Efficiency	4.9/5.0	
Total Remuneration	KRW million	4,320	9,691	8,109	Committee Activities	4.8/5.0	Executives in each Committees
Average Remuneration per Director	KRW million	617	1,384	1,158	Independent Director Self-evaluation	3.8/4.0	All independent directors (4 persons)

Board Meetings in 2023

Meeting	Date	Agenda	Approval	Attendance Rate	Agreement Rate
1	February 13, 2023	Approval of the 19th financial statement and business report in 2022	Approved	100%	100%
		Approval of adoption of electronic voting system at general shareholders' meeting	Approved	100%	100%
		Approval of the business plan in 2023	Approved	100%	100%
		Appointment of Compliance Officer	Approved	100%	100%
		Report on Compliance Officer's activities in 2022	Reported	100%	-
		Report on the 1st ESG Committee's resolution report in 2023	Reported	100%	-
2	March 10, 2023	Approval of the organization of the 19th Regular General Shareholders' Meeting and its purpose	Approved	100%	100%
		Approval of the Board of Directors' Rules	Approved	100%	100%
		Report on the operation of the internal accounting management system	Reported	100%	-
		Report on the evaluation result of the internal accounting management system	Reported	100%	-
3	March 29, 2023	Appointment of the CEO	Approved	100%	100%
		Appointment of a member of the Independent Director Recommendation Director	Approved	100%	100%
		Delegation of director remuneration execution	Approved	100%	100%
4	May 11, 2023	Report on the financial result in Q1 2023	Reported	100%	-
5	August 17, 2023	Amendment of personnel management regulations for executive officers	Approved	100%	100%
		Report on 2023 half-year financial results	Reported	100%	-
		Publication of Sustainability Report in 2022	Reported	100%	-
6	November 9, 2023	Large-scale internal transactions with affiliates and transactions with stakeholders	Approved	100%	100%
		Approval of bond issuance and borrowing limits for 2024	Approved	100%	100%
		Approval of the record date of regular shareholders' meetings for 2023 (20th term)	Approved	100%	100%
		Report on the financial result in Q3 2023	Reported	100%	-
7	November 29, 2023	Appointment of executive officers	Approved	100%	100%
8	December 19, 2023	Appointment of executive officers	Approved	100%	100%

Board of Directors



Committee under the Board of Directors

Composition of the Independent Director Recommendation Committee

The Independent Director Recommendation Committee is responsible for nominating independent director candidates to the shareholders' meetings through a fair process. The Independent Director Recommendation Committee consists of the majority of independent directors according to relevant laws, securing independence and fairness in the nomination and appointment process. During the disclosure period (2023 to the first half of 2024), two meetings of the Independent Director Recommendation Committee were held. Through a fair candidate recommendation process by the committee, Han Deuck-churl was newly appointed at the 19th General Shareholders' Meeting, and Han Jin-hyun was reappointed while Lee Chang-jae was newly appointed as an independent director at the 20th General Shareholders' Meeting.

Composition of the Independent Director Recommendation Committee

Name	Position	Appointment	Transaction with GS Holdings	Relationship with the Largest Shareholder	Term
Hong Soon-ky	Executive Director	Reappointment	N/A	Executive of an affiliate	March 2026
Han Jin-hyun	Independent Director	Reappointment	N/A	N/A	March 2027
Han Deuck-churl	Independent Director	New appointment	N/A	N/A	March 2026

Activities of the Independent Director Recommendation Committee

Date	Agenda	Approval	Attendance Rate	Agreement Rate
March 2, 2023	Nominating an independent director candidate (Han Deuck-churl)	Approved	100%	100%
March 7, 2024	Nominating an independent director candidate (Lee Chang-jae) Nominating an independent director candidate (Han Jin-hyun)	Approved	100%*	100%**

*Attendance rate does not include Han Jin-hyun, an independent director, because the agenda was regarding himself

** The percentage of votes does no include Han Jin-hyun, and independent director, because the agenda was regarding himself

Activities of Independent Director Recommendation Committee

In order to ensure effective governance, the Independent Director Recommendation Committee assesses the independence and diversity of the board's composition. The committee nominated Han Deuck-Churl in 2023 and Lee Chang-jae in the first half of 2024 as candidates for independent directors after verifying that the nomination complied with the independence and diversity criteria.

Composition of Audit Committee

The Audit Committee audits the accounting and operations of GS Holdings. It also creates the audit report based on the know-how and the audit results, preventing the accounting information from being distorted or incorrectly measured. The audit records the balance sheet and profit and loss statement submitted by the director, as well as the audit results of other financial status management performance. The Audit Committee submits this report to the director at least one week prior to a shareholders' meeting. We have a working-level organization to support the Audit Committee following in-house audit rules. In 2023, we conducted education about the internal accounting management system and the role of the Audit Committee for its members to enhance their expertise.

Composition of the Audit Committee

Name	Position	Appointment	Transaction with GS Holdings	Relationship with the Largest Shareholder	Term
Han Deuck-churl	Independent Director	New appointment	N/A	N/A	March 2026
Moon Hyo-eun	Independent Director	New appointment	N/A	N/A	March 2025
Lee Chang-jae	Independent Director	New appointment	N/A	N/A	March 2027

* At the Shareholders' Meeting held on 28 March 2024, independent director Moon Hyo-eun and independent director Lee Chang-jae were appointed to replace independent director Han Jin-hyun and independent director Hyun Oh-seok, who retired due to the expiry of his term.

Non-audit Services

(Unit: KRW)

Business Year	Contract Date	Service	Service Period	Price
20 th (current)	February 20, 2023	Tax reconciliation	February 23, 2023 – March 28, 2023	9,000,000
19 th (former term)	February 28, 2022	Tax reconciliation	February 28, 2022 – March 28, 2022	9,000,000
18 th (the term before last)	February 24, 2021	Tax reconciliation	February 24, 2021 – March 29, 2021	8,500,000

Board of Directors



Committee under the Board of Directors

The ESG Committee

We created the ESG Committee in March 2021 to practice responsible ESG management. Han Jin-hyun, the independent director, holds the chair position, while Hong Soon-ky, the CEO, and Moon Hyo-eun, the independent director, participate as members. The committee sets GS Holdings' strategies and directions, deliberates and votes for policies, and manages and supervises the setting of ESG management.

ESG Committee Members

Name	Position	Specialty	Term
Han Jin-hyun	Independent director	Industry, legal	March 2027
Hong Soon-ky	CEO	Management, finance	March 2026
Moon Hyo-eun	Independent director	IT, management	March 2025

ESG Committee's Activities

Date	Agenda	Approval	Attendance rate	Agreement rate
February 10, 2023	Selecting a service provider to publish the Sustainability Report 2022	Approved	100%	100%
	KCGS' ESG evaluation grade announcement	Reported	-	-
	Serious accident inspection in the second half of 2022 and safety and health plan in 2023	Reported	-	-
May 11, 2023	Materiality assessment and progress report on the sustainability report 2022	Reported	-	-
June 28, 2023	Publishing the sustainability report	Approved	100%	100%
	Submitting the corporate governance report	Reported	-	-
	Registration to the environmental information disclosure system	Reported	-	-
November 9, 2023	KCGS' ESG evaluation grade announcement	Reported	-	-
	MSCI's ESG ratings summary	Reported	-	-
	Holding the ESG Council's second working-level meeting	Reported	-	-

Shareholder



Exercise of Shareholder Rights

Organization of Shareholders' Meeting

To safeguard the rights and interests of shareholders, GS Holdings holds a general meeting within three months after the end of each business year as mandated by the Korean Commercial Act and the company regulations. In order to ensure that shareholders have the information they need to exercise their rights in a timely manner, we provide written or electronic notification of the meeting's time, venue, and purpose two weeks in advance. Additionally, we make a deliberate effort to schedule the meeting on a day that differs from the common date for general meetings to encourage greater shareholder participation. As a result, the 19th and 20th meetings were purposely held on different days to maximize shareholder attendance.



Code of Business Ethics

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	-

Voting Rights Exercise and Delegation

Voting System	Cumulative Voting	Voting in Writing	Electronics Voting	Proxy Voting System
Introduction	Excluded	Not introduced	Introduced	Introduced
Implementation	-	-	The 19 th general meeting of shareholders	The 19 th general meeting of shareholders

Shareholder Interest Protection

Communication with Shareholders

To provide a performance report timely before submitting an annual, quarterly, and semiannual report 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. In addition, we perform IR activities through face-to-face meetings and conference calls to support the shareholders to understand the corporate information completely.

IR Activities in 2023

Date	Target	Type
February 13, 2023	Equity Analyst	Conference call
February 14-15, 2023	Institutional investors in Korea	NDR
May 9, 2023	Equity Analyst	Conference call
May 12, 15, 2023	Institutional investors in Korea	NDR
August 8, 2023	Equity Analyst	Conference call
August 10-11, 2023	Institutional investors in Korea	NDR
November 8, 2023	Equity Analyst	Conference call
November 10, 13, 2023	Institutional investors in Korea	NDR

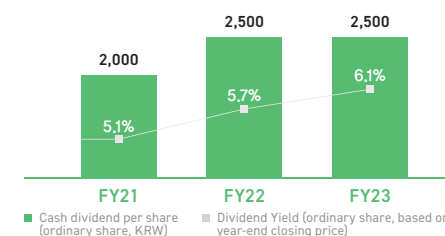
Shareholder Interest Protection

We control internal transactions and self-dealings to prevent self-dealings that aim for the personal interests of the management of significant shareholders. According to Article 12 of the Board of Directors Regulation, a transaction between a director and the company should be approved through discussion. Directors with a special interest in resolutions of the Board are restricted from exercising their voting rights. In addition, if the annual transaction volume between the largest shareholder and other related parties is more than 5% of assets or if the transaction volume per transaction is more than 1% of assets, prior approval is required from the Board. The same also applies to transactions between directors and the company.

Shareholder Return Policy

In February 2023, we announced the mid-to-long-term dividend policy to increase shareholder value. We aim to return more than 40% of our 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 shareholders of the information on dividends through the disclosure of the 'Decision on Cash Dividends and Dividends in Kind' on the day of the discussion of the board of directors. It is also uploaded on the disclosure systems and GS Holdings' official website.

