GS Caltex
2017 Sustainability Report

Value No.1
Energy & Chemical Partner

I am your Energy
GS Caltex

ABOUT THIS REPORT

At **GS** Caltex, we share insights into our business plan and the progress we have made towards achieving the highest level of sustainability in terms of economic, environmental and social value creation with our stakeholders through our sustainability report. This is our 13th sustainability report since 2006.

Reporting Period

This report covers our sustainability performance from January 1, 2017 to December 31, 2017. For the key quantitative performance, the results of the past three years (from 2015 to 2017) are shared for comparative analysis while newly disclosed quantitative and qualitative performances are separately indicated. Some of the highlights over the first half of 2018 are included in this report to ensure their timely disclosure.

Scope of Report

The scope of this report encompasses the **GS** Caltex headquarters and major business operations including the Yeosu Complex. A certain part of the data was derived from the terminal, lubricant plant, gasoline stations, LPG stations and affiliated companies. Any parts that require special attention are indicated accordingly.

Reporting Guidelines

The **GS** Caltex 2017 Sustainability Report was prepared in accordance with the Core Option of the GRI (Global Reporting Initiative) standards and designed to incorporate feedback from stakeholders in compliance with AA1000SES. The content of this report has been internally reviewed by GRI certified professionals and third parties. There are no significant changes in terms of its scope, boundaries, and measuring processes from the previous report.

For more information about **GS** Caltex, please visit our website at www.gscaltex.com or contact us at the following:

CSR Team, **GS** Caltex 02-2005-1614 news@gscaltex.com

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CEO Message

Dear valued stakeholders,

The year 2017 has been a meaningful year for us at **GS** Caltex as we celebrate our 50th anniversary. Despite the uncertainties surrounding our business environment, we managed to further strengthen our competitive advantages by generating strong revenue, preparing to invest in a mixed feed cracker (MFC) with Korea's most advanced processing capabilities, and completing the construction of a biobutanol demo plant.

Furthermore, we established a corporate-wide ESG (Environmental, Social, Governance) management system in 2017, to be followed up by reviewing our human rights policies and improving the CSR performance by enacting code of conduct for our partners in 2018. In particular, we will place the highest priority on safety in all our business areas, continue to invest in eco-friendly products and energy efficiency, and generate social values throughout our value chains.

I hope that this 13th Sustainability Report will provide an opportunity for communication between all our stakeholders, including customers, shareholders, partners and local communities. I cordially ask for your continued support and sincere interest in our work.

Thank you.

Jin-Soo Huh Chairman & CEO

GS Caltex Vision & GSC Way

In January 2014, we unveiled our new vision for the future, 'Value No. 1 Energy & Chemical Partner'. To this end, we defined and implemented the Shared Value '**GSC** Way'.

GS Caltex Vision

Value No.1 Energy & Chemical Partner

Vision Statement

Our mission is to deliver quality products and services by developing the potential of energy & chemical resources.

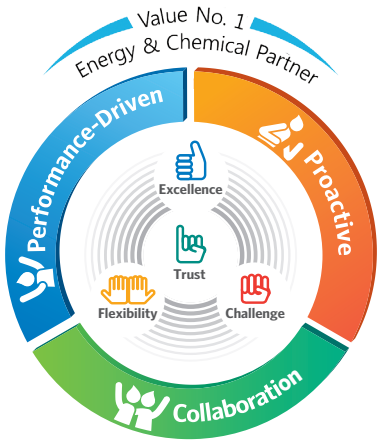
We are committed to increasing our capacity to generate environmentally responsible and innovative new values.

As a global energy & chemical company, we are passionate about growing with our partners and helping the world move forward.

Strengthen Vision and **GSC** Way Practice

At **GS** Caltex, we share with our management and employees on how the **GSC** Way is implemented in relation to our vision based on their recommendations. The challenges we face in our business operation and actions we took to overcome them are introduced in detail in line with the **GSC** Way Corporate Values and Core Behaviors in order to make a positive impact on the other employees' commitment to the **GSC** Way. With the **GSC** Way as our foundation, we select and award those who displayed excellent performance and set an example for others in the previous year. In 2017, 35 employees were selected based on their performances.

GSC Way



Corporate Values

- **Trust** Fulfill one's role, and trust and respect one another.
- **Flexibility** Welcome diversity with an open mind and behavior.
- **Challenge** Set high goals and pursue them aggressively.
- **Excellence** Strive for excellence in individual and organizational performance.

Core Behaviors

- Proactive - Think ahead and be the first to act.
- Collaboration - Strategically utilize external resources and capabilities.
- Performance-Driven - Deliver tangible results.

GSC Way Statement

We will take the following actions to maintain the highest level of Trust, Flexibility, Challenge, and Excellence.

- Think ahead and be the first to act.
- Strategically utilize external resources and capabilities.
- Deliver tangible results.

We achieve our vision by applying the **GSC** Way in practice.

Corporate Overview

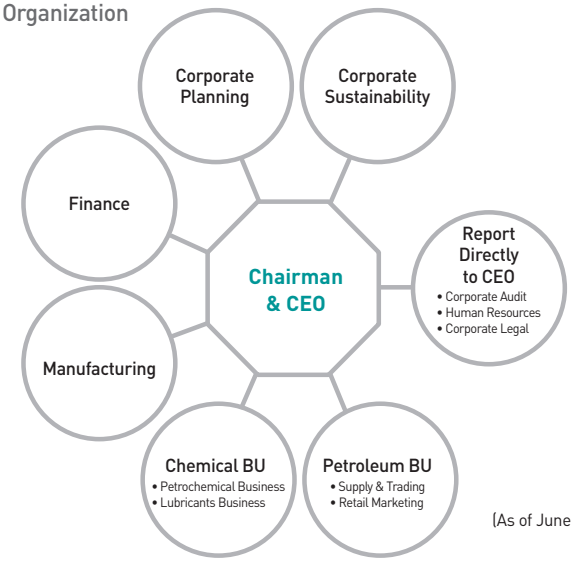
Since its establishment in 1967 as Korea's first private oil refiner, **GS** Caltex has set a new standard in the domestic petroleum industry and played a critical role in making oil and petroleum products Korea's major export items. Through continuous investments and research in petroleum and petrochemical businesses, we are taking major steps toward becoming a leading energy enterprise in the global market.

Corporate Profile

Profile	Description
Name of Company	**GS** Caltex Corporation
Date of Incorporation	May 19, 1967
Address	**GS** Tower, 508, Nonhyeon-ro, Gangnam-gu, Seoul
Overseas offices (branches)	China, Czech Republic, India, Singapore, Mexico, London, etc.
No. of employees	2,969
Areas of business	Petroleum, Petrochemicals, Base Oil & Lubricants

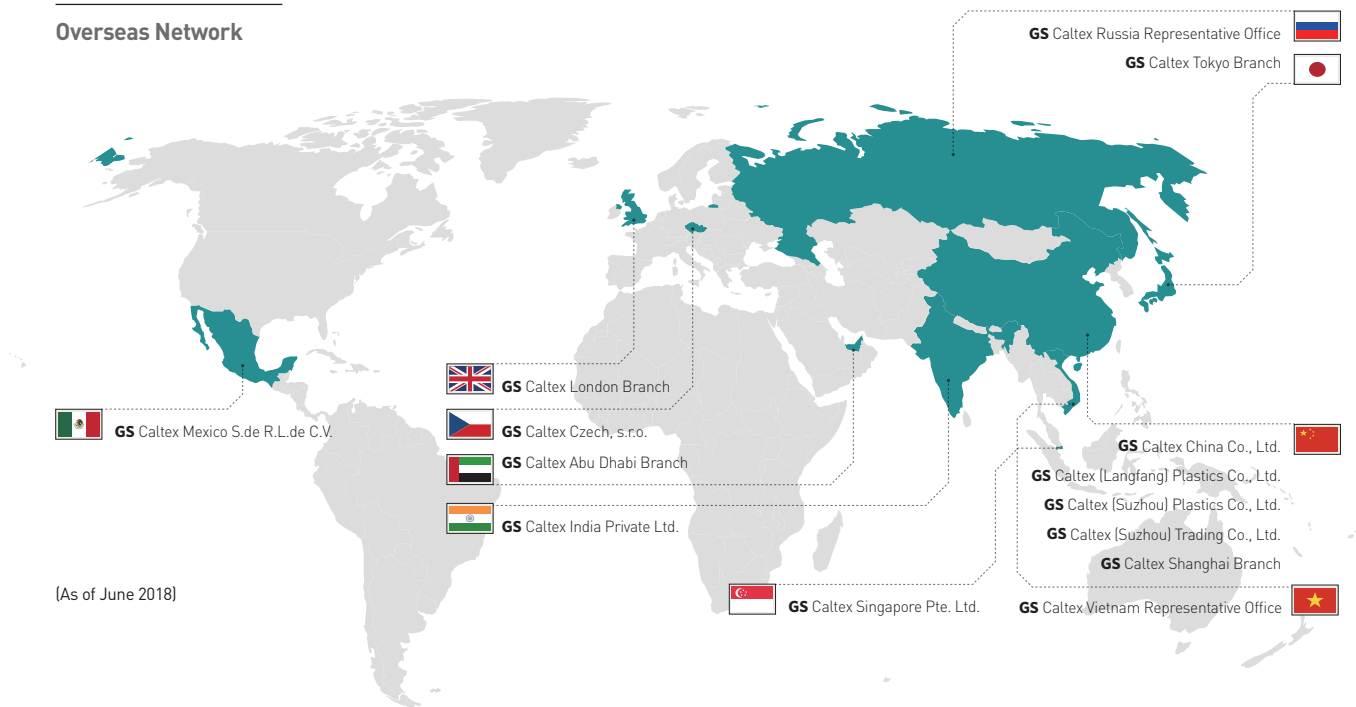
(As of December 2017)

Organization



(As of June 2018)

Overseas Network



(As of June 2018)

Business Areas

Petroleum

Refining capacity (barrels/day)

790,000

Upgrading Ratio

35%

Night View of the VRHCR #3 (Vacuum Residue Hydrocracker)

GS Caltex supplies petroleum products to the domestic market through 2,563 gasoline stations and 399 LPG stations nationwide. About 70% of our sales come from the overseas market. With a daily refining capacity of 790,000 barrels, we produce high-quality petroleum products from state-of-the-art automated production facilities including liquefied petroleum gas desulfurization facilities.

In 2018, the domestic oil industry is expected to continue its upward trend with the global economic boom. As a result, investment in high value-added products in the refinery industry will continue in order to take advantage of the economic tailwind. However, the domestic petroleum retail industry is facing tough challenges in the sales environment due to the saturation of the domestic market and intensifying competition caused by increased consumers' sensitivity to price. Furthermore, the domestic oil price may go up dramatically if the global oil price and the exchange rate continue to rise.

At **GS** Caltex, we have solidified the foundation for oil supply by diversifying our suppliers and purchasing crude oil not only from the Middle East but also from the U.S. and gained competitive advantages by building the largest facilities in South Korea. Added to that, we offer various loyalty programs such as bonus card and affiliated card discount to improve our service quality. Because of these efforts, we were named the best gasoline station brand in the NCSI (National Customer Satisfaction Index) for the ninth consecutive year.

Aromatic

Aromatic Production capacity (tons/year)

2,800,000

Aromatic sample used as a base material for petrochemicals

Our aromatic production facilities were built in 1990 with an annual capacity of 200,000 tons of paraxylene and a half million tons of aromatic products for full-scale production. We are continuing our investment in production facilities and process optimization in the aromatic sector. Our current production capacity reached 2.8 million tons a year including 1.35 million tons of paraxylene, 0.93 million tons of benzene, 170,000 tons of toluene, and 350,000 tons of mixed-xylene.

In the aromatic market, margins have been declining over the past five years due to the continued operation of new production facilities in Asia and we are working on the development of new markets while looking into aromatic downstream businesses to protect our margins.

Base Oil

Base Oil Production capacity (tons/year)

1,300,000

Our base oil production started in November 2007 when our BOP (Base Oil Plant) with a daily capacity of 16,000 barrels (800,000 tons/year) was completed. Since then, we increased our capacity to 23,000 barrels per day (1.15 million tons/year) in 2010, followed by a further increase to 26,000 barrels (1.3 million tons/year) through additional improvement in our production facilities.

In Asia, including China, demand for lubricant is expected to increase along with its economic growth, particularly high-quality lubricant products due to growing attention to environmental impact and fuel efficiency. As a major supplier of base oil in Asia, we are strengthening our leadership position in the market.

Lubricant

Lubricant Production capacity (barrels/day)

9,000

For our lubricant business, we are maintaining a daily capacity of 9,000 barrels of lubricants with 9,000 tons of grease per year. As a leading producer in the market, we are recognized for our superior quality and technological expertise in the industry. Our product portfolio ranges from automobiles and industrials to ships and special oils, including more than 200 product types with Kixx engine oil as our flagship brand.

