SUSTAINABILITY REPORT

GS ENERGY

GS Energy

About this Report

In 2025, GS Energy is pleased to be publishing its fourth sustainability report, to honor our commitment to transparently disclose our activities and achievements in sustainable management to our stakeholders.

Reporting Principle

This report follows the Global Reporting Initiative Standards 2021 (GRI Standards 2021), and references the Sustainability Accounting Standards Board (SASB) standards to include essential information about sustainable management based on the characteristics of our industry. The financial information in this report is presented on a consolidated basis, and complies with Korean International Financial Reporting Standards (K-IFRS).

Reporting Scope

This report covers GS Energy and its subsidiaries, with specific information marked when the reporting scope differs. For quantitative environmental performance, the GHG emissions data include data from joint ventures and associates.

*Subsidiaries: GS Power, Incheon Total Energy, With Incheon Energy, GS CHARGEV

**Joint ventures & associates: GS Caltex, Boryeong LNG Terminal, Shin Pyeongtaek Power, Dongducheon Dream Power, Lotte GS Chemical

Reporting Period

The report covers GS Energy's sustainable management activities and performance from January 1 to December 31, 2024. It also includes some information from the first half of 2025. Quantitative performance data from 2022 to 2024 are also provided to track trends over the past three years.

Reporting Cycle

Annual (the last report was published in August 2024)

Reporting Assurance

The Korea Management Registrar, an independent assurance institute, verified this report in accordance with AA1000AS v3 and AA1000AP (2018).

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Cautionary Note Regarding Forward-looking Statements

This report may contain predictions, expectations, and estimates, in addition to details of both current and past sustainable management activities and performance at GS Energy. These can be identified by the use of words such as "prospect," "expect," "anticipate," "plan," "target," "to be" or other comparable terms. They are based on assumptions, forecasts, and expectations that we believe to be reasonable at the time of reporting. These forward-looking statements involve both known and unknown risks and uncertainties that may cause actual results to be materially different from those projected. We do not guarantee the accuracy or completeness of these judgements, estimates, or assumptions, and undertake no duty and have no obligation to update or revise any forward-looking statements or their underlying information. Please be advised that this report should not be considered as a basis for legal liability regarding investment outcomes under any circumstances.

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Interactive User Guide

GS Energy's Sustainability Report has been created as an interactive PDF to enhance the reader's convenience and understanding. It includes icons that provide easy navigation to relevant pages and shortcuts to related web pages.

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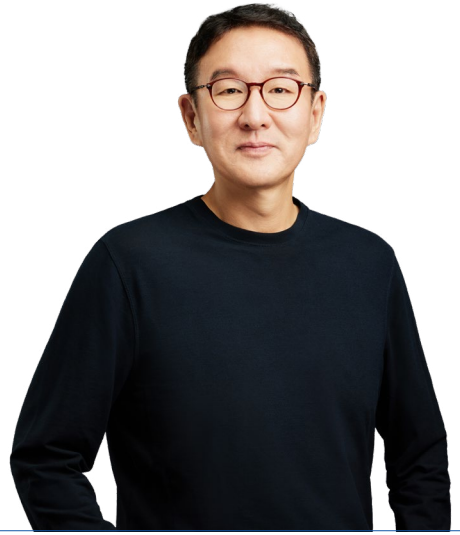
INTRODUCTION

Message from the CEO



Dear Esteemed Stakeholders,

In these times of change and uncertainty, we are working diligently to enhance the corporate value of GS Energy. Despite facing a global economic recession and ongoing geopolitical risks over the past year, we managed to strengthen the competitiveness of our core businesses. Our new Beyond project has become a vital growth engine for our company. We have been particularly focused on upgrading our electricity and district heating portfolio to support the energy transition. In addition, we have invested in various future-oriented businesses, laying a solid foundation for carbon neutrality. These accomplishments would not have been possible without the trust and support of all our stakeholders, for which I am sincerely grateful.

Strategic Investment for Energy Transition

Last year, we successfully installed new EV charging infrastructure and developed a battery recycling platform, creating a comprehensive value chain and solidifying our presence in the eco-friendly energy market. Simultaneously, we continued to implement our roadmap to commercializing the energy transition by developing blue ammonia and establishing solar power facilities. Looking ahead, we plan to diversify our global business portfolio by introducing an innovative power business that integrates AI technology with Battery Energy Storage Systems (BESS). These strategic investments will help us build our long-term sustainability and competitiveness, while aligning with the global trends of energy transition and carbon neutrality, rather than focusing solely on short-term achievements.

Strengthening ESG Risk Management and Governance

As the need to address climate change and meet stakeholders' expectations grows, ESG (Environmental, Social, and Governance) has become a key indicator of corporate sustainability. Currently, we are committed to proactively managing ESG risks and seizing relevant opportunities. In 2023, we introduced an ESG risk assessment system that enables the Investment Deliberation Committee to review significant ESG risks associated with our investees. We also regularly assess the ESG status of GS's electricity generation and energy companies through the ESG Council, allowing us to identify and respond to risks and opportunities arising from climate change. Furthermore, we are dedicated to continuously managing ESG implementations, including the establishment and disclosure of responsible investment policies and strategies to secure additional carbon credits. Through these efforts, we will continually improve our ESG management and build trust with our investors.

Efforts to Create Social Values

To foster shared growth with the local communities in which we operate, we have encouraged employee engagement in positive social initiatives by expanding eco-friendly campaigns, such as waste plastic recycling and social contribution programs. In addition, we have nurtured our One Team culture and implemented a prompt decision-making system to enhance flexibility company-wide to encourage collaboration. This approach empowers our employees to practice social responsibility, creating positive impacts on GS Energy's brand value.

Building on these achievements, we aspire to expand our role as a leader in sustainable energy. We anticipate that complex challenges, such as the acceleration of the energy transition, an insecure global supply chain, and inflationary pressures, will persist for some time. In this context, advanced innovation, swift decision-making, and transparent communication with stakeholders are essential. GS Energy will cultivate an Open & Challenge mindset, empowering our employees to lead change and seize opportunities with a Growth Mindset. I am fully committed to listening to your feedback and collaborating to establish sustainable value. Thank you for your support.

Huh Yongsoo, CEO, GS Energy

Company Profile

About GS Energy

GS Energy Corporation was established in 2012 as the energy holding company of the GS Group. The company has been united in making a determined effort to contribute to the development of the energy industry, the mainstay of the national economy, and to lead the future energy paradigm shift. Currently, GS Energy is actively engaged in the development of overseas resources, particularly in the Middle East, and is taking the lead in improving Korea's energy self-sufficiency rate and energy security, which have historically limited our domestic resources. Furthermore, we are striving to create a happy society for all through the stable supply of energy based on eco-friendly natural gas, thereby fostering a clean and convenient living environment. To this end, we have established an LNG value chain encompassing LNG imports, the operation of LNG regasification terminals, and electric power and district heating utilizing LNG as fuel, reinforcing our capabilities. In addition, to contribute to the realization of a carbon-neutral society through an energy transition, we are incorporating new cutting-edge energy technologies by establishing an EV charging value chain and promoting the development of a circulation system for recycling waste EV batteries from electric vehicles. We will continue to discover new businesses that embrace energy-related innovation and create sustainable growth.

(As of December 31, 2024)

Name	Affiliate Business Group	Foundation Date	CEO
GS Energy	GS	January 3, 2012	Huh Yongsoo

Address	Industry	Total Asset	Revenue (Sales)
508, Nonhyeon-ro, Gangnam-gu, Seoul, Republic of Korea	Holding Company	KRW 16.83 trillion	KRW 5.96 trillion

Operating Profit	Number of Employees
KRW 2.2 trillion	203 persons

Credit Rating*

Debenture AA (September 12, 2024)

Commercial Paper A1 (December 16, 2024)

Corporate Credit Rating AA (June 18, 2024)

Key Subsidiaries in Korea

GS Caltex (50.0%) | GS Power (51.0%)

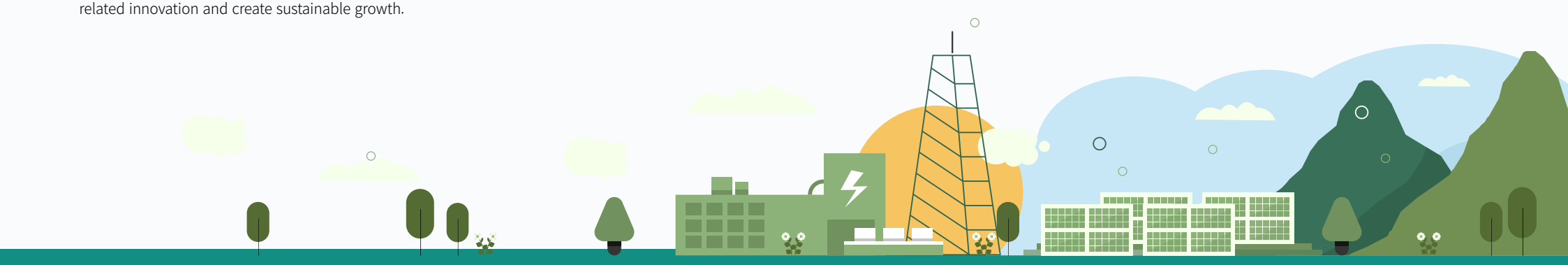
Boryeong LNG Terminal (50.0%)

Incheon Total Energy (70.0%)

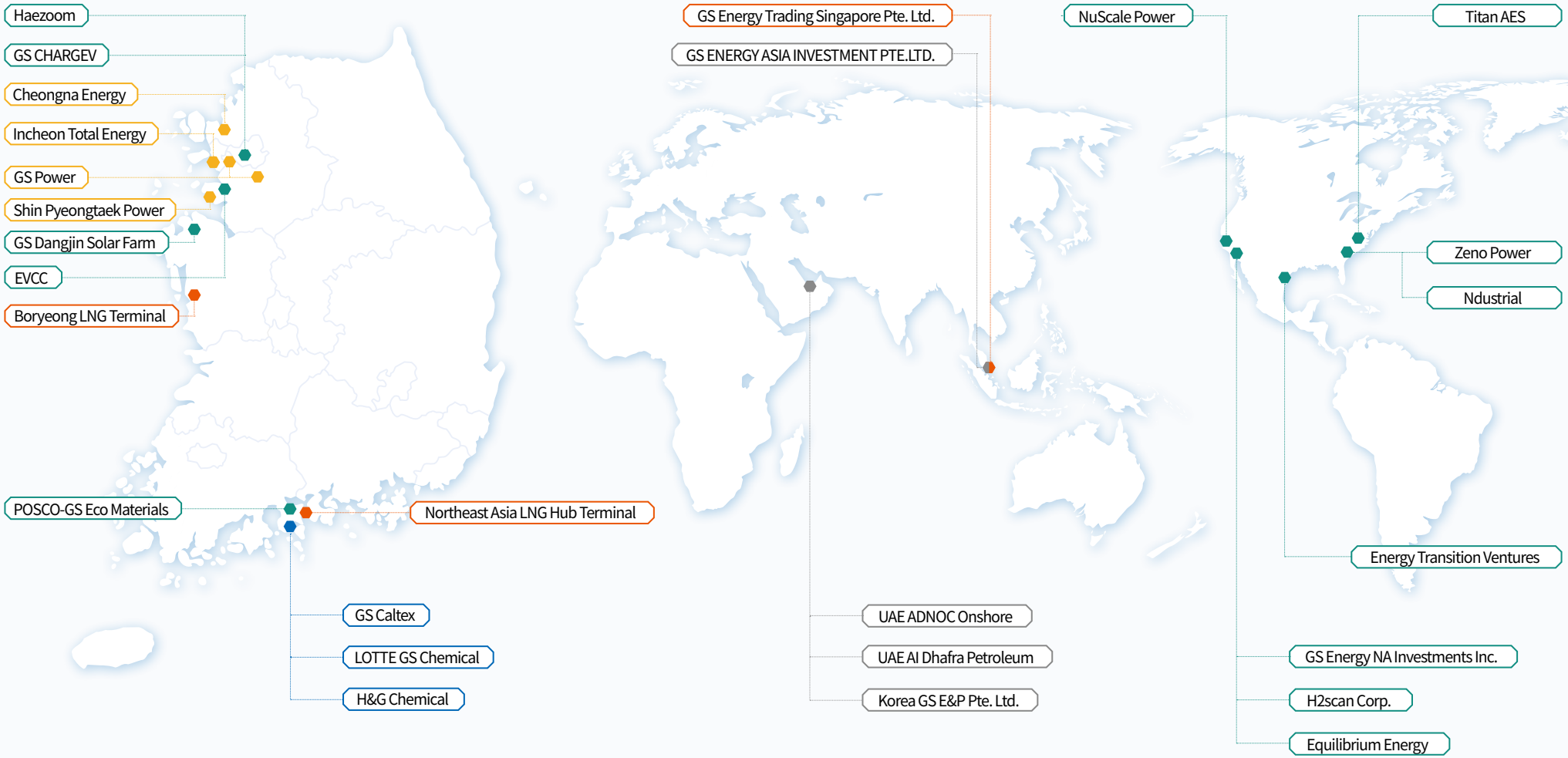
GS Dangjin Solar Farm (100.0%)

GS CHARGEV (91.3%)

*Based on the Korea Investors Service



Global Network



Achievements in 2024

Economic Value Achievements

Despite continued economic uncertainty, we have achieved strong financial performance. We are not standing still—through strategic investments in renewable and next-generation energy sectors, we are identifying new business opportunities and laying the groundwork for sustainable long-term growth.

Condensed Consolidated Income Statement

Category	Unit	2022	2023	2024
Revenue and equity method income	KRW million	7,753,634	6,519,023	**5,957,721**
Cost of sales and equity method loss	KRW million	3,834,139	3,720,718	**3,575,061**
Gross Profit	KRW million	3,919,495	2,798,305	**2,382,660**
Operating income	KRW million	3,802,746	2,641,487	**2,201,960**
Income before income taxes	KRW million	3,738,440	2,606,738	**2,167,762**
Net profit	KRW million	1,827,726	1,014,223	**476,522**

Condensed Consolidated Balance Sheet

Category		Unit	2022	2023	2024
Assets	Current assets	KRW million	1,520,007	1,227,906	**1,491,744**
	Non-current assets	KRW million	13,769,545	14,593,374	**15,339,329**
Total assets		KRW million	15,289,552	15,821,280	**16,831,073**
Liabilities	Current liabilities	KRW million	1,675,775	1,653,080	**1,744,058**
	Non-current liabilities	KRW million	4,248,546	4,520,226	**5,027,846**
Total liabilities		KRW million	5,924,321	6,173,306	**6,771,904**
Equity	Controlling interest	KRW million	8,376,602	8,622,548	**8,891,600**
	Non-controlling interest	KRW million	988,629	1,025,426	**1,167,569**
Total Equity		KRW million	9,365,231	9,647,974	**10,059,169**

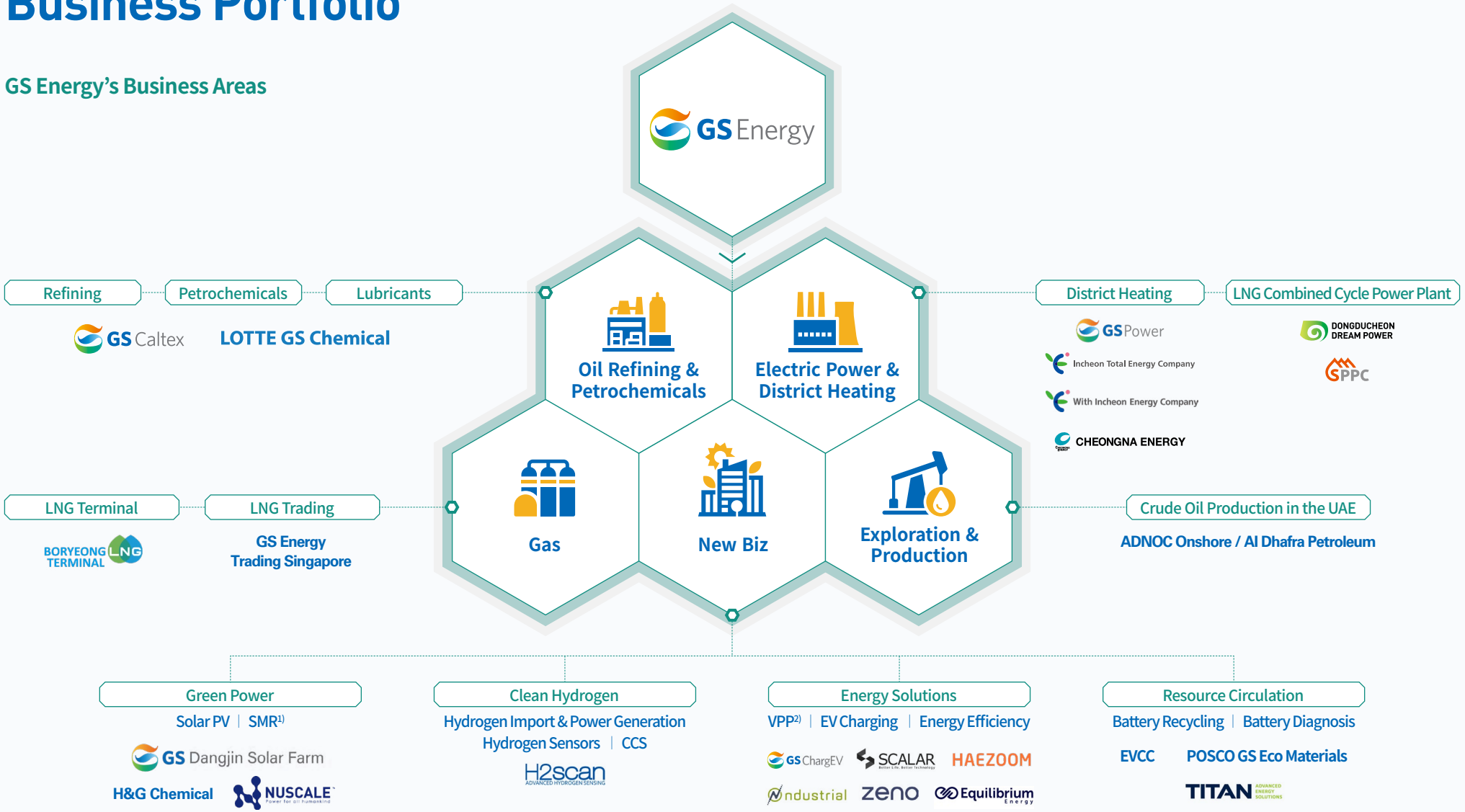
Business Performance

External ESG Achievements

We were ranked first in the utilities sector in the 2024 ESG Excellent Brands survey conducted by the Korea Economic Daily ESG. We achieved the highest environmental score of any company in our sector, earning strong evaluations for our climate change response, energy conservation and resource circulation, and eco-friendly products and services.

Business Portfolio

GS Energy's Business Areas



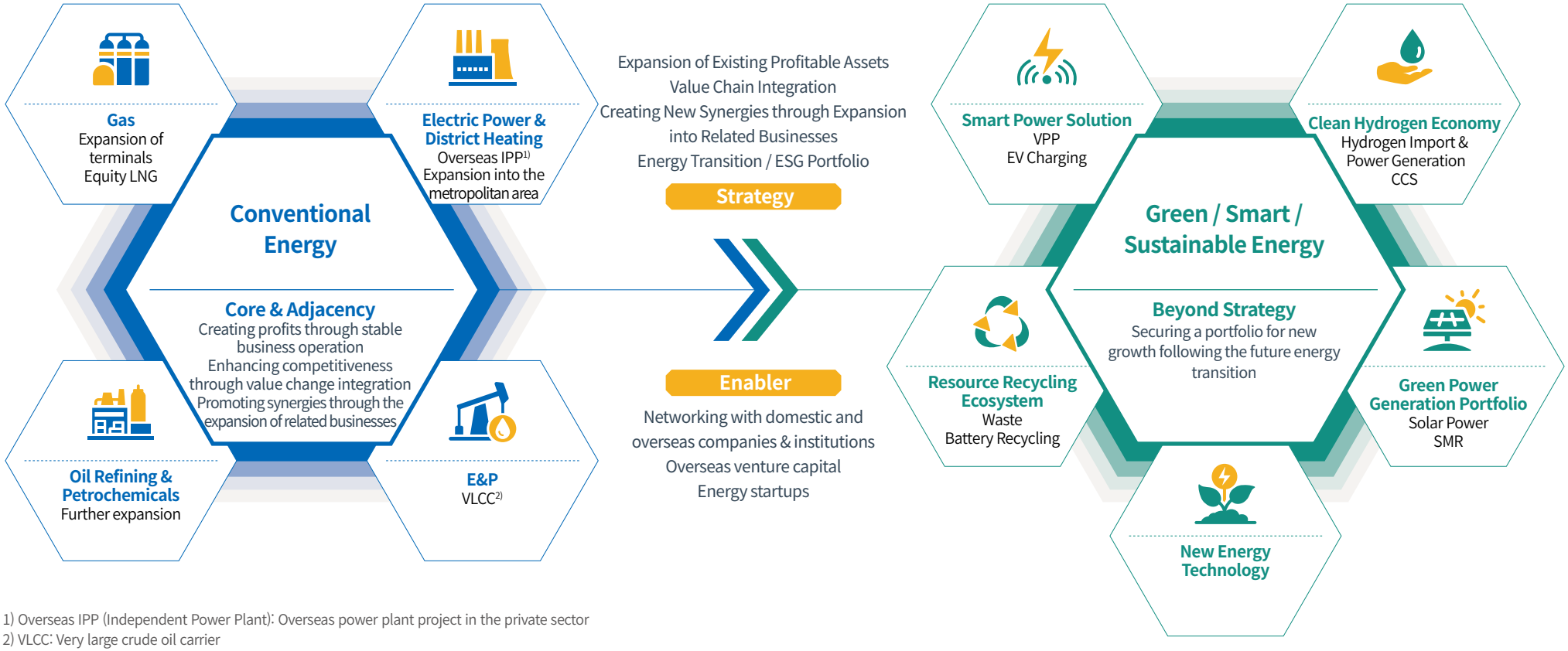
1) SMR: Small Modular Reactor
2) VPP: Virtual Power Plant

ESG MANAGEMENT

Medium- to Long-term Strategic Targets

ESG Management Strategy

GS Energy has established a mid- to-long-term strategic roadmap for sustainable growth, and is carrying out tasks which are focused on the continuous innovation of the business portfolio, the reinforcement of our human capabilities, the promotion of ESG management, and digital transformation. Notably, since 2021 we have pursued four ESG strategies in earnest: expanding our green power generation portfolio, leading the energy solution market, establishing a resource circulation ecosystem, and leading the reorganization of infrastructure for the clean hydrogen economy. We aim to achieve future growth through these strategies by reinforcing our digital competencies, while promoting eco-friendly management.