Dividends for the Last Three Years



Category (Unit: KRW 1 billion)	FY21	FY22	FY23
Adjusted Net Income*	128.8	445.5	877.3
3-Year Average Dividend Payout Ratio**	92%	91%	49%
Total Dividend Amount	189.4	236.8	236.8

*Net income excluding one-time, non-recurring gains
 **Total dividends for the year as a percentage of the average net income over the most recent three years, including the current year

Risk Management



Ethical Risk

Ethical Management Declaration

We practice ethical management by establishing a code of ethics as a standard for decision-making in business management activities and employees' work performance. We satisfy customers by providing excellent products and services, provide fair opportunities and supports, and maximize shareholder value. On the other hand, we strive to become a sustainable corporate by operating worksites and performing activities to protect the environment and contribute to the society.

Code of Ethics

In October 2021, we established a code of ethics and provides an ethical standard for employees. Through regular education and audits, we practice the code of ethics composed of six parts: 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.

Ethical Management Education

To promote ethical management, we conduct ethical education for employees. The online and offline education aims to make them understand the framework of ethical management and present guidelines to comply with ethical standards.

Unethical Behavior Audit & Report

We operate a reporting channel for employees' unfair acts and violations, strengthening transparency and responsibility for their work. Complaints and reports include unjustifiable offering and 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 conduct. Reporters' identities and report contents are kept strictly confidential and will not be disclosed without their consent.

GS Holdings' Code of Ethics

Respect for executives and employees
<ul style="list-style-type: none"> We create a culture that recognizes diversity and respects each other. We do not abuse position or authority. We create a healthy and safe working environment.
Transparency of work
<ul style="list-style-type: none"> We do not misuse corporate systems or create a false performance report. We protect and legitimate use corporate assets. We accurately create and thoroughly manage records.
Prohibition of conflict of interest
<ul style="list-style-type: none"> We are not interrupted by personal relationships and keep a fair working environment. We avoid conflict of interest arising from personal relationships. We do not make an investment using inside information. We do not participate in external activities for profit or engage in any other occupation without permission from the Company.

External communications
<ul style="list-style-type: none"> We take a neutral stance on certain interest groups and social issues. We discuss with the Company for external communication related to work.
Information protection and security
<ul style="list-style-type: none"> We comply with privacy protection laws and the corporations regulations. We comply with policies related to the protection of company information. We pay attention to information security during the employment.
Mutually beneficial cooperation and fair trade
<ul style="list-style-type: none"> We do not abuse the position and authority granted by the Company. We transact with partner companies according to transparent and fair procedures and objective standards. We do not demand unreasonable working conditions from partner companies. We do not accept money or entertainment from partner companies.

Ethical Management Education

Category	Unit	2021	2022	2023
Number of employees who completed the education	Person	71	82	99
Total education hours	Hour	319	82	297

Unethical Behavior Reporting and Handling Status

Category	Process	Investigation	Discipline & Punishment
Unfair business handling	4	4	-
Unethical behavior	-	-	-
Others	7	7	-
Total	11	11	-

Unethical Behavior Reporting and Handling Process

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

Risk Management



Compliance Risk

Compliance System

We established a compliance management system and appointed a compliance officer to practice it. The compliance officer is responsible for reporting the results of activities at the board meetings. In 2023, we conducted an inspection of the compliance system and received a comprehensive opinion that its operation is appropriate.

Appointment of Compliance Officer

We have introduced a compliance officer system in accordance with Article 542-13 of the Commercial Act to confirm compliance with the compliance control standard. The compliance officer monitors whether the management and employees follow relevant laws and corporate regulations and reports the results.

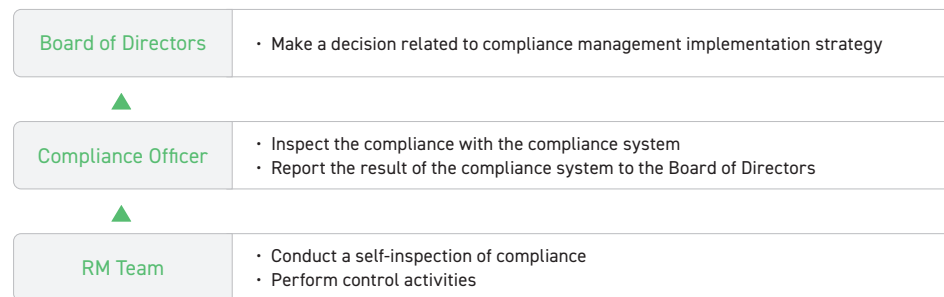
Internal Accounting Management

According to Article 8 of the Act on External Audit of Stock Companies, we operate an internal accounting management system. Since we introduced it on a consolidated basis in 2023, we have continuously improved and updated it to establish internal control policies in GS Holdings and major subsidiaries. On December 31, 2023, external auditors audited GS Holdings' internal accounting management system based on its structure and operational definitions. We received comments that it was designed and operated efficiently from an importance perspective.

Internal Accounting Management Education

We conduct education to entrench internal accounting management. The education includes exemplary cases and practical guidelines, which allow employees to comply with legitimacy and transparency during work. In 2023, 99 employees took the internal accounting management education for 495 hours.

GS Holdings' Compliance System



GS Holdings' Compliance Officer

Compliance Officer	Appointment Date	Academic Background & Career
An Seong-yeon	February 13, 2023	<ul style="list-style-type: none"> • Master Degree in Law Studies, Ewha Womans University • USC Gould Law School LLM • Compliance Team Leader & Compliance Officer, GS Home Shopping (2017 - 2021) • Compliance Team Leader & Compliance Officer, GS Retail (2021 - 2022) • Compliance Officer, GS Holdings (2023 - Present)

Internal Accounting Management Education Status

Category	Unit	2021	2022	2023
Number of employees who completed the education	Person	71	89	99
Total education hours	Hour	53.25	267	495

Risk Management

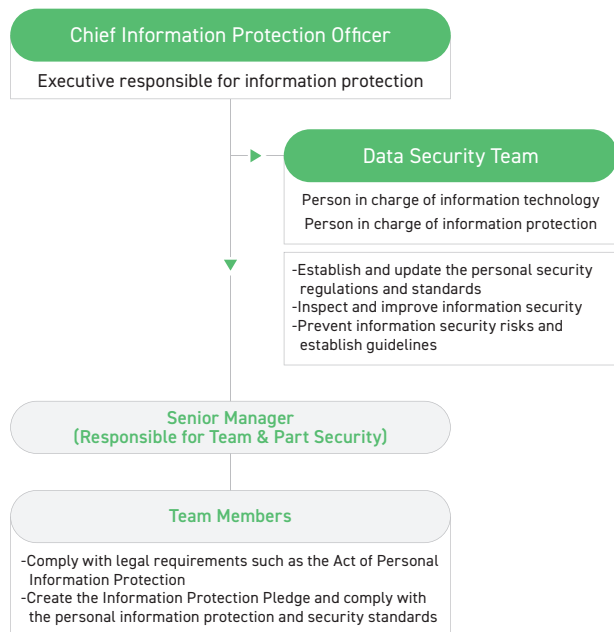


Information Security Risk

Information Protection System

We have a information protection management system in accordance with the general information protection regulation. We e regularly reviews the current status of information protection and make an improvement.

GS Holdings' Information Protection Risk Management System



Information Protection Pledge

We require all employees to sign the Information Protection Pledge to promote a culture of information security. The pledge defines all information related to GS Holdings (including financial, management, customer, sales, and technical information) as confidential. By signing the pledge, employees commit to upholding the responsibility of good managers.

GS Holdings' Information Protection Pledge



Personal Data Protection Education

To increase awareness of personal data protection, we educate all employees. In 2023, 91 employees received education about the concept of personal data, the revision of the Personal Information Protection Act, and its special standards. To ensure that employees practice information protection, we conducted a simulation quiz about the core concept of the personal data process standard.

Information Protection Education

Category	Unit	2021	2022	2023
Number of employees who completed the education	Person	71	81	91
Total education hours	Hour	71	81	91

Risk Management



Financial Risk

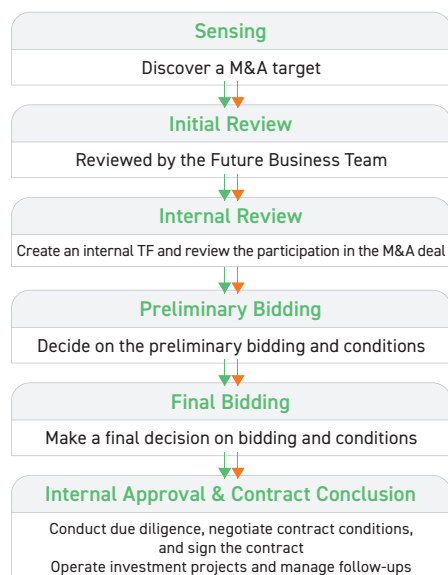
Risk Management System

We identified potential risks impacting business management and established risk management policies and procedures. Each protection and operation department, as well as the finance, legal, management improvement, policy, and public relations departments, manages matters related to ordinary business performance. The Board of Directors manages and supervises critical issues related to management.

Investment Risk

We have created investment deliberation guidelines and operated the Investment Deliberation Committee. According to the investment deliberation guidelines applied when investing more than KRW 3 billion or acquiring equivalent securities, we decide on investments considering stability, profitability, and risk. Investments are reviewed through initial, internal, and in-depth reviews before the preliminary bidding. If necessary, we conduct due diligence on the investment target to verify the provided data and finalize the contract.

Investment Deliberation Procedures



Price Risk

We are exposed to price risk due to our investments in equity securities, which are classified as financial assets measured at fair value in other comprehensive income or profit or loss on the consolidated statement of financial position. To manage price risks related to our investments in equity securities, we diversify our portfolio within certain limits.

Credit Risk

Credit risks include risks arising from cash, cash equivalents, derivative financial products, and deposits at banks and financial institutions, as well as credit risks from wholesale and retail suppliers, including receivables and confirmed contracts. Each Group Company transacts with banks, financial institutions, and business partners only when they meet the financial standards the Group Companies set. Individual risk limits for financial institutions and business partners are determined based on internal standards. GS periodically reviews credit transaction limits by reevaluating their creditworthiness.