The suppliers in the domestic market are facing difficulties in increasing sales and generating profits due to flat demand and growing competition between suppliers, while in the overseas market, the environmental regulations and policies are being tightened to strengthen support for local suppliers. In order to overcome these challenges, we focus on improving product mix, developing cost-saving recipes and attracting new industries.

Polymer

Propylene Production capacity (tons/year)	PP Production capacity (tons/year)	Composite resins Production capacity (tons/year)
476,000	**180,000**	**300,000**

Our polypropylene production facilities were completed in 1988 with an annual production capacity of 120,000 tons. The current production capacity is about 180,000 tons a year. We have an annual production capacity of 476,000 tons of propylene, which is used for polypropylene, thanks to our RFCC process developed in 1995 and VGOFCC in 2013. Our facilities in Korea, China, and the Czech Republic produce polymer compound, which is used for high value-added products such as automobiles and electronics. Their annual production capacity is 270,000 tons. In March 2017, a new plant with an annual capacity of 30,000 tons was completed in Mexico. The most critical risk factor in the petrochemical industry where commodity is a driving force is the fact that profitability can be subject to external factors such as oil prices. In this regard, our polymer business is known to have an optimized portfolio that can distribute risks through vertical integration between upstream and downstream, from propylene to PP and composite resins.

View of the VGOFCC (Vacuum Gas Oil Fluidized Catalytic Cracking Unit) at the Yeosu Complex

Sustainability Management System

We manage economic, social and environmental aspects of our business to ensure sustainable growth in a fast-changing global business environment. Since establishing the four CSR strategies and convening the first CSR Committee Meeting in 2010, we have continued to develop our sustainability management system based on risk management and the fulfillment of social responsibilities.

CSR Committee

With the CEO as chairman, **GS** Caltex holds a CSR committee meeting on a regular basis. Since its first meeting in 2010, the committee discusses and makes decisions on CSR issues. In the 20th CSR Committee Meeting held in January 2018, we discussed the progress we had made towards improving our ESG practices in 2017 and our improvement plans for 2018, as well as our Maum Talk Talk, which is our social contribution campaign. **GS** Caltex holds a variety of committee meetings in relation to sustainability management, including the CSR Committee, in order to strengthen our sustainability management system on a corporate-wide level. Each committee undertakes the following activities.

Status of Sustainability Management Committee

CSR Committee
Corporate-wide discussion and decision-making on CSR-related issues

CCM Committee
Decision-making on consumer-oriented strategies and their implementation

Corporate Compliance Committee
Discussion on key issues of Voluntary Compliance Program

HR Committee
Discussion and decision-making on key issues of HR operation and management

Information Security Committee
Corporate-wide discussion and decision-making on information security and policies

Risk Management Committee
Providing guidelines and performance review on risk management

Safety & Environment Committee
Decision-making on EHS (Environment, Health, and Safety) policies and strategies

Fair Trade Review Committee
Internal reviewing for fair and transparent business practices

Shared Growth Committee
Discussion and implementation of shared growth-related policies

Strategic Investment Adjustment Committee
Reviewing strategic investment projects for building mid- and long-term portfolio

Occupational Safety & Health Committee
Reviewing and resolving of key safety issues for employees

Establishing ESG Database

Lately, there is an increasing trend for legislation of CSR. For example, the Indian Government legislated to make corporate CSR activities mandatory in 2014 and the EU legislated to disclose Corporate ESG of which has more than 500 employees from 2018. In Korea, discussion on the stewardship code is ongoing and the importance of non-financial disclosure is growing.

As a result, global investors and corporations require transparent disclosure of non-financial information from its trading partners. At **GS** Caltex, we have established an ESG database in 2017 as an integrated ESG initiative that encompasses everything from policies to performance evaluation in response to the increasing need for evaluation and management of CSR performance. Together with the Sustainability Management Center of the Korea Productivity Center, we are managing the '**GS** Caltex ESG Database' by analyzing global ESG standards such as GRI Standards, DJSI, UNGC, ISO 26000, and IPIECA.

The '**GS** Caltex ESG Database' consists of 56 index titles, 166 requirements, and 849 types of data in categories under the Environment, Society, and Governance fields. The 849 types of data will be divided into CSR global standards, management system (principle, strategy, governance), and qualitative and quantitative data. Each data item is classified into three categories according to its level of importance.

In 2018, Human Right Management and Enhancement of Partner CSR were selected as key areas for performance and a management system will be implemented for these areas.

GS Caltex ESG Database

ENVIRONMENTAL (14)

Response to climate change	Air pollutants
Biodiversity	Water resource risk management
Renewable energy	Energy
Greenhouse gas	Water consumption
Resource consumption	Hazardous material control
Waste discharge	Wastewater discharge
Environmental compliance	Environment general

SOCIAL (22)

Labor union	Employee training
Diversity	Employee satisfaction
Human rights of security guards	Performance retention
Benefits	Communication
Social responsibility	Recruitment and retention
Occupational safety & health	Employee status
Child and forced labor	Infringement of local community rights
Human rights impact analysis	Anti-discrimination
Human rights policy	Partner CSR
Human rights-based investment	Partner management
Employee counseling system	Partner due diligence

GOVERNANCE (20)

Anti-competition activities	External initiatives
Economic value creation and distribution	Ethics management
Personal data of customers	Stakeholder engagement
Customer management	Government subsidy
General affairs	Political engagement
Risk management	Product safety
Marketing communication	Tax
Anti-corruption	Performance incentive
Stable production	Governance general
External commitment	Compliance

Selection of Material Topics

The topics of this report have been selected according to the GRI Standards in consideration of Sustainability Context, Materiality, Completeness, and Stakeholder Inclusiveness.

Sustainability Context and Materiality

Our pool of sustainability issues consists of 38 issues selected based on our internal and external environment in the context of sustainability. The materiality is evaluated based on 'Relevance' and 'Impact'. The material issues identified based on the Relevance may have an impact on our business performance if they are not managed properly. Those based on the Impact have major impact on business performance and stakeholders. Based on these criteria, we conducted a materiality assessment through comprehensive review of employee surveys, external stakeholder surveys, industry benchmarking, and media analysis. We then selected 11 material issues from the pool of 38 sustainability issues.

Materiality Assessment Process

STEP.1 Issue definition

Create a pool of 38 issues in the context of sustainability

- 7 issues in economic responsibility
- 9 issues in environmental responsibility
- 9 issues in responsibility towards employees
- 6 issues in responsibility towards customers
- 7 issues in social responsibility

STEP.2 Prioritization

Global standard analysis

Based on analysis of global standards and initiatives such as GRI Standards, ISO 26000, IPIECA and UN SDGs, we focus on 'Partner CSR' issue.

Industry benchmarking

We analyzed the sustainability report of six of our global competitors and identified 'new growth engines', 'response to climate change', and 'emission control' as material issues in the industry.

Media analysis

We selected articles related to sustainability management and created a list. Based on media analysis, we found that articles about 'investment in local communities' and 'sales increase' were most frequent.

Stakeholder and employee survey

In February 2018, we conducted online surveys to collect opinions from stakeholders including employees, partners, gasoline station managers, shareholders/investors NGOs, academic circles, and experts. A total of 441 people took the survey and selected 'new growth engines' and 'prevention of incidents and raising safety awareness' as the most important issues.

STEP.3 Material issue selection

11 material issues were selected based on business relevance and impact on our stakeholders.

Completeness

The material issues identified through materiality assessment are reflected in each section of the report while 'Communication with stakeholders' is reflected throughout the report.

Result of Materiality Assessment

❶ New growth engines/business diversification	❼ Fair practice
❷ Prevention of incidents and raising safety awareness	❽ Ethics management
❸ Investment in local communities	❾ Mutual growth with partners
❹ Response to environmental regulations	❿ Customer safety and health
❺ Talent recruitment and retention	⓫ Emission control
❻ Energy conservation and improvement of efficiency	

Areas of Reporting	Key Areas	Impact on Stakeholders	Page
Core Issues Creating new growth engines	❶	Shareholders and investors, customers, NGOs, subsidiaries	16-20
Core Issues Response to the new climate regime and environmental management	❹ ❻ ⓫	Government, local community, NGOs, employees	21-27
Core Issues Building a safe workplace	❷	Government, local community, NGOs, employees, partners	28-32
Core Issues Promoting fair and transparent practice	❼ ❽	Employees, partners	33-36
Management Report Customers	❿	Customers, NGOs	40-44
Management Report Employees	❺	Employees	45-49
Management Report Partners	❾	Partners	50-51
Management Report CSR	❸	Government, local community, employees	52-56

Stakeholder Inclusiveness

At **GS** Caltex, we consider communication with our stakeholders as a fundamental part of our sustainable growth. We classify our stakeholders into several groups including government, customers, local community, and employees, and established the following communication channels:

Classification of Stakeholders & Communication Channels

Government
- Public hearings, discussions, seminars
- Website • Newsletter
- Conferences on economic cooperation

NGOs
- CSR activities
- Discussion
- Website, press releases

Labor Unions
- Joint labor-management conference
- Joint labor-management volunteer activities
- Joint labor-management campaigns

Partners
- Consultation meetings with partners
- Web-portal partners
- Satisfaction survey

Subsidiaries
- CEO messages
- Website, company newsletter, press releases

Employees
- CEO messages
- Company newsletter, internal bulletin board
- Employee surveys

Local Community
- CSR programs
- Discussion
- Website, press releases

Customers
- Customer satisfaction survey
- Website • SNS channels
- Customer Service Center

Shareholders & Investors
- Business reports
- Disclosure

Business Model

At **GS** Caltex, we are committed to creating values for our stakeholders throughout the entire business process.

Supply

- Human Resource 2,969 employees
- Material Resource 270.5M barrels of crude oil (270,502,436BbLs)
- Equity Structure GS Energy 50%
  Chevron (Overseas) Holdings Ltd. 40%
  Chevron Global Energy Inc. 10%

Production

- Refining Capacity 790,000 barrels/day
- Aromatic Production Capacity 2.8M tons/year
- Base Oil Production Capacity 1.3M tons/year
- Lubricant Production Capacity 9,000 barrels/day

Sales

- 2,563 gasoline stations 399 LPG stations
- Domestic market share 25.0%
- 11.36M membership subscribers*
- Sales KRW 30,318.4B
- Value of export KRW 21,552.6B
- Export ratio 71.1%

Investment

- Investment in facilities KRW 396.9B
- Investment in environmental protection KRW 10.2B
- Investment in R&D KRW 51.9B

Value Creation

- Total employee compensation KRW 311.9B
- Social contribution KRW 17.7B
- Low interest loan program for partners KRW 53.1B
- Consolidated Operating Profit KRW 2,001.6B
- Consolidated Net Profit KRW 1,438.1B

* The personal information of about 6 million people was destroyed or separately stored in accordance with the revised validity period of the Information and Communication Network Act.

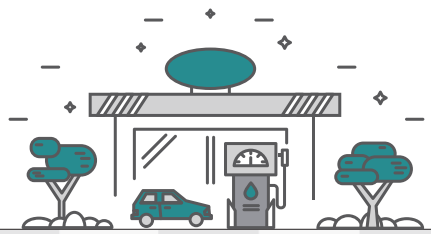
Core Issues

Issue 1. Creating New Growth Engines 16

Issue 2. Response to the New Climate Regime and Environmental Management 21

Issue 3. Building a Safe Workplace 28

Issue 4. Promoting Fair and Transparent Practice 33



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Creating New Growth Engines

CONTEXT & CHALLENGE

Increased conflict in the Middle East, changing production volume of OPEC, the development of shale oil in the U.S., and intensifying competition in the market with business expansions are having an unpredictable impact on our business practice. The global market is more competitive and volatile than ever with the increase of refineries and exports in China, Asia, and the Middle East. As a result, our earning is fluctuating significantly. To achieve sustainable growth, we have to strengthen our internal competence while proactively responding to this changing environment.

Contents	Relevant Issues	Importance	Link to GRI Standards
• R&D performance • New growth engines • Solid foundation for growth	New growth engines/ business diversification	Key Issues	• GRI 201 Economic Performance
	Financial stability	Reporting Issues	
	R&D	Reporting Issues	

HIGHLIGHTS

Investment in Facilities

KRW 396.9B

Investment in R&D

KRW 51.9B

V-Project Financial Performance

KRW 265.6B

Creating New Growth Engines through R&D Projects

At **GS** Caltex, we are committed to strengthening the competitive advantages of our existing business models and creating new growth engines for sustainable growth. Based on the technological expertise and know-how accumulated over the years, we are focusing our resources on R&D projects in biochemical and high value-added derivative sectors while diversifying our product portfolio and driving technological innovation in refining, lubricant and polymer materials sectors. Going forward, we will continue to innovate our products and technology.

R&D Facility Investment

We invested KRW 50 billion in the Yeosu Complex #2 and completed a bio-butanol demo plant with an annual production capacity of 400 tons in 2017. Currently, we are working on research to find out whether a mass production plant can maintain financial viability of bio-butanol.
In addition, we are building a 2,3-BDO (Butanediol) demo plant with an annual production capacity of 300 tons in the Gunjang Industrial Complex with the aim to complete it by 2018 as part of the government's technology development project. Using these facilities, we are going to conduct research for applications in cosmetics, health care, and agricultural pesticide sectors.