1) Overseas IPP (Independent Power Plant): Overseas power plant project in the private sector
2) VLCC: Very large crude oil carrier

Key ESG Activities

Environmental

Stronger Climate Change Response System	• Identify climate risks and opportunities for each business portfolio, and establish countermeasures • Analyze physical risks caused by climate change, including heat waves and heavy rain (designated for GS Power and Incheon Total Energy's power plants)
Environmental Impact Management	• Conduct activities to contribute to the headquarters' carbon neutrality (e.g., transition to eco-friendly cars) • Conduct activities to reduce environmental impacts of subsidiaries (e.g., utilization of unused energy)

Social

Safety and Health Management	• Proactively manage risks by developing unique risk assessment tools, and conduct regular inspections and training
Expansion of CSR Activities	• Implement integrated social contribution programs to enhance ESG performance across employees of GS Energy and its subsidiaries (introduction of the Haenggarae app) - Implement an integrated CSR program for GS Energy and its subsidiaries, Haenggarae, and quantify social values - Support energy-vulnerable households through coal briquette donation

Governance

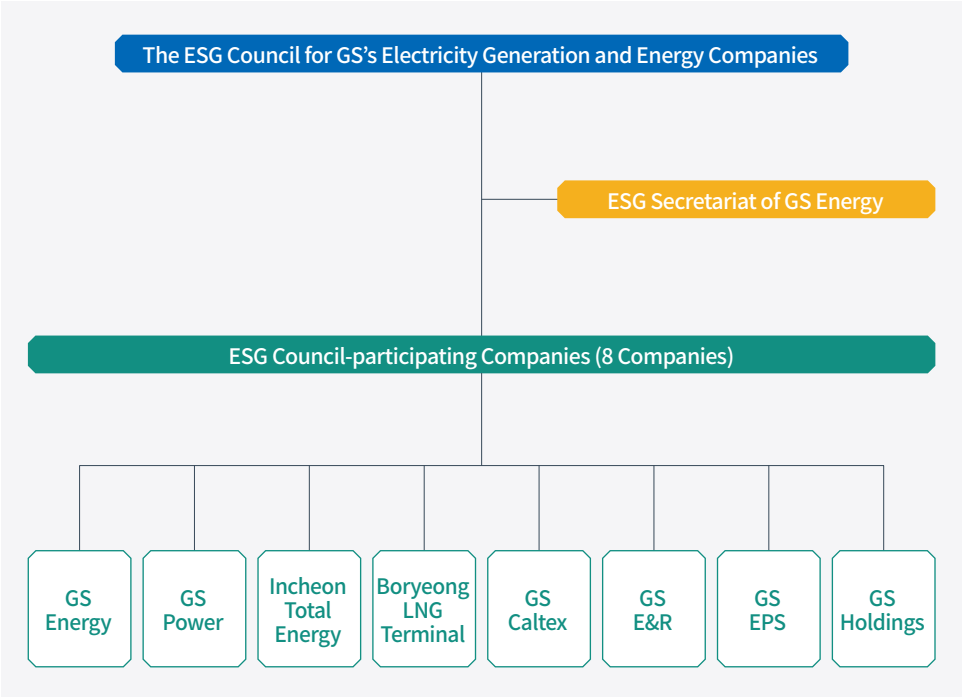
ESG Council	• Hold regular ESG Council meetings for GS's electricity generation and energy companies - Report results of the Council meetings to the CEO, including analysis on the carbon credit market, and its influences and climate disclosure plans
Stronger Data Protection	• Create a new security-dedicated department, the IT Security Team - Conduct company-wide data protection campaigns and enhance security education for employees

ESG Risk Management System

The ESG Council for GS's Electricity Generation and Energy Companies

We operate the ESG Council for GS's electricity generation and energy companies to proactively manage ESG risks within our subsidiaries and evaluate the effectiveness of our ESG strategies. The Council consists of GS Energy, four subsidiaries (GS Power, Incheon Total Energy, Boryeong LNG Terminal, and GS Caltex), and three affiliates (GS E&R, GS EPS, and GS Holdings). The Council focuses on key ESG trends in the electricity generation and energy sector, shares the ESG status of each subsidiary, and discusses appropriate countermeasures. Significant ESG issues identified through the Council's discussions are reported to the CEO.

Organizational Chart of the ESG Council



ESG-relevant Committees

In addition to the ESG Council, we also have committees for ESG-relevant sectors. We operate the Investment Deliberation Committee and the Business/Strategy Committee to support sustainable business practices and the administrative decision-making process.

ESG-relevant Committee List

Investment Deliberation Committee	• Reviewing the economic viability and ESG sustainability of investment projects, deliberating on the strategic direction of the investment portfolio, and assessing the appropriateness of funding and the risks of each investment structure
Business/Strategy Committee	• Setting the strategic direction and roadmap, and identifying new business opportunities through market sensing
Asset Review Committee	• Managing and optimizing investment assets by reviewing the company-wide portfolio and developing improvement plans
People Session	• Discussing and sharing key issues related to HR policies and systems
Employee Recognition and Discipline Committee	• Deliberating on employee rewards and disciplinary actions

ESG Policy

Responsible Investment Policy

We understand that environmental, social, and governance (ESG) factors can have direct or indirect impacts on us and our investments. As a result, we have developed a Responsible Investment Policy to ensure these factors are incorporated into all processes, and to integrate ESG into our existing approach. Responsible investment is defined as thoroughly considering ESG factors when making investment decisions. We are committed to complying with this policy to ensure the stable implementation of responsible investment practices over the long term.

Responsible Investment Principles

In forming a comprehensive policy for implementing responsible investment, we have established the following six principles. We have declared that we will observe these principles in all investment decision-making process.

1. We actively incorporate ESG factors in our investment analysis and decision-making processes.
2. We seek new investment opportunities from an ESG perspective, and contribute to the development of responsible investment.
3. We continuously communicate and cooperate with stakeholders to implement the responsible investment principles.
4. We continuously assess the ESG status of investment targets, and engage in activities that will have positive impacts.
5. We continuously strive to ensure our employees have the competence and expertise needed to implement responsible investment effectively.
6. We report on our responsible investment activities and their outcomes to transparently disclose the goal and status of responsible investment.

Responsible Investment Policy

Environmental Management Policy

We have developed and implemented an environmental management policy to promote sustainable management by conserving and enhancing the environment. This policy is applied to the business operations of GS Energy and its subsidiaries. We encourage our subsidiaries to adhere to the policy, without interfering with the independence of their management.

Environmental Management Policy

Charter of Human Rights

We recognize the importance of human rights, a universal value of humanity, and corporate social responsibility in the process of corporate management. We also work to ensure that we respect the human rights of our stakeholders. We established our Charter of Human Rights to provide a foundation for our human rights management. Its scope of application encompasses our employees, including those of our subsidiaries. In the event that requirements of our Charter of Human Rights conflict with local laws and regulations, the local laws and regulations shall take priority. Without interfering with the independence of their management, we encourage our subsidiaries to implement this Charter.

Charter of Human Rights

Code of Conduct for Partners

We have established a Code of Conduct for Partners to ensure that they embrace our sustainable management principles. We recommend that all partners, including our subsidiaries, voluntarily comply with this Code, regardless of their business location.

Code of Conduct for Partners

ESG Policy

Green Bond Management System

We have created the Green Bond Management System to carry out the Environment (Green) Award Project. The goal is to address climate change and enhance our commitment to eco-friendly practices. This system follows the Korean Green Bond Guidelines, and outlines the permissible uses of funds based on four key elements of green bonds. As Korea's first private energy company, we are proud to have issued Korean Green Bonds. Funds raised through the sale of these bonds are allocated to three K-Taxonomy eligible Green Projects: waste recycling, construction and operation of zero-emission transportation infrastructure, and renewable energy generation. These initiatives have led to our recognition as an Excellent Green Bond Issuance Company (Minister of Environment Award) in 2023.

Green Bond Management System

Materiality Assessment

Materiality Assessment Process

We have conducted materiality assessments to identify information that stakeholders should know about management issues in the area of sustainability. We selected key issues through a quantitative analysis and priority review of the impacts of each financial, environmental, and social issue.

Step 1 — Creation of Issue Pools
We analyzed the topics presented in the GRI Standards and European Sustainability Reporting Standards, and created 18 sustainable management issue pools to understand critical issues related to sustainable management.

Step 2 — Impact Analysis

Environmental and Social Impact Assessment
- Review ESG standards and guidelines from an environmental and social perspective (OECD Guidelines for Multinational Enterprises, SDGs, etc.)
- Identify critical issues for each power generation and energy company in the GS Group
- Benchmark key issues of other companies

Financial Impact Assessment
- Understand ESG-related laws and regulations
- Review the standard ESG disclosure from a financial perspective (SASB)
- Review key issues for each industry, as identified by external agencies

Step 3 — Selection of Key Issues
We set priority levels for the various issues based on the results of environmental, social, and financial impact assessments. After reviewing the order of priority, we have selected two key issues for 2024: climate change and safety and health.

Key Issues

Issue	Impact Type		Major Impact	Disclosure Standard & Initiatives			Compared to Previous Year[2]	Page
	Positive/ Negative	Current/ Potential		GRI	SASB[1]	SDGs		
Climate Change	Positive	Current	• An increase in opportunities for new eco-friendly businesses amid strengthened global GHG emissions regulations and the anticipated acceleration of the Korean government's energy transition policy	GRI: 305	IF-EU-110a	13 CLIMATE ACTION	No change	22-40
	Negative	Potential	• Funding conditions worsen due to changes in the capital market, such as the increase in challenges related to achieving carbon neutrality for key external stakeholders (e.g., financial institutions)					
Safety and Health	Positive	Current	• Efforts to establish safety and health management system, improve the level of safety awareness among employees, and minimize the occurrence of industrial accidents • Prevent legal risks by complying with laws and regulations related to safety and health, such as the Serious Disaster Punishment Act	GRI: 403	IF-EU-320a	8 DECENT WORK AND ECONOMIC GROWTH	No change	53-60
	Negative	Potential	• Reduced productivity and manpower when an industrial accident occurs due to the poor safety and health management system • Potential for legal liabilities and reputational risks due to violations of safety and health-related laws and regulations					

1) SASB Electric utilities and power generators
2) Changes in key issues compared to the previous year

Stakeholder Engagement

Stakeholder Communication

We engage with both internal and external stakeholders to gather their feedback and incorporate it into our management practices, with the goal of promoting sustainable development. This process starts with identifying the various stakeholders related to our business operations or services, as well as those who have shared economic, environmental, or social interests. Based on our internal guidelines, our stakeholders are divided into the categories of employees, investors, and local communities, and we communicate with them consistently and dependably to better understand their expectations.

Stakeholders and Key Communication Channels

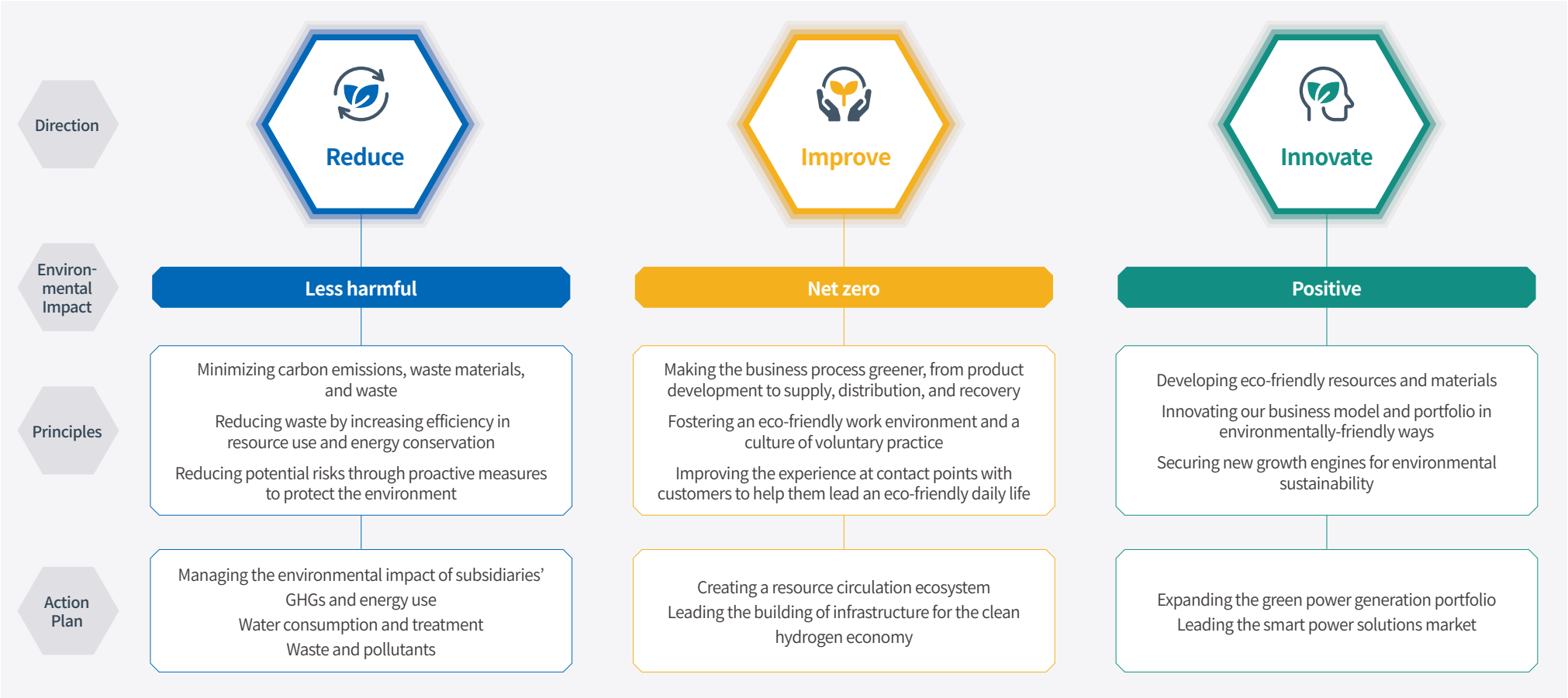
	Employees	Stakeholders & Investors	Affiliates & Investment Companies	Governments & Local Communities	Academia & Research Institutes
Communi-cation Channels	• Business briefing sessions • GSE Round (Labor-Management Council)	• General shareholders' meeting and BOD • GS Group's ESG Council • Websites for disclosure (e.g., DART)	• GS Group's ESG Council • Extended executive board meeting of GS Energy • ESG Council of GS's electricity generation and energy companies	• Energy-related associations and organizations • Meetings and workshops	• Joint technology research • Meetings and workshops
Key Interests	• Improving the work environment • Non-discrimination and respect for human rights • Job security • Fair performance evaluations • Opportunities for competency development	• Business portfolio diversification • Reinforcement of financial stability • Legal compliance • Transparency in tax payments	• Prevention of unfair transactions and corruption • Win-win growth and cooperation between companies • ESG risk identification and mitigation	• Local community development • Legal compliance related to the environment and society • Protection of customer information	• Strengthening industrial-educational cooperation • Joint technology research and development
Response by GS Energy	• Human rights management • Innovation of the HR system • Welfare system • Capacity-building program	• Stable revenue generation • Reinforcement of project execution competencies • Engagement in government policy development • Disclosure of ESG data	• Increased venture capital investment in Korea and foreign countries • Fair business relations • Operation of communication channels • Expansion of the scope of ESG management	• CSR aligned with business • Donations and support • Monitoring for compliance with laws and regulations • Strengthening our competence in protecting customer information	• Industrial-academic projects to analyze climate risks • Working for open innovation

ENVIRONMENTAL

Environmental Management System

GS Energy's Environmental Management System

In a proactive effort to respond to the growing social demand for companies to address climate change and minimize our environmental impact, GS Energy aims to actively engage in a transition to low-carbon and eco-friendly operations. We have established specific mid- to long-term action plans in line with GS Group's direction for environmental impact management and the promotion of environmental management, with a focus on the "Beyond" strategy. In addition, GS Energy is monitoring the environmental impact of our major subsidiaries, such as GS Power and Incheon Total Energy, to fulfill our environmental responsibility as a holding company.



Response to Climate-Related Financial Disclosures (TCFD)

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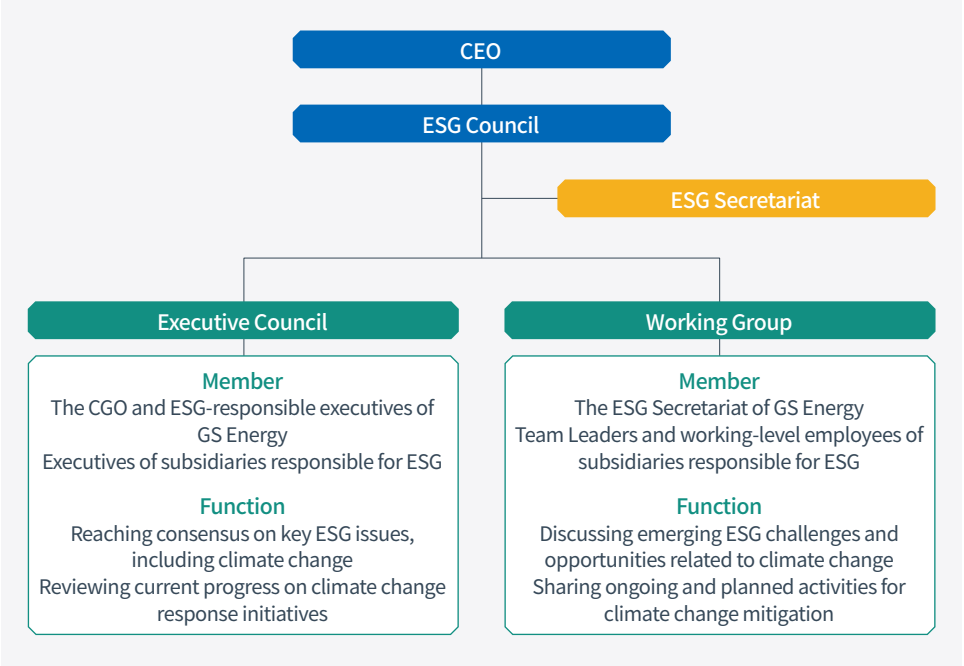
Response to Climate-Related Financial Disclosures (TCFD) Governance

Monitoring and Supervision of Climate Risk and Opportunity

At GS Energy, the CEO, as the highest decision-maker, is responsible for addressing key issues related to managing climate change-related risks and opportunities. The CEO also oversees management activities related to climate change, and reviews the appropriateness of response activities. In addition, we have the ESG Council for GS's electricity generation and energy companies, which consists of GS's major subsidiaries[1)] and is led by the ESG Secretariat to support the CEO. The ESG Council is divided into the Working Group and the Executive Council, and the subsidiaries share their climate change responses in the Council. This allows for a comprehensive review of the climate change responses of the subsidiaries, with key issues identified in the Council reported to the CEO.

1) GS Power, Incheon Total Energy, Boryeong LNG Terminal, GS Caltex

Governance System



ESG Council Log

Date	Key Issue	Reported to the CEO
April 2024	• Progress on international carbon reduction projects and future plans • Status of key climate change mitigation initiatives	●
July 2024	• Analysis and outlook of the domestic carbon credit market • Overview and forecast of carbon credit management	●
September 2024	• Plans to establish a robust ESG disclosure framework (climate, etc.) • CDP response roadmap	●
February 2025	• Physical risk assessment plan for GS Energy's assets • ESG progress updates and plans of each company	
March 2025	• International carbon credit market trends • Status of delegated trading activities in emission trading schemes	

Response to Climate-Related Financial Disclosures (TCFD) Strategy

Electrical Power & District Heating

Overview

GS Energy produces electricity and heat through GS Power's combined heat power plants, and the heat is supplied to Anyang, Bucheon, and the surrounding areas. By acquiring shares in Incheon Total Energy and Cheongra Energy, we have also established a large-scale network that supplies heat to 700,000 households, mainly in the southwestern part of the metropolitan area. Through these subsidiaries, we are maximizing the impacts of our district heating business, which include large-scale energy savings and GHG reductions through energy efficiency improvements, diversification of the national power supply through distributed energy resources, and convenience in energy use for the residential and industrial sectors. In addition, GS Energy has expanded its electric power business by acquiring shares in Shin Pyeongtaek Power and Dongducheon Dream Power, which own LNG-fueled combined-cycle power plants. We will continue to expand our power business and establish a foundation for stable profits by proactively identifying new opportunities in this sector, both at home and abroad.

Heat Supply Using Unutilized Energy

Heat production	In-house production (Gcal)	Utilization of Unused Energy (Gcal)	Unutilized Heat Ratio (%)
GS Power	1,868,635	1,549,318	0.45
Incheon Total Energy	705,525	381,661	0.35
With Incheon Energy	60,035	375,114	0.86
Cheongna Energy	2,786	1,459,145	1.00

Action Plan for Climate Risks and Opportunities

Category	Type		Climate Risks and Opportunities	Action Plan
Risk	Transition	Policy & Regulation	Higher barriers to starting the district energy business created by stricter permit criteria for LNG combined heat power projects	• Exploring joint development opportunities with other power companies, including a project related to the replacement demand for aging power generation facilities
			Increasing carbon credit demand and price volatility driven by enhanced national GHG reduction targets (NDC) and the expansion of paid allocation schemes	• Exploring domestic and international carbon reduction business opportunities to secure offset credits • (Cheongna Energy) Securing 5,000-6,000 tCO_2eq annually via KOC (reducing fossil fuel usage by utilizing waste heat)
		Technology	Lack of commercialized decarbonization technologies, such as hydrogen co-firing and CCUS, applicable to operational gas-fired power plants (currently in the R&D phase)	• Seeking participation in R&D initiatives in collaboration with the government and other decarbonization technology researchers
		Market	Rising fuel cost burden and power generation costs due to LNG price surges amid geopolitical instability	• (GS Power) Mitigating price risk through high-efficiency facility upgrades at Bucheon Combined Heat Power Plant • Enhancing resilience against fuel price volatility through value chain linked to an LNG trading subsidiary
	Physical Risk		Increased exposure to risks such as heat waves and heavy rainfall leading to reduced power generation efficiency and potential asset damage	• Conducting science-based physical risk analysis across existing and new subsidiaries • Reviewing subsidiaries' response strategies, including heat-resilience facility management and operational optimization
Opportunity	Policy & Regulation		Strengthened regulations on building-sector GHG emissions, leading to the expansion of mandatory Zero Energy Building certification to new private buildings starting in 2025	• (GS Power, Incheon Total Energy, Cheongna Energy) Supplying district heating by recovering unused energy from surrounding plants (e.g., waste heat from incineration) • Advocating for policy updates to recognize waste or recycled heat in Zero Energy Building certification criteria, securing new heating demand sources
			Increasing demand for overseas carbon reduction projects under strengthened NDC and international decarbonization obligations	• Pursuing participation in government-supported overseas projects and VCM carbon credit projects
			Emerging business opportunities from grid instability caused by distributed energy policies and the rapid expansion of renewable energy	• Developing AI-based grid stabilization solutions leveraging BESS capabilities
			Emerging clean hydrogen supply and power generation business opportunities from the introduction of a competitive bidding system	• Securing import channels for clean hydrogen and ammonia, and preparing for participation in future biddings • (With Incheon Energy) Awarded a domestic hydrogen power generation project in 2024 (commercial operation expected by March 2026)

Response to Climate-Related Financial Disclosures (TCFD) Strategy

Refining & Petrochemicals

Overview

We have achieved global competitiveness in the oil refining, petrochemical, and lubricant industries through our subsidiary, GS Caltex, which is a world-class refining and petrochemical company. Our advanced processing capabilities are particularly notable, thanks to our large crude oil refining facilities and heavy oil upgrading technology. In addition, we have established Lotte GS Chemical, a specialized chemical materials company, in partnership with Lotte Chemical. This collaboration strengthens our position in the refining and chemicals sector. Lotte GS Chemical produces C4 fraction, butadiene, and TBA at the Yeosu Industrial Complex, and is preparing to expand its high-value materials business to include phenol production. The company sources raw materials from GS Caltex and supplies products to a range of customers, including Lotte Chemical, ensuring a stable supply chain and improved market access. Furthermore, in 2023 we established H&G Chemicals through a partnership with Hanwha Solutions. By receiving ethylene from GS Caltex, H&G Chemicals aims to supply EVA to global solar power component manufacturers through Hanwha Solutions, enhancing its role in the renewable energy value chain. With our expertise and experience, we are committed to generating sustained profits and reinforcing our competitiveness through sound operations in both domestic and international refining and petrochemical businesses.

Action Plan for Climate Risks and Opportunities

Category	Type		Climate Risks and Opportunities	Action Plan
Risk	Transition	Policy & Regulation	• Increasing production costs driven by higher expenses under the strengthened emissions training scheme	• Reducing emissions credit procurement costs through portfolio optimization • (GS Caltex) Exploring domestic and international decarbonization projects to secure offset credits through external decarbonization projects • Advancing emissions monitoring by developing an integrated energy and GHG management system
			• Potential decline in export competitiveness if products fail to meet carbon standards under stricter EU CBAM and international shipping and aviation regulations (ICAO and IMO)	• Implementing LCA to measure the carbon intensity of each product, and expand its application in product development • Expanding product portfolio with low-carbon fuels and chemical products (biodiesel, bio-marine and aviation fuels, etc.)
		Market	• Reduced demand for gasoline and diesel due to EV adoption and energy transition	• Diversifying the demand portfolio through the expansion of EV charging business operations • Expanding product portfolio by conducting demonstrations and commercializing bio fuels • Expanding into solar power and petrochemical materials to support energy transition in response to declining traditional fuel demand
			• Need to manage heightened price volatility of crude oil and petroleum products due to geopolitical risks such as the Russia-Ukraine conflict	• Operating Risk Management Committees in subsidiaries to identify and mitigate market price fluctuation risks in crude oil and petroleum products
		Reputation	• Increased risk of greenwashing allegations due to misconceptions about fossil fuel companies and heightened scrutiny from NGOs	• Strengthening environmental responsibility and transparency through TCFD-based sustainability reporting
	Physical Risk		• Potential financial losses from asset damage, supply disruptions, and increased insurance costs in the event of disasters • Production disruptions from insufficient access to water resources under worsening water stress	• Upgrading and maintaining disaster-prevention facilities (mooring systems, ground reinforcement, etc.) • Diversifying water supply channels and pursuing water reuse solutions
Opportunity	Policy & Investment		• Growing availability of green bonds and transition bonds to access tax incentives and subsidies for low-carbon facility investment	• Reducing capital costs through the issuance of green bonds in 2019 and participating in low-carbon facility support programs (Ministry of Trade, Industry and Energy's financing for emissions reduction facilities in 2023)
	Market		• Increasing demand for biofuels and recycled raw materials • Rising international sustainability certification requirements for chemical materials	• Expanding product portfolio with low-carbon fuels and chemical products (biodiesel, bio-marine and aviation fuels, etc.) • Obtaining global certifications for biofuels

Response to Climate-Related Financial Disclosures (TCFD) Strategy

Gas

Overview

We have established a strong foundation for our LNG business by creating a trading corporation for direct LNG imports and operating an LNG regasification terminal. A competitive LNG supply has been secured through a long-term contract with GS Energy Trading Singapore PTE. LTD, an LNG trading company, and by conducting thorough market analysis. Through the Boryeong LNG Terminal, we provide natural gas for power generation, industrial use, and self-consumption to direct LNG importers in South Korea. Looking ahead, we plan to expand our competitive fuel supply system to meet the growing demand for direct natural gas imports. This includes enhancing our LNG capabilities by adding more storage tanks and expanding the terminal. Recently, we initiated a joint project for the Northeast Asia LNG Hub Terminal, which involves developing large-sized LNG storage and bunkering facilities in Myodo-dong, Yeosu-si, Jeollanam-do, South Korea. This project will further strengthen our LNG business by expanding our terminal operations. In addition, we aim to establish a solid foundation to become a global player by creating an integrated LNG value chain and exploring overseas business opportunities by starting upstream operations.