Foreign Exchange Risk

We conduct business globally, which exposes us to foreign exchange risk. Specifically, we face the risk of exchange rate fluctuations related to the US dollar, Japanese Yen, Australian dollar, and euro. Foreign exchange risk is likely to occur in connection with assets and liabilities and net investments in business sites in foreign countries. Our management has established policies to ensure that each group company manages foreign exchange risks for each functional currency. We manage foreign exchange risks related to recognized assets and liabilities through derivatives transactions, such as forward transactions. This typically occurs when recognized assets and liabilities are presented in a currency other than the functional currency.

Interest Rate Risk

Interest rate risk is the fluctuation of interest income and expense of deposits or borrowings depending on the future market interest rate. The risk usually occurs in deposits and borrowings with variable interest rates. To minimize uncertainty and net interest costs caused by interest fluctuations, we conduct analysis based on scenarios considering refinancing, loan renewal, alternative financing, and risk aversion. We manage cash flow interest rate risk using variable interest collection and fixed interest payment swaps based on various scenarios.

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Governance Structure

ESG FACTBOOK



Financial Performance



GS Holdings' Consolidated Balance Sheet

(Unit: KRW million)

Category	20 th (2023)	19 th (2022)	18 th (2021)
Asset			
Current assets	5,982,341	5,978,612	5,388,853
Cash and cash equivalents	2,222,015	2,331,204	1,204,959
Financial assets at fair value through profit or loss	129,316	82,051	723,465
Financial assets at fair value through comprehensive income	79	142	243
Derivative assets	2,827	12,258	5,132
Account receivable & other receivable	2,631,787	2,558,032	2,372,909
Other current assets	258,535	258,340	306,317
Current tax assets	11,003	7,059	2,265
Current inventories	686,610	712,544	629,020
Other non-current financial assets	0	0	0
Assets held for sale	40,169	16,982	144,543
Non-current assets	28,466,084	27,943,630	25,802,434
Financial assets at fair value through profit or loss	657,558	642,398	696,541
Financial assets at fair value through comprehensive income	485,272	469,262	385,259
Non-current derivative assets	12,205	5,948	377
Investment assets in joint ventures and associates	8,862,150	8,690,286	7,037,836
Investment property	1,442,429	1,403,106	1,471,794
Property, plant and equipment	11,342,219	10,866,722	11,228,467
Right-of-use assets	1,997,376	1,874,976	1,515,272
Intangible assets and sales right	1,981,460	2,029,233	1,903,021
Long-term trade and other non-current receivables	1,395,814	1,648,339	1,383,645
Other non-current assets	133,191	117,716	97,143
Other non-current financial assets	0	0	0
Deferred tax assets	69,191	88,915	83,079
Net defined benefit assets	87,219	106,729	0
Total assets	34,448,425	33,922,242	31,191,287

Category	20 th (2023)	19 th (2022)	18 th (2021)
Liabilities			
Current liabilities	6,573,930	6,527,808	5,501,784
Trade and other current payables	2,911,645	2,808,341	2,353,654
Liquid borrowings and debentures	2,913,781	2,881,742	2,419,910
Current derivative liabilities	23,452	18,030	15,604
Other current financial liabilities	12,807	4,418	8,285
Other financial liabilities	410,225	329,684	264,149
Current corporate tax liability	216,744	392,484	243,727
Provisions for current liabilities	85,276	93,109	113,240
Liabilities held for sale	0	0	83,215
Non-current liabilities	10,249,300	10,906,624	11,486,559
Long-term trade and other non-current payables	2,405,800	2,415,261	1,920,457
Non-current borrowings and debentures	5,915,164	6,662,017	7,836,464
Non-current derivative liabilities	16,178	26,964	26,871
Other non-current financial liabilities	116,908	118,543	138,224
Other non-current liabilities	350,592	328,419	315,955
Deferred tax liabilities	1,327,778	1,232,959	1,137,579
Defined Payroll Liability	5,732	4,360	-22,056
Non-current provisions	111,148	118,101	133,065
Total liabilities	16,823,230	17,434,432	16,988,343
Shareholders' equity			
Equity attributable to owners of parent	13,450,004	12,438,586	10,288,563
Capital	473,501	473,501	473,501
Additional paid-in and other capital	1,696,001	1,692,715	1,693,177
Other components of equity	-2,966,854	-2,965,224	-2,983,678
Accumulated other comprehensive income	100,073	113,952	-25,734
Retained earnings	14,147,282	13,123,642	11,131,297
Non-controlling Invest equity	4,175,191	4,049,224	3,914,381
Total shareholders' equity	17,625,195	16,487,810	14,202,944
Total liabilities and shareholders' equity	34,448,425	33,922,242	31,191,287

Financial Performance



GS Holdings' Consolidated Income Statement

(Unit: KRW million)

Category	20 th (2023)	19 th (2022)	18 th (2021)
Sales	25,978,494	28,582,513	20,165,049
Cost of sales	-19,264,794	-20,614,776	-15,229,461
Gross profit	6,713,700	7,967,737	4,935,588
Selling and administrative expenses	-2,991,898	-2,847,556	-2,284,242
Operating income	3,721,802	5,120,181	2,651,346
Other profit	333,472	360,526	827,486
Other loss	-278,981	-401,086	-442,717
Financial income	217,336	230,566	184,441
Financial expense	-531,222	-550,246	-367,589
Income before income tax expense	3,462,407	4,759,941	2,852,967
Income tax expenses	-1,822,133	-2,174,470	-1,227,116
Continuing operating profit (loss)	1,640,274	2,585,471	1,625,851
Discontinued operating income (loss)	-61,563	-102,767	-11,169
Net income (loss)	1,578,711	2,482,704	1,614,682
Attribution of net profit (loss)			
Attribution of net profit (loss)	1,300,651	2,142,967	1,448,999
Profit and loss from continuing operations attributable to the owners of the parent company	1,337,076	2,203,949	1,455,627
Profit and loss from discontinued operations attributable to the owners of the parent company	-36,425	-60,982	-6,628
Non-controlling interest net income	278,060	339,737	165,683
Earnings per share			
Total basic earnings (loss) per share (unit: KRW)	13,737.0	22,634.0	15,304.0
Earnings per common stock from continuing operations (unit: KRW)	14,122	23,278	15,374
Earnings per common stock from expansion operations (unit: KRW)	-385.0	-644	-70
Preferred stock earnings per share (loss) (unit: KRW)	13,787.0	22,684.0	15,354.0
Earnings per share preferred from continuing operations (unit: KRW)	14,172	23,328	15,424
Earnings per preferred share from discontinued operations (unit: KRW)	-385	-644	-70

Environmental Performance



GHG Emissions

GS Holdings

Category	Unit	2021	2022	2023
Direct emissions (Scope 1)	tCO ₂ e	174	193	174
Indirect emissions (Scope 2)	tCO ₂ e	252	304	303
Total emissions	tCO ₂ e	426	497	477
GHG emissions intensity (Scope 1)	tCO ₂ e/KRW billion	0.75	0.34	0.17
GHG emissions intensity (Scope 2)	tCO ₂ e/KRW billion	1.09	0.54	0.30

*The intensity is calculated based on separate criteria for sales revenue.

GS Energy

Category	Unit	2021	2022	2023
Direct emissions (Scope 1)	tCO ₂ e	85	78	70
Indirect emissions (Scope 2)	tCO ₂ e	154	213	220
Total emissions	tCO ₂ e	239	291	290
GHG emissions intensity (Scope 1)	tCO ₂ e/KRW billion	0.66	0.26	0.07
GHG emissions intensity (Scope 2)	tCO ₂ e/KRW billion	1.19	0.70	0.22

*The intensity is calculated based on separate criteria for sales revenue.

GS Caltex

Category	Unit	2021	2022	2023
Direct emissions (Scope 1)	tCO ₂ e	6,545,310	7,203,043	7,326,603
Indirect emissions (Scope 2)	tCO ₂ e	1,910,848	1,950,759	1,603,051
Total emissions	tCO ₂ e	8,456,147	9,153,789	8,929,641
GHG emissions intensity (Scope 1)	tCO ₂ e/KRW billion	201.10	123.06	150.73
GHG emissions intensity (Scope 2)	tCO ₂ e/KRW billion	58.71	33.33	32.98

*The intensity is calculated based on separate criteria for sales revenue.

The total of Scope 1 and 2 emissions may differ from the aggregated emissions due to rounding down the greenhouse gas emissions for each business site.
 **The 2021 emissions represent the standalone emissions of GS Caltex, whereas the 2022 and 2023 emissions represent the consolidated emissions of GS Caltex.
 ***The 2023 emissions data has been changed in August 2024 based on the results of objections.

****The annual sales revenue for the GHG emissions intensity is equivalent to the same criteria as the emission aggregation

GS Power

Category	Unit	2021	2022	2023
Direct emissions (Scope 1)	tCO ₂ e	2,174,033	2,967,293	2,534,649
Indirect emissions (Scope 2)	tCO ₂ e	24,403	20,662	21,534
Total emissions	tCO ₂ e	2,198,430	2,987,955	2,556,183
GHG emissions intensity (Scope 1)	tCO ₂ e/KRW billion	2,339.06	1,468.58	1,534.78
GHG emissions intensity (Scope 2)	tCO ₂ e/KRW billion	26.26	10.23	13.04

*The intensity is calculated based on separate criteria for sales revenue.

GS EPS

Category	Unit	2021	2022	2023
Direct emissions (Scope 1)	tCO ₂ e	3,152,283	3,126,011	2,883,309
Indirect emissions (Scope 2)	tCO ₂ e	14,412	12,015	12,025
Total emissions	tCO ₂ e	3,166,695	3,138,025	2,895,332
GHG emissions intensity (Scope 1)	tCO ₂ e/KRW billion	2,553.85	1,365.03	1,453.08
GHG emissions intensity (Scope 2)	tCO ₂ e/KRW billion	11.68	5.25	6.06

*The intensity is calculated based on separate criteria for sales revenue.

GS E&R

Category	Unit	2021	2022	2023
Direct emissions (Scope 1)	Banwol tCO ₂ e	978,884	966,144	887,364
	Gumi tCO ₂ e	1,121,154	1,103,772	1,058,536
Indirect emissions (Scope 2)	Banwol tCO ₂ e	127	148	140
	Gumi tCO ₂ e	180	102	169
Total emissions	tCO ₂ e	2,101,054	2,070,867	1,946,859
GHG emissions intensity (Scope 1)	tCO ₂ e/KRW billion	2900.50	1669.43	1965.57
GHG emissions intensity (Scope 2)	tCO ₂ e/KRW billion	0.42	0.20	0.31

*The intensity is calculated based on separate criteria for sales revenue.