Key R&D Projects

Sector		Description
Biochemical	Industrial Base Materials	Biochemical is produced by microbial treatment of sugar produced from biomass. We are developing biochemical production technology and demand in eco-friendly sectors (e.g. cosmetics, health care, pesticide) and reviewing commercialization. We plan to carry out various projects such as downstream research and technology verification through scale-up research.
	Cosmetics and Healthcare	
	Agriculture	
High Value-added Derivatives and Materials	Functional Textile	In response to market demand for eco-friendly materials, we are developing bio-based functional fibers and eco-friendly special solvents as well as high-performance specialty polymers to meet growing demand for lightweight materials in the automotive industry.
	Eco-friendly Special Solvent	
	Specialty Polymer	
Refining and Petrochemical	Oil	In order to improve the quality of our refinery products and respond to changes in eco-friendly energy policy, we are conducting research on quality control. In addition, we are developing high value-added products and improving productivity of our refinery process.

Bio-butanol Demo Plant Groundbreaking Ceremony

NEW GROWTH ENGINES

Connected Car

The connected car market including autonomous driving is expected to grow rapidly due to the development of communication technology and IoT(Internet of Things). In response to this market trend, we acquired 12% of shares in OWIN, a Bluetooth-based connected car technology company.
Using the technology, customers can make a non-face-to-face payment with their vehicles as a means for payment. We are planning to expand its offline applications in places such as parking lot and F&B store and develop drive-through service where customers do not even have to get out of their vehicles to present credit cards.
As of the end of 2017, there are 17 gasoline stations and 114 F&B stores that support OWIN service. Going forward, we will commercialize the vehicles with the system and increase the distribution of Car IDs (in-car Bluetooth transmitters) in cooperation with automobile manufacturers and credit card service providers.

cardoc

Acquisition of Cardoc Shares

In order to attract more automobile maintenance service customers through online and mobile platforms, we acquired 9% of the shares of the startup company, Cardoc, in 2017. The company provides O2O* service that connects the car owner and the exterior maintenance service company using a mobile platform and is expanding its service into new areas such as replacement of lubricant and consumable parts, and premium car wash. We also expect to see synergistic benefit between Cardoc and Auto Oasis, the franchise of **GS** Mbiz which is one of our subsidiaries.
In the second half of 2018, we plan to introduce a new concept of gasoline station that combines high-end car wash service with café through collaboration with Cardoc which will provide semi-automatic hand wash service and high-quality food and beverage in the waiting area of the gasoline station under the 'Cardoc Wash Express' brand as part of our efforts to offer new service and increase the level of customer satisfaction.

* Online to Offline

Cardoc exterior maintenance

Connect to on-demand exterior maintenance service providers

Cardoc Wash

Online premium car wash service

Cardoc imported car maintenance

Online sales of maintenance parts and service for imported cars

GSC Start-up Garage

GS Caltex START-UP GARAGE

At **GS** Caltex, we held the **GSC** Start-up Garage to develop and share ideas for collaboration in early 2018. The program is designed to promote open innovation that enables start-up companies to demo services or launch a new business with us based on gasoline stations, LPG stations, mobility maintenance, car wash, and **GS** & POINT membership. We will renovate certain gasoline stations located in key areas to develop a business model and use it as a test-bed. The start-ups selected through the process will be able to use the test-bed free of charge for 6 months, and enjoy financial support and opportunities for investment. In the future, we will explore new opportunities for business and create a business model for mutual success.

SOLID FOUNDATION FOR GROWTH

Expansion of Petrochemicals & Lubricant Business

At **GS** Caltex, we are strengthening the foundation for growth in our existing business sectors including aromatic, polymer, base oil and lubricant.

In the aromatic sector, we are gaining competitive advantages by reducing costs and optimizing our process while establishing a sales network in overseas bases in China, Japan, and Southeast Asia to expand our presence in the global market and achieve sustainable growth by developing and increasing sales of high value-added solvent products.

Polymer is also another sector on which we are focusing our resources on to drive global sales. Following the operation of the existing composite resin production facilities in China and Czech Republic, we commenced commercial operations in Mexico in March 2017 and secured new customers in North, Central, and South America to increase our overseas sales and ensure sustainable growth.

In the base oil industry, we have increased the sales of Group III, which is a high-end base oil, by optimizing the production mode since 2015. We export more than 70% of our total production to the global market and are building a global sales network in China, India and Southeast Asia to develop new customers and expand our influence in the global market.

Our lubricant sector is also increasing its overseas sales based on its strong competitive edge and global OEM supply performance. Currently, we're operating Chinese and Indian subsidiaries and a main office in Russia while expanding our distribution channels in Southeast and Southwest Asia.

Financial Stability

GS Caltex is committed to secure financial stability in response to increasing volatility and uncertainties in the business environment. While our cash flow remains robust on the back of strengthened business competitiveness, we maintain appropriate level of debt through debt and cash managements in consideration of our short and long-term business plans. While the debt maturity profile is optimized based on our cash flow, we are also securing sufficient bank credit lines around the world to secure stable source of funding and increase ability to response to emergency situations. In addition, our international credit ratings were upgraded to Baa1 and BBB+ early 2018 reflecting prudent financial policy and efforts to meet agencies' rating triggers. With these upgrades, **GS** Caltex is able to reduce interest expenses further by funding at competitive rates in domestic and international financial markets.

Credit Ratings

Moody's : Baa1
S&P : BBB+

* Based on overseas long-term bonds as of March 2018

Strengthening Internal Competency Based on V-Project

At **GS** Caltex, we established a corporate-wide organization to strengthen our internal competency on the value chain (crude oil - production - sales) as part of the V-Project which has played a key role in securing stable revenue streams in the fast-changing business environment.
We identified more than 150 items for improvement including crude oil cost reduction, optimization of refinery/upgrade and petrochemical facilities, utility and energy efficiency, and maximizing sales of high value-added products. In 2017, we added 40 more items for short- and long-term improvement activities for sustainable revenue generation to enhance our competitive edge in the market. As a result of the V-Project, we achieved a financial performance of KRW 265.6 billion in 2017.
In 2018, as part of the V-Project, we defined areas of improvement for short-term profitability and set flexibility as a key factor in response to changes in our external environment from mid- to long-term perspectives. Furthermore, we focused on optimizing our investment costs and increasing the competencies of our employees by improving the way we work in areas such as facility design, procurement, and maintenance that did not fall within the scope of our existing activities. We expect to see our financial performance reach KRW 288.6 billion in 2018.

V-Project Areas of Improvement & Financial Performance (Unit: KRW 1B)

Areas of Improvement	V-Project (Year of Implementation)	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Expected
1. Competitiveness of feedstock	**Wave1**(2013)	64.2	99.2	153.9	108.4	84.7	**78.4**
2. Optimization of process operation	**Wave2**(2014)	–	61.0	117.0	72.0	61.6	**54.9**
3. Maximization of product value	**Wave3**(2015)	–	–	30.7	65.6	57.6	**53.5**
4. Optimization of energy/utility	**Wave4**(2016)	–	–	–	27.0	36.7	**36.1**
5. Reinforcement of Mid-/Long-term competitiveness	**Wave5**(2017)	–	–	–	–	25.0	**50.7**
	Wave6(2018)	–	–	–	–	–	**15.0**
Grand Total		64.2	160.2	301.6	273.0	265.6	**288.6**

View of the Yeosu Complex

2

Response to the New Climate Regime and Environmental Management

CONTEXT & CHALLENGE

The demand for energy and environmental management in business practice is growing. At the 21st UN Climate Conference (COP21) held in Paris in December 2015, the Convention on Climate Change was ratified and became effective in November 2016. As a result, industries around the world are changing their structure to reduce GHG emissions. Due to the nature of its business that consumes a significant amount of energy, the refinery industry requires strict control of its energy and environmental impact throughout the entire process, as it may have various impacts on our lives and environment. Energy and environmental management is recognized as an essential part of business practice today and companies have to take a proactive approach in dealing with growing regulatory demands.

Contents	Relevant Issues	Importance	Link to GRI Standards
• Response to climate change • Environmental pollution management	Response to environmental regulations	Key Issues	• GRI 302 Energy • GRI 303 Water • GRI 305 Emissions • GRI 306 Effluents and Waste • GRI 307 Environmental Compliance
	Energy conservation and improvement of efficiency	Key Issues	
	Emission control	Key Issues	
	Response to climate change	Reporting Issues	
	Recycling and reduction of waste materials	Reporting Issues	

HIGHLIGHTS

Investment in Environmental Protection

KRW 10.2B

Annual Energy Reduction

1,896 TJ

Recycling Rate

76.2%

Air Pollutants

Reduced by 39.3%

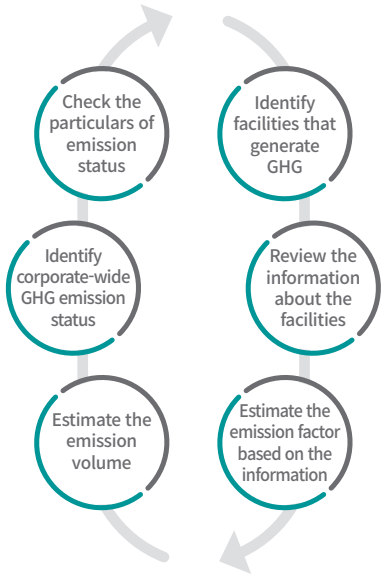
* Based on the dust emission compared to the previous year

RESPONSE TO CLIMATE CHANGE

Establishment of New Climate Regime

With the Paris Agreement and new climate regime in place, countries around the world including South Korea are obliged to reduce GHG emissions. South Korea, the world's 7th largest GHG emitter, has submitted its plan to the UNFCCC Secretariat to reduce emissions by 37% by 2030. To achieve this target, it is essential to shift the paradigm in the industry to a low-carbon economy. Because the refinery industry uses a significant amount of energy and has a considerable impact on our environment throughout the entire process from production to storage and transportation, stricter management on energy and environment need to be implemented. Now, environmental management is an essential part of our sustainability as much as stable profit generation. Companies must take a proactive approach to their management activities and make them a priority to build a reputation as an eco-friendly business.

GHG/Energy Management Plan



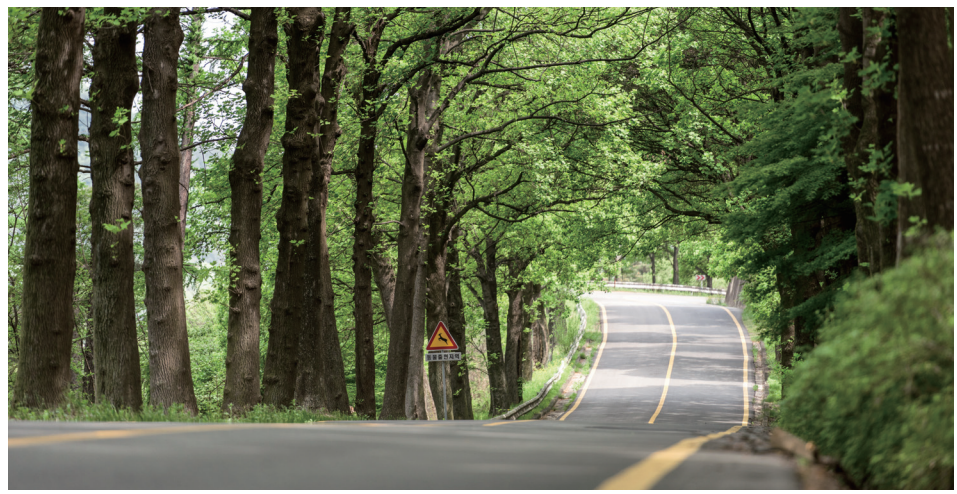
Preemptive GHG Management Activities

The ETS (Emission Trading System) which was implemented in 2015 will enter its second phase in 2018. Based on the experience and expertise we gained during the first phase, we are establishing systemic response strategies through financial impact analysis on GHG emissions. We also implemented an internal GHG emission monitoring process and climate change strategies through environmental analysis in line with the national GHG reduction roadmap and our business strategies. When making new investments, we conduct an economic evaluation to reflect the impact of GHG emissions on the environment and our value chain at a corporate-wide level to plan our strategy to deal with the new climate regime and seek new business opportunities. We also raise employee awareness of GHG emissions by sharing information about GHG and climate change and organizing internal training programs while creating a culture for GHG reduction.

GHG Index (Unit: tCO_2eq)

Classification	2015	2016	**2017**
Scope I : Direct Emissions (Fixed combustion, mobile combustion and process emission)	6,616,133	6,989,465	**6,364,585**
Scope II : Indirect Emissions (externally purchased steam and power)	1,818,771	1,438,495	**1,442,829**

* The 2016 data has been changed due to the adjustment made to GHG emissions by the government.