Action Plan for Climate Risks and Opportunities

Category	Type		Climate Risks and Opportunities	Action Plan
Risk	Transition	Policy & Regulation	• Increasing direct import and transportation risks driven by the introduction of global methane reduction regulations and accelerated domestic legislative discussions	• Monitoring global and domestic methane regulatory trends and evaluating pilot methane measurement initiatives
			• Lower natural gas demand and reduced terminal utilization rates due to national energy policies requiring a lower gas-fired power generation share	• Exploring additional terminal utilization opportunities, including assessing demand for natural gas as a raw material for domestic hydrogen production • Securing overseas clean hydrogen and ammonia suppliers and pursuing opportunities to participate in related biddings
		Market	• Rising procurement costs and profitability risks amid heightened global LNG price volatility	• Securing competitive LNG in a timely manner, leveraging volumes under long-term LNG contracts while reflecting market conditions
			• Heightened financial and reputational risks from increased methane monitoring by NGOs and ESG investors	• Monitoring global and domestic methane regulatory trends and evaluating pilot methane measurement initiatives
		Reputation	• Growing stakeholder expectations for environmental performance in the gas business and reputational risks	• Evaluating the introduction of eco-friendly LNG such as biogas blends • Strengthening integrity through voluntary emissions credit quality assessment when introducing carbon-neutral LNG[1)]
	Physical Risk		• Exposure to revenue loss and asset damage risks from natural disasters such as typhoons, floods, and sea-level rise	• Considering expansion of physical risk analysis scope using science-based tools (satellite, AI, etc.)
Opportunity	Policy & Investment		• Increasing demand for LNG bunkering under strengthened IMO GHG emissions regulations	• Exploring business opportunities in the LNG bunkering sector
	Market		• Maintained or increased short- to medium-term demand as LNG is recognized as a bridge fuel and an energy source that contributes to grid stability	• Expanding terminal capacity through the Northeast Asia LNG Hub Terminal development project

1) Carbon-Neutral LNG: LNG for which carbon emissions generated throughout the production, transportation, and consumption stages are offset by certified voluntary carbon credits.

Response to Climate-Related Financial Disclosures (TCFD) Strategy

Exploration & Production

Overview

In March 2012, GS Energy became the first Korean company to participate in the development of a crude oil field in the UAE, a sector previously dominated by major global oil companies, through which it laid the groundwork for its expansion into the Middle East. In May 2015, the company further solidified its presence in the region by participating in the development of a giant oil field in the UAE, achieving a daily crude oil production of approximately 45,000 barrels. GS Energy's daily oil production in Abu Dhabi accounts for about 1.8%[1] of South Korea's daily oil consumption and is entirely sold to major international companies. By leveraging its global network and strategic partnerships, GS Energy will continue to advance its E&P business as a core asset of the company, and contribute to securing energy resources for South Korea.

1) Domestic daily oil consumption: approximately 2.54 million barrels (source: Petronet) Al Dhafra: 4,100 barrels/day, ADNOC Onshore 41,300 barrels/day

Action Plan for Climate Risks and Opportunities

Category	Type		Climate Risks and Opportunities	Action Plan
Risk	Transition	Policy & Regulation	• Increased operating cost due to the UAE's declaration of carbon neutrality, and possible introduction of a carbon pricing scheme • Higher costs anticipated from investments in emissions reduction facilities amid expected tightening of GHG regulations in oil field development	• (ADNOC) Establishing the target of net-zero 2045 and making efforts to reduce emissions (6.2 million tCO_2e reduction achieved in 2023)
		Market	• Declining oil and gas demand and increased price volatility resulting from accelerated energy transition	• Diversifying portfolio (LNG value chain, hydrogen, EV charging, etc.) to reduce fossil fuel dependency and mitigate price risks
		Reputation	• Heightened social criticism and pressure from NGOs on fossil fuel operations, which may impact corporate reputation and financing costs	• Enhancing ESG disclosures based on TCFD recommendations (including climate risks and opportunities and eco-friendly businesses) • Reducing financing costs by issuing green bonds based on renewable energy businesses such as solar power
Opportunity			• Improving production efficiency and reducing energy consumption through emissions reduction initiatives	• (ADNOC) Advancing energy efficiency and productivity by leveraging company-wide energy monitoring, AI-driven operational optimization, and waste heat recovery under the net-zero strategy
			• Promoting the transition to blue hydrogen and low-carbon ammonia production	• Participating in ADNOC's blue ammonia production project and advancing domestic commercialization

*Due to our participation in major UAE oil field development projects (ADNOC Onshore, Al Dhafra Petroleum) through a partnership with ADNOC, certain disclosures incorporate the UAE government's and ADNOC's climate response efforts, with reference to sources such as ADNOC's 2023 Sustainability Report.

Response to Climate-Related Financial Disclosures (TCFD) Strategy

New Business | Clean Hydrogen CCS

Background

Clean Hydrogen Transition to Low-Carbon Fuels and Expansion of Hydrogen Utilization

As the global trend toward decarbonization accelerates, hydrogen and ammonia are expected to play pivotal roles in the energy market. These two fuels are gaining attention as clean energy sources that can replace fossil fuels. Their potential applications are expanding beyond just power generation into various industrial sectors. South Korea aims to have its coal-fired power plants utilize a 20% mixture of ammonia, and is introducing the clean hydrogen power bidding market starting in 2024. We are also witnessing a growing market in countries like Japan, Saudi Arabia, and Singapore, as they expand their production and export of clean ammonia. Notably, an increase in demand of the global marine sector is anticipated. The International Maritime Organization (IMO) has set a target of a 50% reduction in marine emissions by 2050 compared to 2008 levels. The International Energy Agency (IEA) has highlighted hydrogen and ammonia as viable alternative fuels. As a result, global companies have been encouraged to invest in the development and operation of hydrogen- and ammonia-powered ships, which is expected to drive further growth in demand. In this context, energy companies may view the hydrogen and ammonia sector as new growth opportunities by establishing infrastructure for ammonia importation and securing cracking technologies. In addition, the rising demand across various sectors, including marine transportation, is poised to become a major driver of the long-term growth of the hydrogen and ammonia market.

CCS Increasing Necessity of Decarbonization in the Industrial Sector and Carbon-neutral Infrastructure Businesses

It is essential to reduce carbon dioxide emissions in industrial sectors in order to achieve carbon neutrality. Carbon Capture and Storage (CCS) technology, which captures and stores carbon dioxide, is a practical solution for reaching this goal. CCS is particularly necessary in the steel and petrochemical industries, which produce significant amounts of emissions. According to the International Energy Agency (IEA), 7.6 billion tons of CO_2 should be processed using CCS, and more than 300 CCS projects are currently underway around the world. The Korean government has established a plan to process 11 million tons of CO_2 with CCS annually. Energy companies can implement CCS projects in various ways, such as capturing CO_2 at refining and hydrogen production facilities and establishing transportation networks. Moreover, by extending into CCUS projects that make use of captured carbon as a resource, there is an opportunity to emerge as an infrastructure leader in the carbon-neutral era.

GS Energy's Response

GS Energy

We are gradually pursuing businesses to secure future energy sources, particularly clean hydrogen and ammonia, and are participating in a variety of projects aimed at transforming both the domestic and international hydrogen infrastructure.

One significant project we are involved in is the blue ammonia production, which aims to produce one million tons annually and is led by the UAE's national oil company, ADNOC. At the end of 2022, we secured a contract for 200,000 tons of clean ammonia with major participants. This clean ammonia will be used as fuel for hydrogen-based energy generation in Korea and other countries. In line with these efforts, we are considering participating in various global hydrogen and ammonia projects in North America, the Middle East, and Australia. In addition, we are working on establishing infrastructure to import fuels produced overseas into Korea to supply primary end-users, including power plants. This includes securing terminals and pipelines and developing customer relationships. We are also actively seeking cooperative structures that create synergies with key assets within the GS Group.

In addition, we are exploring new business opportunities in the Carbon Capture and Storage (CCS) sector. CCS is a technology that captures and stores carbon in offshore or depleted gas fields, and it is primarily led by global major oil companies with expertise in oil development. We focus on capturing carbon dioxide in Korea and storing it near the coast or in overseas facilities, and are actively exploring the feasibility of these projects in partnership with various industrial stakeholders.

Response to Climate-Related Financial Disclosures (TCFD) Strategy

New Business | Solar Power

Background

Solar Power Generation Development of Solar Power Plants and Increasing Demand for Integrated ESG Solutions Following the Growing Renewable Energy Sector

As the share of renewable energy continues to rise, solar power has become one of the fastest-growing energy sources. According to the International Energy Agency (IEA), more than 60% of new electricity facilities worldwide are expected to be powered by solar or wind energy. South Korea also plans to increase the share of renewable energy to 30.6% by 2036. This trend gives energy companies the opportunity to establish a stable, low-carbon power profit structure by developing solar power plants in diverse locations, including unused lands, industrial complexes, offshore areas, and buildings, both in Korea and abroad. Recently, there has been a growing demand for integrated solar power and energy storage solutions, particularly those combining solar power with BESS, which enhances their potential added value.

In South Korea, solar electricity can be supplied in two primary ways. First, it can serve as a means to implement RE100 and reduce Scope 2 emissions through Power Purchase Agreements (PPAs) or unique consumption models. Second, it can be sold to customers adhering to a Renewable Portfolio Standard (RPS) by obtaining Renewable Energy Certificates (RECs). By leveraging these two different market opportunities with a single generator, we can greatly enhance the attractiveness of the solar power business.

GS Energy's Response

GS Dangjin Solar Farm

GS Dangjin Solar Farm, a fully-owned subsidiary of GS Energy, was established in October 2020 in Chorakdo-ri, Seokmun-myeon, Dangjin, Chungcheongnam-do, South Korea. The farm operates a large-scale solar power business and is equipped with facilities capable of producing 230,000 MWh of electricity annually, which is enough to power approximately 100,000 households for a year. In alignment with the Korean government's renewable energy initiatives, GS Dangjin Solar Farm aims to serve as a model power plant that reliably supplies clean energy to local communities. The company is committed to continuously enhancing operational efficiency and reducing carbon emissions, thus contributing to the development of a renewable energy-focused power ecosystem.

Response to Climate-Related Financial Disclosures (TCFD) Strategy

New Business | SMR

Background

Opportunities for Climate Change Countermeasures Next-Generation Zero Carbon Power Technology for Carbon Neutrality

With the global effort towards carbon neutrality, diversifying the energy mix and ensuring supply stability have become critical issues. This has led to an increased interest in small modular reactors (SMRs) as an alternative technology. SMRs are nuclear reactors with a power capacity of up to 300 MW. They offer greater safety compared to conventional reactors, are suitable for small-scale distributed installations, feature shorter construction timelines, and have relatively lower costs. These advantages position SMRs as a stable baseload power source that can help mitigate against the intermittency of renewable energy sources.

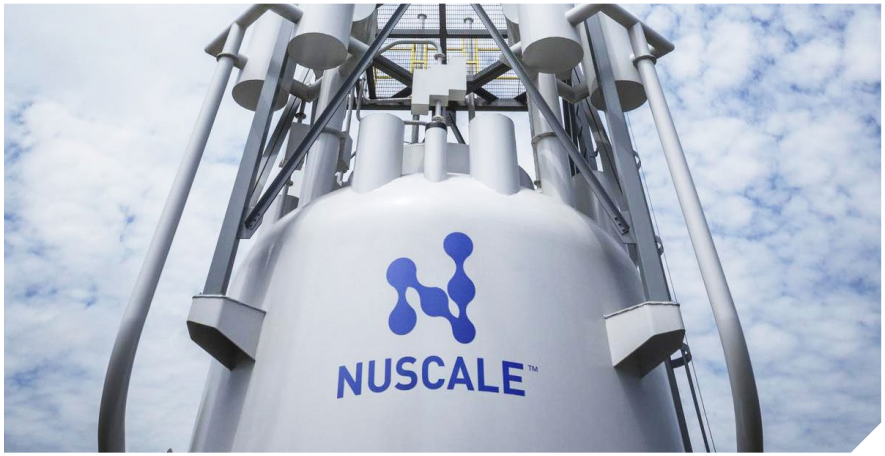
Most importantly, SMRs are classified as zero-carbon power sources, emitting minimal greenhouse gases during power generation. This characteristic aligns directly with the CFE Initiative, which is a collaborative effort between global corporations and energy authorities aimed at utilizing zero-carbon power 24/7. The initiative pursues real-time power consumption and zero-carbon power generation, expanding the previous goal of annual renewable energy procurement. Major global tech companies, including Google, Microsoft, and Nvidia, along with the U.S. Department of Energy and various European energy authorities, are actively involved in this initiative. Their participation includes strategies to maximize decarbonization effects by integrating various zero-carbon technologies, such as nuclear facilities, renewable energy, and combined heat and power systems. In addition, the EU Taxonomy recognizes nuclear power generation as an environmentally-friendly economic activity that contributes positively to the environment and climate. As an energy company, strategically exploring zero-carbon power sources like SMRs and proactively including them in energy portfolios can enhance our ESG capabilities. This approach goes beyond merely transforming power sources to include setting RE100 targets, engaging cooperatively in the global CFE initiative, and securing methods to reduce Scope 1 emissions in the long term.

GS Energy's Response

NUSCALE Power for all Humankind

In June 2021, we began to make strategic investments in NuScale Power, a leader in global SMR technology, and secured exclusive business rights on the Korean Peninsula. NuScale Power received design certification from the Nuclear Regulatory Commission (NRC) for its SMRs, and also has obtained standard design certification for its 77 MW model, positioning it as a technical leader in the field. Leveraging this strong position, the company aims to commence its first commercial operations in 2030 with support from the U.S. Department of Energy.

GS Energy is committed to actively pursuing SMR business development activities while continuously expanding our clean energy portfolio with a focus on SMRs. We aim to introduce and develop innovative technologies that will contribute to the era of carbon neutrality. Through this approach, we will strive to provide stable and sustainable eco-friendly energy, paving the way for a cleaner future worldwide.



Response to Climate-Related Financial Disclosures (TCFD) Strategy

New Business | Waste Battery Recycling

Background

Waste Battery Establishing a Battery Collection System and Expanding Circular Economy Businesses Based on Recycling Certifications

As the EV and energy storage system (ESS) markets grow rapidly, it has become critical to develop effective processes for recycling waste batteries. These batteries contain essential metals, including nickel, cobalt, and lithium, making it crucial to focus on their collection and reuse rather than simple disposal, particularly from a resource security and supply chain stability perspective. In the European Union, the use of a certain percentage of renewable materials has already been made mandatory. Similarly, South Korea plans to introduce related initiatives gradually, starting with a recycling certification system in 2025, followed by mandatory functional assessments in 2027. In May 2024, Korea's Ministry of Environment announced the Battery Circulation Utilization Plan, which outlines specific actions required to establish a comprehensive life-cycle framework. This plan includes the introduction of a certification system, the implementation of recycled material usage targets, eased recycling regulations, advancement of related technologies, and the development of a traceability system. These approaches create a highly favorable environment for companies looking to enter the battery recycling business. Amid this trend, energy companies have the opportunity to establish new revenue streams while contributing to carbon reduction goals. They can achieve this by building used battery collection networks, securing long-term supply agreements with battery manufacturers, and developing technologies for recovering valuable metals such as nickel and cobalt.

Waste battery recycling is increasingly being recognized as an essential tool for reducing Scope 3 emissions, in addition to promoting resource circulation. Battery manufacturers and EV companies can proactively address the European Union's battery regulations and the Carbon Border Adjustment Mechanism by establishing a supply chain based on renewable materials. In summary, waste battery recycling projects are moving beyond simple resource recycling, to gain traction as a high-value circular economy business model that fulfills three key objectives: carbon reduction, resource security, and compliance with international regulations.

GS Energy's Response

GS Energy

In response to the increasing number of used batteries resulting from the growing supply of EVs, we have established a business model that is focused on recycling waste batteries and promoting resource circulation. To achieve this, we have secured the necessary technologies and diversified our business model across the entire value chain, which includes battery diagnosis, decomposition, material collection, and resupply. To start, we have invested in MinTech, a company that specializes in battery diagnosis and evaluation, and have partnered with GS Mbiz, which operates a nationwide automobile maintenance network. These collaborations enabled us to launch B-BRIDGE, a real-time monitoring service app for EV batteries, enhancing our life-cycle management system. Furthermore, to build a strong technological foundation for recycling lithium, nickel, cobalt, and manganese from waste batteries as cathode battery materials, we have made investments in and partnered with several companies. This includes SCTPS, a specialist in battery transportation and packaging, and Thoth, which utilizes AI-powered robots for the automatic disassembly of batteries. In addition, we have invested in EVCC, a company with capabilities for producing black powder and securing raw materials, as well as ECO RNS, which employs pyrometallurgy technology to recover lithium from waste batteries.

POSCO-GS Eco Materials

In December 2022, we established POSCO-GS Eco Materials in partnership with POSCO, a company dedicated to recycling. POSCO-GS Eco Materials is 51% owned by POSCO Holdings and 49% owned by GS Energy. The company focuses on battery recycling, collecting lithium, nickel, and other metals from used EV batteries and supplying them as cathode battery materials. Through this initiative, we have created a resource circulation-oriented battery value chain, reducing our dependence on material imports. Looking ahead, the company aims to expand into the BaaS area, which will include battery diagnosis, evaluation, and reuse, transforming our offerings into high-value-added services. POSCO-GS Eco Materials operates with a strategic partnership model that enhances stable materials procurement and value chain integration capabilities, particularly as market uncertainties grow with the decreasing demand for EVs.

Response to Climate-Related Financial Disclosures (TCFD) Strategy

New Business | Smart Energy Solutions

Background

Expansion of Power Infrastructure Driven by EV Adoption

With internal combustion engine phase-out policies and the rapid adoption of EVs, charging infrastructure has emerged as a critical enabler of carbon neutrality goals. The Korean government has set a target of deploying 4.5 million EVs cumulatively by 2030, while encouraging private-sector investment in charging station development. However, a temporary slowdown in the EV market's growth could temper the pace of infrastructure expansion. In this transitional phase, strategic site selection, tailored service development, and enhanced energy connectivity will be essential. Energy companies have opportunities to develop both fast and slow charging stations, operate integrated charging networks in conjunction with commercial and residential facilities, and manage power demand through EV-based solutions. Notably, charging infrastructure holds significant potential to evolve into next-generation power services such as vehicle-to-grid (V2G), smart charging, and distributed energy resource integration.

Accelerating the Digital Power Transition through Distributed Energy

As the energy transition accelerates, power systems are shifting from centralized to distributed and digital architectures. The growing deployment of distributed resources, including solar power, ESS, demand response (DR), and EV charging, underscores the increasing importance of integrated control and optimization through 'smart power solutions.' Globally, next-generation energy portfolio platforms combining AI with advanced energy technologies are gaining traction, with some companies already using AI to automate real-time demand forecasting and distributed resource aggregation. These technology-based energy operational models are recognized as solutions than can enable companies to meet RE100 and Scope 2 and 3 emission reduction targets.To effectively reduce emissions from corporate electricity consumption and supply chains, companies require operational systems that are capable of accurately forecasting and optimizing energy usage while increasing the share of renewable energy in their power mix. Smart power solutions have the potential to serve as critical infrastructure that can fulfill these needs.

GS Energy's Response

GS ChargEV

GS CHARGEV operates the nation's largest electric vehicle charging network, with approximately 72,000 units, offering an integrated charging solution from infrastructure development to operations for both slow and fast charging. Leveraging technology-driven capabilities such as fault prediction, operational optimization, real-time charger monitoring, and utilization-based deployment planning, the company focuses on enhancing both profitability and reliability. In addition, CHARGEV plans to launch a smart-controlled slow charger that combines safety with efficiency. Over the long term, the company aims to expand its business into V2G bidirectional charging and virtual power plant (VPP) integration, moving beyond charging infrastructure to support the flexibility of the power market and contribute to the climate change mitigation effort.

SCALAR

SCALAR DATA operates an integrated platform for EV chargers called "EV Modu." The company has integrated complex EV charging payment methods, and provides EV charging services for individuals and the My Car Service for the convenient use of EVs.

HAEZOOM

As a satellite data and artificial intelligence technology-based energy IT company, Haezoom is accelerating the development of technologies for its energy platform and VPP businesses. It is also conducting an R&D project worth over KRW 20 billion to advance power generation forecasting and electricity analysis technologies for its VPP business. Currently, the company is one of the leading energy companies participating in a real-time market demonstration project on Jeju Island. With its Haezoom Platform, which has over two million users, the company has established itself as a prominent solar power and energy enterprise, and actively engages in direct PPA transactions. Recently, it has developed a new business by linking its DR (demand response) business with EV charging providers to generate revenues and contribute to the development of VPP technology. Moving forward, Haezoom plans to promote its IT-based cleantech business for cleaner energy and more sustainable growth.

Response to Climate-Related Financial Disclosures (TCFD) Strategy

New Business | Investment in Climate Technology

Background

Innovative Climate Technology and Investment Market Expansion to Address Climate Change

As the response to climate change becomes essential for business survival and growth, the focus on technology as a means to respond effectively has become critical, even within the energy industry. Energy companies are actively pursuing new business opportunities and achieving ESG goals through the climate technology sector. Climate technology encompasses a range of solutions designed to combat climate change by leveraging advancements in various areas, including energy transition, resource efficiency, carbon reduction, and circular economy practices. Notably, sectors such as power grid optimization, energy storage systems (ESS), carbon capture, utilization, and storage (CCUS), as well as clean fuels (hydrogen and ammonia), are gaining traction as pivotal components closely tied to the energy industry.

Recently, there has been a growing trend of investing directly in climate technology startups with promising innovations or allocating capital to climate-focused technology funds. These initiatives aim to integrate low-carbon technologies at an early stage while fostering synergies with external innovations. Beyond seeking short-term financial returns, such investments lay the groundwork for enhancing long-term resilience against climate risks and improving business adaptability through the digitalization of power markets, the decarbonization of energy portfolios, and the development of open innovation strategies that utilize cutting-edge technologies. For energy companies, proactive engagement in the climate technology sector is not just a financial investment; it represents a strategic decision to secure technological leadership in the future power market and carbon-neutral economy, while also mitigating the costs associated with the transition to sustainable energy.

GS Energy's Response

GS Energy

We established the Global Investments to invest in and develop businesses that provide energy economically, reliably, and sustainably. The Global Investments selected three investment areas based on the latest global energy industry trends, and we seek to secure future growth engines by reviewing and investing in overseas companies with leading technologies and funds.