**GHG emissions and total emissions may differ from the aggregated emissions from workplace due to the rounding down of each business sites during the summation process.

Incheon Total Energy Company

Category	Unit	2021	2022	2023
Direct emissions (Scope 1)	tCO ₂ e	379,252	370,696	371,576
Indirect emissions (Scope 2)	tCO ₂ e	3,076	3,144	4,404
Total emissions	tCO ₂ e	382,327	373,840	375,980
GHG emissions intensity (Scope 1)	tCO ₂ e/KRW billion	2107.93	1269.06	1227.57
GHG emissions intensity (Scope 2)	tCO ₂ e/KRW billion	17.10	10.76	14.55

*The intensity is calculated based on separate criteria for sales revenue.

GS Retail

Category	Unit	2021	2022	2023
Direct emissions (Scope 1)	tCO ₂ e	1,513	3,471	2,118
Indirect emissions (Scope 2)	tCO ₂ e	56,413	62,178	56,992
Total emissions	tCO ₂ e	57,926	65,649	59,110
GHG emissions intensity (Scope 1)	tCO ₂ e/KRW billion	0.17	0.33	0.19
GHG emissions intensity (Scope 2)	tCO ₂ e/KRW billion	6.19	5.97	5.23

*The intensity is calculated based on separate criteria for sales revenue.

GS Global

Category	Unit	2021	2022	2023
Direct emissions (Scope 1)	tCO ₂ e	0	0	0
Indirect emissions (Scope 2)	tCO ₂ e	314	313	355
Total emissions	tCO ₂ e	314	313	355
GHG emissions intensity (Scope 1)	tCO ₂ e/KRW billion	0.00	0.00	0.00
GHG emissions intensity (Scope 2)	tCO ₂ e/KRW billion	0.09	0.07	0.10

*The intensity is calculated based on separate criteria for sales revenue.

Environmental Performance



Energy Consumption

GS Holdings

Category	Unit	2021	2022	2023
Total energy consumption	TJ	8	10	9
Direct energy consumption	TJ	3	3	3
Indirect energy consumption	TJ	5	6	6
Energy intensity	TJ/KRW billion	0.03	0.02	0.01

*The intensity is calculated based on separate criteria for sales revenue.

GS Energy

Category	Unit	2021	2022	2023
Total energy consumption	TJ	3	3	3
Direct energy consumption	TJ	2	1	1
Indirect energy consumption	TJ	1	2	2
Energy intensity	TJ/KRW billion	0.02	0.01	0.00

*The intensity is calculated based on separate criteria for sales revenue.

GS Caltex

Category	Unit	2021	2022	2023
Total energy consumption	TJ	116,029	127,442	122,988
Direct energy consumption	TJ	77,537	87,525	89,030
Indirect energy consumption	TJ	38,507	39,928	33,968
Energy intensity	TJ/KRW billion	3.56	2.18	2.53

*The intensity is calculated based on separate criteria for sales revenue.

**The total value may differ from the aggregated values due to rounding down the values for each business site.

***The energy consumption in 2021 represents the standalone consumption of GS Caltex, whereas the 2022 and 2023 emissions represent the consolidated emissions of GS Caltex.

****The energy consumption in 2023 has been changed in August 2024 based on the results of objections.

***** Revenue used to calculate intensity is that of business sites used to calculate energy consumption.

GS Power

Category	Unit	2021	2022	2023	2023
Total energy consumption	Anyang	TJ	28,951	43,731	38,342
	Bucheon	TJ	13,086	14,624	11,447
	Seoul	TJ	8	6	4
Direct energy consumption	Anyang	TJ	28,729	43,517	38,079
	Bucheon	TJ	12,806	14,304	11,093
	Seoul	TJ	1	1	1
Indirect energy consumption	Anyang	TJ	222	214	263
	Bucheon	TJ	280	321	353
	Seoul	TJ	7	5	3
Energy intensity	TJ/KRW billion	45.24	28.88	30.15	

*The intensity is calculated based on separate criteria for sales revenue.

GS EPS

Category	Unit	2021	2022	2023
Total energy consumption	TJ	73,277	65,946	70,658
Direct energy consumption	TJ	72,977	65,696	70,408
Indirect energy consumption	TJ	301	251	251
Energy intensity	TJ/KRW billion	59.37	28.80	35.61

*The intensity is calculated based on separate criteria for sales revenue.

GS E&R

Category	Unit	2021	2022	2023	
Total energy consumption	Banwol	TJ	11,527	11,381	10,324
	Gumi	TJ	12,723	12,502	12,015
Direct energy consumption	Banwol	TJ	11,524	11,378	10,321
	Gumi	TJ	12,719	12,500	12,011
Indirect energy consumption	Banwol	TJ	3	3	3
	Gumi	TJ	4	2	4
Energy intensity	TJ/KRW billion	33.49	19.26	22.56	

*The intensity is calculated based on separate criteria for sales revenue.

Incheon Total Energy Company

Category	Unit	2021	2022	2023
Total energy consumption	TJ	7,578	7,496	7,550
Direct energy consumption	TJ	7,514	7,344	7,362
Indirect energy consumption	TJ	65	152	188
Energy intensity	TJ/KRW billion	42.12	25.66	24.94

*The intensity is calculated based on separate criteria for sales revenue.

GS Retail

Category	Unit	2021	2022	2023
Total energy consumption	TJ	1,208	1,339	1,229
Direct energy consumption	TJ	29	40	38
Indirect energy consumption	TJ	1,179	1,299	1,191
Energy intensity	TJ/KRW billion	0.013	0.013	0.011

*The intensity is calculated based on separate criteria for sales revenue.

GS Global

Category	Unit	2021	2022	2023
Total energy consumption	TJ	5	5	5
Direct energy consumption	TJ	N/A	N/A	N/A
Indirect energy consumption	TJ	5	5	5
Energy intensity	TJ/KRW billion	0.001	0.001	0.001

*The intensity is calculated based on separate criteria for sales revenue.

Environmental Performance



Water Consumption and Reuse

GS Holdings

Category	Unit	2021	2022	2023
Water consumption*	ton	0	0	0
Water intake	ton	4,399	4,744	4,862
Water discharge	ton	4,399	4,744	4,862
Water reuse	ton	N/A	N/A	N/A

*Water consumption = Intake volume - Discharge volume (data revised due to changes in internal calculation standards).

**As a GS Tower tenant, the total intake volume matches the total discharge volume of GS Tower.

GS Energy

Category	Unit	2021	2022	2023
Water consumption*	ton	0	0	0
Water intake	ton	5,718	4,610	4,708
Water discharge	ton	5,718	4,610	4,708
Water reuse	ton	N/A	N/A	N/A

*Water consumption = Intake volume - Discharge volume (data revised due to changes in internal calculation standards).

** As a GS Tower tenant, the total intake volume matches the total discharge volume of GS Tower.

GS Caltex

Category	Unit	2021	2022	2023
Water consumption*	ton	11,022,644	14,175,260	13,561,707
Water intake	ton	24,052,054	28,006,135	28,318,011
Water discharge	ton	13,029,410	13,830,875	14,756,304
Water reuse	ton	1,847,890	2,079,753	2,339,415

*Water consumption = Intake volume - Discharge volume (data revised due to changes in internal calculation standards).

The data aggregation scope has been expanded from the Yeosu plant to include the entire company, resulting in discrepancies compared to the previous year's report. *The increase in water consumption in 2022 is due to the increased operational days of the new MFC process (6 months in 2021, 1 year in 2022).

GS Power

Category	Unit	2021	2022	2023
Water consumption*	Anyang ton	2,522,248	2,895,641	2,522,248
	Bucheon ton	299,915	296,478	221,288
Water intake	Anyang ton	2,677,651	3,057,540	1,955,627
	Bucheon ton	408,968	388,326	318,357
Water discharge	Anyang ton	155,403	161,899	164,168
	Bucheon ton	97,069	82,394	102,448
Water reuse	Anyang ton	422,034	481,914	377,497
	Bucheon ton	19,335	19,701	14,676

*Water consumption = Intake volume - Discharge volume (data revised due to changes in internal calculation standards).

GS EPS

Category	Unit	2021	2022	2023
Water consumption*	ton	227,567	243,137	433,090
Water intake	ton	551,634	505,026	723,254
Water discharge	ton	324,067	261,889	290,164
Water reuse	ton	443,184	402,491	466,192

*Water consumption = Intake volume - Discharge volume (data revised due to changes in internal calculation standards).

GS E&R

Category	Unit	2021	2022	2023
Water consumption*	Banwol ton	3,097,571	2,655,393	2,295,174
	Gumi ton	2,316,421	2,429,512	2,873,273
Water intake	Banwol ton	3,641,318	3,232,183	2,790,996
	Gumi ton	2,988,771	3,227,145	3,631,477
Water discharge	Banwol ton	543,747	576,790	495,822
	Gumi ton	672,350	797,633	758,204
Water reuse	Banwol ton	530,107	570,861	587,549
	Gumi ton	884,311	958,992	1,084,631

*Water consumption = Intake volume - Discharge volume (data revised due to changes in internal calculation standards).

Incheon Total Energy Company

Category	Unit	2021	2022	2023
Water consumption*	ton	58,454	45,576	40,208
Water intake	ton	82,213	63,927	58,449
Water discharge	ton	23,759	18,351	18,241
Water reuse	ton	7,829	10,931	8,356

*Water consumption = Intake volume - Discharge volume (data revised due to changes in internal calculation standards).

GS Retail

Category	Unit	2021	2022	2023
Water consumption*	ton	0	0	0
Water intake	ton	898,952	940,810	893,824
Water discharge	ton	898,952	940,810	893,824
Water reuse	ton	N/A	N/A	N/A

*Water consumption = Intake volume - Discharge volume (data revised due to changes in internal calculation standards).

** As a GS Tower tenant, the total intake volume matches the total discharge volume of GS Tower.

GS Global

Category	Unit	2021	2022	2023
Water consumption*	ton	0	0	0
Water intake	ton	5,649	4,680	5,187
Water discharge	ton	5,649	4,680	5,187
Water reuse	ton	N/A	N/A	N/A

*Water consumption = Intake volume - Discharge volume (data revised due to changes in internal calculation standards).