Energy Management Activities

At **GS** Caltex, we developed a mid- to long-term roadmap to respond to changing business environment and strengthen our competitive advantages through energy saving and efficiency programs as part of our energy management activities. Our employees, including managers, share their ideas to save energy and incorporate innovative technologies in our business operation through external consultation and benchmarking.

In addition, we take a long-term, macroeconomic approach in investment for energy-saving projects. Due to these efforts, we managed to reduce our energy cost by KRW 20 billion in 2017. We are committed to achieving the goal we set each year.

We also take a proactive approach in the government policies on GHG and energy in agreement with the Convention on Climate Change. In response to growing demand for GHG emissions reduction worldwide, we keep track of GHG emissions at the Yeosu Complex on a monthly basis and focus our resources on identifying the activities of reduction and developing the expertise of our human resources.

Energy Index (Unit: TJ)

Classification	2015	2016	**2017**
Scope I : Direct Energy Consumption	87,759	93,003	**77,784**
Scope II : Indirect Energy Consumption	17,657	16,099	**16,472**
Annual Reduction	2,705	2,562	**1,896**

*** Energy consumption calculation method and unit conversion factor source**

- Direct consumption: Calculation of calorific value by product after checking the amount of consumption through the flow meter
- Unit conversion source: Unit conversion based on the energy caloric conversion standard of the Energy Act

Improving Energy Efficiency

At **GS** Caltex, we take a proactive approach in improving energy efficiency in our business site and dealing with climate change. More than 90 energy saving activities were carried out in 2017 as follows:

Activities	Energy Reduction	Cost Reduction
Replaced old type air preheater in the CDU process to improve heater efficiency	140 TJ	KRW 1.49 billion
Replaced burners of heaters in the aromatic process to reduce fuel consumption	109 TJ	KRW 1.17 billion
Generated LP steam* through waste heat recovery	150 TJ	KRW 1.6 billion

* Low Pressure Steam

ENVIRONMENTAL POLLUTION MANAGEMENT

Reduction of Air Pollution

To make our environment clean and healthy, we take various initiatives in reducing air pollutant emissions. In order to ensure compliance with the emission limit on heating boilers and to reduce particulate matters, sulfur oxides, and nitrogen oxides, we introduced clean fuel such as LNG. In addition, we are replacing the low NOx burner in our heating boilers with the high-efficiency ultra-low NOx burner to reduce the emission of nitrogen oxides while investing a great deal of effort in building facilities such as NOx reductor to minimize the emission of nitrogen oxide. We are going to invest KRW 2.5 billion to add more NOx reductors by 2019. Additionally, in order to reduce sulfur oxides, we plan to invest approximately KRW 51.7 billion in the RFCC process by the first half of 2019 to replace the existing facilities. It is expected to reduce the annual emission of sulfur oxides from 5,000 tons to 300 tons. Meanwhile, our Yeosu Complex is using such reduction facilities as electrical collector, scrubber, RTO* and VRU** to reduce the emission of air pollutants.
CleanSYS is installed on the chimneys to automatically measure emissions, so we can collect data and identify the types of pollutant we need to reduce. We will continue to invest in air quality improvement facilities and increase the amount of clean energy for reducing air pollution.

* RTO: Regenerative Thermal Oxidizer

** VRU: Vapor Recovery Unit

Recycling rate of wastewater 18.8%

Reduction of Water Contamination

At **GS** Caltex, we manage wastewater produced during our production process on a daily basis through our monitoring system for wastewater sources. We reuse wastewater produced during the process for the dealkalization facilities. Since 2017, we have reused the wastewater in our kerosene and diesel refinery and improved the total recycling rate to 18.8%. In the future, we plan to reuse wastewater, using high efficiency wastewater treatment facilities (physical, chemical, biological filtering).

Recycling rate of waste materials 76.2%

Waste Materials Management Activities

At **GS** Caltex, we diversify our efforts to reduce the amount of waste we produce and maximize their recyclability. We share the production of waste materials by worksite on a monthly basis and ensure that each type of waste material is stored separately. We also use a computer system to request disposal and an identification system to raise awareness among our employees and partners. To improve the recyclability of waste materials, we work on the development of technologies and look for collectors while recycling tank sludge, waste oil, catalyst, synthetic resin, wood, and food for various uses. As a result, we managed to increase recyclability to 76.2% in 2017. Through continuous training and inspection, we ensure that waste materials are collected and disposed of without leaving a footprint, while further increasing recyclability of waste.

Hazardous Material Management Activities

At **GS** Caltex, we monitor the consumption of hazardous chemicals on a daily basis through the SHE System and make sure that any new chemical substances introduced in our work process are subject to the preliminary review system of the chemical substance portal and investment request review system. By setting our own emission reduction target, we are committed to reducing benzene, toluene, and xylene through the stable operation of marine VRU, installation of aromatic tank VRU, and strengthening of LDAR* management. We provide training programs on a regular basis for response to toxic chemical spills and the prevention of damage. In 2013, the Joint Accident Prevention Agreement was signed with companies in the Yeosu Industrial Complex to establish emergency response measures and organize joint training for chemical accident response. As a representative of the 2nd Group of the Yeosu Industrial Complex**, we hold a seminar for the exchange of information on a quarterly basis and joint training once every six months. In addition, we have reinforced our preparation for hazardous chemical spills by improving our protective gear and emergency chemical substances around each hazardous chemical storage facility. We also conduct inspection of our contractors that handle hazardous chemical substances on a regular basis and offer training programs for their managers as part of our prevention measures.

* LDAR : Leak Detection And Repair

** Currently, there are 4 emergency response teams organized by 22 companies in the Yeosu Industrial Complex, and they participate in training and share information to ensure a timely response to industrial accident.

Compliance with Government Policies

Acts	Activities
Chemicals Control Act	❶ Planned external impact evaluation/hazard control ❷ Undertook TF activities for improving facilities under the Chemicals Control Act (by 2019) ❸ Distributed personal protective gear under new regulations ❹ Established the procedure of reporting tools and inspecting facilities ❺ Installed facilities for emergency cleaning and to prevent solid catalyst from scattering ❻ Replaced harmful chemical substance warning signs ❼ Conducted regular inspection on the hazardous chemical substance facilities ❽ Established a training program on the Chemicals Control Act (for all employees)
Act on the Registration and Evaluation, etc. of Chemical Substances	❶ Built a chemicals control system (improve the purchase process, etc.) ❷ Registered chemical substances
Clean Air Conservation Act	❶ The reduction facilities were upgraded to improve their efficiency (e.g. replacement of NOx reductors and catalyst in SOx elimination process) ❷ Introduction of clean fuel (LNG) ❸ Upgraded/replaced heating boiler (minimize the emission of NOx) ❹ Upgraded existing facilities and installed new ones

Prevention of Soil Contamination

As part of our commitment for the conservation of soil environment, we have signed an voluntary agreement with the Ministry of Environment. The Yeosu Complex relocated their underground oil pipes on the ground to prevent contamination of soil and groundwater while monitoring systems were installed at every part of the complex to monitor contamination.

Protection of Biodiversity

We recognize the importance of protecting biodiversity and manage the biodiversity around our business sites in cooperation with the government and local community. There is no eco-system protection zone or habitat of any endangered species in our business sites. In 2017, there was no hazardous chemical spill that affected biodiversity.

Protected Areas in Yeosu

Classification	Description	Note
Water Source Protected Area	1 Water Source Protected Area is located in Mipyeong-dong, Yeosu	8.8km from the worksite
Wildlife Protected Area	There are 4 wildlife protected areas in Yeosu. The closest one is located in 190-1 (san), Jungheung-dong	6.8km from the worksite
Designated Island Area	There are 12 designated island areas in Yeosu. The one closest is the Gadeok Island	15.8km from the worksite
Nature Park	Odong Island located in the eastern part of the Yeosu Peninsula is part of the Hallyeohaesang National Park and the front side of the sea and certain areas of Dolsaneup are designated as Dadohaehaesang National Park	Hallyeohaesang National Park : 6.5km from the worksite Dadohaehaesang National Park : 29km from the worksite
Air Protected Area	Gwangyang Bay Area has been designated as an Air Protected Area in accordance with the 'Designation of Air Protected Area, Ministry of Environment #1999-191'	-
Low Sulfur Oil Supply and Use Area	The sulfur content must be 0.3% or less in fuel oil in accordance with Article 10-2 of the Enforcement Decree of the Clean Air Conservation Act, 'Scope of Low Sulfur Oil Supply and Use Facilities'	-
Special Controlled Area	Located in the Special Controlled Area in the Gwangyang Bay	-

Status of Voluntary Environmental Management Agreements

Agreements	Terms of Agreement	Activities
Voluntary Agreement against BAU by 2020	2014~2020	Reduction of GHG emission in industry sectors to achieve the national GHG target against BAU by 2020
Voluntary Agreement for Soil Preservation	2013~2023	Prevention of soil contamination by oil spills, voluntary inspection and recovery
Joint Agreement for Emergency Response to Chemical Accident	2013~	Establishment of emergency response plan for the prevention and recovery of chemical accidents
Agreement on SMART Program for Chemical Emission Reduction	2013~2017	Reduction of emissions fo benzene(by 60%) and butadien(by 14%) from 2009 to 2017

Environmental indicators

Indicators		2015	2016	2017
Volume of Air Pollutants (ton)	Dust	179.0	165.9	**100.7**
	Nitrogen oxide (NOx)	4,151.5	4,374.1	**3,221.4**
	Sulfur oxides (SOx)	6,304	7,392.1	**7,479.9**
	Carbon monoxide (CO)	757.5	395.4	**649.9**
	Volatile organic compounds (VOC)	116.5	109.8	**107.4**
	Hazardous air pollutants (HAP)	80.5	95.6	**66.8**
Concentration Level of Air Pollutants* (ppm) ※ **GSC** State/Legal Req.	Dust**	4.8/30	5.7/30	**3.8/30**
	Nitrogen oxide (NOx)	88.0/150	83.3/150	**88.8/150**
	Sulfur oxides (SOx)	59.2/180	62.1/180	**37.4/180**
	Carbon monoxide (CO)	32.3/200	24.2/200	**27.1/200**
Volume of Water Pollutants (ton)	Biochemical oxygen demand (BOD)	119.7	172.8	**169.7**
	Chemical oxygen demand (COD)	132.4	140.2	**202.8**
	Suspended solids (SS)	85.7	82.3	**71.2**
Concentration Level of Water Pollutants*** (ppm) ※ **GSC** State/Legal Req.	Biochemical oxygen demand (BOD)	6.8/30	6.9/30	**7.7/30**
	Chemical oxygen demand (COD)	10.1/40	9.2/40	**10.7/40**
	Suspended solids (SS)	2.2/30	3.2/30	**3.3/30**
Volume of Waste Material (ton)	Designated waste	22,461	21,165	**23,972**
	General waste	18,481	20,726	**19,371**
	Recyclable	28,668	30,001	**33,018**
	Composting	276	263	**281**
	Collected (incl. energy)	19,544	19,129	**23,040**
	Incinerated	3,029	2,596	**2,316**
	Buried	9,163	9,294	**8,009**
	Misc.	8,929	10,609	**9,697**
Water Consumption (ton/day)	Annual average consumption	53,930	55,487	**56,068**
Wastewater (ton/day)	Annual average effluent	26,942	28,542	**27,488**
Hazardous Chemical Consumption (ton)	Caustic soda (NaOH)	25,521	30,398	**29,824**
	Sulfuric acid (H2SO4)	1,123	770	**1,155**
	Hydrochloric acid (HCl)	1,666	1,840	**1,703**
	Ammonia (NH3)	462	579	**535**
Investment in Environmental Protection (KRW 100M)	Wastewater and Marine Contamination	22.5	20.0	**6.0**
	Air	21.6	52.6	**36.3**
	Volatile Organic Compounds	0.4	2.1	**0.0**
	Soil Contamination	73.1	51.8	**47.2**
	Misc.	–	–	**16.1**
	Total	117.6	126.5	**105.6**

* Dust/ NOx/SOx
Effluent quality standards and average concentration level of standard heaters and boilers

Carbon monoxide
Effluent quality standards of Incineration facility

** Dust Unit : mg/m^3

*** Effluent quality standards and concentration level of ocean effluence

※ **Pollutant Discharge Facilities**

• **Air Pollutant Discharge Facilities**
RFCC CO Boiler, Heater, Package Boiler

• **Water Pollutant Discharge Facilities**
Petroleum Refinery Facilities, Basic Petrochemical Compound Production Facilities, Industrial Water Purification Facilities

3
Building a Safe Workplace

CONTEXT & CHALLENGE

With growing concern about safety and recent industrial accidents, safety and health management is more important than ever in our industry and the prevention of accidents is an essential part of maintaining sustainable growth and competitive advantages. As corporate citizens, companies take a proactive approach in creating safer workplaces and work toward sustainable growth while strengthening their safety and healthcare policies and regulations. In this context, **GS** Caltex sets SHEQ (Safety, Health and Environment Quality) as the highest priority and carries out corporate-wide SHEQ activities.