Response to Climate-Related Financial Disclosures (TCFD) Strategy

New Business | Startup Discovery

GS Energy's Response

The GS Challenge

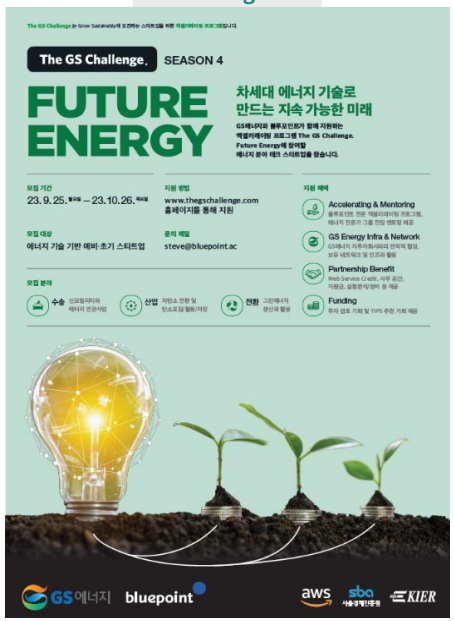
The GS Challenge was launched in 2021 to search for promising startups that can collaborate with GS Energy in our efforts to create a sustainable future based on next-generation energy technologies. The program targets early-stage startups and pre-startups with next-generation energy technologies. Selected startups are offered various growth opportunities, which include discussing strategic collaboration with GS Energy and attracting investment through a five-month accelerator program. The fourth GS Challenge ended in May 2024. In this fourth challenge, six startups were selected: Bigtorage, Leemobility, CBBS, ATB Lab, GT, and Sevasa. We hold an Alumni Day for the selected startups and create opportunities for them to cooperate with external institutions, providing a range of growth opportunities through this open innovation program.

Challenge 1

Challenge 2

Challenge 3

Challenge 4



Response to Climate-Related Financial Disclosures (TCFD) Strategy

Physical Risk Analysis

Analysis Overview

To develop proactive countermeasures for the physical risks associated with climate change, we conducted a thorough analysis of the financial impacts on GS Power (Anyang) and Incheon Total Energy (Songdo). We selected major disaster types based on the characteristics and locations of each site, analyzed hazards by producing customized climate data, and performed modeling that considered asset information and operational characteristics to evaluate our financial risks.

Analysis Process

1. Analysis Target Selection and Period
- GS Power (Anyang), Incheon Total Energy (Songdo)
- 2025 – 2100

2. Target Disaster Research and Selection
- Disaster research for power plants
- Geographic feature research
- Disaster history research

3. Scenario Selection and Climate Data Production
- Scenario: SSP2-4.5, SSP5-8.5
- Data Collection: Collecting high-resolution satellite and ground data
- Data Production: A 30-m resolution; Daily data production

4. Hazard Analysis
- Number of days exposed to risks
- Risk score per disaster

5. Financial Risk Analysis
- Physical damage risk

Analysis Target Disasters

The types of climate disasters that power plants may encounter include: 1) sea level rise, 2) heavy rainfall, 3) typhoons, 4) water stress (drought), and 5) extreme heat and cold waves. Given the geographic characteristics and historical disaster data of the analysis targets, we did not select typhoons as an analysis target due to the relatively small damage size and low probability of impact.

Scenario Selection

We conducted a parallel analysis of the SSP2-4.5 (Intermediate Pathway)[1] and SSP5-8.5 (High-Emissions Pathway)[2] scenarios from the IPCC Sixth Assessment Report (AR6). These scenarios were selected for their relevance in assessing the range of potential climate risks based on varying levels of policy implementation, and for their applicability in informing the Company's strategic planning and prioritization of response measures. While some sustainability reports also incorporate the SSP1-2.6 (Low-Emissions Pathway) in their analyses, we excluded this scenario, as its realization is deemed unlikely given the current pace of global warming, policy trends, and technological developments.

1) Represents a scenario in which existing policies remain in place, accompanied by moderate socioeconomic development and parallel efforts to reduce GHG emissions. This pathway assumes a radiative forcing level of 4.5 W/m^2 by 2100, and serves as a relatively realistic target scenario given the continuation of current international policy directions.

2) Represents an extreme high-emissions trajectory in which limited GHG mitigation efforts are coupled with continued economic growth–oriented policies. This pathway assumes a radiative forcing level of 8.5 W/m^2 by 2100 and is used to evaluate the upper bound of potential climate risk.

Climate Data Production

We collected various climate data and assessed risks using climate intelligence (CI), which can produce high-resolution future climate data regarding the frequency and intensity of extreme weather events. By utilizing the Seoul National University Climate Tech Center's CLICK (Climate Intelligence for multiscale Climate risK assessment) system in this process, we secured an objective basis for our risk analysis and enhanced the accuracy of our findings.

Climate Data Production Procedure

1. Base Model Selection
Select five base models with outstanding predictability from among the NASA NEX-GDDP.

2. Observation Data Collection
Collect high-resolution satellite and ground data related to various climate factors, including temperature, rainfall, and humidity.

3. Climate Data Production and Elaboration
Use the collected data, along with machine learning and AI techniques, to analyze and produce current and future extreme weather data at a 30-meter resolution.

4. Model Verification and Utilization
Compare the models against observational data to perform a quantitative verification of their predictability performance.

Response to Climate-Related Financial Disclosures (TCFD) Strategy

Physical Risk Analysis

Climate Change Risks

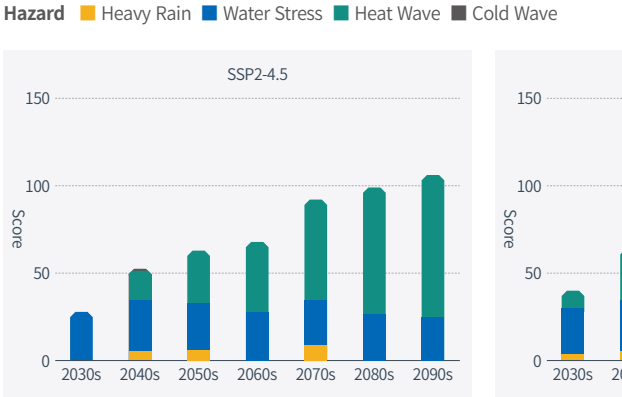
We conducted a risk assessment of various disasters over a 10-year timeframe, taking into account different climate change scenarios. The risk score for each disaster is determined by forecasting how often it is likely to occur in the future compared to its average frequency in the past. For instance, if a disaster that historically occurred 10 times per year is projected to occur 15 times per year in the future, this represents a 50% increase in frequency, resulting in a risk score of 50. Unlike current measures that focus solely on increasing trends, this formula allows for a comparison between current and future risk levels.

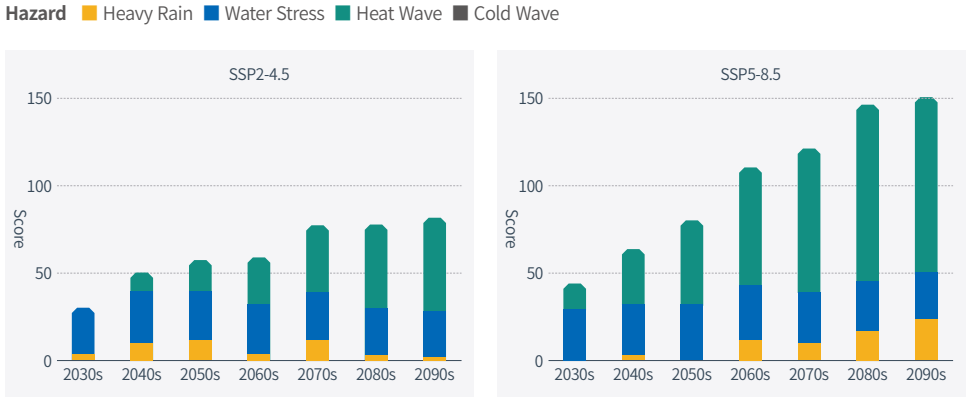
GS Power (Anyang)

At GS Power's Anyang Campus, the most critical climate risk identified is extreme heat, which is expected to increase significantly over time. In contrast, water stress is at a normal level, and its risk is anticipated to remain stable in the long term. Although the risk of heavy rainfall is currently low, it is projected to rise steadily, potentially reaching seven times its current level by 2090. Overall, extreme heat and heavy rainfall are considered critical risk factors, posing significant dangers under the SSP5-8.5 scenario compared to the SSP2-4.5 scenario. Conversely, the risk of cold waves remains low both now and in the future, suggesting that this does not need to be considered a significant climate risk factor.

Incheon Total Energy Company (Songdo)

Like GS Power's Anyang Campus, extreme heat is identified as the most critical climate risk at Incheon Total Energy's Songdo Campus. Water stress is expected to remain at a normal level, and is not considered a risk factor. However, the risk of heavy rainfall is anticipated to gradually increase over time. In the SSP5-8.5 scenario, the risks associated with both extreme heat and heavy rainfall are projected to rise significantly compared to the SSP2-4.5 scenario. Compared to GS Power's Anyang Campus, the risk level of extreme heat at Songdo Campus is relatively lower.





Response to Climate-Related Financial Disclosures (TCFD) Strategy

Physical Risk Analysis

Economic Damage from Climate Change

Definition and Assessment Method

The measures to define and assess the risks of physical damage due to climate disasters are outlined as follows. To understand the major risks associated with climate change, we analyzed the economic damage inflicted by climate-related events such as heavy rainfall, extreme heat, and cold waves, following the SSP5-8.5 scenario.

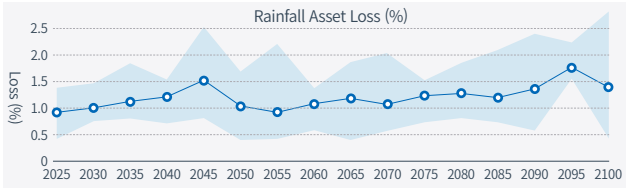
Definition	Physical Damage Risk	Assessment Method
Heavy Rainfall	Decline in building and equipment asset value due to damage or obsolescence from flooding events	Utilizing machine learning–based modeling to assess potential physical damage and flooding risk
Extreme Heat & Cold Waves	Physical stress on building walls and mechanical equipment leading to reduced asset value	Utilizing machine learning–based modeling to assess potential asset value decline from extreme heat or cold events

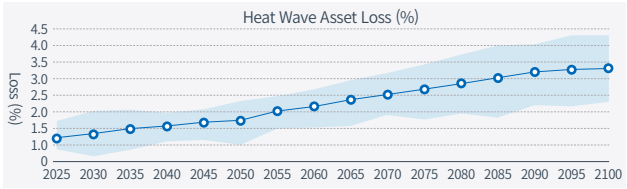
Economic Damage Progresses of Each Site

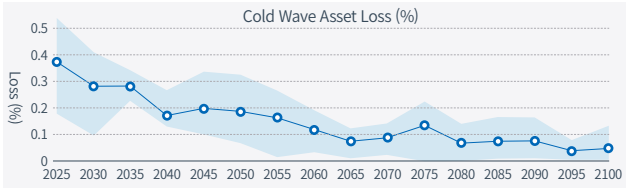
GS Power (Anyang)

GS Power's Anyang Campus is expected to be exposed to an accelerated increase in extreme heat and a gradual rise in heavy rainfall. In terms of physical damage risk, projections indicate that by 2095, heat waves could cause up to 4.4% damage, heavy rainfall could lead to up to 2.8% damage by 2100, and cold waves may result in up to 0.54% damage by 2025.

Physical Damage Risk



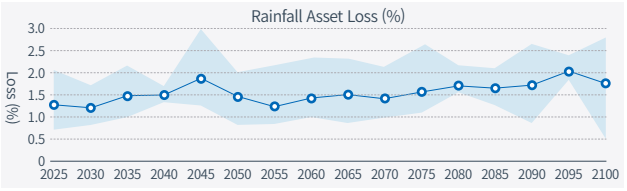


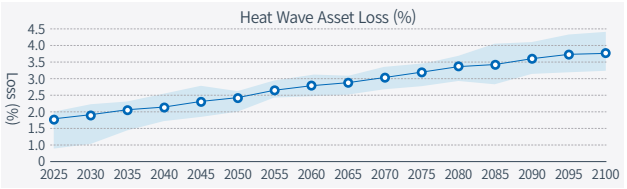


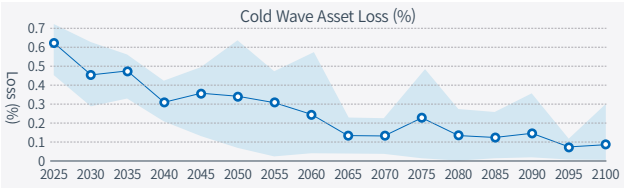
Incheon Total Energy Company (Songdo)

Similarly, the Songdo Campus of Incheon Total Energy is also witnessing a rapid acceleration of heat waves and a gradual increase in heavy rainfall. The projected physical damage risks are estimated to be up to 4.3% due to heat waves in 2100 and up to 3.0% due to heavy rainfall in 2095. While the likelihood of cold waves is decreasing, they are still anticipated to cause up to 0.75% damage by 2025.

Physical Damage Risk







Response to Climate-Related Financial Disclosures (TCFD) Strategy

Physical Risk Analysis

Economic Damage from Climate Change

Scenarios and Economic Damages per Disaster

In the short term, there is not a significant difference between the scenarios at GS Power's Anyang Campus and Incheon Total Energy's Songdo Campus in terms of the economic damage. Analysis indicates that the most substantial damage over the next five years will be caused by extreme heat. This is due to the increased frequency and rapid acceleration of extreme heat events compared to other types of disasters, resulting in the highest economic losses. Heat waves and heavy rainfall are expected to cause escalating economic damage over time. In the medium to long term, the financial risk decreases by more than 35% in the SSP2-4.5 scenario compared to the SSP5-8.5 scenario.

GS Power (Anyang)

Short-term Risks within the Next Five Years

Heavy Rainfall (%)		2025	2026	2027	2028	2029
Physical Damage	SSP2-4.5	0.80	1.12	0.40	0.80	0.96
	SSP5-8.5	0.88	1.44	0.72	0.96	0.56

Heat Waves (%)		2025	2026	2027	2028	2029
Physical Damage	SSP2-4.5	1.29	1.23	1.28	1.09	1.27
	SSP5-8.5	1.01	1.10	1.48	1.30	1.29

Cold Waves (%)		2025	2026	2027	2028	2029
Physical Damage	SSP2-4.5	0.36	0.36	0.35	0.42	0.34
	SSP5-8.5	0.35	0.37	0.40	0.52	0.26

Medium- to Long-term Risks over a 10-year Timeframe

Heavy Rainfall (%)		2030 - 40	2040 - 50	2050 - 60	2060 - 70	2070 - 80	2080 - 90	2090 - 100
Physical Damage	SSP2-4.5	1.15	1.07	1.12	1.05	1.04	1.05	0.98
	SSP5-8.5	1.06	1.32	0.98	1.12	1.14	1.22	1.48

Heat Waves (%)		2030 - 40	2040 - 50	2050 - 60	2060 - 70	2070 - 80	2080 - 90	2090 - 100
Physical Damage	SSP2-4.5	1.27	1.47	1.63	1.77	1.99	2.15	2.29
	SSP5-8.5	1.39	1.65	1.90	2.31	2.62	2.98	3.27

Cold Waves (%)		2030 - 40	2040 - 50	2050 - 60	2060 - 70	2070 - 80	2080 - 90	2090 - 100
Physical Damage	SSP2-4.5	0.34	0.36	0.33	0.29	0.26	0.19	0.17
	SSP5-8.5	0.28	0.18	0.17	0.09	0.11	0.07	0.05

Incheon Total Energy Company (Songdo)

Heavy Rainfall (%)		2025	2026	2027	2028	2029
Physical Damage	SSP2-4.5	1.68	1.60	1.12	1.20	1.20
	SSP5-8.5	1.44	1.76	1.12	1.44	0.80

Heat Waves (%)		2025	2026	2027	2028	2029
Physical Damage	SSP2-4.5	1.64	1.57	1.61	1.53	1.65
	SSP5-8.5	1.52	1.65	1.93	1.88	1.84

Cold Waves (%)		2025	2026	2027	2028	2029
Physical Damage	SSP2-4.5	0.57	0.59	0.61	0.68	0.59
	SSP5-8.5	0.55	0.66	0.65	0.73	0.51

Heavy Rainfall (%)		2030 - 40	2040 - 50	2050 - 60	2060 - 70	2070 - 80	2080 - 90	2090 - 100
Physical Damage	SSP2-4.5	1.60	1.45	1.57	1.46	1.47	1.51	1.48
	SSP5-8.5	1.38	1.72	1.39	1.49	1.52	1.71	1.90

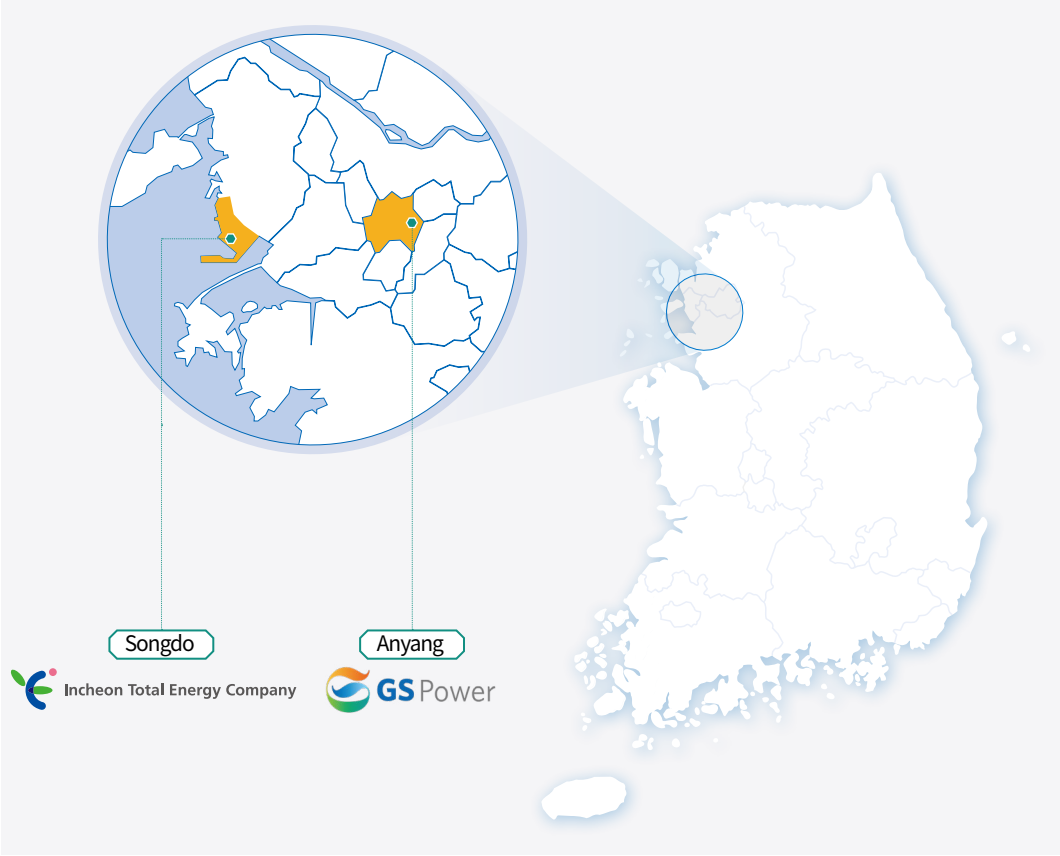
Heat Waves (%)		2030 - 40	2040 - 50	2050 - 60	2060 - 70	2070 - 80	2080 - 90	2090 - 100
Physical Damage	SSP2-4.5	1.69	1.92	2.01	2.15	2.38	2.55	2.66
	SSP5-8.5	1.97	2.26	2.56	2.90	3.15	3.44	3.73

Cold Waves (%)		2030 - 40	2040 - 50	2050 - 60	2060 - 70	2070 - 80	2080 - 90	2090 - 100
Physical Damage	SSP2-4.5	0.51	0.52	0.49	0.44	0.36	0.30	0.29
	SSP5-8.5	0.46	0.34	0.32	0.19	0.19	0.14	0.11

Response to Climate-Related Financial Disclosures (TCFD) Strategy

Physical Risk Analysis

Action Plan



We established an action plan to address the identified risks, and will review them comprehensively.

Risk Factor	Action Plan (Review Needed)
Extreme Heat	• Optimizing operations to improve power generation efficiency relative to fuel input • Implementing technical and operational measures to maintain ambient temperatures below defined thresholds • Conducting targeted inspections and regular maintenance of aging facilities before and after extreme heat events
Heavy Rainfall	• Establishing internal operating standards for proactive drainage inspection and repair, as well as safety measures for major facilities • Installing flood barriers and implementing other structural countermeasures
Sea Level Rise	• Establishing a regular inspection program that includes strengthening wave protection facilities and enhancing mooring equipment

Furthermore, we recognize the importance of assessing whether the locations of new sites are appropriate from a scientific perspective regarding climate change risks. It is crucial to identify and respond to physical risks as well. To achieve this, we plan to include a physical risk analysis step in the climate risk assessment system used in our investment and deliberation process.

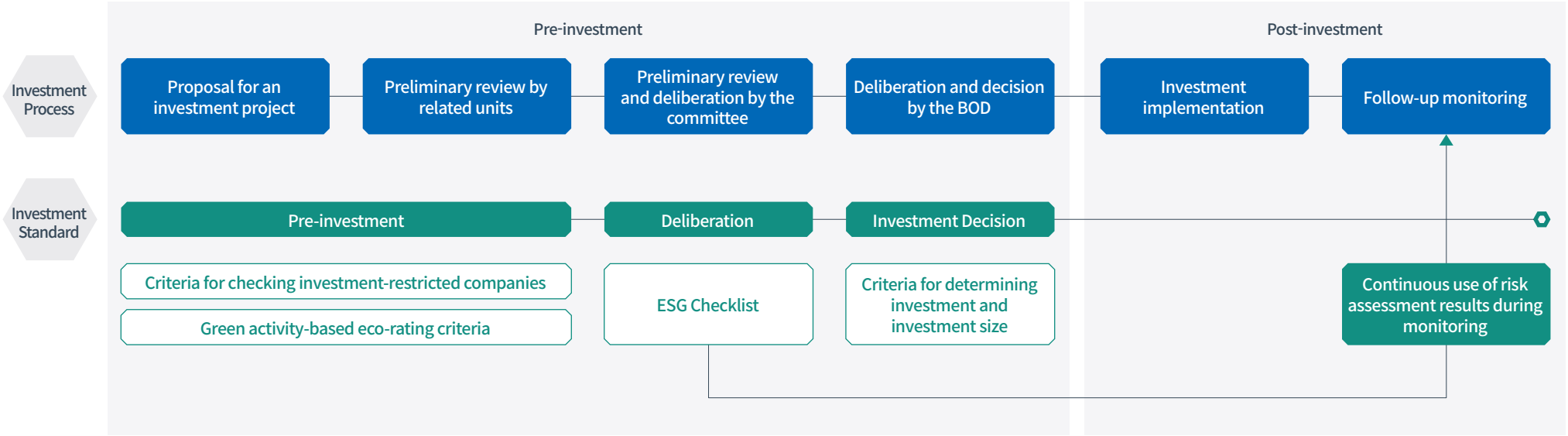
Response to Climate-Related Financial Disclosures (TCFD) Risk Management

Establishing a Climate-related Risk Assessment System

As we recognize that ESG-related risk factors can both directly and indirectly affect our future financial status and performance, we actively consider the ESG risk level of investee companies when starting new businesses. We established an ESG risk assessment system for prospective investees in the investment review and deliberation process. This assessment is conducted in two stages: pre- and post-investment. In the pre-investment step, relevant organizations check the ESG investment restriction and eco-friendliness criteria after the investment proposal. During the preliminary review and decision-making process, the Investment Deliberation Committee reviews the result of the risk assessment of an investee based on the ESG checklist.[1] Based on the result, the Board of Directors makes a final decision on the investment and its size. After the investment, we conduct follow-up monitoring to improve investees' ESG management and mitigate their risks.

1) This review involves confirming whether the company has an organization to respond to climate change, and the GHG emissions and energy use reductions it has achieved thus far

Investment Review and Deliberation Process



Response to Climate-Related Financial Disclosures (TCFD) Metrics and Targets

We track the scope 1 and 2 emissions of GS Energy and its dependent, common, and relational enterprises as indicators of our response to climate change. We will set mid- to long-term greenhouse gas (GHG) emissions targets to evaluate our progress in addressing climate change. These targets will be established by taking into account the degree of commercialization of reduction technologies, anticipated investment costs, and funding sources.

GHG Emissions (GS Energy and Dependent Enterprises)[1)]

※ Where total GHG emissions differ from the sum of Scope 1 and Scope 2 emissions, it is due to rounding when calculating the total emissions

Category	Unit	GS Energy (Separate)			Dependent Enterprises			Total Emissions		
		2022	2023	2024	2022	2023	2024	2022	2023	2024
Scope 1 Emissions	tCO_2eq	78	70	**79**	3,337,989	2,926,648	**3,092,956**	3,338,067	2,926,718	**3,093,035**
Scope 2 Emissions		213	220	**243**	23,806	29,010	**27,044**	24,019	29,230	**27,287**
Total		291	291	**322**	3,361,795	2,955,653	**3,119,997**	3,362,086	2,955,944	**3,120,318**

1) Reporting Scope: For 2002, GS Power and Incheon Total Energy are included. Starting from 2023, With Incheon Energy and GS CHARGEV are also included.