** As a GS Tower tenant, the total intake volume matches the total discharge volume of GS Tower.

Environmental Performance



Waste Discharge and Recycling Rate

GS Holdings

Category	Unit	2021	2022	2023
Total waste discharged	ton	13	20	22
Designated waste	ton	0	0	0
General waste	ton	13	20	22
Waste processed	Landfill	ton	0	0
	Incineration	ton	0	0
	Recycle	ton	7	10
	Others	ton	6	10

GS Energy

Category	Unit	2021	2022	2023
Total waste discharged	ton	N/A	N/A	41
Designated waste	ton	N/A	N/A	0
General waste	ton	N/A	N/A	41
Waste processed	Landfill	ton	N/A	0
	Incineration	ton	N/A	26
	Recycle	ton	N/A	15
	Others	ton	N/A	0

*Data for waste management in 2021 and 2022 is unavailable and is marked as N/A.

GS Caltex

Category	Unit	2021	2022	2023
Total waste discharged	ton	40,169	37,882	37,627
Designated waste	ton	13,304	14,324	15,251
General waste	ton	26,865	23,557	22,377
Waste processed	Landfill	ton	5,456	4,726
	Incineration	ton	1,921	2,724
	Recycle	ton	32,208	30,183
	Others	ton	585	249

*Data was revised by expanding the scope to include the entire company, such as the Yeosu plant, logistics centers, and the Incheon lubricants plant.

GS Power

Category	Unit	2021	2022	2023
Total waste discharged	Anyang	ton	449	631
	Bucheon	ton	285	394
Designated waste	Anyang	ton	4	1
	Bucheon	ton	16	24
General waste	Anyang	ton	445	627
	Bucheon	ton	270	370
Waste processed	Landfill	Anyang	ton	0
		Bucheon	ton	0
	Incineration	Anyang	ton	178
		Bucheon	ton	232
	Recycle	Anyang	ton	271
		Bucheon	ton	60

*The total waste processed in 2021 at the Bucheon facility differs from the previous year's total due to the processing of waste in 2021 that could not be processed in 2020.

GS EPS

Category	Unit	2021	2022	2023
Total waste discharged	ton	81,952	92,145	119,753
Designated waste	ton	4,170	19	20
Construction waste	ton	89	58	0
General waste	ton	77,693	92,068	119,733
Waste processed	Landfill	ton	569	450
	Incineration	ton	53	103
	Others (shredding & smashing)	ton	89	58
	Recycle	ton	81,240	91,535

GS E&R

Category	Unit	2021	2022	2023
Total waste discharged	Banwol	ton	74,093	86,896
	Gumi	ton	59,753	64,108
Designated waste	Banwol	ton	6	7
	Gumi	ton	22	13
General waste	Banwol	ton	74,087	86,888
	Gumi	ton	59,731	64,094
Waste processed	Landfill	Banwol	ton	0
		Gumi	ton	42
	Incineration	Banwol	ton	61
		Gumi	ton	50
	Recycle	Banwol	ton	37,887
		Gumi	ton	59,661

Environmental Performance



Waste Discharge and Recycling Rate

Incheon Total Energy Company

Category	Unit	2021	2022	2023
Total waste discharged	ton	42	14	10
Designated waste	ton	24	1	1
General waste	ton	18	14	9
Waste processed	Landfill	ton	4	0
	Incineration	ton	10	10
	Recycle	ton	27	4

GS Retail

Category	Unit	2021	2022	2023
Total waste discharged	ton	12,670	14,568	15,664
Designated waste	ton	N/A	N/A	N/A
General waste	ton	12,670	14,568	15,664
Waste processed	Landfill	ton	1,106	1,472
	Incineration	ton	1,147	1,414
	Recycle	ton	8,747	9,829
	Others	ton	1,670	1,852

GS Global

Category	Unit	2021	2022	2023
Total waste discharged	ton	9	9	11
Designated waste	ton	0	0	0
General waste	ton	9	9	11
Waste processed	Landfill	ton	0	0
	Incineration	ton	0	0
	Recycle	ton	0	0
	Others (Method of disposal unknown)	ton	9	9

Air Pollutant Emissions

GS Holdings

Category	Unit	2021	2022	2023
SOx	ton	N/A	N/A	N/A
NOx	ton	N/A	N/A	N/A
Dust	ton	N/A	N/A	N/A

*GS Holdings does not possess the relevant environmental facilities as a pure holding company, thus marked as N/A.

GS Energy

Category	Unit	2021	2022	2023
SOx	ton	N/A	N/A	N/A
NOx	ton	N/A	N/A	N/A
Dust	ton	N/A	N/A	N/A

*GS Energy does not possess the relevant environmental facilities as a pure holding company, thus marked as N/A.

GS Caltex

Category	Unit	2021	2022	2023
SOx	ton	169	257	350
NOx	ton	3,596	3,510	3,119
Dust	ton	82	56	119

*Data was revised by expanding the scope to include the entire company, such as the Yeosu plant, logistics centers, and the Incheon lubricants plant.

GS Power

Category	Unit	2021	2022	2023
SOx	Anyang	ton	4	0
	Bucheon	ton	0	0
NOx	Anyang	ton	321	243
	Bucheon	ton	359	346
Dust	Anyang	ton	18	0
	Bucheon	ton	0	0

Environmental Performance



Air Pollutant Emissions

Category		Unit	2021	2022	2023
GS EPS					
SOx		ton	62	78	127
NOx		ton	975	1,067	922
Dust		ton	12	6	6

Category		Unit	2021	2022	2023
GS E&R					
SOx	Banwol	ton	146	166	91
	Gumi	ton	210	201	135
NOx	Banwol	ton	402	497	435
	Gumi	ton	594	487	393
Dust	Banwol	ton	17	13	10
	Gumi	ton	8	11	10

Category		Unit	2021	2022	2023
Incheon Total Energy Company					
SOx		ton	0	0	0
NOx		ton	67	60	69
Dust		ton	0	0	0

Category		Unit	2021	2022	2023
GS Retail					
SOx		ton	N/A	N/A	N/A
NOx		ton	N/A	N/A	N/A
Dust		ton	N/A	N/A	N/A

*GS Retail is marked as N/A as it is not applicable.

Category		Unit	2021	2022	2023
GS Global					
SOx		ton	N/A	N/A	N/A
NOx		ton	N/A	N/A	N/A
Dust		ton	N/A	N/A	N/A

*GS Global is marked as N/A as it is not applicable.

Wastewater and Water Pollutant Discharge

Category		Unit	2021	2022	2023
GS Holdings					
Wastewater discharge		ton	N/A	N/A	N/A
Water pollutant discharge	BOD	ton	N/A	N/A	N/A
	COD	ton	N/A	N/A	N/A
	TOC	ton	N/A	N/A	N/A
	SS	ton	N/A	N/A	N/A

*GS Holdings does not possess the relevant environmental facilities as a pure holding company, thus marked as N/A.

Category		Unit	2021	2022	2023
GS Energy					
Wastewater discharge		ton	N/A	N/A	N/A
Water pollutant discharge	BOD	ton	N/A	N/A	N/A
	COD	ton	N/A	N/A	N/A
	TOC	ton	N/A	N/A	N/A
	SS	ton	N/A	N/A	N/A

*GS Energy does not possess the relevant environmental facilities as a pure holding company, thus marked as N/A.

Category		Unit	2021	2022	2023
GS Caltex					
Wastewater discharge		ton	13,029,410	13,830,875	14,756,304
Water pollutant discharge	BOD	ton	115.11	200.13	232.00
	COD	ton	161.73	208.99	N/A
	TOC	ton	126.92	215.68	277.76
	SS	ton	194.53	179.70	101.41

*Due to the Ministry of Environment's change in the water pollutant organic matter measurement index from COD to TOC, COD data for 2023 was not collected.

**Past data has been revised due to the change in measurement standards from internal laboratory data to external laboratory data.

***Past data has been recalculated due to changes in internal data management units.

Environmental Performance



Wastewater and Water Pollutant Discharge

GS Power

Category		Unit	2021	2022	2023
Wastewater discharge	Anyang	ton	164,168	161,899	155,403
	Bucheon	ton	102,448	82,394	97,069
Water pollutant discharge	BOD	Anyang	0.53	0.13	0.14
		Bucheon	0.08	0.08	0.08
	COD	Anyang	0.62	0.40	N/A
		Bucheon	0.43	0.40	N/A
	TOC	Anyang	N/A	N/A	0.17
		Bucheon	N/A	N/A	0.19
	SS	Anyang	0.16	0.21	0.06
		Bucheon	0.17	0.36	0.01

*Due to the Ministry of Environment's change in the water pollutant organic matter measurement index from COD to TOC, COD data for 2023 was not collected.

** Past data has been recalculated due to changes in internal data management units.

GS EPS

Category		Unit	2021	2022	2023
Wastewater discharge		ton	324,067	261,889	290,164
Water pollutant discharge	BOD	ton	0.42	0.52	0.32
	COD	ton	1.6	1.1	N/A
	TOC	ton	N/A	N/A	0.73
	SS	ton	0.06	0.18	0.23

*Due to the Ministry of Environment's change in the water pollutant organic matter measurement index from COD to TOC, COD data for 2023 was not collected.

** Past data has been recalculated due to changes in internal data management units.

GS E&R

Category		Unit	2021	2022	2023
Wastewater discharge	Banwol	ton	543,747	576,790	495,822
	Gumi	ton	672,350	797,633	758,204
Water pollutant discharge	BOD	Banwol	0.98	0.80	0.67
		Gumi	1.35	1.00	1.00
	COD	Banwol	5.33	N/A	N/A
		Gumi	7.53	N/A	N/A
	TOC	Banwol	N/A	2.99	3.00
		Gumi	N/A	3.63	4.66
	SS	Banwol	4.34	5.99	2.48
		Gumi	4.37	1.79	4.44

*Due to the Ministry of Environment's change in the water pollutant organic matter measurement index from COD to TOC, COD data for 2023 was not collected.