Contents	Relevant Issues	Importance	Link to GRI Standards
• Occupational safety and health management	Prevention of accident and safety awareness	Key Issues	• GRI 403: Occupational Health and Safety
	Employee health	Reporting Issues	

HIGHLIGHTS

Employees/Partners

TRIR 0.09
DAFWR 0.01

OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT

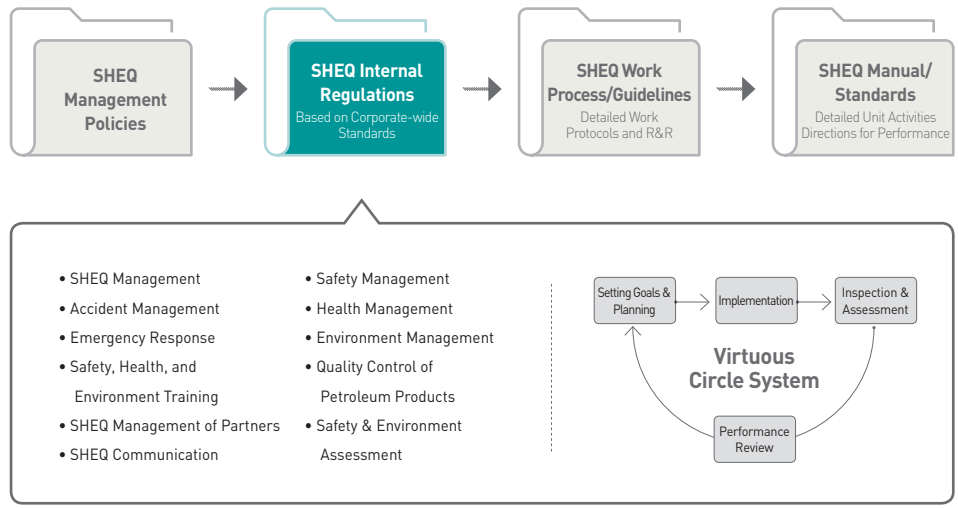
SHEQ Management Policies

- Disclose our SHEQ data to the local community and stakeholders.
- Create SHEQ-based culture in compliance with the laws and regulations and voluntary practice.
- Innovate our SHEQ management system to track our progress and realize improvement while conducting training programs.
- Incorporate safety in our practice and ensure the safety of facilities.
- Improve our working environment and healthcare program for our employees and partners.
- Reduce emission of contaminants and conserve our environment.
- Deliver high quality products and services through consistent quality control.
- Cooperate with our partners to maintain the highest standards in SHEQ management.

SHEQ Management System

Recognizing the importance of SHEQ management in our business practice, we have established the SHEQ management system to fulfill our social responsibility beyond the legal requirements. We established and revised our regulations in agreement with 8 Corporate SHEQ Policies. Our system undergoes the process of setting goals, planning, implementation, inspection, and improvement in accordance with the 'Plan-Do-Check-Action Cycle'.

SHEQ Management System



Internalization of Process Safety Management

GS Caltex recognizes that safety is essential for sustainable growth and creates a workplace culture with a strong commitment to safety. We understand that it is important to promote active communication among employees and raise safety awareness and safe practices. We must also create a consistent system and safe facilities while enhancing our response to emergency situations.
At **GS** Caltex, we continue to enhance the level of our response and operation in accordance with PSM*. We make sure that all our employees understand the 12 items of PSM and internalize each area of emergency response, including Human (Education and Training, Accident Investigation, Partner Management, and Internal Audit), Facilities (Facilities Maintenance and Pre-Safety Checkup), and System/Technology (Process Safety Data, Safety Operation Instruction Procedures, Safety Work Permit Procedures, Process Risk Assessment, and Change Management) for voluntary compliance.
In 2017, we conducted a safety environment analysis in the areas of Human, Facilities and Systems based on the 12 PSM factors and the Chevron SHE Assessment Protocol in order to make the analysis focus on objective and quantitative data. In addition, by implementing an advanced risk-assessment system, we reduced risk factors in our workplaces in order to create a workplace free of accidents.

* Process Safety Management

Internalization of Process Safety Management System

Occupational Safety Certifications

Certifications	Workplaces
OHSAS 18001	Incheon Logistics Center (from 2002)
	Busan Logistics Center (from 2002)
KOSHA 18001	Incheon Logistics Center (from 2013)
	Incheon Lubricant Plant (from 2011)

Raising Safety Awareness

At **GS** Caltex, we create a self-reliant safety culture by raising awareness and improving safety practices for voluntary compliance. We are working with DuPont, a company with the highest standards in safety, to establish the 'Safety Culture Program' and encourage our leaders to set an example for their coworkers and take the initiative in promoting active communication for safety issues. We also provide a variety of programs for our partners to raise awareness and help them stay motivated. While supporting the establishment of the Safety and Health Management System (KOSHA 18001) to foster expertise in risk assessment, we help our partners improve their safety management practice through the Work Certification System.

Improving Facility Safety

Our facilities are designed, built, and operated with the highest level of safety in the world. For the last 50 years, we have checked and maintained the safety of our facilities using our state-of-the-art inspection and diagnostic system and replaced any outdated facilities. From 2014 to 2016, we conducted a safety assessment on vulnerable parts of our facilities and established our mid to long-term Reliability Master Plan to be reached by 2020, to make continuous improvement. All facilities are operated in strict compliance within the safety range. If they go outside the range, the alarm system is activated and the process operation system stops automatically. Based on our 50 years of operation expertise, we continuously develop the expertise of our operators to maintain the highest level of safety and emergency response at all times.

Firefighting Drill in **GS** Caltex Yeosu Complex

Upgrading the Safety System/Technology

At **GS** Caltex, we assess our risks using advanced, practical techniques for more consistent analysis of risks in the petrochemical. By revising our former risk assessment system to the HAZOP-LOPA-SIL-QRA* system, we are undertaking a risk assessment lasting until 2022. To maintain a high level of safety in our operation, we ensure that safety requirements are met prior to undertaking the work through advanced, practical risk assessment, and all our activities comply with our safety plan. While work is in progress, safety supervisors are allocated to ensure safety compliance. When changes are needed, the risk assessment is resumed and the safety work plan is revised. If any part of the work is found to be unsafe during the operation, it is stopped until safety issues are rectified.

To make sure our SHEQ management system is operated effectively, we carry out objective safety environment diagnosis with some of the best experts in Korea. The Safety Environment Diagnosis is conducted on a regular team-by-team basis through a quantified checklist. We use advanced techniques so the areas of Human, Facilities, System/Technology, and Emergency Response can be identified in a comprehensive and consistent manner. In addition, we conduct an API** safety environment diagnosis every three years at our workplace while conducting an assessment of safety culture every two years to identify the areas of improvements and continue to raise the level of safety.

* Hazard and Operability Study, Layer of Protection Analysis, Safety Integrity Level, Quantitative Risk Assessment)

** American Petroleum Institute

Emergency Response System Establishment

At **GS** Caltex, we established an Emergency Response Team in 2014, to expedite our emergency response process in case of industrial accidents, safety and environmental accidents, and natural disasters such as earthquakes and typhoons, 24 hours a day. Based on the '**GS** Caltex Emergency Response Manual,' we clarify the responsibilities of our employees in emergency situations while simplifying our reporting system so that we can promptly respond when an accident occurs. At each workplace, an emergency response scenario is prepared. Training is conducted on a monthly basis while unannounced emergency response training is conducted at our headquarters. The Yeosu Complex has a system of dispatching 200 emergency personnel as the first line of response, and 100 personnel as the second line of response. In addition, we are focusing on strengthening the emergency response and preparedness of all our employees through fire drills at the largest fire training facility in Korea, in order to minimize death and property damage as well as environmental impact.

Occupational Safety Drills

Classification	Drills	2017
Corporate-wide	Corporate-wide Firefighting/Response Drills	1 time/quarter
Workplace*	Firefighting Drills	3 times/year (by shift)
	On & Offshore Oil Spill Response Drills	3 times/year (by shift)
	Emergency Response Drills	16 times/year
	Process Dry Training Drills**	1 time/month (by shift)
	Early Response Drills	1 time/month (by shift)

* The drills at the workplace are based in the Yeosu complex, and internal drills are conducted under individual guidelines in each place

** One type of training according to the emergency response scenario

Health Management in the Workplace

At **GS** Caltex, we provide various healthcare programs and facilities to help our employees maintain their health and deal with musculoskeletal disease, smoking, and obesity. At the Yeosu Complex, we operate a clinic with specialized medical staff including doctors, nurses, medical laboratory technologist and emergency rescue personnel and the latest medical equipment. The clinic can provide basic medical services such as first aid treatment, blood tests, hearing tests, and X-ray examinations as well as follow-up examinations if necessary.
In addition, we established an MSDS* management system to manage and train throughout the entire business process (purchase-production-sale). We also provide various healthcare support including protective gear, work environment analysis and special medical check-ups for our employees.

* Material Safety Data Sheet

Occupational Safety & Health Indicators

Classification		2015	2016	2017
Employees/ Partners	TRIR*	0.05	0.07	**0.09**
	DAFWR**	0.03	0.03	**0.01**
Employees	TRIR*	0.03	0.03	**0.13**
	DAFWR**	0.00	0.03	**0.00**
	Work-related Death – Male(Persons)	0	0	**0**
	Work-related Death – Female(Persons)	0	0	**0**
Partners	TRIR*	0.07	0.10	**0.06**
	DAFWR**	0.07	0.03	**0.03**
	Work-related Death – Male(Persons)	0	1	**0**
	Work-related Death – Female(Persons)	0	0	**0**

* Total Recordable Incident Rate = Number of incidents / working hours * 200,000
Number of incidents (any injuries, illnesses, and fatalities excluding those equivalent to or less serious than incidents requiring first aid) that occur every 200,000 working hours

** Days Away From Work Rate = Number of incidents that cause a loss of work / working hours * 200,000
Number of incidents that cause a loss of one or more days' work every 200,000 working hours

Efforts to Prevent Accidents in our Workplace

In August 2017, a fire accidentally broke out in a heavy oil upgrading facility, Yeosu Complex. After the accident, we inspected the entire facility to find the cause and make the necessary improvements to prevent recurrence, while carrying out an in-depth safety analysis on similar processes with outside specialist agencies. In addition, we carried out continuous improvements throughout the system, from layout to emergency response, and took our safety to the upper level. At **GS** Caltex, we focus on safety culture programs to raise awareness and internalization of PSM to prevent industrial accidents.

4

Promoting Fair and Transparent Practice

CONTEXT & CHALLENGE

Corporate ethics management has both direct and indirect impact on legal risk and productivity as it affects employees' attitude and conduct. Most global companies have ethical management systems in line with social standards and are engaged in various activities to build an ethical workplace culture. In addition, multinational companies have to implement a well-structured compliance system to deal with the risk of violations of anti-corruption and anti-trust laws in certain countries where there are no proper regulations.

Contents	Relevant Issues	Importance	Link to GRI Standards
• Ethics management	Ethical management	Key Issues	• GRI 205: Anti-corruption
• Fair trade	Fair practice	Key Issues	• GRI 206: Anti-competitive Behavior

HIGHLIGHTS

Number of ethical management training participants

2,120 (Online)
842 (Offline)

Number of official letters sent for ethical management

5,875

Number of violations against fair practice in 2017

Zero

ETHICAL MANAGEMENT

Ethical Management System

We established the Code of Ethics in 1994 as a framework for ethical management and our compliance program was implemented in 2001, through which we built a compliance officer appointment system and related reporting system under the CEO's compliance policy. Our ethical management activities are reported through the Audit Committee under BOD twice a year.

Compliance Management Organization

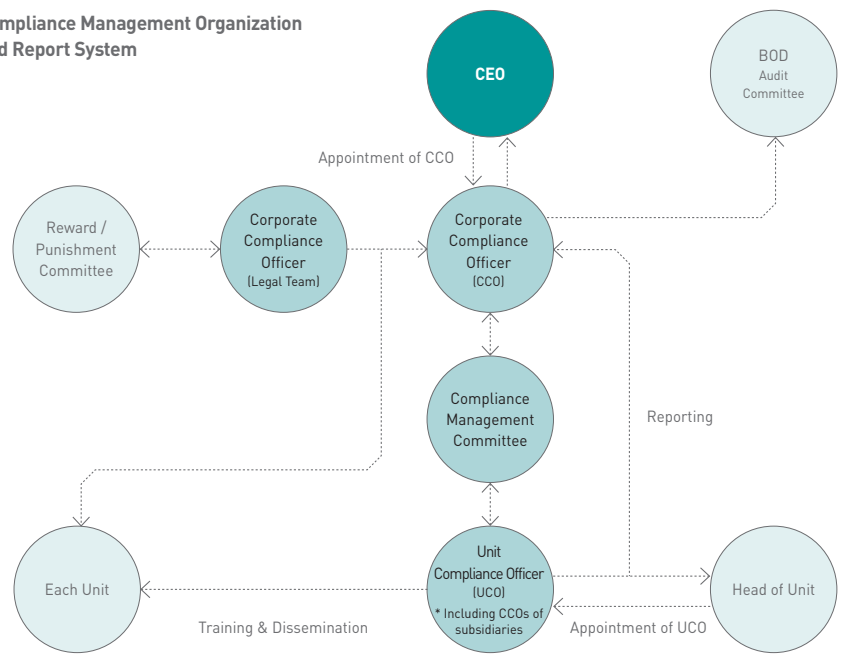
In order to implement consistent compliance management, we have CCO* and UCO** at each division and subsidiary. Individual compliance activities are reported to the BOD while we encourage oversight and compliance at our business sites by organizing the Compliance Management Committee consisting of CCO and UCO on an annual basis.