GHG Emissions[1)] (Common and Relational Enterprises)

Category	Unit	Common Enterprises[2)]		Relational Enterprises[3)]		Total Emissions	
		2023	2024	2023	2024	2023	2024
Scope 1 Emissions	tCO_2eq	3,639,960	**3,719,762**	935,434	**928,853**	4,575,394	**4,648,615**
Scope 2 Emissions		804,910	**797,816**	46,331	**47,875**	851,240	**845,690**
Total		4,444,863	**4,517,573**	981,765	**976,727**	5,426,627	**5,494,300**

1) Calculated using the equity share approach (equity share as of December 31 of each year)
2) Reporting Scope: Boryeong LNG Terminal and GS Caltex (separate entity basis) / Revision of 2023 joint venture emissions due to updated emissions data from GS Caltex
3) Reporting Scope: Shin Pyeongtaek Power, Dongducheon Dream Power, and Lotte GS Chemical / Revision of 2023 relational enterprise emissions following Lotte GS Chemical's inclusion in the GHG Target Management System and subsequent emissions verification

GHG Emissions[1)] (Per Business Sector)

Category	Unit	Power & District Energy		Gas		Oil & Chemicals[2)]		EV Charging	
		2023	2024	2023	2024	2023	2024	2023	2024
Scope 1 Emissions	tCO_2eq	3,841,791	**4,004,061**	1,021	**1,252**	3,659,229	**3,736,258**	0.3	**0.7**
Scope 2 Emissions		31,245	**29,119**	25,817	**29,271**	823,134	**814,267**	54	**77**
Total		3,873,031	**4,033,176**	26,838	**30,522**	4,482,357	**4,550,520**	55	**78**

1) Reporting Scope: Power and district heating (GS Power, Incheon Total Energy, With Incheon Energy, Shin Pyeongtaek Power, Dongducheon Dream Power), gas (Boryeong LNG Terminal), oil and chemical (GS Caltex, Lotte GS Chemical), EV charging (GS CHARGEV)
2) Revision of 2023 joint venture emissions due to updated emissions data from GS Caltex and Lotte GS Chemical

Environmental Impact Management

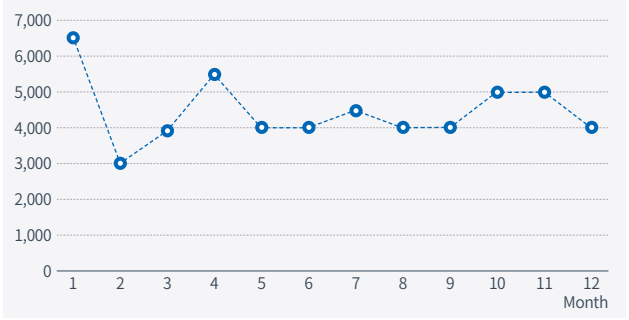
GS Energy

Revitalization of the Use of Reusable Cups

As part of embracing a culture of practicing ESG, we are promoting the use of reusable cups to transition to an eco-friendly office. This initiative to reduce our use of disposable products is being undertaken in partnership with THE GREET, an eco-friendly service company specialized in rentals, collection, and washing of reusable cups. We will continue to pursue eco-friendly management through various measures to minimize our negative environmental impacts and create a more sustainable society.

Monthly Consumption in 2024

(Unit: cups)



Transition to Eco-friendly Cars

We have replaced our corporate cars with eco-friendly vehicles to reduce GHG emissions and air pollutants. We see this measure as part of fulfilling our corporate social responsibility, by contributing to the creation of a sustainable future. By 2024, we replaced 18 of our corporate cars with EVs.

Initiative for Biodiversity Protection

Recognizing the importance of biodiversity conservation, we joined the Biz N Biodiversity Platform (BNBP). The BNBP was founded in 2016 with the aim of improving the capacity of companies to respond to biodiversity-related issues. As part of this initiative, we have participated in meetings with government agencies and other companies. In addition to these efforts, we are exploring measures to protect biodiversity, and cooperating with many stakeholders in this area.

BNBP 기업과 생물다양성 플랫폼
Biz N Biodiversity Platform

Environmental Impact Management

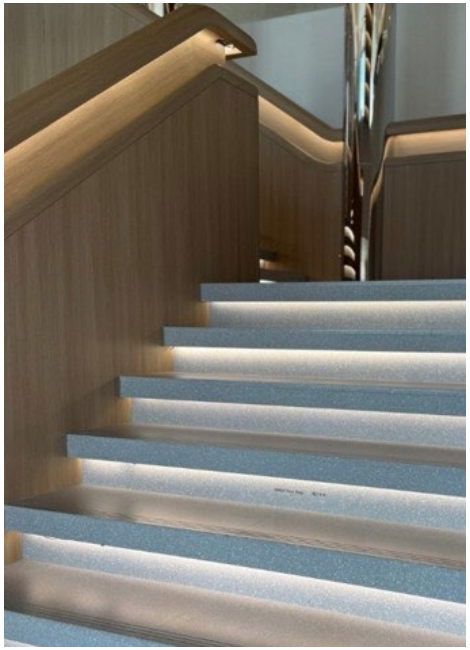
GS Energy

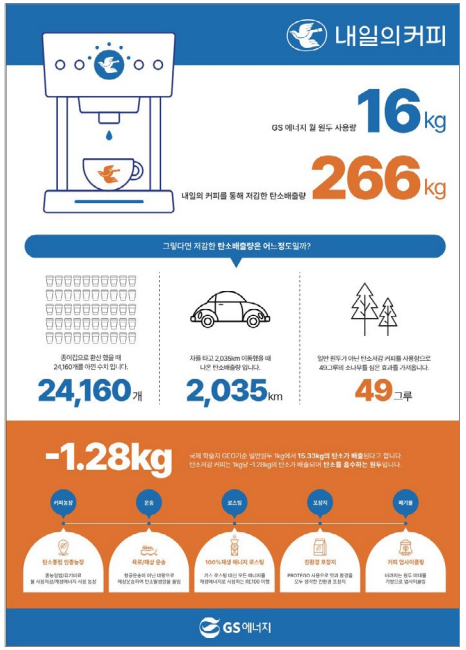
Carbon Neutral Stairs Board

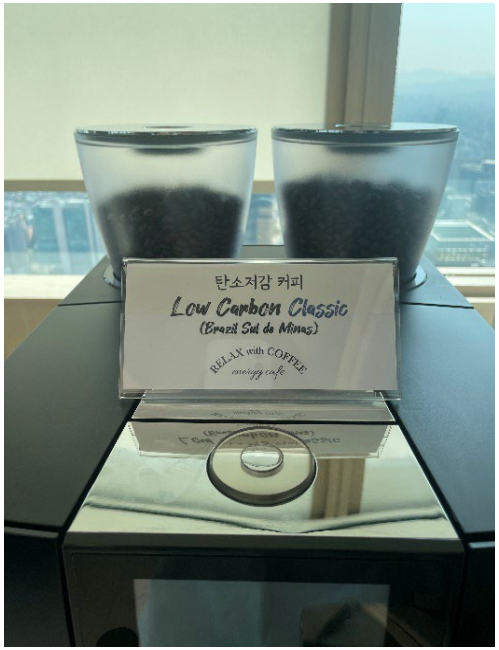
We have installed boards next to the stairs at our headquarters that display the number of steps people take and the corresponding carbon reduction. The boards are located on the 36th and 37th floors, and sensors measure the cumulative number of steps taken on the stairs. Based on our calculations, the elevator in our headquarters generates 4g of carbon emissions when it moves up one floor. By going up the stairs instead, which takes about 21 steps, the employee achieves a 4g carbon emissions reduction while supporting their health.

Low Carbon Coffee Beans

We have replaced some of the coffee beans used at the office with low-carbon beans from Naeil Coffee, a start-up that supplies low-carbon coffee beans grown using agroforestry, organic fertilizers, and reusable energy. Naeil Coffee also upcycles used coffee sacks into bags. Thanks to these approaches, the coffee beans it sells use less carbon in their production than regular coffee beans. We quantify and post the reduction in carbon emissions achieved by consuming low-carbon coffee beans. In 2024, we used 56 kg of low-carbon beans, resulting in a carbon emissions reduction of 930kg. This is equivalent to saving 84,560 paper cups, or the carbon absorbed by 115 30-year-old pine trees.







* Numbers above are current as of June 5, 2025

Environmental Impact Management

Dependent Enterprise

Recovery of Unutilized Energy

GS Power

In collaboration with Bucheon-si, GS Power launched an additional biogas utilization project at the Gulpo Sewage Treatment Facility in 2023. In 2024, construction was completed and operations began. This project involves dismantling unused boilers and installing boilers specifically for district heating. It aims to recycle biogas from sewage sludge that would otherwise go unused due to the capacity limits of existing biogas facilities, supplying this biogas for district heating. The project is expected to achieve a heat recovery of 9,500 Gcal and reduce emissions by approximately 1,200 tons of CO_2 equivalent annually. The GS Power and Bucheon-si joint renewable energy development initiative received a Minister's Award from South Korea's Ministry of Interior and Safety, recognition as an outstanding example of local financing for its efforts and achievements in optimizing the operation of the sewage treatment facility and reducing costs.

Incheon Total Energy Company

Incheon Total Energy is committed to continuously exploring, investing in, and operating new, external sources of heat to recover and recycle unutilized energy that would otherwise be just released into the air. Through these activities, the company reduced its LNG usage by approximately 42,500 tons and its GHG emissions by 68,000tCO_2eq in 2024.

Developing Energy Efficiency Technologies

GS Power

To respond to the new climate system led by global warming, GS Power is developing eco-friendly technologies to make its energy consumption more efficient and reduce carbon emissions. GS Power's patents are listed below:

GS Power's Patents
Real-Time Analysis Method and Apparatus for District Heating Supply Network Based on Heat Demand Time-Series Data
Heat Recovery System of Steam Turbine Power Generation Facility
Latent Heat Recovery System of Exhaust Gas Using Heat Exchanger, System Modularization, and Heat Exchanger Used Therein
Combined Heat and Power Generation System Using Heat Pump
Fuel Cell-Based Bi-Directional Trading Heat Utilization Module and Heat Supply Control System Using the Same
District Heating Production System Integrated with District Heating-Driven Heat Pump and a Control Method Thereof
District Heating and Cooling Supply System Using Wastewater Treatment Plant and Incineration Plant
Method for Real-time Analysis of District Heating Pipe Network Based on Time Sequence Data for Heat Demand
Method And Apparatus for Real-time Analysis of District Heating Pipe Network Based on Time Sequence Data of Heat Demand

Eco-friendly and Low-carbon Product Certification

Incheon Total Energy Company

The Korea Environmental Product Declaration label provides the quantitative environmental impact of all processes of raw material collection, production, transportation, distribution, use, and disposal of products and services. By providing environmental impact information to consumers, this system can potentially encourage a continuous market-led environmental improvement. Incheon Total Energy acquired the Korea Environmental Product Declaration label in August 2023 and the Low Carbon Product Certification in February 2024 in recognition of the excellent energy production efficiency and carbon dioxide reduction effect of its LNG combined heat and power plant. The company is expected to prove the value of its district heating by satisfying the need to use eco-friendly products while reducing GHG emissions.

GHG Emissions and Energy Consumption Management

GS Power

Since being designated as a business entity eligible for the allocation of emission permits in 2015, GS Power has submitted an annual GHG emissions report to the Ministry of Environment after it has been verified by an external verification agency, along with the corresponding emission permits. GS Power prepares for the verification process by creating an emissions calculation plan through an external agency every year to improve the accuracy of its GHG emissions calculation and systematize the measurement of activity data and parameters. In addition, the company has established a GHG inventory to monitor and manage its direct (scope 1) and indirect (scope 2) GHG emissions.

Incheon Total Energy Company

Incheon Total Energy is fulfilling its obligation to reduce GHG emissions under the Framework Act on Low Carbon, Green Growth, and the Act on the Allocation and Trading of Greenhouse Gas Emission Permits. The company has implemented mid- to long-term plans to reduce carbon emissions, which include strengthening energy efficiency through the installation of energy-efficient power generation facilities. In addition, Incheon Total Energy has secured sufficient carbon credits by applying and upgrading BM coefficients for the rational allocation of carbon credits while maximizing its profits by trading surplus carbon credits based on continuous monitoring of revisions to the relevant laws and market trends. In this way, Incheon Total Energy is responding efficiently to the emissions trading system.

Environmental Impact Management

Dependent Enterprise

Water Resource Management

GS Power

GS Power introduced a cooling water reuse facility to maximize the amount of water recycling and minimize wastewater and water use at power plants. In addition, the company monitors its water use and conducts regular environmental audits to minimize water resource risks.

Incheon Total Energy Company

Incheon Total Energy operates wastewater treatment facilities to protect water resources and reduce water use and wastewater. The company also utilizes reused water to recycle water resources and minimize water use. In 2024, Incheon Total Energy recycled 11,439 tons of water, achieving a water recycling rate of approximately 13%.

Waste Management

GS Power

GS Power transparently manages waste using Allbaro, the Ministry of Environment's waste processing system. Each business site in Anyang and Bucheon has designated waste managers who monitor all processes to manage waste. In addition, the company has explored and introduced measures to save resources and maximize the recycling rate, which was increased by 11.5%p in 2023 and 2.3%p in 2024 compared to the previous years. The waste, including wastewater sludge, waste sand, and waste absorbent, is processed by external processing companies, with some of the waste recycled into building materials.

Incheon Total Energy Company

The entire process of waste management, from waste generation to storage, transportation, and final treatment, is managed digitally or using RFID[1)] through the Allbaro waste information service operated by Korea Environment Corporation. Incheon Total Energy strives to minimize the amount of general waste, designated waste, and construction waste generated from its business sites at the source, and classifies waste by type and characteristics to maximize waste reuse and recycling. Designated waste and recyclable waste adsorbents are sent to specialized companies for recycling and reuse.

1) RFID: A technology for identifying objects or persons using RF (radio frequency)

Environmental Impact Management

Dependent Enterprise

Water Pollutant Management

GS Power

GS Power treats wastewater from its business sites with both physical and chemical processes at its on-site wastewater treatment facilities. The wastewater undergoes a process of neutralization, coagulation, sedimentation, filtration, and absorption before the purified water is released to nearby sewage treatment plants. To ensure high standards, the company conducts regular environmental audits to manage wastewater quality, and applies internal standards that are stricter than the legal requirements. For example, in managing suspended solids, GS Power enforces an internal standard that is 50% stricter than what the law mandates.

Incheon Total Energy Company

Wastewater from Incheon Total Energy's business sites undergoes physical and chemical processes at its wastewater treatment plant before being discharged to a sewage treatment facility in Songdo, Incheon. Incheon Total Energy efficiently manages wastewater quality through regular measurements and continuous monitoring. The concentrations of water pollutants in its discharged wastewater are kept below 10% of the legal limit.

Air Pollutant Management

GS Power

To effectively reduce air pollutant emissions and comply with air pollution regulations, GS Power has installed and operates advanced air pollution prevention equipment, including NOx burners and selective catalytic reduction (SCR) systems. The company continuously monitors air pollutants 24/7 using an automatic chimney monitoring system. Data from this system is promptly sent to the air pollutant management system to enhance transparency. GS Power adheres to internal air pollutant emission standards that are stricter than the legal requirements. The company is committed to continuously introducing and maintaining facilities that minimize air pollutant emissions. In 2024, the Bucheon CHP Plant underwent upgrades to the SCR Ammonia Injection Grid (AIG) and replaced its catalyst. GS Power regularly inspects the function of the catalysts and replaces them in a timely manner to ensure their effective management.

Incheon Total Energy Company

Incheon Total Energy uses LNG, a clean fuel, to manage and reduce air pollutants, and operates facilities that are optimized to reduce air pollutants such as NOx. Its TMS (tele-monitoring system) monitors air pollutant emissions 24/7 and sends real-time data to the Korea Environment Corporation, ensuring transparency in environmental data management. In addition, the company has installed air pollution prevention equipment using new technologies (DI SCR, oxidized steel dust collector) to keep air pollutant emissions below the requirements specified in the integrated environmental permit. Notably, the company achieved an average NOx emission level of 5 ppm in 2024, which was lower than the level allowed by its integrated environmental permit (8 ppm) and about 48% of its emissions quota. In addition, Incheon Total Energy entered into the Blue Sky Agreement with Incheon Metropolitan City and a voluntary agreement to reduce fine dust as part of its endeavors to decrease fine dust in the local community and minimize its environmental impacts.

Environmental Impact Management

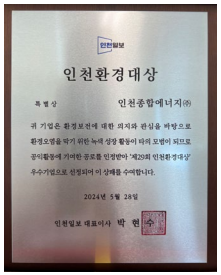
Dependent Enterprise

Case Study: Incheon Total Energy's High-efficiency Wide Temperature Range SCR Catalyst

Natural gas power generation emits fewer air pollutants than coal power generation and offers flexible operation and shutdown capabilities, allowing a rapid response to changes in electricity demand. However, most natural gas power plants are situated near urban areas, which means that the significant amounts of carbon monoxide, nitrogen dioxide, and unburned hydrocarbons released during their initial operation can adversely affect the health of local residents. To mitigate against this, natural gas power plants employ selective catalytic reduction (SCR) technology to reduce hazardous emissions. However, the efficiency of the catalyst tends to decrease at lower temperatures.

To address this challenge, Incheon Total Energy entered into a demonstration agreement with the Korea Institute of Energy Research and Geumhwa C&E for low-temperature catalyst technology. A study was conducted to verify the performance and applicability of this catalyst in natural gas power generation, and the results showed that when the new high-efficiency wide temperature range catalyst developed by the Korea Institute of Energy Research was applied for three months, the NOx removal rate was improved from 30% in the initial low-temperature range. In addition, the delay time to the prevention facility in this low-temperature range was improved by more than 50%. Overall, the findings indicated a 33% reduction in pollutants compared to the existing catalyst.

By collecting long-term operational data, Incheon Total Energy aims to enhance local air quality by replacing the current catalyst with the new high-efficiency one. Furthermore, Incheon Total Energy has been recognized in the community for its contributions to pollution prevention, including its SCR low-temperature catalyst research, pilot tests, and unused energy utilization. The company received the Special Award in the Environmental Enterprise category at the 29th Incheon Environmental Awards, hosted by Incheon Ilbo.



Chemicals Management

GS Power

GS Power does not use harmful chemical substances, and in 2019, the government approved the closure of its hazardous chemical substance business. The Anyang and Bucheon Campuses have signed the large corporations and small and medium-sized enterprises joint operational agreement to collaborate on equipment and manpower, with the aim of preventing and responding to chemical accidents. This initiative includes regular mock training sessions to prepare for potential chemical incidents. In addition, GS Power actively participates in national crisis drills to maintain the trust of residents in the operations of its combined heat and power plant in the metropolitan area.

Incheon Total Energy Company

Incheon Total Energy has lowered the concentrations of hazardous chemical substances used and generated at its business sites in order to protect its employees. As its business sites are subject to PSM,[1] it manages chemical substances efficiently through regular MSDS[2] updates. Its subsidiary, With Incheon Energy, also utilizes lower concentrations of hazardous chemicals, having completed its report on the closure of its hazardous chemical business in 2024.

1) PSM (Process Safety Management System): Companies submit a process safety report for evaluation in order to prevent serious industrial accidents caused by the leakage of hazardous substances, fires, explosions, etc.
2) MSDS (Material Safety Data Sheet): A table containing the data necessary for the safe use and management of chemical substances

Environmental Impact Management

Related Companies

GHG Emissions Management

SPPC

Shin Pyeongtaek Power has reduced its exposure to the risks created by the emissions trading system through timely implementation and compliance with government policies. The company has also enhanced the reliability of its data by conducting internal reviews of GHG inventory tools and data through a unified monitoring, reporting, and verification (MRV) system. It has measured energy consumption, conducted regular facility examinations, and received audits from external institutions. Furthermore, the company has reduced emissions by about 20,000 tons through operational improvements to its power generation facilities, such as by optimizing the method of steam supply and the operational order of gas and steam turbines. Shin Pyeongtaek Power has also proactively increased its emissions allowances for 2024 and 2025 by carrying forward allowances in line with stronger Nationally Determined Contributions (NDC). In addition, the company has minimized NOx emissions to contribute to reducing fine dust by optimizing the SCR operation of an emergency ultrafine dust reduction measure.

DONGDUCHEON DREAM POWER

As part of its efforts to address climate change risks, Dongducheon Dream Power has actively reduced its energy consumption by avoiding the unnecessary operation of rotating equipment (e.g., high voltage motors, auxiliary boilers) during the installation of a fan motor inverter in its cooling tower, as well as during startup and shutdown processes. The company plans to carry out various activities to reduce carbon emissions in order to contribute to the government's goal of achieving carbon neutrality by 2050.

CHEONGNA ENERGY

Instead of using fossil fuels, Cheongna Energy recycles energy from waste heat, such as the waste heat from power plant smokestacks, waste-burning heat from resource recovery facilities, and waste steam heat from fuel cells, which it uses to provide district cooling and heating services. In this way, the company contributes both to reducing national energy costs and to improving air quality. Cheongna Energy Resource is also involved in GHG reduction activities. For example, since 2016, it has obtained approximately 5,500tCO_2eq of external project-based carbon offset credits annually for the effective reduction of fossil fuel consumption it achieved by supplying the waste-burning heat from its resource recovery facilities to district heating and cooling.

HAEZOOM

Haezoom is focused on expanding the supply of renewables through various solar PV and power services, and has directly installed and is managing more than 15,000 renewable power generation facilities, including solar power plants. Recently, the company conducted a number of RE100 consultations based on "HaezoomR," the first RE100 platform in Korea, to assist large domestic and global companies in implementing RE100, thus helping them to have a positive influence on the environment. Furthermore, through CSR activities such as "Hope Haezoom" and the energy sharing project, Haezoom supports those who are energy-disadvantaged by installing solar PV facilities and covering electricity bills, and also by donating solar lanterns to Africa for each solar power plant installation, through which the company is exerting a good influence on the environment.

SOCIAL

Employees

Organizational Culture

Culture & Communication

We listen to the voices of our employees, and have built a strong community based on the One Team spirit.

Tailored Workshop Design and Operational Support

Professional facilitators design and support workshops tailored to the needs of GS Energy, its subsidiaries, and portfolio companies, using various tools and insights aligned with the organization's agenda

Open Communication with Management

We hold regular company-wide business briefings each year to share performance updates and directions for growth, and hold open discussions on various topics with the CEO and the heads of divisions.

Midday Talk

A group of approximately ten team members, including the CEO, gathers monthly to communicate on various subjects, such as sports, food, art, cooking, travel, and music, with the goal of understanding each others' interests and networking together.

GSE Round (Employee-Management Council)

The GSE Round is a employee-management council of GS Energy through which management communicates and builds consensus with employee representatives on various issues, including management status, the work environment, and system improvements. As such, the GSE Round contributes to fostering healthy development and communication within the company.

Employee Assistance Program (EAP)

We have implemented an EAP (employee assistance program) to proactively manage the mental and physical stress experienced by employees in the rapidly changing business environment, protect their human rights from an ESG perspective, and promptly and effectively address and resolve various issues within the organization. The EAP consists of profiling and analysis based on workplace-specific assessments, as well as 1:1 coaching and counseling.

Readers' Club

We support e-book subscriptions to enable our employees to acquire knowledge in various fields, share insights, and grow together.

Employees' Club

We support our employees in pursuing their diverse interests and hobbies within the company to facilitate networking. Club activities, which were temporarily suspended due to the COVID-19 pandemic, resumed in 2023.

Employees

Learning & Development

On-Boarding

Our on-boarding program ensures that new employees feel like they are part of the company from day one of their employment. Prior to their first day (D-Day), a "Welcome Survey" is conducted to gather information such as preferred IT devices and email addresses in order to ensure a smooth start on the first day. On D-Day, we celebrate the arrival of new employees and their joining the company. All new employees participate in various programs with an assigned "buddy" in order to familiarize themselves with the company's spaces, systems, and networks. Eventually, they themselves become buddies and assist future new employees. In this way, we instill a sense of pride in the company among employees.

Job Training

To enhance job expertise, we allocate a budget to each department to support independent education sessions and the use of external training programs as needed. The People Team has a dedicated job skills curriculum, allowing employees to take fundamental and advanced knowledge courses related to their roles at any time.

Generational Learning Initiative

We operate a "reverse mentoring program" that matches executives with new employees. The program helps executives understand the perspective of the younger generation and improve their communication with them, while helping new employees gain insights into the company and build their networks. We also provide various educational content tailored to specific roles, career paths, and the latest trends through irregular education programs offered based on years of service.