** Past data has been recalculated due to changes in internal data management units.

Incheon Total Energy Company

Category		Unit	2021	2022	2023
Wastewater discharge		ton	23,759	18,351	18,241
Water pollutant discharge	BOD	ton	0.02	0.02	0.03
	COD	ton	0.10	0.04	0.05
	TOC	ton	N/A	0.04	0.06
	SS	ton	0.014	0.022	0.005

GS Retail

Category		Unit	2021	2022	2023
Wastewater discharge		ton	N/A	N/A	N/A
Water pollutant discharge	BOD	ton	N/A	N/A	N/A
	COD	ton	N/A	N/A	N/A
	TOC	ton	N/A	N/A	N/A
	SS	ton	N/A	N/A	N/A

*GS Retail is marked as N/A as it is not applicable.

GS Global

Category		Unit	2021	2022	2023
Wastewater discharge		ton	N/A	N/A	N/A
Water pollutant discharge	BOD	ton	N/A	N/A	N/A
	COD	ton	N/A	N/A	N/A
	TOC	ton	N/A	N/A	N/A
	SS	ton	N/A	N/A	N/A

*GS Global is marked as N/A as it is not applicable.

Environmental Performance



Violations of Environmental Laws and Regulations

GS Holdings

Category	Unit	2021	2022	2023
Number of legal obligations and regulatory violated	cases	0	0	0
Total fine	KRW 10,000	0	0	0

GS Energy

Category	Unit	2021	2022	2023
Number of legal obligations and regulatory violated	cases	0	0	0
Total fine	KRW 10,000	0	0	0

GS Caltex

Category	Unit	2021	2022	2023
Number of legal obligations and regulatory violated	cases	8	2	2
Total fine	KRW 10,000	4,068	96	160

*Data has been revised based on the business report standards.

GS Power

Category	Unit	2021	2022	2023
Number of legal obligations and regulatory violated	cases	1	0	0
Total fine	KRW 10,000	500	0	0

GS EPS

Category	Unit	2021	2022	2023
Number of legal obligations and regulatory violated	cases	0	0	0
Total fine	KRW 10,000	0	0	0

GS E&R

Category	Unit	2021	2022	2023
Number of legal obligations and regulatory violated	cases	3	1	1
Total fine	KRW 10,000	939	160	160

Incheon Total Energy Company

Category	Unit	2021	2022	2023
Number of legal obligations and regulatory violated	cases	0	0	0
Total fine	KRW 10,000	0	0	0

GS Retail

Category	Unit	2021	2022	2023
Number of legal obligations and regulatory violated	cases	0	0	0
Total fine	KRW 10,000	0	0	0

GS Global

Category	Unit	2021	2022	2023
Number of legal obligations and regulatory violated	cases	0	0	0
Total fine	KRW 10,000	0	0	0

Social Performance



Employees and Executives

GS Holdings

Category	Unit	2021	2022	2023
Total number of employees	persons	63	71	87
Executives	persons	2	2	2
Employees	persons	61	69	85
Male	persons	46	49	62
Female	persons	15	20	23
Regular	persons	50	58	76
Temporary	persons	13	13	11
Under 30	persons	3	6	9
30-50	persons	52	57	68
51 or above	persons	8	8	10

*Data for 2021 and 2022 has been revised due to changes in internal data calculation standards.

GS Energy

Category	Unit	2021	2022	2023
Total number of employees	persons	160	192	196
Executives	persons	1	1	1
Employees	persons	159	191	195
Male	persons	124	144	151
Female	persons	35	47	44
Regular	persons	149	183	188
Temporary	persons	11	9	8
Under 30	persons	21	25	19
30-50	persons	114	140	146
51 or above	persons	25	27	31

*Data for 2021 and 2022 has been revised due to changes in internal data calculation standards.

GS Caltex

Category	Unit	2021	2022	2023
Total number of employees	persons	3,259	3,291	3,242
Executives	persons	44	45	38
Employees	persons	3,215	3,246	3,204
Male	persons	2,912	2,917	2,872
Female	persons	303	329	332
Regular	persons	3,101	3,113	3,051
Temporary	persons	114	133	153
Under 30	persons	555	558	504
30-50	persons	1,818	1,812	1,803
51 or above	persons	886	921	935

*The number of executives is listed as the number of non-registered executives, and employment types (regular/temporary) are listed for employees.

GS Power

Category	Unit	2021	2022	2023
Total number of employees	persons	300	305	320
Executives	persons	2	2	2
Employees	persons	298	303	318
Male	persons	270	273	289
Female	persons	28	30	29
Regular	persons	298	296	314
Temporary	persons	2	9	6
Under 30	persons	40	47	63
30-50	persons	145	139	133
51 or above	persons	115	119	124

*Past data has been recalculated due to changes in internal data management standards.

GS EPS

Category	Unit	2021	2022	2023
Total number of employees	persons	269	285	294
Executives	persons	3	3	3
Employees	persons	266	282	291
Male	persons	248	258	266
Female	persons	18	24	25
Regular	persons	265	279	290
Temporary	persons	4	6	4
Under 30	persons	97	100	90
30-50	persons	147	158	177
51 or above	persons	25	27	27

*Past data has been recalculated due to changes in internal data management standards.

GS E&R

Category	Unit	2021	2022	2023
Total number of employees	persons	341	322	329
Executives	persons	2	2	2
Employees	persons	339	320	327
Male	persons	307	286	292
Female	persons	32	34	35
Regular	persons	332	313	321
Temporary	persons	9	9	8
Under 30	persons	36	47	51
30-50	persons	216	193	199
51 or above	persons	89	82	79

*Past data has been recalculated due to changes in internal data management standards.

Social Performance



Employees and Executives

Incheon Total Energy Company

Category	Unit	2021	2022	2023
Total number of employees	persons	85	87	91
Executives	persons	2	2	2
Employees	persons	83	85	89
Male	persons	76	77	80
Female	persons	7	8	9
Regular	persons	78	80	83
Temporary	persons	7	7	8
Under 30	persons	13	15	17
30-50	persons	55	48	51
51 or above	persons	17	24	23

*Past data has been recalculated due to changes in internal data management standards.

GS Retail

Category	Unit	2021	2022	2023
Total number of employees	persons	7,850	7,816	7,370
Executives	persons	2	2	2
Employees	persons	7,848	7,814	7,368
Male	persons	4,017	4,264	4,165
Female	persons	3,831	3,550	3,203
Regular	persons	5,258	5,056	5,174
Temporary	persons	2,592	2,760	2,196
Under 30	persons	1,658	1,576	1,433
30-50	persons	4,563	4,755	4,572
51 or above	persons	1,629	1,485	1,365

GS Global

Category	Unit	2021	2022	2023
Total number of employees	persons	250	260	270
Executives	persons	8	8	8
Employees	persons	242	252	262
Male	persons	186	190	194
Female	persons	56	62	68
Regular	persons	237	251	254
Temporary	persons	13	9	16
Under 30	persons	31	27	29
30-50	persons	189	200	201
51 or above	persons	30	33	40

Employee Training

GS Holdings

Category	Unit	2021	2022	2023
Total training hours	hours	N/A	N/A	N/A
Average training hours per employee	hours/person	N/A	N/A	N/A
Total training cost	KRW million	110	229	205
Average training cost per employee	KRW million/person	1.5	2.8	2.1

*Past data has been recalculated due to changes in internal data management standards.

**No data was collected for 2023 due to changes in internal operations (approval line).

GS Energy

Category	Unit	2021	2022	2023
Total training hours	hours	4,238	6,500	8,690
Average training hours per employee	hours/person	25	33	42
Total training cost	KRW million	276	399	845
Average training cost per employee	KRW million/person	1.6	2.0	4.1

*Past data has been recalculated due to changes in internal data management standards.

GS Caltex

Category	Unit	2021	2022	2023
Total training hours	hours	N/A	169,714	156,775
Average training hours per employee	hours/person	27	52	49
Total training cost	KRW million	2,776	4,295	3,789
Average training cost per employee	KRW million/person	0.9	1.3	1.2

*Past data has been recalculated due to changes in internal data management standards.

**A system for aggregating industrial safety education data was established in 2022, so 2021 training data only includes non-industrial safety education.

GS Power

Category	Unit	2021	2022	2023
Total training hours	hours	10,908	13,431	11,661
Average training hours per employee	hours/person	37.1	46.6	47.8
Total training cost	KRW million	183	201	128
Average training cost per employee	KRW million/person	0.6	0.7	0.5

Social Performance



Employee Training

GS EPS

Category	Unit	2021	2022	2023
Total training hours	hours	15,944	10,060	14,412
Average training hours per employee	hours/person	61	35	49
Total training cost	KRW million	445	814	970
Average training cost per employee	KRW million/person	1.7	2.9	3.3

*Past data has been recalculated due to changes in internal data management standards.

GS Global

Category	Unit	2021	2022	2023
Total training hours	hours	9,753	12,991	10,158
Average training hours per employee	hours/person	37	47	36
Total training cost	KRW million	206	260	602
Average training cost per employee	KRW million/person	0.79	0.94	2.14

GS E&R

Category	Unit	2021	2022	2023
Total training hours	hours	678	1,610	3,641
Average training hours per employee	hours/person	2	5	11
Total training cost	KRW million	239	310	473
Average training cost per employee	KRW million/person	0.7	1.0	1.4

*Past data has been recalculated due to changes in internal data management standards.

Incheon Total Energy Company

Category	Unit	2021	2022	2023
Total training hours	hours	5,428	4,515	3,256
Average training hours per employee	hours/person	64	52	36
Total training cost	KRW million	47	105	141
Average training cost per employee	KRW million/person	0.6	1.2	1.5

*Past data has been recalculated due to changes in internal data management standards.

GS Retail

Category	Unit	2021	2022	2023
Total training hours	hours	303,505	249,210	230,740
Average training hours per employee	hours/person	72	60	53
Total training cost	KRW million	2,697	4,657	5,572
Average training cost per employee	KRW million/person	0.6	1.2	1.3

*Past data has been recalculated due to changes in internal data management standards.

Social Performance



Workforce Diversity

GS Holdings

Category	Unit	2021	2022	2023
Number of employees with disabilities	persons	1	1	1
Ratio of employees with disabilities	%	1.6	1.4	1.1
Number of female managers	persons	N/A	N/A	2
Ratio of female managers	%	N/A	N/A	13.3

*Manager: Senior Manager or above

**In 2021, there was no separate classification for managers due to rank unification (Manager), but a Senior Manager system was introduced in 2023.