* Corporate Compliance Officer
** Unit Compliance Officer

Compliance Management Activities

Every year, we organize corporate-wide compliance programs, particularly ethics training for new employees, to ensure full compliance with the Code of Ethics and Rules of Conduct. We also provide ethical management training for employees of our partners. At the quarterly Compliance Management Committee meetings for CCO and UCO, we discuss compliance issues and review the progress. Additionally, we sent 5,875 letters to our customers and partners not to send traditional holiday gifts in 2017.

Compliance Management Organization and Report System



Compliance Programs

All **GS** Caltex employees are obliged to take the CCP* and submit the Pledge of Compliance every year to reaffirm their commitment to ethical practice. The CCP consists of subjects essential to day-to-day business such as ethical principles, fair trade, prevention of sexual harassment, information security, and CCM**. These programs are also implemented at our subsidiaries worldwide. They were updated to reflect regulatory changes and new systems in place in 2017.

* Corporate Compliance Program
** Consumer Centered Management

Raising Awareness of Ethical Management

We raise awareness of ethical practice by organizing ethics campaigns for our employees. We also send out CEO messages to our employees to ensure ethical compliance before traditional holidays as part of our ethical compliance program.

- **Ethics Management Reporting Line**
  +82-2-2005-6011
  ethics@gscaltex.com
- **Sexual Harassment Reporting Line**
  +82-2-2005-6012

Anti-corruption and Bribery Prevention System in Supply Chain

At **GS** Caltex, we promote shared and sustainable growth by ensuring that our customers, shareholders, and employees, as well as other stakeholders such as partners, local communities, and environment, fulfill their ethical and social responsibility throughout the entire business process. We post our ethics management initiatives and the full Code of Ethics on our Ethics Management website*, while providing specialized counseling service for inquiries and ethical dilemmas that they may face in the course of business. In addition, we have established an anonymous ethics management reporting line to make it easy for our employees and stakeholders to report any violations and corrupt/unfair practices.

* http://ethics.gscaltex.com

Ethical Management Training

Classification		Unit	2015	2016	2017
GS Caltex employees who participated in training	Online	Persons	1,963	2,052	**2,120**
	Offline	Persons	871	833	**842**
Partner employees who participated in training	Offline	Persons	20	–	**22**
Letters sent for work ethics		Cases	6,148	5,964	**5,875**

FAIR TRADE

Member of The Korea Fair Competition Federation

Private organization authorized by the Fair Trade Commission, It was established to provide online and offline training, legal counseling, and suggestions for improving the government policies.

Consultative Bodies and Organizations for Fair Trade

At **GS** Caltex, we have formed a fair trade organization consisting of executives and employees to ensure consistent compliance. We also monitor regulatory changes to adapt accordingly.

Fair Trade Review Committee

The Fair Trade Review Committee was organized to review compliance with the laws and regulations prior to undertaking any business practices. Under the committee, there are the Internal Trade Review Committee, which reviews relations with businesses in which we are in a special relationship, such as affiliates, and the Subcontractor Review Committee, which reviews business relations with small and medium-sized companies.

Fair Work Process Team

At **GS** Caltex, we have the Fair Work Process Team in charge of communication with organizations and consultation for business units within our company. The team ensures compliance with laws such as the 'Monopoly Regulation and Fair Trade Act', the 'Fair Trade Practices Act for Subcontractors' and the 'Fair Supplier-Vendor Trade Practices Act.'

Fair Trade Compliance Activities

Internal Trade Review Committee

The Internal Trade* Review Committee was organized to ensure fair practice in internal business relations. The committee reviews compliance with applicable laws (e.g. Fair Trade Act, Commercial Act, Tax Act, etc.) and keeps our business departments informed of compliance issues as they take the necessary follow-up measures based on the result.

* Internal trade: Business dealing with businesses with which we are in a special relationship (e.g. affiliates)

Subcontractor Review Committee

The Subcontractor Review Committee operates to ensure fair business dealings with subcontractors. The committee reviews compliance with the Fair Trade Practices Act for Subcontractors before dealing with small and medium-sized companies.

Fair Trade Act

Violations in 2017

Zero

Employee Training

At **GS** Caltex, we organize mandatory employee training on an annual basis to ensure fair business practice while providing offline training programs for new employees, as well as those with job experience and occasional training programs tailored to the needs of each business department all year long.

Management Report

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Corporate Governance

Composition of the BOD

The **GS** Caltex Board of Directors is comprised of executives from **GS** and Chevron with professional expertise and risk management skills. As of June 2018, there are two inside directors and eight non-standing directors. They are appointed each year at the General Meeting of Shareholders based on their professional qualifications in accordance with its internal policies.

Composition of the BOD

(As of June 2018)

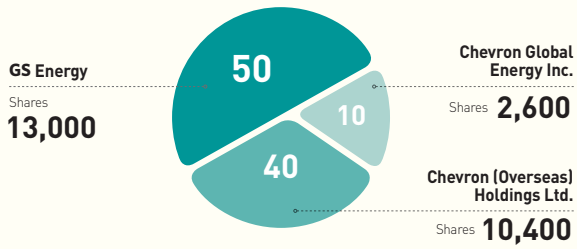
Classification	Name	Job Title
Inside Directors	Jin-Soo Huh	Chairman & CEO **GS** Caltex Corporation
	Hyung Kuk Kim	President, Petroleum Business **GS** Caltex Corporation
Non-standing Directors	Young-Bong Ha	Vice Chairman & CEO **GS** Energy Corporation
	Taik Keun Jung	Vice Chairman & CEO **GS** Holdings Corporation
	Saehong Hur	President & CEO **GS** Global Corporation
	Andy B. Walz	President Chevron Downstream & Chemicals, International Products
	Navin K. Mahajan	Vice President Chevron Downstream & Chemicals, Finance
	John J. Kuehn	Vice President Chevron Downstream & Chemicals, Strategy, Planning & Technology
	William L. Stone	CEO Singapore Refining Company
	William J. Miner	Country Chairman Chevron Korea

Roles of the Board Committees

Classification	Composition	Role
Accountability Committee	2	Review and discussion of governance-related issues
Audit Committee	4	Review and discussion of compliance program and major audit issues
LNG Procurement Management Committee	2	Review and discussion of LNG related issues

Ownership Structure

(Unit: %, 1,000 shares)



BOD Management & Prevention of Conflict of Interest

As our Board members are executives from each company, their compensation schemes follow the internal policies of their respective company, and no additional compensation is granted for their Board-related activities. The Board resolutions require an affirmative vote of more than two-thirds of all registered directors, as stated in the Articles of Incorporation. In order to guarantee the independent operation of the BOD and prevent possible conflicts of interest, any Board members who have a special interest in the agenda will be prohibited from voting in regard to that particular issue.

The Board Support Office provides support to the directors on all Board matters, including preparation of the agenda for Board meetings, through proactive communication and cooperation with related divisions. Board members are provided with meeting materials at least one week before the actual meeting to ensure enough time to review the agenda items. Seven Board meetings were held in 2017 to review and approve key agenda items such as the 2018 Business Plans, investment in VRHCR Revamp Project, and approval of RFCC Wet Gas Scrubber Project.

Operation of Committees in Support of the BOD

The BOD operates separate committees including the Accountability Committee, Audit Committee (different from the Audit Committee under the commercial code), and LNG Procurement Management Committee. The members of each committee provide support based on their responsibilities and roles to ensure the reliable and transparent operation of the BOD.

Risk Management

Risk Management Governance

In response to the changing business environment, we have organized risk management teams: RM Operation Team, RM Strategy Team, and Accounting Team to monitor and analyze risks, and report the results.

Risk Management Teams

Classification	Key Activities
RM Operation Team	Report on issues and current agenda through daily market monitoring, and propose and implement derivatives trading
RM Strategy Team	Analyze market and price, conduct risk assessment, and trade derivatives on a weekly/monthly basis
Accounting Team	Monitor and report internal risk management activities and compliance

The Risk Management Committee meeting comprising CEO and executive officers is held on a quarterly basis, where we review major risks and plan mitigation strategies.

Risk Management Committee Profile

Classification	Description
Chairman	CEO
Committee Members	General Manager of Petroleum BU, General Manager of Chemical BU, Corpoate Planning Office Manager, Finance Office Manager, Managing Director of Supply & Trading, Singapore Regional Head
Board Members	Head of Corporate-wide Optimization Division, Head of Aromatics Division, Head of Crude Oil Product Division, Head of Financial Resource Division
Secretary/ Secretariat	Head of RM Division, Head of Accounting Division / RM Strategy Team, Accounting Team
Activities	Provide guidelines on risk management and review performance
Frequency	4 times a year (quarterly basis)

*As of June 2018

Risk Management for Price Fluctuation

GS Caltex is focused to secure financial stability in response to increasing volatility and uncertainties in the business environment. We're maintaining appropriate level of debt with solid cash flow generation and secure sufficient credit lines to increase financial flexibility and maintain strong risk management.

Financial Risk Management

In response to increasingly more volatile business and industrial environment, we focus on maintaining financial stability. We keep our borrowing at a safe level based on stable cash flow and secure sufficient credit lines to finance and maintain strong risk management.

Non-financial Risk Management

As the demand for sustainable practice has grown, so has the importance of social and environmental issues. The CSR Team coordinates with other teams to manage non-financial risk while executive officers attend CSR Committee meeting to review corporate-wide sustainability issues, activities and performance.

In 2017, we focused on building ESG DB. In 2018, we will take a more proactive approach in dealing with non-financial risk by establishing a code of conduct for our partners and human rights policy.

Emerging Risk Management

Crude Oil & Petroleum Price Fluctuations

Overview	• Oil prices are highly sensitive to geopolitical and economic uncertainties including inter-state trade disputes. • The price of petroleum products too are subject to various external factors such as supply-demand and inventory fluctuations.
Impact on Business	• Oil and petroleum product prices have major impact on production cost and sales.
Activities	• We use derivatives such as futures and options to hedge the risks of volatile oil and product prices while organizing quarterly Risk Management Committee meetings as part of our risk management.

Changing Market due to Climate Change

Overview	• The increasing regulatory demand on GHG emissions and investment in renewable energy is shifting the energy paradigm.
Impact on Business	• The investment in GHG emission reduction is expected to increase while the demand for petroleum products is declining due to improved energy efficiency.
Activities	• We are establishing mid- to long-term strategies to adapt to the shift in the energy paradigm and reviewing the impact of GHG on our new business investments and the operation of existing facilities for sustainable growth and development.

Customers ECO-FRIENDLY PRODUCTS

Development of Eco-friendly Products

At **GS** Caltex, we support low-carbon energy policies by developing energy efficient eco-friendly products. Our gasoline, diesel, and kerosene products boast superior quality thanks to our cutting-edge refining process. We are also working on the development of next-generation eco-friendly technologies such as biobutanol.

GS Caltex Kixx high-quality gasoline contains a high-purity functional additive that protects the key parts of the engine and significantly reduces the emission of hazardous substances in full compliance with environmental standards. It also maximizes the engine performance of vehicles for better fuel efficiency and driving comfort.

Our diesel products also feature excellent ignitability and power, containing a high-performance flow improver for better ignition at low temperatures. Produced at our advanced desulfurization facilities, they have been recognized as eco-friendly products with five stars, which is the highest level by the Ministry of Environment for more than 10 years.

Our kerosene is highly purified and eco-friendly with less emissions of harmful gas as it is produced through our advanced refinery process. It produces less petroleum odor and helps promote comfortable environments. It was certified by the Ministry of Environment for eco-friendly attributes as the sulfur content is less than 30ppm, which is 33% of the legal limit.

Development of Eco-friendly Biofuel

We also lead the development of eco-friendly biofuel. Through our in-house R&D project that began in 2007, we have secured technology that integrates the pretreatment, saccharification, fermentation, and separation/purification processes needed for mass production of biobutanol from non-edible wood waste, and succeeded in developing high-performance strains. Our biobutanol production technology is eco-friendly as it can reduce GHG emissions and was certified for NET* by the Ministry of Trade, Industry and Energy in 2014, top 10 Technologies of Korea for Climate Change Response by Ministry of Science, ICT and Future Planning in 2015, and for Green Technology by the Ministry of Environment in 2016. In 2017, it was named Top 100 Technologies to Lead Korea in 2025 by the NAEK (National Academy Engineering of Korea). As a result of our technological innovation, we completed the mechanical construction of the demo plant for the production of bio-butanol in Yeosu, Jeonnam at the end of 2017, and operation is scheduled to start in July 2018.