Wednesday Lecture

On one Wednesday each month, we host open, in-person lectures across a wide range of topics not only business, but also humanities, digital transformation, ways of working, personal finance, and well-being to share useful information, knowledge, and experiences that enrich employees' work and lives and to provide diverse insights.

Degree Program Support

To enhance our employees' professional expertise and help them build their networks, we support the participation of select employees in degree programs at outstanding universities in Korea.

Support for E-Learning, Language Learning, and Learning Communities

We encourage the self-directed learning of our employees through e-learning courses. In addition, considering the significance of our global business, we provide foreign language learning through various channels, including online, by phone, video, face-to-face, and individual learning. Furthermore, voluntarily formed learning CoPs (communities of practice) receive diverse support for their learning. Typically, around 10 learning CoPs are set up each year.

GS Group Learning Program

In line with the digital transformation, training courses on data and DX (digital transformation) are provided to employees with learning needs, and various issues and solutions are identified through hackathons. Catalysts and facilitators are nurtured through training programs by 52g, an open innovation group of GS Group. Through these, we discover problems in the field, come up with diverse projects, and develop and implement solutions.

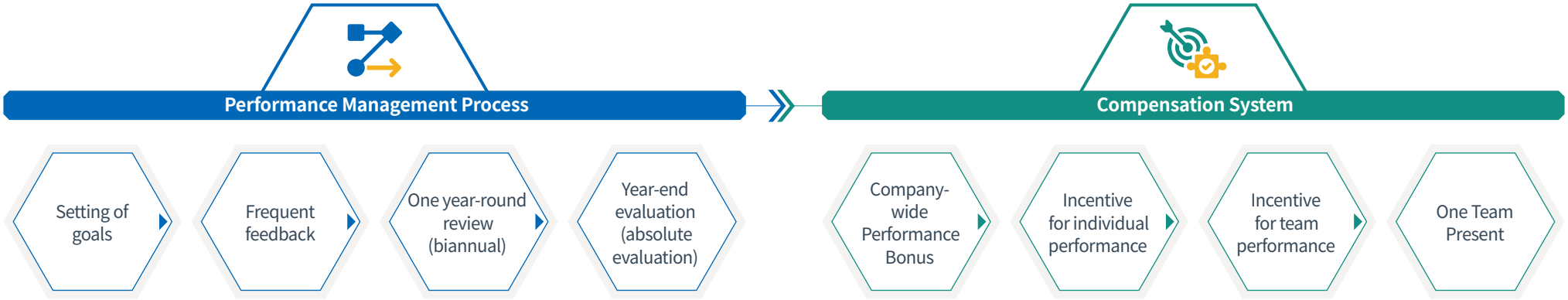
Employees

Performance Evaluations and Compensation

We aim to ensure that the growth of the organization and our team members go hand in hand, enabling them to experience various roles and enhance their practical expertise and influence. Performance management is conducted through continuous, multi-faceted, and observation-based absolute evaluations rather than relative evaluations of annual goals.

We ensure compensation is fair and competitive while reflecting the size of the role, and recognize and reward diverse contributions. We set individual goals that are aligned with the organization's, and help our employees to grow continuously through ongoing feedback from their superiors and colleagues. We manage performance through feedback on job accomplishments and biannual reviews. At the end of the year, an absolute evaluation is conducted based on objective performance, individual achievement compared to expectations, and peer reviews.

The results of evaluations are utilized as indicators for nurturing and feedback, and with the exception of evaluations for some high performers are generally decoupled from compensation. For promotions, candidates undergo comprehensive evaluations that include performance compared to their expected roles and peer reviews. There are no restrictions on promotions, with the exception that a minimum of two years of tenure is required for each job position. From the perspective of collaboration, we provide various incentives and compensation at the organizational level. In addition to company-wide bonuses, we offer incentives such as performance bonuses for individuals and teams, and the One Team presents to express mutual appreciation for collaboration.



Employees

Welfare Benefits

Flexitime System

We operate a flexitime system, which enables our employees to set their own working hours on a monthly basis within the legal working hour limit.

Financial Support for Retirees

Retirement pensions are accumulated with compound interest under two pension plans: DB (defined benefit) or DC (defined contribution). GS Energy also supports IRPs (individual retirement pensions) by offering matching grants. We introduced a DC payment system for bonuses at the end of 2021 to relieve the tax burden on our employees.

Congratulations on Long-term Service and Retirement

Congratulatory money and vacation time are offered as a token of appreciation to employees with many years of service. For those who have reached retirement age, we offer a celebration gift and long-term retirement leave to support them as they prepare for their life after retirement, while also expressing our gratitude for their years of service.

Selective Welfare System

We operate a welfare mall and a welfare points system that allows employees to choose from various benefits for self-development, leisure activities, health care, and more.

Support for Leisure Activities

Our employees can enjoy member prices at resorts and condominiums nationwide throughout the year, as well as access to some winter and summer resorts free of charge to support their leisure time.

Health Care Support

With the aim of improving the health of employees as well as their spouses and children, the company pays a certain amount of their medical expenses to reduce their financial burden and ensure a stable livelihood. Furthermore, our employees are covered by collective medical insurance, while comprehensive medical examinations are provided to employees and their spouses as a proactive health care measure.

Support for Living and Children's Education

GS Energy provides low-interest loans to its employees to support their financial stability. This support promotes employee welfare. In addition, the company operates an in-house daycare center near the GS Tower and offers financial assistance for its employees' children's college tuition and admission, from elementary school to university.

Support for Family Events and Funerals

GS Energy provides support for the family events and funerals of its employees to share in their joys and sorrows.

Human Rights Management

Human Rights Education

We conduct human rights education for all employees. Disability awareness training and workplace bullying and sexual harassment prevention training are conducted online and offline at least once a year. In addition, separate workplace bullying and sexual harassment prevention training is provided to employees in managerial positions to enhance their understanding of the relevant laws and organizational management. Furthermore, we share the "Guidelines to Prevent Workplace Bullying" through our groupware, ensuring that employees know the procedures and standards for preventing and handling incidents.

Grievance Handling Process

We operate a two-track process to handle grievances, including both grievances reported directly through the hotline and grievances reported to the grievance handling committee, which is composed entirely of employees. In addition to these official channels, employees can also report grievances through small-group meetings with the CEO, the GSE Round, or via e-mail, phone call, or written communication. Once a grievance is reported, an investigation is promptly launched to ensure a swift resolution. Any violations that cannot be resolved through the grievance handling committee are forwarded to the personnel committee or discipline committee and resolved according to our internal regulations. Sexual harassment and workplace bullying incidents are handled in confidence according to strict processes and policies, taking into account the gravity of each case. In addition, we proactively assess our employees' mental wellness through the EAP (Employee Assistance Program), and offer various coaching and counseling services to help them maintain a healthy mindset and grow together with the company.

Safety and Health

Key Issue

Safety and Health Management

GS Power

Safety and Health Management Policy

GS Power prioritizes safety and health as a core management value, and has established a safety and health management policy to manage safety and health for all employees. The company strives to prevent industrial accidents by continuously engaging in safety and health management activities to ensure that all employees can work in a safe and pleasant environment.

01 The company shall strive to create a safe and healthy working environment by establishing and operating a safety and health management system that is preventive and rooted in self-discipline, placing the safety and health of its employees and all of its partners' employees as its top priority based on human respect in all management activities.

02 The company fulfills its responsibilities and obligations in the area of safety and health, actively provides organizational, manpower, and budget support, in addition to other resources, to ensure compliance with safety and health regulations and internal rules, and strives to prevent industrial accidents through eliminating harmful and hazardous factors, while strengthening its accident prevention capabilities.

03 The company regularly assesses and improves the effectiveness of its safety and health management system based on communication with and the participation of all employees, ensuring that the same is effectively established and executed, and strives to promote a culture of voluntary observance of safety through these efforts.

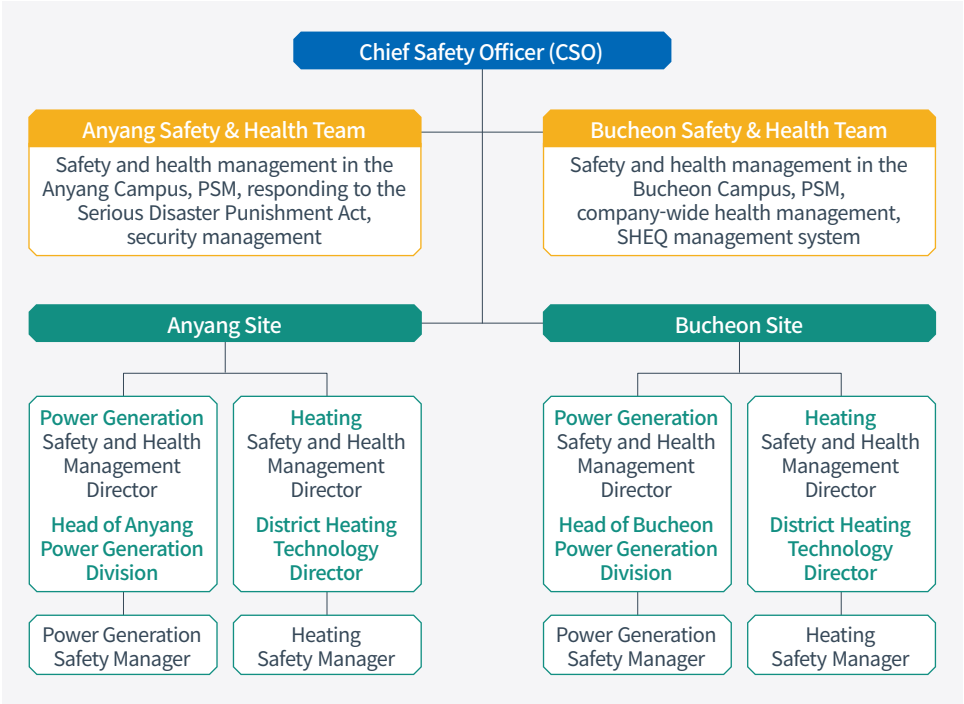
04 The company forms partnerships with stakeholders, including cooperating companies, by providing them with safety and health-related information, facilitating training, support, inspections, improvements, and other processes to encourage their participation in creating a mutually beneficial and cooperative relationship.

05 All workers understand and observe the safety and health management policy, actively participate in identifying potential hazards to achieve safety and health improvements, and diligently adhere to safety rules and regulations, with the goal of maintaining accident-free workplaces.

Safety and Health Management Organization

To prioritize safety and health, GS Power has appointed a Chief Safety Officer (CSO) to strengthen its safety and health management system. The CSO is responsible for developing and implementing overall safety and health policies, ensuring the safety of all employees and stakeholders. Furthermore, each business site has a dedicated organization focused on safety and health, under the CSO. These organizations aim to enhance safety management expertise, and systematically manage and continuously improve safety practices.

Safety and Health Organizational Chart



Safety and Health

Key Issue

Process Safety Management

As required by the Industrial Safety and Health Act, GS Power actively manages process safety by regularly updating relevant materials, conducting inspections, and operating a Process Safety Management Task Force (PSM TF) to prevent accidents such as leaks of hazardous materials, fires, and explosions associated with hazardous facilities. The company has specifically developed and implemented the Power Job Safety Analysis (P-JSA), a risk assessment method that identifies potential risk factors in each process. It assesses the effectiveness of current safety measures based on these risk factors. Following this assessment, GS Power establishes and adopts safety measures for each risk factor identified, drawing on internal and external safety incident cases for reference.

Process Safety Data Updating and practical use of process safety data	**Process Risk Assessment** Regular hazard assessments conducted with worker participation	**Safe Operation Guides** Utilizing and complying with operators' safe operation guides
Facility Inspection, Testing, and Maintenance Regular inspections and maintenance based on equipment risk	**Safe Work Permit** Establishment of safety plans and compliance with procedures for hazardous tasks	**Contractor Safety Management** Implementation and evaluation of contractor safety management
Worker Training Development and management of worker PSM training plans	**Pre-startup Check** Conducting pre-startup checks on facilities and address	**Changing Elements Management** Managing and monitoring changes made according to the inspection results
Internal Audit Selection of internal audit team and objective audits followed by corrective actions	**Process Incident Investigation** Investigation of process incidents, including near-miss incidents, and development of preventive measures	**Emergency Response** Development of emergency response plans based on quantitative incident scenarios and regular training

Safety and Health Patrol

GS Power relies on subcontractors for hazardous jobs, which presents a risk of safety accidents without proper technical orders and guidance. To mitigate these risks, the company has implemented a Safety Patrol program. This program features a senior safety engineer from the Korea Construction Safety Corporation who is stationed on-site during planned preventive maintenance work. In addition, regular inspections are conducted for district heating pipeline construction. Through these activities, potential hazards are identified and addressed before any high-risk operations take place. In 2024, the Safety Patrol was conducted for a total of 70 days, from March to November. The program focused on 14 key areas, including workplace management and safety railing management, reviewing on-site conditions, worker practices, and compliance with the Occupational Safety and Health Act, as well as other relevant regulations. For any areas in which the safety was deemed insufficient, corrective actions and improvement measures were implemented.

STOP System

GS Power runs the Safety Training Observation Program (STOP), which involves all employees and suppliers. Under this program, any employee is empowered to stop work if they identify a risk factor. The STOP Operation Committee reviews cases reported through STOP cards, discusses potential risks and near-miss incidents, and rewards exemplary cases. By utilizing the STOP program, the company enhances safety awareness among its employees and suppliers, helping to prevent safety accidents.

Special Safety Inspection for Important Dangerous Works

GS Power holds safety and health education sessions before all significantly hazardous jobs. These sessions are designed to increase the safety awareness of workers from suppliers who are particularly exposed to potential risks. In addition, external safety specialists, along with employees responsible for safety and health, carry out special safety inspections on-site during facility overhauls or prolonged construction projects.

Safety and Health

Key Issue

Health Checkup and Aftercare Programs

GS Power provides a comprehensive annual health check-up for its employees to promote sustainable health management. Depending on the results, employees can transfer their job duties, participate in health challenges, receive follow-up tests, manage their health data, or receive counseling services. The health challenges aim to improve their body composition and InBody scores. Employees can also monitor their health condition through follow-up tests.

Counseling Services

GS Power is committed to supporting its employees' mental health through a comprehensive psychological support program. The company collaborates with external organizations to offer personal counseling services that help employees address a range of concerns, including depression, job stress, and family issues. For those who prefer not to participate in in-person counseling sessions, GS Power also provides a range of resources, such as psychology-related videos and stress self-assessment tools.

Health Management

To ensure a safe work environment for everyone, GS Power conducts regular inspections and assessments of hazardous factors, collaborating with external professionals to enhance safety. To prevent occupational diseases caused by toxic chemicals, all work sites prohibit the use of hazardous substances, and have replaced them with safer alternatives. The company also identifies potential risks that can lead to musculoskeletal diseases caused by repetitive tasks and heavy lifting and takes action to address them. Since 2020, GS Power has been conducting annual assessments of risks related to cerebro-cardiovascular diseases and job stress to prevent occupational illnesses. In addition, musculoskeletal risk factor assessments are carried out every three years. In 2024, the company evaluated job stress factors and related symptoms for all employees, incorporating the results into its ongoing health management efforts.

Work Environment Measurement

GS Power makes every effort to prevent employee injuries caused by hazardous factors on-site. It conducts work environment measurements biannually at Korea Industrial Health Association (Bucheon) and Anyang Sam Hospital in Anyang. The results of the 2024 work environment measurements indicated that all hazardous factors, such as noise, acids and alkalis, metals, and dust, were being maintained below the exposure limits. Despite meeting the exposure standards, GS Power recognizes that workers may still be vulnerable to diseases depending on the job's physical requirements and working conditions. To address this, the company has placed warning signs and provided earplugs in noisy areas, routinely inspects the controlled wind speed of local exhaust devices, and has implemented management guidelines for chemical agent handling areas. These measures aim to create safer workplaces for workers.

Safety and Health

Key Issue

Safety and Health Management

Incheon Total Energy Company

Safety, Environment, and Health Management Policy

Incheon Total Energy has established a safety, environment, and health management policy to realize sustainable management and social values in accordance with goals and principles that prioritize safety, the environment, and health.

01 We build and operate organizations based on safety, the environment, and health to enhance our capabilities and provide greater value to our customers and stakeholders.

02 We prioritize safety and health as key elements of our management strategy, and comply with all applicable laws, regulations, and other requirements to lead the way in establishing a proactive and self-regulating safety culture.

03 We build safe business sites by proactively identifying and continuously addressing potential hazards and risks using risk assessments.

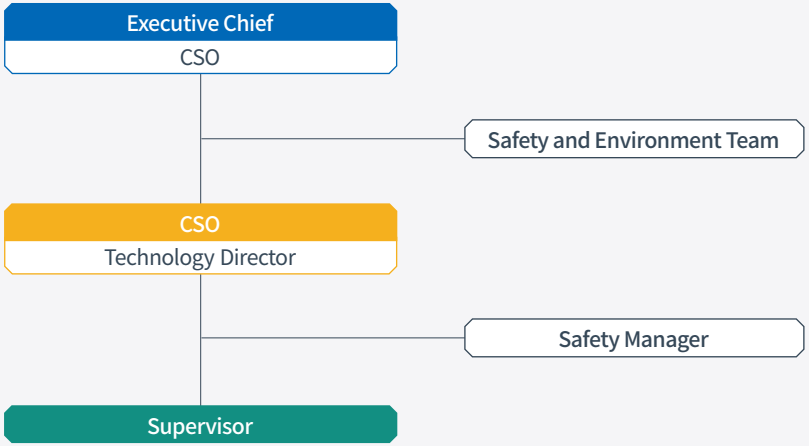
04 We practice eco-friendly management by strengthening environmental management in our business sites and actively engaging in initiatives to reduce environmental pollutants.

05 We communicate our safety, environment, and health management policies to all stakeholders, and work together to implement these policies through activities.

Safety and Health Management Organization

Incheon Total Energy has appointed a Chief Safety Officer (CSO), as required under the Serious Disaster Punishment Act, and is working to strengthen its safety and health management. In addition, it has created the Safety and Environment Team under the CSO. The company establishes safety and health targets and regularly inspects its performance to ensure thorough and continuous management.

Safety and Health Organizational Chart



Process Safety Management

To prevent accidents that may cause harm to workers or to residents in areas near business sites, such as hazardous material leaks, fires, and explosions from hazardous facilities, Incheon Total Energy systematically manages process safety according to the Industrial Safety and Health Act. The company regularly updates process safety data, conducts process safety assessments, manages the safety of suppliers, and performs an annual internal audit.

Safety and Health

Key Issue

Safety Accident Prevention

Incheon Total Energy does its utmost to improve safety awareness and prevent accidents through process safety management (PSM), the potential risk and near-miss accident discovery system, and monthly safety inspection day. In addition, it inspects areas with potential for accidents on its business sites. As well, to promote shared growth, the company conducts safety and health education and on-site inspections and organizes meetings of the Safety and Health Council in partnership with its suppliers. Incheon Total Energy supports suppliers in improving their safety management through various approaches, while conducting safety and health education and supporting risk assessments.

Category	Description	Frequency
Safety Inspection Day	• Safety and health education • On-site inspection • Suppliers' Safety and Health Council	Monthly
Emergency Response Training	• Emergency scenario drills • Emergency external institution contact information • Study of the private fire brigade's roles and action	Annually
Joint Safety Inspection Special Safety Inspection	• Facility stability and field safety inspection	Quarterly and as needed

Safety Education for Employees

Incheon Total Energy employees receive quarterly online safety education from the Korea Industrial Safety Association. In addition, the company has designated the 4th of every month as Safety Inspection Day, on which safety and PSM education are conducted. On this day, Incheon Total Energy provides safety and health information for each season to its employees, improving the effectiveness of education. This information includes the professional curriculum of external safety institutions, to enhance the level of safety management.

Health Education for Employees

Incheon Total Energy provides monthly information and group education on seasonal disease prevention guidelines to promote employee health.

Health Education History

Schedule	Subject	Note
January 2024	Stretches	Group education and online materials
February 2024	Diabetes	
March 2024	Iliopsoas stretches	
April 2024	Insomnia	
May 2024	Fine dust	
June 2024	Heat-related illness	
July 2024	VDT syndrome	
August 2024	Back pain	
September 2024	Autumn health management	
October 2024	Clean and safe workplace	
November 2024	Winter safety and health management	
December 2024	CPR and AED education	

Safety and Health

Key Issue

Employee Health Management

Incheon Total Energy conducts annual health checkups and special checkups for employees. Nurses from health management agencies visit the site every month to assess the health of individuals under observation and those with health concerns. Based on their diagnosis, employees may change their roles or receive personal protective equipment. The company also carries out health management inspections and arranges in-depth consultations through semi-annual visits by doctors. In addition, to prepare for emergencies, Incheon Total Energy has automated external defibrillators on hand. To prevent occupational diseases, the company conducts an annual risk assessment for cardiovascular and cerebrovascular diseases, as well as a musculoskeletal test every three years.

Health Checkup and Counselling Programs for Employees

Incheon Total Energy's employees undergo annual health checkups at hospitals in Incheon. Employees with health issues receive monthly consultations, guidance, and education.

Work Environment Measurement

Incheon Total Energy is committed to eliminating the harm to workers caused by hazardous substances in our business sites. We conduct an annual assessment of the work environment through Nasaret International Hospital. Based on the assessment results, we take measures such as providing PPE, improving the work environment, and facilitating job transitions. The 2024 assessment results indicate that the required standards were being met for noise, acids, alkali, metals, and dust.

Safety Education and Inspection for Suppliers

At Incheon Total Energy, the Safety and Environment Team is responsible for providing safety and health education to ensure the well-being of suppliers' workers. Additionally, designated personnel conduct monthly on-site inspections alongside suppliers' workers. The CSO and the supervisor conduct field inspections every week. Incheon Total Energy identifies and addresses potential risks through safety patrol inspections, performed with the help of external specialists.

Safety and Health

Key Issue

Safety and Health Management

With Incheon Energy Company

Safety and Health Management Policy

With Incheon Energy has announced a safety, environment, and health policy that prioritizes the safety and health of its employees, and has established and operates a safety management system that is in line with this policy. According to the system, the employees and suppliers on the site observe consistent safety and health practices.

Safety and Health Management Organization

With Incheon Energy manages safety on-site through safety supervisors and employees in charge of safety from each business team and the Safety and Environment Team, which manages and supports safety at the company level. Although the Industrial Safety and Health Act does not require the business sites to appoint a safety manager, the company has proactively appointed a safety manager and created a dedicated organization to ensure the systematic practice of safety management and enable a zero-accident workplace.

Safety and Health Management System

To make a zero-accident workplace, With Incheon Energy is leading safety and health management for all employees and suppliers through the planning, inspection, evaluation, and improvement process. In addition, the annual safety and health plan is reported to the CEO. The plan covers safety and health policies, targets, health management for all employees (including suppliers), and preventive management of hazardous and dangerous substances. Going a step further, With Incheon Energy has formed a safety and health council to perform regular safety and health management activities for suppliers' employees.

Safety Accident Prevention

With Incheon Energy works to achieve a zero-accident workplace by performing regular safety and health activities based on the systematic safety and health system. The company has designated the 4th of every month as Safety Inspection Day, on which all employees and suppliers receive safety education and inspect facility safety. It also conducts safety inspections during excessive power usage periods such as winter, rainy season, spring thaw, and holidays, as well as during special disaster situations such as earthquakes and typhoons. As well, With Incheon Energy receives a regular inspection by Incheon City and the Central Regional Labor Office to continuously strengthen safety and improve the reliability of its business sites.

Activity	Description	Note
Safety Inspection Day	Raise employees' safety awareness and conduct safety inspections of vulnerable facilities	4th of Every month
Field Inspection Activity	Supervisor (each Team Leader)	Weekly
	Safety Manager	Weekly
Firefighting Activity	Inspect the operation and conduct comprehensive precision inspections	Annually (respectively)
	Inspect the external condition	Monthly
	Conduct fire safety education	Annually
Gas Facility Inspection	Regular inspections conducted by an authorized inspection agency	Annually
	User facility inspections conducted by Samchully ENG	Annually (respectively)
Safety- and Health-focused Period	Hold an industrial safety- and health-focused period	July
	Hold a fire caution period	November
Safety Inspection	Safety Valve	Annually
	Heat-using equipment (heat exchanger and pressure vessel)	Biennially
	Main boiler (performance inspection and inspection during opening or use)	Annually
	PLB (performance inspection and inspection during opening or use)	Annually
	Cranes, hoists, and pressure vessels	Biennially
	Regular inspection of electrical facilities for business use by KESCO	Biennially
Seasonal Safety Inspection	Spring thaw	March
	Rainy season	July – September
	Winter	December – February
Vulnerable Period Safety Inspection	Lunar New Year's holiday	February
	Chuseok holiday	September

Safety and Health

Key Issue

Process Safety Management

Incheon Energy operates a process safety management (PSM) system to enhance workplace safety. The company frequently performs safety inspections and internal assessments to eliminate potential risks in the workplace. In addition, it provides regular training for PSM-responsible workers with the help of an external PSM consulting company. Thanks to these efforts, Incheon Energy was able to maintain a grade of 'S' in the implementation evaluation by the Ministry of Employment and Labor.