***Past data omissions were identified, and data for 2021 and 2022 has been revised.

GS Energy

Category	Unit	2021	2022	2023
Number of employees with disabilities	persons	1	1	1
Ratio of employees with disabilities	%	0.6	0.5	0.5
Number of female managers	persons	2	3	3
Ratio of female managers	%	6.1	8.3	6.9

*Past data omissions were identified, and the number of female managers and other data in 2022 have been revised.

GS Caltex

Category	Unit	2021	2022	2023
Number of employees with disabilities	persons	N/A	N/A	N/A
Ratio of employees with disabilities	%	1.9	1.8	2.1
Number of female managers	persons	116	125	125
Ratio of female managers	%	9.7	10.6	10.9

*GS Caltex currently manages the employment rate based on the "Employment Calculation Method for Disabled Employment Levy."

**Senior level + Team Leader level + executives

GS Power

Category	Unit	2021	2022	2023
Number of employees with disabilities	persons	8	7	7
Ratio of employees with disabilities	%	2.7	2.3	2.2
Number of female managers	persons	3	3	3
Ratio of female managers	%	6.5	6.7	6.5

*Manager: Non-executives among Division Heads, Directors, Team Leaders, and equivalent positions to Team Leader

GS EPS

Category	Unit	2021	2022	2023
Number of employees with disabilities	persons	1	0	1
Ratio of employees with disabilities	%	0.4	0	0.3
Number of female managers	persons	1	1	1
Ratio of female managers	%	3.1	3.1	3.0

*Manager: Team Leader or above

GS E&R

Category	Unit	2021	2022	2023
Number of employees with disabilities	persons	4	5	5
Ratio of employees with disabilities	%	1.2	1.6	1.5
Number of female managers	persons	0	0	0
Ratio of female managers	%	0	0	0

*Manager: Non-executives among Team Leaders, Office Leader, Directors, Division Heads, and Department heads

Incheon Total Energy Company

Category	Unit	2021	2022	2023
Number of employees with disabilities	persons	2	2	3
Ratio of employees with disabilities	%	2.4	2.3	3.3
Number of female managers	persons	1	1	1
Ratio of female managers	%	8.3	8.3	7.1

*Manager: Team Leader or above

**Past data has been recalculated due to changes in internal data management standards.

GS Retail

Category	Unit	2021	2022	2023
Number of employees with disabilities	persons	236	208	217
Ratio of employees with disabilities	%	3.2	2.8	3.1
Number of female managers	persons	3	5	6
Ratio of female managers	%	8.8	14.3	18.2

*Manager: Executives are counted as managers (excluding independent and non-executive directors)

**The ratio of employees with disabilities is based on the number of full-time workers (different from the number used in the Annual Report)

GS Global

Category	Unit	2021	2022	2023
Number of employees with disabilities	persons	0	0	0
Ratio of employees with disabilities	%	0	0	0
Number of female managers	persons	1	1	1
Ratio of female managers	%	2.3	2.1	1.8

*Manager: Pro A and Pro B Team Leaders, Overseas Managers

Social Performance



Recruitment Status

GS Holdings

Category	Unit	2021	2022	2023
Number of new employees	persons	20	22	19
Gender	Male	14	16	13
	Female	6	6	6

*Data for 2021 and 2022 has been revised due to identified past data omissions.

GS Energy

Category	Unit	2021	2022	2023
Number of new employees	persons	25	54	18
Gender	Male	16	36	15
	Female	9	18	3

*Past data has been corrected due to data entry errors.

GS Caltex

Category	Unit	2021	2022	2023
Number of new employees	persons	168	211	132
Gender	Male	140	170	111
	Female	28	41	21

*Past data has been corrected due to data entry errors.

GS Power

Category	Unit	2021	2022	2023
Number of new employees	persons	20	32	31
Gender	Male	18	26	28
	Female	2	6	3

GS EPS

Category	Unit	2021	2022	2023
Number of new employees	persons	39	36	23
Gender	Male	35	30	18
	Female	4	6	5

* Data has been revised to include contract-to-regular conversions.

GS E&R

Category	Unit	2021	2022	2023
Number of new employees	persons	13	33	25
Gender	Male	11	25	24
	Female	2	8	1

Incheon Total Energy Company

Category	Unit	2021	2022	2023
Number of new employees	persons	5	4	12
Gender	Male	5	3	9
	Female	0	1	3

*Data for 2022 has been revised due to data entry errors

GS Retail

Category	Unit	2021	2022	2023
Number of new employees	persons	625	912	585
Gender	Male	360	575	368
	Female	265	337	217

GS Global

Category	Unit	2021	2022	2023
Number of new employees	persons	53	50	37
Gender	Male	37	31	26
	Female	16	19	11

Governance



Shareholding

Category		Unit	2021	2022	2023
Affiliated persons	Number of shares	shares	48,742,590	48,217,167	49,314,299
	Share ratio	%	52.46	51.92	53.07
Government institution and minority shareholders	Number of shares	shares	45,517,980	42,699,083	44,244,774
	Share ratio	%	48.99	45.96	47.62
Treasury stock	Number of shares	shares	19,883	19,883	19,883
	Share ratio	%	0.02	0.02	0.02
Total	Number of shares	shares	92,915,378	92,915,378	92,915,378
	Share ratio	%	100*	100*	100*

*Total sum excluding duplicate calculations of minor shareholders for small accounts in the National Pension.

Associations and Initiatives

Name
The Federation of Korean Industries
The Korea Listed Companies Association
The Korea Chamber of Commerce and Industry

Stakeholder Distribution

Category		Unit	2021	2022	2023
Employee	Wages and bonuses, post-employment benefits and welfare*	KRW million	21,292	27,392	28,501
Shareholder	Dividend	KRW million	189,439	236,776	236,776
	Dividend payout ratio	%	63.2%	53.2%	27.0%
Investor	Interest on bonds, interest on bank loans, etc.	KRW million	15,165	19,906	16,344
Local community	Social contribution activity costs		-	3	230
Government	Tax expense (profit)		17,855	20,105	14,698

*It has been revised based on separate criteria for financial statements.

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Double Materiality Assessment



Double Materiality Assessment Procedure

We conduct an annual materiality assessment to establish sustainable goals, analyze the critical impact on corporate management, and establish countermeasures. Through the double materiality assessment, which considers the social and environmental effects of our business activities in addition to the financial impact from the external perspective, we selected six core issues. Our performance, which relates to the values, is presented in the Sustainability Report 2023. We will listen to the voices of our stakeholders and reflect them in future sustainability management.

Materiality Assessment Process

Step 1:: Issue Pool			
To identify issues related to our business activities and considered critical in the industry, we identified 43 sustainable issues based on GRI, KCGS, DJSI, TCFD, SASB, WEF, and MSCI.			
Step 2:: Double Materiality Analysis			
To measure criticality from the external impact perspective, we conducted surveys of ESG experts and external stakeholders, as well as media research.		To measure financial criticality, we analyzed major issues of GS Group's affiliates, conducted surveys of internal stakeholders, and benchmarked against leading companies in the same industry.	
Media research	Analyzed 482 articles of major Korean media outlets	Benchmarking	Analyzed major issues in peer industry companies
ESG experts survey	Conducted an issue impact survey with 10 experts	Affiliate critical issues	Analyzed major issues in GS Group affiliates
External stakeholder survey	Conducted an importance survey from the perspective of external impact	Internal stakeholder survey	Conduct an importance survey from a financial perspective
Survey period: February 13, 2024 – February 16, 2024			
Step 3:: Assessment Result			
We quantified the environmental and social impacts and financial impacts of each issue and conducted a comprehensive evaluation. As a result of the evaluation, three core issues were selected in the environmental sector and three in the social sector.			

Double Materiality Assessment Result

Based on this year's materiality assessment, the following factors have been identified as core issues: expanding the eco-friendly business portfolio, reinforcing mutual growth policies and activities, managing and reducing GHG emissions, managing and responding to climate change risks, selecting and evaluating suppliers fairly, and strengthening the safety culture at business sites. Similar to last year, expanding our eco-friendly business portfolio remains our top priority. In order to achieve this objective, we have established a vision of maximizing customer value and pursuing profits through the development of eco-friendly businesses, with a focus on sustainability.

Core Issue Management

Priority	Issue	Environmental & social impact	Financial impact	Priority change	Reference
1	Expanding the eco-friendly business portfolio	●	●	No Change	p. 24-26
2	Reinforcing mutual growth policies and activities	●	●	Up	p. 42
3	Managing and reducing GHG emissions	●	●	Up	p. 30-31
4	Managing and responding to climate change risks	●	●	No Change	p. 27-29
5	Selecting and evaluating suppliers fairly	●	○	Up	p. 44
6	Strengthening the safety culture at business sites	●	○	Up	p. 38-41
7	Managing waste and circular economy	●	●	Up	p. 33
8	Discovering new businesses and diversifying businesses	●	○	Up	p. 24-26

The results of the materiality assessment were quantified and classified into high (●), medium (○), and low (○) based on the scores.