*New Excellent Technology

Response to the EU REACH

At **GS** Caltex, we are implementing our response to the EU REACH* under a proactive and systematic plan to protect the environment and people's health by identifying the hazards and risks of chemicals. Since preregistration in 2008, we have registered our products exported more than 1,000 tons (2010) and 100 tons (2013) to Europe. By 2018 all chemical exports exceeding 1 ton will be registered. Our customers in Europe and those who export our chemical products to Europe ensure their confidence. In addition to the EU REACH, we are committed to strict compliance with domestic and overseas chemical substance registration and evaluation systems.

* Registration, Evaluation, Authorization and Restriction of CHemicals

K/D HDS(Kero-Diesel Hydrodesulfurization Unit), which removes sulfur and nitrogen compounds, aromatic compounds, and metal components and increases specifications such as cetane number and fluidity.

Customers QUALITY MANAGEMENT

When it comes to motor fuel, quality control is crucial as it has a significant impact on atmospheric environment and vehicle performance. As engine technology makes advances along with driving performance while consumer interest and knowledge grows, product quality control has become more important than ever. Consumers are extremely sensitive to product quality as they experience the effects on their vehicles and fuel efficiency

Production and Management of Competitive Products

Complex	Terminal	Gasoline station/Customers
·More stringent quality control than legal requirements ·Quality inspection before shipment	·Quality inspection before receipt ·Quality inspection for products in long-term storage	·Operation of Kixx quality service vehicles

Strict Product Quality Control

GS Caltex carries out rigorous quality control in the entire business process from production to sales. Our products are subject to quality standards that are stricter than the legal requirements, and quality inspection is carried out on incoming and long-term storage products in addition to those being shipped out.

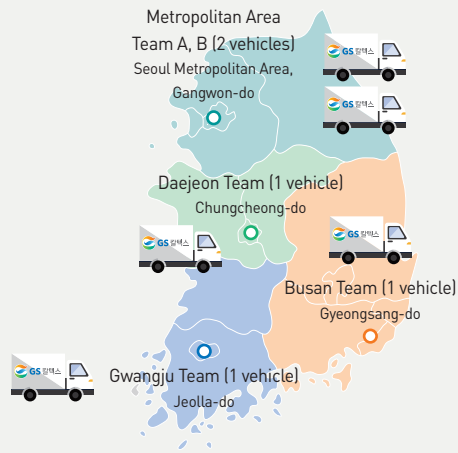
We also maintain quality assurance in the distribution process which is our customer contact point. Quality issues can result in sales suspension or loss to consumers when the return process is not properly carried out. Since 2007, we have been operating 'Kixx Quality Service Vehicle', the first in the industry to carry out quality testing of gasoline stations nationwide. We also ensure a prompt response to complaints and emergency situations. In addition, 'LPG Quality Service Vehicles' has been operating since 2013 while maintaining the highest quality standards to ensure full compliance with legal requirements and prevent any violations at LPG stations.

Quality Inspection Status

Classification	Unit	2015	2016	2017
Quality inspection on gasoline stations	Number of times	4,676	4,426	**5,217**
Quality inspection on LPG stations	Number of times	424	439	**479**

About Kixx Quality Service Vehicles

Purpose	Equipped with systems that can detect defective and illegal petroleum products, the vehicles perform on-site sampling and quality inspections at **GS** Caltex stations
Operation Process	Selection of stations or emergency inspection → Onsite quality analysis Output process and guidance → Follow-up (send the samples to the lab if required)
Vehicle-mounted Equipment	○ Gasoline analysis: FT-NIR (Fourier Transform-Near Infrared Spectrometer) ○ Detection of kerosene in diesel: Colorimeter, UV Spectrometer ○ Detection of water content and sediment: moisture detection reagent, centrifugal separator



Customers CUSTOMER SATISFACTION

Consumer Centered Management

As a result of our efforts to create values for consumers and achieve the highest level of satisfaction, we became the first company in the industry to receive CCM* certification in 2010 and certifications for 5 consecutive years (2012, 2014, 2016, and 2018).

We provide consultation services through our Customer Service Center (CSC; 1544-5151 or kixx.co.kr), an integrated channel for customer consultation services established to promptly handle customer complaints and inquiries. We also continue to invest in fostering professional service representatives and improving the call service infrastructure, thereby handling customer complaints more expeditiously and enhancing customer satisfaction of the complaint-handling process.

Customer complaints received through the CSC are analyzed and used for improvement and prevention of recurrence while progress is monitored after their implementation. In order to protect personal data of our customers, we have also maintained the PIMS (Personal Information Management System) certification status until 2018 after acquiring it for the first time in the industry in 2013.

* Consumer Centered Management: the certification system for consumer-centered business operation and improvement evaluated by the Korea Consumer Agency and certified by the Fair Trade Commission.

Various Promotional Events

GS & POINT, the membership program of **GS** Group, provides membership benefits like travel, sports, and cultural experiences for a 'Happy Family Life'.

In 2017, we further enhanced our communication channels through promotional events such as 'Bingo Promotion', '**GS** & Camping Season 5 : Midsummer Night Mini-Concert', and 'Who will win 188g of gold?' and provided various benefits for more than 100,000 customers. Through **GS** & Camping, which has been held for 5 years since 2013, we invited more than 150 family members on six occasions in 2017 and received a great response from customers through an acoustic concert at famous travel destinations nationwide. In addition, **GS** Caltex is continuously developing customer satisfaction programs such as soccer and baseball training, Escort Kids, and a sports program known as '**GS** & SPORTS' where parents and children can play sports together.

A large-scale year-round online event, 'I am your Cinema', has contributed to our brand differentiation since it was launched in 2006 as part of our marketing program. We also share our unique and entertaining value of 'adding fun to filling up' through the 'Lucky Receipt Event', one of our biggest annual promotions to show customer appreciation.

Enhancing Mobile Business using Smart Platform

To improve our brand experience and encourage participation of consumers, we introduced 'Smart Gas' service which is a mobile-based communication platform. Smart Gas provides useful information and benefits for users in real time through the **GS** & POINT application.

In order to respond promptly to the rising purchasing influence of customers and their right to choose information in line with the development of mobile-based ICT, we will increase the number of Smart gas stations and expand their utility values.

Systematic Pricing

At **GS** Caltex, we determine product prices through a transparent and systematic pricing process. Global crude oil prices, changes in exchange rates, global petroleum product prices and other relevant factors are properly reflected in our pricing, while we increase our cost competitiveness and make sure consumers benefit from it. We will maintain a consistent pricing structure not only to offer reasonable prices to our customers but to stabilize domestic oil prices and enhance consumer satisfaction.

Star Service Team Offers Unique Experience

At **GS** Caltex, we operate a Star Service Team to provide professional service training in order to improve customer experience by offering standardized services. Providing on-site service training for over two decades since its establishment in 1997, the Star Service Team has contributed to our achievement of taking first place in the gasoline station category of the National Customer Satisfaction Index (NCSI) for nine consecutive years.

The Star Service Team also works to standardize the service manual and offers the 'Green Star Training Program' to consistently improve the quality of our services. It also serves as a VOC channel delivering the voices of on-site workers to relevant departments.

Service Training at Gasoline Stations

Customer Satisfaction Performance

Classification	2015	2016	2017
CCM Certification	Valid for 2 years since 2014	Certified	**Valid for 2 years since 2016**
KSQI*	Excellent Call Center	Excellent Call Center	**Excellent Call Center**
Average time handling customer complaints	0.7 day	0.8 day	**0.7 day**
NCSI (National Customer Satisfaction Index) Gasoline Station Category	Ranked 1st (for 7 consecutive years)	Ranked 1st (for 8 consecutive years)	**Ranked 1st (for 9 consecutive years)**
Membership subscribers**	16.99 million subscribers	17.57 million subscribers	**11.36 million subscribers**
Domestic market share	24.8%	25.6%	**25.0%**

* Korea Service Quality Index

** The number of membership subscribers has changed from the previous year as the data of about 6 million people were destroyed or stored separately in accordance with the revision of the validity period of the Information and Communication Network Act (separate storage requirements).

Customers INFORMATION SECURITY

Organization and Management of Information Security

To respond to various security threats, protect our assets, and ensure reliable business practice and safety, we have implemented consistent information security policies while operating our information security system in accordance with laws and standards.

As our top decision-making organization in information security, our 'Information Security Committee' is composed of the executive officers of each division with CISO* as the chairman for discussing investment, activities and current issues regarding personal information protection, prevention of cyber-crime, and raising employee awareness. Furthermore, we conduct annual information security and personal data protection training for all our employees.

* Chief Information Security Officer

Personal Information Protection System

GS Caltex acquired the government-designated PIMS* certification in 2013 for the first time in the industry. Our company undergoes stringent examination to maintain the status. To protect our customers' personal information, important data is encrypted when it is stored and transmitted. Access to customer data is only allowed in a security area where fingerprint scanners and CCTV are installed. In addition, we implemented a personal information access control system to manage access to personal information and to monitor any unauthorized access. Any teams and third parties with access to personal information are subject to security audit every year in order to prevent any violation of laws or misuse.

In 2012, we destroyed the resident registration numbers of all our customers and no longer collect or use that information. We also announce the status of processing personal information to our customers at least once a year to make sure their rights are protected while improving our security.

* Personal Information Management System

Protection and Management of National Infrastructure

We are designated as 'Critical National Facilities' and 'National Security Target Facilities', and meet the security requirements under the laws (e.g. United Defense Act, Security Policies) while implementing the national infrastructure protection plan in response to emergency situations. In the event of a disaster or emergency situation, we ensure that our petroleum production and storage are maintained and controlled in an effective manner while preventing interruption of supply and operation.

Internal Security Measures

At **GS** Caltex, we examine our security issues identified in Korea as well as other countries through our security organization composed of top experts in the industry. To prevent security breaches, we conduct various employee training and programs including scenario-based simulations, security seminars, and campaigns.

We are also certified for ISMS* designated by the government by maintaining strict security standards while the IT system vulnerability assessment and cyber-attack simulation are carried out on an annual basis. At the same time, we monitor and analyze logs on network anomalies, such as unauthorized access, through various security solutions. Meanwhile, business infiltration tests and unannounced security checks are also carried out to enhance physical security.

* Information Security Management System

Access Monitoring System

GS Caltex's main business sites are designated as restricted and controlled areas, and a special access control and monitoring system is implemented. Unauthorized access is strictly denied and outsiders should require authorization through our access system and process to enter our business premises.

Security Certifications

Classification	2015	2016	**2017**
PIMS Certification Status	Certified	Certified	**Certified**
ISMS Certification Status	–	–	**Certified**

Customer Privacy Policy Violations

Classification	2015	2016	**2017**
Number of data leakage, theft and loss	0	0	**0**

Employees HUMAN RIGHTS MANAGEMENT

Human Rights Policy

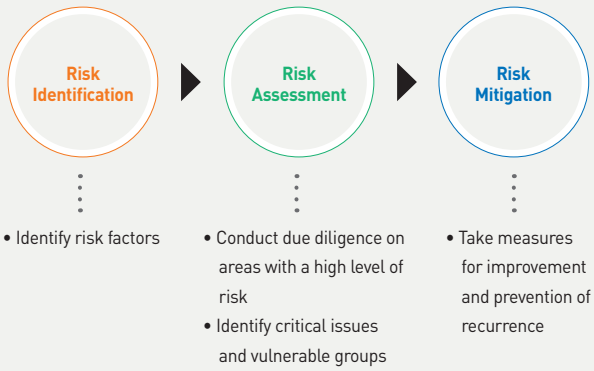
At **GS** Caltex, we are committed to protecting human rights not only in our business operation but also in business relationships. We established our own human rights policy in line with the Universal Declaration of Human Rights and the UNGP*. Our human rights policy is stated in this report for review by our stakeholders. The scope of our human rights management encompasses all our suppliers and partners as well as our employees.

* UN Guiding Principles on Business Human Rights

Human Rights System

In addition to declaration of our human rights policy, we established a human rights system to strengthen human rights management while working on the identification of risk factors, evaluation, and mitigation process throughout the entire business process. In 2018, we will conduct a survey on human rights issues for all our employees to identify risk factors in human rights. By continuing to monitor the risk, we will take necessary measures to make improvement on human rights issues for vulnerable groups and prevent recurrence of violations.

Human Rights Risk Management Process



Grievance Handling Process

At **GS** Caltex, we engage in various activities to provide the support our employees' needs and create a good work environment, through various activities, such as the sexual harassment prevention process.

Campaign for Human Rights Protection

At **GS** Caltex, we promote and protect human rights through our overall business operations. In 2017, we launched a campaign to protect the human rights of call center service representatives suffering from emotional stress, as they have to deal with verbal abuse from callers on a daily basis.