Safety and Health Education

With Incheon Energy conducts regular safety training and education to firmly establish a workplace safety culture and ensure its employees respond to emergencies immediately. In addition, the company has advanced emergency training by adding safety education for each case, so that it can promptly respond to various emergency scenarios.

Education	Duration	Frequency	Note
Education for Supervisors	16 hours	Annually	
Regular Safety Education for Workers	12 hours	Semiannually	All workers excluding office workers
	6 hours	Semiannually	Office workers
Safety Education for New Hires	8 hours	Before the work	New hires
Safety Education for Work Changes	2 hours	Before the work	
Special Safety Education: Hazardous and Dangerous Substances	16 hours	Annually	Workers exposed to hazardous conditions
Safety Education on the Safety Inspection Day	1 hours	Monthly	
Safety and Health Education by an External Institution	Frequently	Frequently	Professional safety education
Safety Seminar	1 hours	Monthly	
PSM Report Education	1 hours	Monthly	Monthly Training on the 12 Key Action Plans

Health Education for Employees

With Incheon Energy provides monthly health education that reflects changes in condition in each season and environment. The company uses various educational materials, such as videos, to cover diverse scenarios.

Health Checkup and Counselling Programs for Employees

Incheon Energy offers annual health checkups for its employees at designated hospitals. In addition, the company provides biennial health checkups for employees' spouses over 40 years of age. Incheon Energy has implemented an Employee Assistance Program (EAP) to support employees dealing with job-related stress, depression, personal issues, and family problems. The program includes a counseling session and two additional sessions for counselling services, a TCI test, and a stress test. Employees have the option to schedule a session using a dedicated app, which also provides access to stress management, meditation, and other helpful resources.

Work Environment Measurement

With Incheon Energy commissions Jian Health and Environment Research Institution to assess the work environment twice a year. The results of this assessment are announced on the company's bulletin board. The company also collects the opinions of field workers and does its utmost to create an improved workplace environment. To create a safe work environment for workers in the field, it inspects the controlled wind speed of local exhaust devices, implements management guidelines, and provides respirators and wearing guidelines.

Local Community

CSR Promotion System

CSR System

As a socially responsible corporate citizen fulfilling the CSR vision of the GS Group, we are committed to contributing to the development of local communities through sharing and volunteering based on our capabilities and resources. We contributed KRW 228.2 million in 2024, and will continue our donations and sponsorship to grow in harmony with the local communities in which we operate.

Total Donations

KRW **228.15** million

Donations in 2024

Category	Amount (KRW 1,000)
National Assembly Forum on Climate Change	30,000
Friends of National Museum of Korea	20,000
National Museum of Modern and Contemporary Art, Korea	20,000
Habitat Korea 815 Run	8,150
The Seoul Forum for International Affairs	15,000
Love Briquette	10,000
People & Society	18,000
Ski Association	100,000
Hanggarae Activity	7,000

Local Community

GS Energy's CSR Activities

Support for Local Communities

Habitat Korea 815 Run

The "Habitat Korea 815 Run" is a campaign to promote the significance of Korea's Liberation Day, express gratitude for the independence activists, and convey the positive message of "It will be all right, Korea!" Funds raised through this campaign are used to support home improvements for the descendants of independence activists.

Climate & Energy

National Assembly Forum on Climate Change

This forum provides a venue for healthy discussions among various stakeholders on climate change issues, raises public awareness of climate change across society, and seeks solutions at the national level. By sponsoring this forum, we are contributing to the climate change response as we strive to build an eco-friendly environment for society.

Supporting Energy-vulnerable Communities (Love Briquette Donation)

We conducted the Love Briquette Donation campaign, providing donations of briquettes, food, and heating supplies to energy-vulnerable communities in collaboration with Coal Briquettes for Neighbors in Korea. Employees who participated in the volunteer activities delivered briquettes to households in need, actively engaging with their communities. By sharing briquettes, they not only delivered physical support but also spread warmth and care within these communities.

Culture and Arts

National Museum of Modern and Contemporary Art

We are expanding the base of art and culture while also supporting exhibitions and artists to help the National Museum of Modern and Contemporary Art establish itself as a symbol of Korea's culture.

Friends of the National Museum of Korea

We are carrying out various museum sponsorship projects, including academic research, education, artifact acquisition, donations and exhibitions, to widely promote and carefully preserve Korea's history and culture. In addition, we are involved in diverse support activities such as social education programs for citizens, and exchange activities with domestic and foreign museum support groups.

Local Community

Integrated Social Contribution Program of Subsidiaries

Employee Engagement on Carbon Neutrality through Hanggarae

Working in collaboration with our subsidiaries, we introduced an app called Hanggarae to encourage employees to practice carbon neutrality and embrace ESG initiatives. “Hanggarae,” which means “making tomorrow adding happiness” in Korean, aims to integrate ESG practices into daily life. The app allows users to record their ESG practices and assess the resulting social values. Employees can choose from various carbon neutrality activities that can be incorporated into their lives, and share their participation on Hanggarae. Employees earn points for their posts based on the difficulty and significance of each activity. These points can be used to purchase products, make donations, or unlock additional app features. Employees can also measure and share the social value derived from their activities, contributing to the resolution of social problems.

Carbon Emission Reduction

6,956kg

Monetization of Social Value

KRW 4,869,000

GOVERNANCE

Governance

Board of Directors

Role of the BOD

The BOD (board of directors) supports management through responsible governance, demanding corrections of problems with management standards, procedures, or methods when necessary, to ensure reasonable management activities. The BOD makes resolutions on agenda items delegated by the general meeting of shareholders and important matters related to the basic management policies and business operations of the company, and supervises the work performance of the directors and management.

BOD Composition

To secure the independence of the BOD, all directors are elected at the general meeting of shareholders from among candidates who meet the qualifications specified in the relevant laws and regulations. To ensure the diversity of the BOD, there is no discrimination based on gender in the election of directors. As of March 2025, the BOD consisted of an executive director (the CEO) and four non-executive directors, and the chairperson of the BOD is elected based on his or her experience and expertise in the energy business.

Board of Directors' Members

(As of March 2025)

Position	Name	Gender	Term of Office	Expertise	Career
Executive Director (CEO)	Huh Yong-soo	Male	March 25, 2028	Management	CEO of GS Energy Former CEO of GS EPS
Non-executive Director	Huh Jun-hong	Male	March 21, 2026	Management	CEO of Samyang Tongsang Former Vice President of GS Caltex
	Hong Soon-ki	Male	March 25, 2027	Finance	Vice Chairman of GS Holdings Former CEO of GS Holdings
	Huh Se-hong	Male	March 25, 2028	Management	CEO of GS Caltex Former CEO of GS Global
	Kim Suk-hwan	Male	March 25, 2028	Management	CEO of GS EPS Former CEO of GS E&R

Transparency of the BOD

Directors are appointed by a resolution of the shareholders at the general meeting of shareholders in accordance with Article 382 of the Commercial Act. Internal directors are appointed from among candidates recommended by the BOD. A director's term of office is three years, and directors are eligible for re-appointment by the general meeting of shareholders after the expiry of their term.

BOD Operation

We operate the BOD in accordance with the BOD operation regulations. The chairperson of the BOD can convene BOD meetings and set the date, and all directors should be notified of a BOD meeting in writing or verbally at least 12 hours in advance. BOD meetings may also be held when agreed upon by all directors, in which case the aforementioned notice can be omitted. In 2024, a total of 13 BOD meetings were held to discuss 43 agenda items, with an attendance rate of 100%.

BOD Performance Evaluation and Compensation

The BOD establishes its remuneration policy for key executives in consideration of the interests of shareholders and the long-term interest of the company, and transparently discloses its details. The activities of the executive director within the BOD are evaluated based on objective and comprehensive criteria, including quantitative indicators, leadership, core competencies, and other contributions to the company.

BOD Remuneration

Position	Number of Persons	Unit	Total Remuneration	Average Remuneration per Person
Registered Director	1	KRW million	2,021	2,021

Governance

Audit System

Internal Audit

We appoint individual with no disqualifying factors under the commercial law as auditor to examine financial statements and evaluate the plans and operations of internal control over financial reporting (ICFR). In addition, we provide auditor with annual training to enhance their expertise and improve audit efficiency, supported by the financial team's guidance in ICFR.

Training for Auditor

Date	Training Institute	Main Content
November 15, 2024	KEHRD	• Conceptual framework and best practice guidelines for ICFR • Core values and ethical management for value-up
October 10, 2023	KEHRD	• Accounting for ICFR
August 18, 2022	Samil PwC Accountings	• Roles of ICFR and the audit (the Audit Committee) • Subsidiary oversight and consolidated ICFR assessment • Fraud investigation and reporting obligations of the audit (the Audit Committee)
April 30, 2022	Oneline Edu (online Education Platform)	• Explanation of ICFR components and principles • Practical guidelines for implementing ICFR

External Audit

We maintain the fairness and transparency of our accounting information through regular audits conducted by an independent external auditor. Our external auditor and the Internal Audit Team regularly communicate regarding the audit plan, independence, and external audit results. In 2024, our audit received a grade of "adequate," and no issues were identified in the audit results.

Audit Opinion

Year	Auditor	Audit Opinion	Note
2024	Deloitte Anjin	Adequate	N/A
2023	Deloitte Anjin	Adequate	N/A
2022	Deloitte Anjin	Adequate	N/A

Audit Expenses

Year	Auditor	Unit	Total Remuneration
2024	Deloitte Anjin	KRW million	330
2023	Deloitte Anjin		340
2022	Deloitte Anjin		290

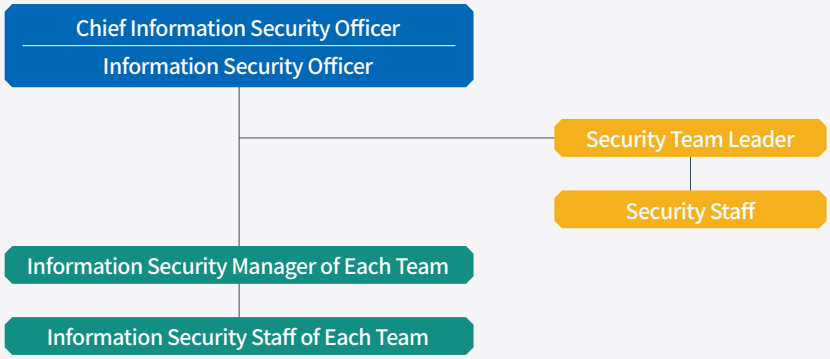
Data Protection

Information Protection Activity

Information Protection Management System

We operate an information security management system in accordance with our internal regulations, conduct annual inspections of information protection, and implement appropriate improvement measures.

Information Protection Organization



- Compliance with legal requirements such as the Personal Information Protection Act.
- The information security manager of each team and security staff review and archive records of personal information use and destruction.
- Added a new security department, IT Security Team, in 2025

Information Protection Education for Employees

We provide courses on information security, including privacy protection, to new hires and the employees of our suppliers once per year.

Pledge of Information Protection

We require all employees to sign a pledge to comply with our information protection regulations during their work.

1. I will uphold the confidentiality of the business information, technical information, management information, and trade secrets of the company and any other information of economic value, and will not use such information for any purposes other than performing my duties.
2. To protect confidential information, I will not bring in outside equipment or software without the approval of the company.
3. To protect confidential information, I hereby give the Information Security Department consent to gather and search information of the company.
4. Upon retirement, I will return the originals and copies of all confidential information I have managed to the company, along with my ID card.
5. I will not illegally bring any information managed as confidential by a third party into the company. I will not leak the confidential information of third parties for which the company has an obligation to maintain confidentiality, nor use such information for purposes other than performing my duties.
6. I will comply with all regulations and work instructions related to the information security of the company.

Technical Safeguards

To provide stable IT services and enhance security, we automatically identify and block viruses and malware. We establish and operate an internal management system based on a cloud environment. Our cloud-based services rigorously manage information security by blocking all external penetration pathways, except for DMZ,[1)] through a firewall and a web application firewall (WAF). The DMZ is monitored year-round through regular vulnerability inspections and services from a specialized information protection agency. Additionally, the internal data levels at GS Energy are systematically monitored. We have established a backup system and prepared for data breaches, including ransomware, through regular disaster recovery simulations. Furthermore, when implementing a new external system, we conduct a hacking simulation to verify its robustness and security.

1) DMZ (Demilitarized Zone): A zone in which access between the internal network and the external network is restricted to protect internal resources when services are provided to the outside.

Data Protection

Information Protection Management

GS CHARGEV, one of our subsidiaries, provides an app service for EV charging and manages the information of multiple customers. Given the unique nature of the company, prioritizing information protection is crucial for sustainable management. Specific information protection activities for GS CHARGEV are outlined below:

Information Security Organization

GS CHARGEV has appointed a Chief Privacy Officer (CPO) and a manager in charge of information security to handle complaints regarding the processing of personal information and provide remedies for any damages. In addition, the privacy management department promptly handles all inquiries related to personal information protection.

Personal Information Protection System

GS CHARGEV provides its employees with the minimum necessary authority for work and manages system access through logs and passwords. In addition, the company blocks illegal access to the personal information processing system using a firewall. Antivirus software and regular updates are used to prevent malware. Critical personal information such as passwords and credit card numbers are encrypted before being saved, transmitted, or received. When disposing of personal information, the company uses methods of destruction that will prevent its recovery, such as incineration, shredding, punching, and overwriting.

Management of Partner Company's Information Protection

GS CHARGEV has systematically established two separate management pages: one for CHARGEV employees and the other for partner companies. This is done to separate access from outside of the company and limit access to personal information. To protect information from internal access, GS CHARGEV allows both internal and external access only through the limited VPN network. Internal parties and external partner companies are required to sign a confidentiality agreement related to information protection to prevent the leakage of core technologies and information.

Information Protection Education

GS CHARGEV provides annual personal information protection education to its employees. Employees who handle customers' personal information are required to sign a personal information protection pledge and receive personal information protection education at least twice a year to ensure that our customers' information is managed safely.

Invasion Response Procedure

GS CHARGEV established a cyber invasion prevention procedure through a web application firewall (WAF). In addition, it is building a 24/7 invasion monitoring system.

Number of customer complaints related to personal data breaches

0 cases in 2024

Total number of confirmed cases of customer data leakage, theft, or loss

0 cases in 2024

Risk Management

Ethics & Compliance Risk

Ethics and Compliance Risk Management System

To ensure ethical management across the company, we have implemented a code of ethics and a comprehensive code of conduct that all employees are required to follow. In addition, we have established reporting channels for ethical management violations and a grievance handling process. Employees are also expected to sign a Voluntary Compliance Pledge to demonstrate their commitment to compliance. These proactive compliance measures help us effectively mitigate ethical and compliance risks.

Ethical Management Reporting Channel

We operate direct reporting channels, such as email and telephone, through which our stakeholders, including employees, customers, and suppliers, can report corruption, including employee misconduct or unfair transactions with suppliers.

Grievance Handling Channel

We have a grievance handling channel which enables employees or anyone else to report damages they have experienced or risks they have identified. Workplace harassment, sexual harassment, or human rights violations can be reported via a direct phone line.

Whistleblower Protection

Upon receiving a report of non-compliance or a grievance, the department in charge takes responsibility for protecting the whistleblower from any potential disadvantages and ensures confidentiality.

Voluntary Compliance Pledge

We require all executives and employees to sign a pledge of voluntary compliance to foster a corporate culture of ethics and compliance. By signing this pledge, members of GS Energy commit to adhering to corporate regulations, the Code of Ethics, and fair trade laws while fulfilling their responsibilities.

Code of Ethics

Chapter 1. Management for Customer Satisfaction
We recognize that customers form the foundation of the profits and growth of the Company, and provide the genuine value customers want to realize customer satisfaction.

Chapter 2. Coexistence and Co-prosperity with Suppliers
We build mutual trust and cooperative relationships with our suppliers through transparent and fair transactions.

Chapter 3. Respect for Employees and Compliance with Basic Ethics
The company and its employees fulfill their obligations for mutual growth and development based on trust and respect.

Chapter 4. Protection of Shareholders' Interests
We protect the interests of shareholders through efficient and transparent management activities so that shareholders can invest in the company with confidence.

Chapter 5. Contributions to the Country and Society
As a corporate citizen, we comply with the law and government policies and fulfill our social responsibilities.

Chapter 6. Environmental, Health, and Safety Management
We strive to protect the environment and pursue an accident-free workplace.

Risk Management

Financial Risks

Financial Risk Management System

We define liquidity risk, credit rating risk, financial market fluctuation risk, and internal control risk as financial risks. We continuously review and implement a variety of measures that are optimized for coping with these financial risks.

Liquidity Risk Management

To manage liquidity risk, we maintain stable liquidity management by thoroughly forecasting the balance of funds while holding cash reserves above an appropriate level and securing credit lines. In addition, we spread out the maturity dates of our funds to reduce our liquidity risks. In the event of a financial crisis caused by market fluctuations, we make efforts to minimize refinancing risk, which include reviewing various financing schemes and diversifying the borrowing portfolio . Recently, we have monitored the financial market's reaction to changes in the ESG environment to analyze the impact of ESG regulations and initiatives of the government and financial institutions on financing.

Credit Rating Risk Management

We strive to maintain a stable credit rating to secure the confidence of our investors and customers. To this end, we include the mid to long-term financial ratio verification in the top management's decision-making process during the deliberation and approval of business and investment plans. We also analyze the impacts of financial market changes, our targets, and various environments on the changes in our borrowings to systematically manage an adequate financial ratio and maintain a sound capital structure.

Financial Market Fluctuation Risk Management

To promptly respond to risks caused by market fluctuations, such as interest rates and exchange rates, we continuously monitor key financial indicators. By thoroughly analyzing the causes of their fluctuation and forecasting their future directions, we select optimal measures that minimize impacts on our financial statements and business plans. In terms of interest fluctuation risks, we eliminate cash flow risk by appropriately adjusting the proportion of borrowings or purchasing derivative products. On the other hand, we manage exchange rates using an appropriate hedging method after analyzing our FX position.

Internal Control Risk Management

We operate the internal accounting control system in compliance with the relevant laws, and promote transparency and reliability across our financial reporting processes, from the calculation to the disclosure of financial information. In addition, we ensure the reliability of our financial information by adopting a reasonable and consistent internal accounting control system. We also provide objective information for investors' decision-making. Thanks to the effectiveness of our internal controls by auditors, it was evaluated that our internal control measures are effective in the fiscal year of 2024.

Investment Risks

Investment Risk Management System

We operate the Investment Deliberation Committee to manage investment risks. The Investment Deliberation Committee reviews the economic feasibility of investment projects and their alignment with the directions of the company's investment portfolio, and examines the feasibility of financing schemes and the risks associated with investment structures. To cope with the rapidly changing business environment and the volatility of different industries, the committee's approval is required for any investment or disposal of assets worth KRW 5 billion or more to minimize financial risks.

Investment Deliberation Process

APPENDIX

ESG Data

Environment

GHG Emissions

Category		Unit	2022	2023	2024
GS Energy	Scope 1 Emissions	tCO_2eq	78	70	**79**
	Scope 2 Emissions		213	220	**243**
	Total Emissions		291	291	**322**
	GHG Intensity	tCO_2eq/KRW billion	0.95	0.28	**0.58**
GS Power	Scope 1 Emissions	tCO_2eq	2,967,293	2,534,649	**2,678,116**
	Scope 2 Emissions		20,662	21,534	**20,704**
	Total Emissions		2,987,955	2,556,183	**2,698,817**
	GHG Intensity	tCO_2eq/KRW billion	1,478.81	1,547.81	**1,757.86**
Incheon Total Energy	Scope 1 Emissions	tCO_2eq	370,696	371,576	**394,740**
	Scope 2 Emissions		3,144	4,404	**2,960**
	Total Emissions		373,840	375,980	**397,700**
	GHG Intensity	tCO_2eq/KRW billion	1,279.83	1,242.12	**1,459.90**
With Incheon Energy	Scope 1 Emissions	tCO_2eq	-	20,423	**20,099**
	Scope 2 Emissions		-	3,015	**3,302**
	Total Emissions		-	23,439	**23,401**
	GHG Intensity	tCO_2eq/KRW billion	-	419.36	**418.70**
GS CHARGEV	Scope 1 Emissions	tCO_2eq	-	0.3	**1**
	Scope 2 Emissions		-	54.2	**77**
	Total Emissions		-	54.5	**78**
	GHG Intensity	tCO_2eq/KRW billion	-	1.73	**1.07**

* Data for With Incheon Energy and GS CHARGEV has been collected and reported starting from 2023.
** The total GHG emissions differ from the sum of Scope 1 and Scope 2 emissions (scope 1 and scope 2 emissions are rounded when calculating the total emissions).

Energy Consumption

Category			Unit	2022	2023	2024
GS Energy		Direct Energy Consumption	TJ	1	1	**2**
		Indirect Energy Consumption		4	5	**5**
		Total Consumption		6	6	**6**
GS Power	Anyang	Direct Energy Consumption		43,517	38,079	**44,780**
		Indirect Energy Consumption		214	263	**207**
		Total Consumption		43,731	38,342	**44,987**
	Bucheon	Direct Energy Consumption		14,304	11,093	**7,032**
		Indirect Energy Consumption		321	353	**419**
		Total Consumption		14,624	11,447	**7,451**
	Seoul	Direct Energy Consumption		1	1	**1**
		Indirect Energy Consumption		5	3	**3**
		Total Consumption		6	4	**4**
Incheon Total Energy		Direct Energy Consumption		7,344	7,362	**7,821**
		Indirect Energy Consumption		152	188	**164**
		Total Consumption		7,496	7,550	**7,984**
With Incheon Energy		Direct Energy Consumption		-	403	**396**
		Indirect Energy Consumption		-	81	**96**
		Total Consumption		-	484	**493**
GS CHARGEV		Direct Energy Consumption		-	0	**0**
		Indirect Energy Consumption		-	1	**2**
		Total Consumption		-	1	**2**

* Data for With Incheon Energy and GS CHARGEV has been collected and reported starting from 2023.
** The total energy consumption differs from the sum of direct and indirect energy consumption (each direct and indirect consumption is rounded when calculating the total consumption).

ESG Data

Environment

Water

Category			Unit	2022	2023	2024
GS Energy		Water Intake	TJ	4,610	4,708	**4,477**
		Water Use		0	0	**0**
		Water Discharge		4,610	4,708	**4,477**
		Water Recycled		-	-	**-**
GS Power[1]	Anyang	Water Intake		3,057,540	2,681,070	**3,550,597**
		Water Use		2,895,641	2,525,667	**3,392,987**
		Water Discharge		161,899	155,403	**157,610**
		Water Recycled		481,914	422,034	**612,240**
	Bucheon	Water Intake		388,326	318,357	**548,584**
		Water Use		305,932	221,288	**382,278**
		Water Discharge		82,394	97,069	**166,306**
		Water Recycled		19,701	19,335	**0**
Incheon Total Energy[1]		Water Intake		63,927	58,449	**88,468**
		Water Use		45,576	40,208	**71,747**
		Water Discharge		18,351	18,241	**16,721**
		Water Recycled		10,931	8,356	**11,439**
With Incheon Energy[1]		Water Intake		-	55,401	**60,765**
		Water Use		-	32,193	**38,447**
		Water Discharge		-	18,245	**18,607**
		Water Recycled		-	0	**0**
GS CHARGEV		Water Intake		-	844	**1,248**
		Water Use		-	0	**0**
		Water Discharge		-	844	**1,248**
		Water Recycled		-	-	**-**

1) The data has been corrected due to a data estimation errors in 2023.
* Data for With Incheon Energy and GS CHARGEV has been collected and reported starting from 2023.