GRI Index



Universal Standards

GRI 2: General Disclosure 2021

Classification	Disclosure	Disclosure Name	Reference	Note
The organization and its reporting practices	2-1	Organizational details	p. 5-15	
	2-2	Entities included in the organization's sustainability reporting	about this report	
	2-3	Reporting period, frequency and contact point	about this report	
	2-4	Restatements of information	Indicate separately if applicable	
	2-5	External assurance	p. 85	
	2-6	Activities, value chain and other business relationships	p. 5-15	
Activities and workers	2-7	Employees		
	2-8	Workers who are not employees		
	2-9	Governance structure and composition	p. 55	
Governance	2-10	Nomination and selection of the highest governance body	p. 55	
	2-11	Chair of the highest governance body	p. 55	
	2-12	Role of the highest governance body in overseeing the management of impacts	p. 56	
	2-13	Delegation of responsibility for managing impacts	p. 56	
	2-14	Role of the highest governance body in sustainability reporting	p. 56	
	2-15	Conflicts of interest	p. 57	
	2-16	Communication of critical concerns	p. 55	
	2-17	Collective knowledge of the highest governance body	p. 55	
	2-18	Evaluation of the performance of the highest governance body	p. 56	
	2-19	Remuneration policies	p. 56	
	2-20	Process to determine remuneration	p. 56	
Strategy, policies and practices	2-21	Annual total compensation ratio	p. 56	
	2-22	Statement on sustainable development strategy	p. 6	
	2-23	Policy commitments	p. 51	
	2-24	Embedding policy commitments	p. 51	
	2-25	Processes to remediate negative impacts	p. 60	
	2-26	Mechanisms for seeking advice and raising concerns	p. 60	
	2-27	Compliance with laws and regulations	p. 72-73	
	2-28	Membership associations	p. 80	
Stakeholder engagement	2-29	Approach to stakeholder engagement	p. 23	
	2-30	Collective bargaining agreements	-	

GRI 3: Material Topics

Classification	Disclosure	Disclosure Name	Reference	Note
Material Topics	3-1	Process to determine material topics	p. 80	
	3-2	List of material topics	p. 80	
	3-3	Management of material topics	p. 80	

Topic-specific Standards

GRI 200: Economic Performance

Classification	Disclosure	Disclosure Name	Reference	Note
Economic performance	201-1	Direct economic value generated and distributed	p. 5, 65-66	
	201-2	Financial implications and other risks and opportunities due to climate change	p. 28-31	
Indirect economic impacts	203-1	Infrastructure investments and services supported	p. 52-54	
	203-2	Significant indirect economic impacts	p. 52-54	
Anti-corruption	205-1	Operations assessed for risks related to corruption	p. 45	
	205-2	Communication and training about anti-corruption policies and procedures	p. 45, 60	
	205-3	Confirmed incidents of corruption and actions taken	p. 60	

GRI Index



Topic-specific Standards

GRI 300: Environmental Performance

Classification	Disclosure	Disclosure Name	Reference	Note
Energy	302-1	Energy consumption within the organization	p. 68-69	
	302-2	Energy consumption outside of the organization		Not managed data
	302-3	Energy intensity	p. 68-69	
	302-4	Reduction of energy consumption	p. 31	Added (separate standard)
	302-5	Reductions in energy requirements of products and services		Not applicable
Water and effluents	303-1	Interactions with water as a shared resource	p. 32	
	303-2	Management of water discharge-related impacts	p. 32	
	303-3	Water withdrawal	p. 69-70	
Emissions	305-1	Direct (Scope 1) GHG emissions	p. 67-68	
	305-2	Energy indirect (Scope 2) GHG emissions	p. 67-68	
	305-3	Other indirect (Scope 3) GHG emissions	-	Not managed data
	305-4	GHG emissions intensity	p. 67-68	
	305-5	Reduction of GHG emissions	p. 30	
	305-6	Emissions of ozone-depleting substances (ODS)	-	Not used
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	p. 71	
Waste	306-1	Waste generation and significant waste-related impacts	p. 33	
	306-2	Management of significant waste-related impacts	p. 33	
	306-3	Waste generated	p. 70-71	
	306-4	Waste diverted from disposal	p. 70-71	
	306-5	Waste directed to disposal	p. 70-71	
Supplier environmental assessment	308-1	New suppliers that were screened using environmental criteria	p. 45	
	308-2	Negative environmental impacts in the supply chain and actions taken	p. 45	

GRI 400: Social Performance

Classification	Disclosure	Disclosure Name	Reference	Note
Employment	401-1	Benefits provided to full-time employees that are not provided to temporary or part-time employees	p. 78-79	
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	p. 50	
	401-3	Parental leave	p. 50	
Occupational health and safety	403-1	Occupational health and safety management system	p. 39-40	
	403-2	Hazard identification, risk assessment, and incident investigation	p. 39	
	403-3	Occupational health services	p. 39-40	
	403-4	Worker participation, consultation, and communication on occupational health and safety	p. 39	
	403-5	Worker training on occupational health and safety	p. 42	
	403-6	Promotion of worker health	p. 41	
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	p. 41	
	403-8	Workers covered by an occupational health and safety management system	p. 41	
	403-9	Work-related injuries	-	Not managed data
	403-10	Work-related ill health	-	Not managed data
Training and education	404-1	Average hours of training per year per employee	p. 76-77	
	404-2	Programs for upgrading employee skills and transition assistance programs	p. 46-48	
	404-3	Percentage of employees receiving regular performance and career development reviews	-	
Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	p. 55	
Non-discrimination	406-1	Incidents of discrimination and corrective actions taken	p. 60	
Freedom of association and collective bargaining	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	p. 45	
Child labor	408-1	Operations and suppliers at significant risk for incidents of child labor	-	Not applicable
Forced or compulsory labor	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	-	Not applicable
Security practices	410-1	Security personnel trained in human rights policies or procedures	-	Not applicable
Rights of indigenous people	411-1	Incidents of violations involving rights of indigenous peoples	-	Not applicable
Local community	413-1	Operations with local community engagement, impact assessments, and development programs	p. 53-54	Not applicable
	413-2	Operations with significant actual and potential negative impacts on local communities	-	Not applicable
Supplier social assessment	414-1	New suppliers that were screened using social criteria	p. 44	Not applicable
	414-2	Negative social impacts in the supply chain and actions taken	p. 44	Not applicable
Public policy	415-1	Political contributions	-	Not applicable
Customer health and safety	416-1	Assessment of the health and safety impacts of product and service categories	-	Not applicable
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	-	Not applicable
Marketing and labelling	417-1	Requirements for product and service information and labeling	-	Not applicable
	417-2	Incidents of non-compliance concerning product and service information and labeling	-	Not applicable
	417-3	Incidents of non-compliance concerning marketing communications	-	Not applicable
Customer privacy	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	-	Not applicable

SASB[®]

Electric Utilities & Power Generator

Topic	Code	Accounting Metric	2023
Greenhouse Gas Emissions & Energy Resource Planning	IF-EU-110a.1	Global Scope 1 emissions, percentage covered under emissions-limiting regulations, and percentage covered under emissions-reporting regulations	GS Energy Sustainability Report
		GHG emissions associated with power deliveries	
	IF-EU-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets.	
		Nitrogen Oxide (NOx)	
IF-EU-110a.3	Sulfur Oxides (SOx)	GS Energy Sustainability Report	
Air Quality	IF-EU-120a.1	Particulate matter (PM10)	GS Energy Sustainability Report
		Lead (Pb)	
		Mercury (Hg); percentage of each in or near areas of dense population	
		Total water withdrawn	
Water Management	IF-EU-140a.1	Total water consumed	GS Energy Sustainability Report
		Percentage of total water withdrawn and total water consumed in regions with high baseline water stress	
		Number of incidents of non-compliance associated with water quality permits, standards and regulations	
	IF-EU-140a.2	Description of water management risks and discussion of strategies and practices to mitigate those risks	
Amount of coal combustion products (CCP) generated, percentage recycled		GS Energy Sustainability Report	
Coal Ash Management	IF-EU-140a.3	Description of coal combustion products (CCPs) management policies and procedures for active and inactive operations	GS Energy Sustainability Report
	IF-EU-150a.1	Total number of nuclear power units, broken down by results of most recent independent safety review	Lack of coal-fired generation in the business portfolio
IF-EU-150a.3	Description of efforts to manage nuclear safety and emergency preparedness		
Nuclear Safety & Emergency Management	IF-EU-540a.1	Total number of nuclear power units, broken down by results of most recent independent safety review	Lack of nuclear electricity generation in the business portfolio
	IF-EU-540a.2	Description of efforts to manage nuclear safety and emergency preparedness	

* The scope of information is based on the GS Energy's business.

Food Retailer & Distributors

Topic	Code	Accounting Metric	2023
Energy Management	FB-FR-130a.1	Energy consumption	1,229TJ
		Power consumption	1,190.7TJ
		Renewable energy generation	124,887kWh
Food Waste Management	FB-FR-150a.1	Amount of food waste generated	GS Retail's Sustainability Report p. 51, 98
		Percentage diverted from the waste stream	GS Retail's Sustainability Report 2023
Data Security	FB-FR-230a.1	Number of data security breaches	2 case
		Description of approach to identifying and addressing data security risks	GS Retail's Sustainability Report p. 77-78
Product Health & Nutrition	FB-FR-240a.2	Discussion of the process to identify and manage products and ingredients related to nutritional and health concerns among consumers	GS Retail's Sustainability Report p. 79-81
Product Labeling & Marketing	FB-FR-270a.1	Number of incidents of non-compliance with industry or regulatory labeling and/or marketing codes	1 case
	FB-FR-270a.2	Total amount of monetary losses as a result of legal proceedings associated with marketing and/or labeling practices	KRW 1.5 billion
Labor Practices	FB-FR-310a.1	Average hourly wage	KRW 9,269
	FB-FR-310a.2	Percentage of in-store and distribution centers employees earning minimum wage	100%
		Percentage of active workforce covered under collective bargaining agreements	2.0%
	FB-FR-310a.3	Number of work stoppages	None
FB-FR-310a.4	Total days idle due to strike	None	
	Labor law violations	1 case	
Management of Environmental & Social Impacts in the Supply Chain	FB-FR-430a.1	Revenue from products third-party certified to environmental or social sustainability sourcing standard	521.8 billion won
		Percentage of revenue from eggs that originated from a cage-free environment	GS Retail's Sustainability Report p. 45
	FB-FR-430a.2	Percentage of revenues from pork produced without the use of gestation-crates	GS Retail's Sustainability Report 2023
	FB-FR-430a.3	Discussion of strategy to manage environmental and social risks within the supply chain, including animal welfare	GS Retail's Sustainability Report p. 65
FB-FR-430a.4	Description of strategies to reduce the environmental impact of packaging	GS Retail's Sustainability Report p. 46	
Activity Metric	FB-FR-000.A	Number of retail locations	GS 25
			GS THE FRESH
			GS Retail's Sustainability Report p. 16
			GS Retail's Sustainability Report p. 16

Independent Assurance Statement



To readers of GS Holdings 2023 Sustainability Report

Introduction

Korea Management Registrar (KMR) was commissioned by GS Holdings to conduct an independent assurance of its 2023 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 305: Emissions
 - GRI 403: Occupational Health and Safety
 - GRI 414: Supplier Social Assessment

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 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.

Independent Assurance Statement



To readers of GS Holdings 2023 Sustainability Report

- 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 2024 Seoul, Korea



CEO *E. J. Hwang*

GS HOLDINGS 2023 SUSTAINABILITY REPORT

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