Waste

Category			Unit	2022	2023	2024
GS Energy		General Waste	Ton	-	41	**30**
		Designated Waste		-	0	**0**
		Total		-	41	**30**
		Waste Recycled		-	15	**16**
		Waste Recycling Rate	%	-	37	**53**
GS Power	Anyang	General Waste	Ton	627	676	**520**
		Designated Waste		4	1	**4**
		Total		631	677	**524**
		Waste Recycled		444	537	**420**
		Waste Recycling Rate	%	70	79	**80**
	Bucheon	General Waste	Ton	370	327	**208**
		Designated Waste		24	20	**15**
		Total		394	348	**223**
		Waste Recycled		139	163	**107**
		Waste Recycling Rate	%	35	47	**48**
Incheon Total Energy		General Waste	Ton	14	9	**22**
		Designated Waste		1	1	**1**
		Total		14	10	**24**
		Waste Recycled		4	5	**5**
		Waste Recycling Rate	%	28	51	**21**
With Incheon Energy		General Waste	Ton	-	1	**9**
		Designated Waste		-	0	**0**
		Total		-	1	**9**
		Waste Recycled		-	-	**-**
		Waste Recycling Rate	%	-	-	**-**

* Data for GS Energy and With Incheon Energy has been collected and reported starting from 2023. Data for GS CHARGEV is expected to be reported in the future.
** Due to rounding calculations, there may be a discrepancy between the sum of individual emissions and the total emissions value.

ESG Data

Environment

Air Pollutant Emissions

Category			Unit	2022	2023	2024
GS Power[1)]	Anyang	NOx Emissions	Ton	243	218	**257**
		SOx Emissions		1	0	**0**
		TSP Emissions		5	8	**5**
	Bucheon	NOx Emissions		346	210	**133**
		SOx Emissions		3	1	**1**
		TSP Emissions		6	5	**2**
Incheon Total Energy		NOx Emissions		60	69	**67**
		SOx Emissions		0	0	**0**
		TSP Emissions		0	0	**0**
With Incheon Energy		NOx Emissions		-	6	**6**
		SOx Emissions		-	0	**0**
		TSP Emissions		-	0	**0**

1) Data has been revised due to changes in the data collection standard in 2022 and 2023.
Data in 2024 is subject to change and will be revised once SEMS emissions are finalized.
* With Incheon Energy has been collected and reported starting from 2023. Data for GS CHARGEV is expected to be reported in the future.
** GS Energy and GS CHARGEV do not operate pollutant-emitting facilities.

Water Pollutant Emissions

Category			Unit	2022	2023	2024
GS Power[1)]	Anyang	COD Emissions	Ton	0.40	-	**-**
		SS Emissions		0.21	0.06	**0.14**
		TOC Emissions		-	0.17	**0.41**
	Bucheon	COD Emissions		0.40	-	**-**
		SS Emissions		0.36	0.01	**0.16**
		TOC Emissions		-	0.19	**0.43**
Incheon Total Energy		COD Emissions		0.04	-	**-**
		SS Emissions		0.02	0.01	**0.03**
		TOC Emissions		-	0.06	**0.02**
With Incheon Energy		COD Emissions		-	-	**-**
		SS Emissions		-	-	**0.28**
		TOC Emissions		-	0.03	**0.07**

* Data for With Incheon Energy has been collected and reported starting from 2023.
** GS Energy and GS CHARGEV do not operate pollutant-emitting facilities.

ESG Data

Environment

Violation of Environmental Laws

Category		Unit	2022	2023	2024
GS Energy	Case	Cases	0	0	**0**
	Fines for Violations	KRW 10,000	0	0	**0**
GS Power	Case	Cases	0	0	**0**
	Fines for Violations	KRW 10,000	0	0	**0**
Incheon Total Energy	Case	Cases	0	0	**0**
	Fines for Violations	KRW 10,000	0	0	**0**
With Incheon Energy	Case	Cases	0	0	**0**
	Fines for Violations	KRW 10,000	0	0	**0**
GS CHARGEV	Case	Cases	0	0	**0**
	Fines for Violations	KRW 10,000	0	0	**0**

Social

Employees

Category		Unit	2022	2023	2024
GS Energy	Total Number of Employees	Persons	192	196	**203**
	Executives		1	1	**1**
	Employees		191	195	**202**
	Male		144	151	**152**
	Female		47	44	**50**
	Full-time		183	188	**194**
	Contract		9	8	**9**
	Employees with Disabilities		1	1	**1**
	Employees who are veterans		4	4	**5**
GS Power	Total Number of Employees		305	320	**321**
	Executives		2	2	**2**
	Employees		303	318	**319**
	Male		273	289	**289**
	Female		30	29	**30**
	Full-time		296	314	**314**
	Contract		9	6	**7**
	Employees with Disabilities		7	7	**6**
	Employees who are veterans		10	8	**7**

ESG Data

Social

Employees

Category		Unit	2022	2023	2024
Incheon Total Energy	Total Number of Employees	Persons	87	91	**92**
	Executives		2	2	**2**
	Employees		85	89	**90**
	Male		77	80	**82**
	Female		8	9	**8**
	Full-time		80	83	**84**
	Contract		7	8	**8**
	Employees with Disabilities		2	4	**4**
	Employees who are veterans		5	5	**4**
With Incheon Energy	Total Number of Employees		-	48	**49**
	Executives		-	4	**4**
	Employees		-	44	**45**
	Male		-	40	**44**
	Female		-	4	**5**
	Full-time		-	46	**47**
	Contract		-	0	**1**
	Employees with Disabilities		-	1	**3**
	Employees who are veterans		-	0	**0**

Category		Unit	2022	2023	2024
GS CHARGEV	Total Number of Employees	Persons	-	99	**96**
	Executives		-	1	**8**
	Employees		-	98	**88**
	Male		-	66	**54**
	Female		-	32	**34**
	Full-time		-	91	**85**
	Contract		-	8	**3**
	Employees with Disabilities		-	2	**3**
	Employees who are veterans		-	0	**0**

* Data for With Incheon Energy and GS CHARGEV has been collected and reported starting from 2023.
** The data on employees with disabilities are based on the figures reported to the Korea Employment Agency for Persons with Disabilities.

ESG Data

Social

Diversity of Employees[1)]

Category		Unit	2022	2023	2024
GS Energy	Ratio of Female Employees and Executives	%	24.5	22.4	**24.6**
	Ratio of Female Managers		8.3	7.0	**11.1**
GS Power	Ratio of Female Employees and Executives		9.8	9.1	**9.3**
	Ratio of Female Managers		6.7	6.5	**6.8**
Incheon Total Energy	Ratio of Female Employees and Executives		9.2	9.9	**8.7**
	Ratio of Female Managers		8.3	7.1	**0.0**
With Incheon Energy	Ratio of Female Employees and Executives		-	8.3	**10.2**
	Ratio of Female Managers		-	0.0	**0.0**
GS CHARGEV	Ratio of Female Employees and Executives		-	32.3	**35.4**
	Ratio of Female Managers		-	0.0	**7.7**

1) Data has been revised due to changes in the data collection standard in 2022 and 2023.
* Data for With Incheon Energy and GS CHARGEV has been collected and reported starting from 2023.

New Hires

Category		Unit	2022	2023	2024
GS Energy	Number of New Hires	Persons	54	18	**22**
	Male		36	15	**12**
	Female		18	3	**10**
	Under 30		14	2	**9**
	30 – 50		35	15	**12**
	Above 50		5	1	**1**
GS Power	Number of New Hires		32	31	**24**
	Male		26	28	**16**
	Female		6	3.	**8**
	Under 30		21	25	**10**
	30 – 50		9	6	**10**
	Above 50		2	0	**4**
Incheon Total Energy	Number of New Hires		4	12	**6**
	Male		3	9	**5**
	Female		1	3	**1**
	Under 30		4	5	**0**
	30 – 50		0	6	**6**
	Above 50		0	1	**0**
With Incheon Energy	Number of New Hires		-	3	**6**
	Male		-	3	**4**
	Female		-	0	**2**
	Under 30		-	0	**2**
	30 – 50		-	0	**4**
	Above 50		-	3	**0**
GS CHARGEV	Number of New Hires		-	45	**14**
	Male		-	18	**6**
	Female		-	27	**8**
	Under 30		-	13	**6**
	30 – 50		-	29	**7**
	Above 50		-	4	**0**

* Data for With Incheon Energy and GS CHARGEV has been collected and reported starting from 2023.

ESG Data

Social

Training[1)]

Category		Unit	2022	2023	2024
GS Energy	Total Training Hours	Hours	6,500	8,690	**6,394**
	Average Training Hours per Person	Hours/Person	33.9	44.3	**31.5**
	Total Training Costs	KRW million	399	845	**841**
	Average Training Cost per Person	KRW million/Person	2.08	4.31	**4.14**
GS Power	Total Training Hours	Hours	13,431	11,661	**10,144**
	Average Training Hours per Person	Hours/Person	44.0	36.4	**31.6**
	Total Training Costs	KRW million	201	128	**415**
	Average Training Cost per Person	KRW million/Person	0.66	0.40	**1.29**
Incheon Total Energy	Total Training Hours	Hours	4,515	3,256	**3,418**
	Average Training Hours per Person	Hours/Person	51.9	35.8	**37.2**
	Total Training Costs	KRW million	105	141	**129**
	Average Training Cost per Person	KRW million/Person	1.21	1.55	**1.40**
With Incheon Energy	Total Training Hours	Hours	-	487	**700**
	Average Training Hours per Person	Hours/Person	-	10.1	**14.3**
	Total Training Costs	KRW million	-	6	**27**
	Average Training Cost per Person	KRW million/Person	-	0.12	**0.55**
GS CHARGEV	Total Training Hours	Hours	-	1,151	**1,265**
	Average Training Hours per Person	Hours/Person	-	11.6	**13.2**
	Total Training Costs	KRW million	-	5	**1**
	Average Training Cost per Person	KRW million/Person	-	0.05	**0.01**

Data has been revised due to changes in the data collection standard in 2022 and 2023.
* Data for With Incheon Energy and GS CHARGEV has been collected and reported starting from 2023.

ESG Data

Social

Turnover

Category			Unit	2022	2023	2024
GS Energy	Total Turnover		Persons	15	11	**7**
	Gender	Male	Persons	8	5	**5**
		Female		7	6	**2**
	Total Turnover Rate		%	8.2	5.9	**3.4**
	Voluntary Turnover Rate		%	6.6	4.3	**3.4**

Information Security Education

Category		Unit	2022	2023	2024
GS Energy	Number of Trainees	Persons	200	208	**219**
	Training Hours	Hours	200	208	**219**

Data Leakage, Theft, and Loss

Category		Unit	2022	2023	2024
GS Energy	Personal Data	Cases	0	0	**0**
	Corporate Data		0	0	**0**

Governance

Violations of Ethical Management

Category		Unit	2022	2023	2024
GS Energy	Violation of the Code of Ethics	Cases	0	0	**0**
	Violation of fair-trade-related laws and regulations		0	0	**0**

GRI Content Index

General Disclosures

Area	Indicator	Page	Note
GRI 2: General Disclosures 2021	2-1 Organization details	7-8	
	2-2 Entities included in the organization's sustainability reporting	3	
	2-3 Reporting period, frequency and contact point	3	
	2-4 Restatements of information	73-74, 77-78	
	2-5 External assurance	84	
	2-6 Activities, value chain and other business relationships	10	
	2-7 Employees	75	
	2-8 Workers who are not employees	-	Refer to the Business Report
	2-9 Governance structure and composition	65	
	2-10 Nomination and selection of the highest governance body	65	
	2-11 Chair of the highest governance body	65	
	2-12 Role of the highest governance body in overseeing the management of impacts	14	
	2-13 Delegation of responsibility for managing impacts	65	
	2-14 Role of the highest governance body in sustainability reporting	14, 65	
	2-15 Conflicts of interest	65	
	2-16 Communication of critical concerns	14, 18	
	2-17 Collective knowledge of the highest governance body	14	
	2-18 Evaluation of the performance of the highest governance body	65	
	2-19 Remuneration policies	65	
	2-20 Process to determine remuneration	65	
	2-21 Annual total compensation ratio	-	Refer to the Business Report
	2-22 Statement on sustainable development strategy	6	
	2-23 Policy commitments	15, 69	
	2-24 Embedding policy commitments	52, 69	
	2-25 Processes to remediate negative impacts	52, 69	
	2-26 Mechanisms for seeking advice and raising concerns	52, 69	
	2-27 Compliance with laws and regulations	69	
	2-28 Membership associations	83	
	2-29 Approach to stakeholder engagement	18	
	2-30 Collective bargaining agreements	-	Operated by the Labor-Management Council

Statement of use	GS Energy reports its sustainable management performance according to the GRI standard for the period from January 1, 2024 to December 31, 2024.
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI Sector Standards	-

GRI Content Index

Material Topics

Area	Indicator	Page	Note
GRI 3: Material Topics	3-1 Process to determine material topics	17	
	3-2 List of material topics	17	
Material Topic #1. Climate Change			
GRI 3: Material Topics	3-3 Management of material topics	17, 22~40	
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	40, 72	
	305-2 Energy indirect (Scope 2) GHG emissions	40, 72	
	305-3 Other indirect (Scope 3) GHG emissions	-	Not managed data
	305-4 GHG emissions intensity	72	
	305-5 Reduction of GHG emissions	43	
	305-6 Emissions of ozone-depleting substances (ODS)	-	Not used
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	74	
Material Topic #2. Safety & Health			
GRI 3: Material Topics	3-3 Management of material topics	17, 53~60	
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	53~60	
	403-2 Hazard identification, risk assessment, and incident investigation	53~60	
	403-3 Occupational health services	53~60	
	403-4 Worker participation, consultation, and communication on occupational health and safety	53~60	
	403-5 Worker training on occupational health and safety	53~60	
	403-6 Promotion of worker health	53~60	
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	53~60	
	403-8 Workers covered by an occupational health and safety management system	53~60	
	403-9 Work-related injuries	-	Not managed data
	403-10 Work-related ill health	-	Not managed data

Other Topics

Area	Indicator	Page	Note
GRI 201: Economic Performance 2016	201-2 Financial implications and other risks and opportunities due to climate change	34-38	
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	61-63	
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	-	GS Energy does not have business sites besides the headquarters as a holding company.
	205-2 Communication and training about anti-corruption policies and procedures	69	
	205-3 Confirmed incidents of corruption and actions taken	79	
GRI 206: Anti-competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	79	
GRI 302: Energy 2016	302-1 Energy consumption within the organization	72	
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	44	
	303-2 Management of water discharge-related impacts	44	
	303-3 Water withdrawal	73	
	303-4 Water discharge	73	
	303-5 Water consumption	73	
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	44	
	306-2 Management of significant waste-related impacts	44	
	306-3 Waste generated	73	
	306-4 Waste diverted from disposal	73	
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	77, 79	
	401-3 Parental leave	-	
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	78	
	404-2 Programs for upgrading employee skills and transition assistance programs	50	
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	66	
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	61-63	
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	79	

SASB Index

Electric Utilities & Power Generators

Topic	Code	Accounting Metric	Page	Note
Greenhouse Gas Emissions & Energy Resource Planning	IF-EU-110a.1	(1) Gross global Scope 1 emissions, percentage covered under (2) emissions-limiting regulations, and (3) emissions-reporting regulations	40, 72	
	IF-EU-110a.2	Greenhouse gas (GHG) emissions associated with power deliveries	40, 72	
	IF-EU-110a.3	Discussion of long- and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	43	
Air Quality	IF-EU-120a.1	Air emissions of the following pollutants: (1) NOx (excluding N2O), (2) SOx, (3) particulate matter (PM10), (4) lead (Pb), and (5) mercury (Hg); percentage of each in or near areas of dense population	74	No emissions of lead or mercury
Water Management	IF-EU-140a.1	(1) Total water withdrawn, (2) total water consumed; percentage of each in regions with High or Extremely High Baseline Water Stress	73	
	IF-EU-140a.2	Number of incidents of non-compliance associated with water quantity or quality permits, standards, and regulations	75	
	IF-EU-140a.3	Description of water management risks and discussion of strategies and practices to mitigate those risks	44	
Coal Ash Management	IF-EU-150a.1	Amount of coal combustion products (CCPs) generated, percentage recycled	N/A	No coal-fired power generation in business portfolio
	IF-EU-150a.3	Description of coal combustion products (CCPs) management policies and procedures for active and inactive operations	N/A	
Energy Affordability	IF-EU-240a.1	Average retail electric rate for (1) residential, (2) commercial, and (3) industrial customers	N/A	Exclusively managed by Korea Electric Power Corporation under domestic electricity market structure
	IF-EU-240a.3	Number of residential customer electric disconnections for non-payment, percentage reconnected within 30 days	N/A	
	IF-EU-240a.4	Discussion of impact of external factors on customer affordability of electricity, including the economic conditions of the service territory	N/A	
Workforce Health and Safety	IF-EU-320a.1	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR) for (a) direct employees and (b) contract employees	-	To be disclosed in the future
End Use Efficiency and Demand	IF-EU-420a.2	Percentage of electric load served by smart grid technology	-	0%
	IF-EU-420a.3	Customer electricity savings from efficiency measures, by market	N/A	Exclusively managed by Korea Electric Power Corporation under domestic electricity market structure
Nuclear Safety & Emergency Management	IF-EU-540a.1	Total number of nuclear power units, broken down by results of most recent independent safety review	N/A	No nuclear power generation in business portfolio
	IF-EU-540a.2	Description of efforts to manage nuclear safety and emergency preparedness	N/A	
Grid Resiliency	IF-EU-550a.1	Number of incidents of non-compliance with physical and/or cybersecurity standards or regulations	N/A	Exclusively managed by Korea Electric Power Corporation under domestic electricity market structure
	IF-EU-550a.2	(1) System Average Interruption Duration Index (SAIDI), (2) System Average Interruption Frequency Index (SAIFI), and (3) Customer Average Interruption Duration Index (CAIDI), inclusive of major event days	N/A	

Membership in Associations & Organizations

Category	Organization	Position	Joined in
Energy in General	National Assembly Forum on Climate Change	Co-representative	2014
	Korea Business Council for Sustainable Development(KBCSD)	Committee Member	2016
	Energy Future Forum	BOD Member	2014
	Energy Alliance	BOD Member	2021
E&P/Gas	Korea Overseas Resources & Energy Industry Association	Vice President	2008 (GSC)
	Korea Gas Union	Vice President	2008 (GSC)
	Private LNG Industry Association	Co-representative	2021
Electric Power/District Heating	Independent Power Producer Association	Special Member	2014
	Korea Integrated Energy Association	Regular Member	2024
Hydrogen	Korea Hydrogen Alliance	Associate member	2021
	K-CCUS Association	General member	2022
	Clean Ammonia Council	General member	2021
	Carbon Free Alliance	Council Member	2023
Greenhouse Gas	GHG International Reduction Industry Association	General member	2023
	Korea REDD Plus Association	General member	2024
Business Community/Others	Korea Chamber of Commerce and Industry	EX Officio Member	2017
	Seoul Forum for International Affairs	Regular Member	2019

Independent Assurance Statement

To readers of GS ENERGY SUSTAINABILITY REPORT 2024

Introduction

Korea Management Registrar (KMR) was engaged to conduct an independent assurance of 2024 GS ENERGY SUSTAINABILITY REPORT 2024 for the year ending December 31, 2024. The preparation, information and internal control of the report are the sole responsibility of GS Energy's the management. KMR's responsibility is to comply with the agreed engagement and express an opinion to GS Energy's management.

Subject Matter

The reporting boundaries included the performance and activities of sustainability-related organizations as described in GS Energy's report:

- GS ENERGY SUSTAINABILITY REPORT 2024

Reference Standard

- GRI Standards 2021 : 2023 (GRI)

Assurance criteria

KMR conducted the verification in accordance with the globally recognized standard AA1000AS v3 and KMR's assurance standard SRV1000 based on requirements of ISO 17029 and KMR EDV 01, and set the levels of assurance and materiality as below. Under AA1000AS v3, We assessed the adherence to the four principles presented in AA1000AP:2018—Inclusivity, Materiality, Responsiveness, and Impact—and evaluated the reliability and quality of the data and information using the GRI index specified in the report. Under SRV1000, we conducted a multidimensional review aimed at zero data errors, applying expert judgment to determine the materiality criteria.

- ISO 17029 : 2019, ISO 14065 : 2020, AA1000AS v3 : 2020 (AccountAbility), AA1000AP : 2018 (AccountAbility), SRV1000 : 2022 (KMR), KMR EDV 01 : 2024 (KMR)
- Levels of assurance/materiality: AA1000AS v3 – Type 2/moderate

Scope of assurance

The scope of our assurance included the verification of compliance with the reporting requirements of the GRI Standards 2021. We confirmed that the following indicators of material topics were identified through the materiality assessment process.

- GRI Standards 2021 reporting principles
- Universal Standards
- Topic Specific Standards
  - GRI 305: Emissions
  - GRI 403: Occupational Health and Safety

As for the reporting boundary, the engagement excludes the data and information of GS Energy's 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:

- Evaluating the appropriateness of the reference standard used as a basis for preparing sustainability information and the reliability of the materiality assessment process and its findings;
- Conducting inquiries to understand the data management and control environment, processes, and information systems (the effectiveness of controls was not tested);
- Evaluating the appropriateness and consistency of the methodology for estimation (note that the underlying data was not tested and KMR has not made any estimates);
- Visiting the headquarters, determining visit sites based on the site's contribution to sustainability and the possibility of unexpected changes since the previous period and sampling data, and carrying out due diligence on a limited number of source records at the sites visited;
- Interviewing people in charge of preparing the report;
- Considering whether the presentation and disclosures of sustainability information are accurate and clearly defined;
- Identifying errors through comparison and check against underlying information, recalculation, analyses, and backtracking; and
- Evaluating the reliability and balance of information based on independent external sources, public databases, and press releases.

Limitations and Recommendations

The absence of generally accepted reporting frameworks or well-established practices on which to draw to evaluate and measure non-financial information allows for different measures and measuring techniques, which can affect comparability between entities. Therefore, our assurance team relied on professional judgment. The scope of this assurance included the confirmation of the truthfulness of claims regarding results that have already been obtained as stipulated by ISO 17029. However, the plausibility of intended claims of forecasts or hypotheses was not validated even if the related content was contained in the report.

A limited assurance evaluates the appropriateness of the criteria used by GS Energy for preparing sustainability information on subject matters, the risk of material misstatement in the sustainability information, whether due to fraud or error, responses to risks, and disclosure of the sustainability information on subject matters. However, the scope of the risk assessment process and the subsequent procedures performed in response to assessed risks, including an understanding of internal controls, is more limited than that of a reasonable assurance.

Our assurance team conducted our work to a limited extent through inquiries, analysis, and limited sampling based on the assumption that the data and information provided by GS Energy are complete and sufficient. To overcome these limitations, we confirmed the quality and reliability of the information by referring to independent external sources and public databases, such as DART and the National GHGs Management System (NGMS).

Independent Assurance Statement

Conclusion and Opinion
Based on the document reviews and interviews, we had several discussions with GS Energy 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 was prepared in accordance with the GRI Standards. Nothing comes to our attention to suggest that the Report was not prepared in accordance with the AA1000AP (2018) principles.

Inclusivity
GS Energy 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 Energy 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 Energy 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 Energy's actions.

Impact
GS Energy 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 data related to sustainability performance, including greenhouse gas emissions, water resource management, energy consumption, water withdrawal, waste generation, total workforce, new hires. 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.

KMR's Competence, Independence, and Quality Control
Korea Management Registrar (KMR) is a verification body for the greenhouse gas emissions trading scheme, accredited by the Korea Laboratory Accreditation Scheme (KOLAS) under the National Institute of Technology and Standards of Korea for ISO/IEC 17029:2019 (Conformity Assessment - General principles and requirements for validation and verification bodies), ISO 14067, and additional accreditation criteria, ISO 14065. It is also recognized by the Korea Accreditation Board (KAB) for ISO/IEC 17021:2015 (Requirements for bodies providing audit and certification of management systems), and the National Institute of Environmental Research under the Ministry of Environment of Korea. Additionally, KMR maintains a comprehensive quality control system that includes documented policies and procedures of the KMR EDV 01:2024 (ESG Disclosure Assurance System) based on ISO/IEC 17029 requirements and compliant with IAASB ISQM1:2022 (International Standard on Quality Management 1 by the International Auditing and Assurance Standards Board). Furthermore, KMR adheres to the ethical requirements of integrity, objectivity, professional competence and due care, confidentiality, and professional behavior in accordance with the IESBA Code:2023 (International Code of Ethics for Professional Accountants). Our assurance team consists of sustainability experts. Other than providing an independent assurance, KMR has no other contract with GS Energy and did not provide any services to GS Energy that could compromise the independence of our work.

Limitations of Use
This assurance statement is made solely for the management of GS Energy for the purpose of enhancing an understanding of the organization's sustainability performance and activities. We assume no liability or responsibility for its use by third parties other than the management of GS Energy. The statement is valid as of the assurance date below. Certain events that may occur between the assurance date and the time of reading this report could have a material impact on the report, which may lead to revisions to this assurance statement. Therefore, we recommend visiting the GS Energy website and verifying whether this is the latest version.

August 9, 2025

KMR SRV1000 Sustainability Committee Assurance AA1000 Licensed Report 000-129/V3-2B1UE

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