To address this issue and raise awareness, we implemented a plan and applied 'kind words ringback tone' at the GM Korea's customer center. While waiting on the line, callers hear such messages as 'please wait, my dad will get to your call in a moment' to remind them that the service representatives have their own families and should be respected.

After five days, we took a survey for the representatives and found that their stress levels were reduced by 54.2% and friendly attitude of the callers has increased by 8.3%. The video about this campaign became a sensation gaining more than 13 million views on SNS, attracting attention of media outlets around the world.

Afterward, seventeen companies started using the ringtone and the campaign was recognized for its social influence winning a number of awards including Korea Advertising Festival in five categories, New York Festival in two categories, which is the top 3 advertising awards in the world, ADFEST in two categories (Asia Pacific), Epica Award (Europe), and Korea Online Advertising Awards, etc.

We will continue to organize and carry out meaningful human rights campaigns through various communication channels.

Listen to Kind Words Ringback tone

Employees HUMAN RESOURCE RECRUITMENT AND RETENTION

Fair and Objective Recruiting Procedure

At **GS** Caltex, we recognize the importance of human resources for sustainable growth and value diversity. We also focus on the actual qualifications of our employees rather than their academic background. To do this, we simplified our application process and removed the foreign language test scores from the qualifications and focused on job competency. We provide equal opportunities in job application using an online system. The applicants are tested for their personal values and competency for the job as well as knowledge of our nation's history. In addition, our interviewers are not allowed to view their academic records: applicants are thus judged based on their level of competency.

We also diversified our hiring process and introduced an academy-industry internship program, and chemical engineering leadership to recruit talented, qualified individuals. The chemical engineering leadership program in particular is a course that is co-established by the company and the university and allows the executive officers of our company to share their know-how and knowledge in practice with students.

Employee Status

Classification		Unit	2015	2016	2017
Total		Persons	3,079	3,000	**2,969**
By Employment Type	Executive		52	51	**49**
	Full-Time		2,811	2,770	**2,758**
	Part-Time		216	179	**162**
By Location	Seoul, etc.		1,373	1,326	**1,317**
	Yeosu		1,706	1,674	**1,652**
By Age	Under 30		–	–	**431**
	30-50		–	–	**1,856**
	Over 50		–	–	**682**
No. of Retirees			257	170	**123**
Retirement Rate		%	8.3	5.7	**4.1**
Percentage of Female Employees			9.1	9.6	**9.6**
Percentage of Employees with Disabilities			1.6	1.5	**1.4**
Average Years of Employment		Years	15.3	15.3	**15.3**
Employees Subject to Pension System		Persons	2,738	2,771	**2,795**

Recruitment Performance

Classification		Unit	2017
No. of new employees		Persons	**171**
by gender	Male		**122**
	Female		**49**
by location	Seoul, etc.		**101**
	Yeosu		**70**

Fair Performance Evaluation and Compensation

At **GS** Caltex, any discrimination in wage, evaluation, and promotion based on gender is strictly prohibited. Our performance evaluation and compensation system is designed to increase job satisfaction and motivate our employees by keeping the system fair and effective.

When it comes to our evaluation system, we categorize based on their positions and ensure that their performance is evaluated based on their roles and responsibilities in a fair and objective manner. When setting job performance goals at the beginning of the year, we closely align employees' goals with our business objectives through interviews and provide feedback so the employees can review their progress and seek ways to improve their performance. At the end of the year, we evaluate performance using a descriptive form to consider both quantitative and qualitative aspects and apply them for their development and compensation. To improve the level of fairness and acceptability of performance evaluation, evaluators are required to record their observations at all times. The follow-up interviews, feedback system, and objection system regarding the results of evaluation have also been implemented.

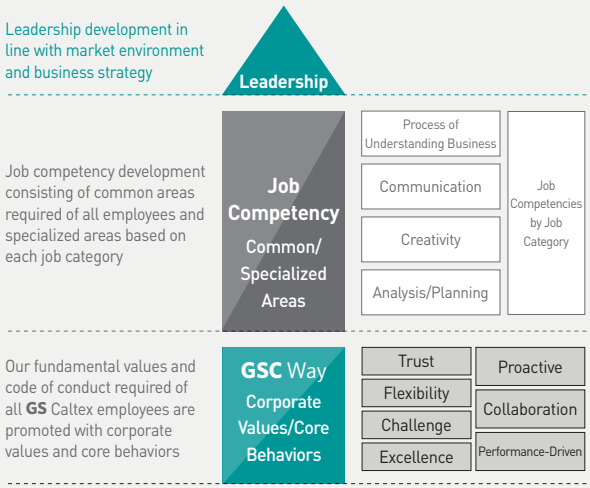
Our compensation system is managed in line with performance evaluation to ensure that our employees stay fulfilled and motivated. The level of compensation for our employees is determined based on their individual performance, level of contribution, and importance of their jobs. High performers are rewarded with additional incentives to motivate them.

Employees HUMAN RESOURCE DEVELOPMENT

Systematic Human Resource Development

At **GS** Caltex, we have established our competency model based on the '**GSC** Way', 'Job Competency', and 'Leadership' for our human resource development program. The **GSC** Way refers to our organizational values and essential conduct, and Job Competency consists of several areas of expertise that are required to perform the job. Leadership includes the qualities that leaders must have in order to achieve our company's vision. Our training programs are oriented towards practical aspects and are designed with special leadership training, job training, coaching/mentoring, and external degree programs. It has both short and long-term courses. All employees can develop their own training plan based on the results of the competency analysis and choose a training course accordingly.

Human Resource Development System



Leadership Development Program

At **GS** Caltex, we provide training programs for all our employees on a regular basis to help them improve their job competency and skills at each stage of growth. We select and foster candidates for team leaders through the LDC (Leadership Development Center), our internal leadership program while organizing Group Study for Team Leaders for mutual learning for team managers. We also evaluate the leadership of our executives and team leaders from multiple perspectives and provide them with feedback on a yearly basis.

Coaching/Mentoring Program

We have organized a coaching program for our new executives and team leaders to help them improve the leadership skills required to perform their duties. Our internal coaching program helps employees adapt to organizational environment and brings out their full potential. Our mentoring program, in which team leaders or seniors play the role of mentors, is also available to new employees during their first and second years of employment.

Job Competency Development Program

Our job competency model consists of common areas required of all employees and specialized areas based on each job category. To develop job competency in the common areas, we provide business courses dealing with the refining process and corporate finance as well as courses for improving individual communication skills, creativity, and planning and analysis skills.

The specialized areas are developed based on an analysis of all the jobs and tasks in our organization and built into the training programs while building infrastructure and providing support to help each organization to join the training programs they need.

Individual Human Resource Development Program

We provide selected individuals with the opportunity to earn various academic degrees including MBAs in eminent, domestic, or global colleges and training programs at global companies such as Chevron to help them reach their full potential. We also provide opportunities for our employees to take various courses and external education programs in their areas of expertise when needed.

HR Development Indicators

Classification	Unit	2015	2016	**2017**
Training Cost	KRW 100M	34	39	**52**

* Training Cost: internal training cost + external training cost (excl. indirect expenses)

Employees ORGANIZATIONAL CULTURE

On/Offline Communication Activities

To share insights into our business strategy and status and promote various forms of internal technology, we established on/offline communication channels. To this end, in 2015, we established a place of 760m^2 on the 27th floor of our **GS** Tower named 'Jieum' for open communication and to promote collaboration between employees and teams, foster new ideas, and engage in organizational cultural activities. Through our online communication channel 'Nanumteo', 99 ideas for improving work process were collected and 50 of them were reviewed and incorporated into practice.

In 2018, we will refine our existing programs to improve our response to a changing environment and understanding of our business strategy. Through Trial & Upgrade program, we will embrace and share our failures and turn them into opportunities for growth and motivate our employees to take initiatives and reach higher performance. In addition, by introducing cooperation tools to our work environment, we are going to promote sharing of information between organizations and facilitate the decision-making process.

Labor Practice for Shared Growth

At **GS** Caltex, we uphold the freedom of association and the right to collective bargaining. We also prohibit any kind of forced labor and child labor in all our workplaces. On December 9, 2005, we established the 'Declaration and Charter for Harmonious Labor-Management Relations' to achieve our vision of 'Shared Growth based on Productive Labor-Management Relations'. Based on this declaration, we have implemented various Labor-Management programs to build Labor-Management relations for shared growth and development.

Through collective agreement, we maintain ongoing communication channels with full-time union officials. As a Labor-Management consultative body, we have the Labor-Management Council* and the Occupational Safety and Health Committee**. We are also engaged in the bargaining process to determine wages for employees every year and negotiate for the renewal of collective agreement to discuss labor union activities and working conditions every two years.

* Composed of 7 members from each side, discuss working conditions and work-related matters

** Composed of 8 members from each side, discuss occupational safety and health issues

Labor-Management Indicators

Classification	Unit	2015	2016	2017
Union Members (joined/eligible)	Persons	1,294/ 1,804	1,289/ 1,796	**1,306/ 1,793**
Labor Dispute	Cases	0	0	**0**

Employee Communication Channels

Classification		Description
Online	CEO Message	Shares business issues with employees on a monthly basis.
	Nanumteo	Interactive communication channel to discuss ways to improve work process, new business ideas or certain issues.
	Magazine	Provide information about the company and business operation and promote communication and interaction through various events using various digital contents.
	Online Business Presentation	Keep employees informed of business performance and mid- to long-term strategy through groupware.
Offline	Jieum Program	Consists of Jieum Academy (giving lectures on business trends that can be applied in daily practice), Jieum Talk (learning and sharing ideas about a specific topic), and Jieum TIME (exchanging knowledge, experience, and topics of interest providing opportunities for communication)
	LIF	Leader Insight Forum is organized to share external trends with all employees and provide business insight through lectures and speeches given by external speakers.
	Seminar for New Managers	CEO joins the new manager training program, listens to the demands of employees and participates in Q&A session on various topics.
	MINT	Management Information N Talk is designed to promote in-depth discussion on our business strategy and share ideas.
	Business Presentation	CEO share business status and performance and get together with employees to seminar

Welfare System for Work-Life Balance

Healthcare Support

We provide medical expenses for our employees and their family members as part of our employee health care and welfare program.

Group Insurance Support

We provide our employees with optional group insurance which covers injuries, death, disability, and hospitalization up to KRW 100 million (maximum KRW 200 million) in case of death caused by industrial accident.

EAP (Employee Assistance Program) Operation

We offer professional counseling program for our employees and their family members regarding their professional and personal lives, as well as legal and financial matters.

Educational Support

As part of our employee educational support program, we provide 50% of the tuition if an employee receives a higher level of education while covering 100% for their children if they go to regular schools and colleges authorized by the Minister of Education. We also allow our employees to receive full performance-based scholarships to promote their academic performance.

Livelihood Support

As part of our employee welfare program, we provide them with a loan up to KRW 80 million at a low interest rate when they purchase or lease a house. However, we set a limit on the size of the house to prevent abuse of the system. We also give our employees a loan of up to KRW 20 million at a low interest rate when they get married.

Selective Welfare System

To meet our employees' varying needs, we have implemented a selective employee welfare system. We give our employees a certain amount of points which they can spend for cultural activities and sports facilities. The amount they spend is settled by our company system.

Maternity Support

We established a nursing room and relaxation room in our headquarters to help female employees during or after their pregnancy.

Parental Leave

Employees are allowed to take parental leave up to 1 year for children up to 8 years old or in second grade of elementary school. The parental leave can be split 1 time.

Indicators related to parental leave

Classification	By gender	Unit	2015	2016	2017
Employees on Parental Leave	Male	Persons	0	2	2
	Female		12	17	8
Employees Who Returned from Parental Leave	Male		1	0	3
	Female		7	10*	13
Employees who have worked for 12 months after returning from parental leave	Male		1	0	**
	Female		7	10	**

* The number of employees who returned is different from the previous reports due to a change in the estimation process.

** The number of employees who have worked for 12 months after returning from parental leave in 2017 will be counted in 2018.

Smart Working Time System

In response to the 52-hour work week, we implemented a Smart Working Time System in May. At **GS** Caltex, we have introduced such work-life balance policies including off-hour announcement/PC off, paperless reporting, flexible approval system, and improved meeting culture to expedite our decision-making process. We are also seeking application and optimization by departments and duties according to the 52-hour work week by promoting vacation use, improving office dinner culture, activating the flexible working hours system, and introducing a work management system.

Even after the 52-hour work week commences, we are going to gather feedback from our employees and incorporate it into our Smart Working System to make necessary improvements.

Partners

Shared Growth Policy

Recognizing that shared growth with partners is a key element of sustainable management, we have implemented various programs including financial support, technological development support, training and education.

We take a proactive approach by focusing on 'fair', 'stable' and 'practical' practice. We ensure fair and ethical practice when dealing with our partners and provide support such as cash settlement and long-term contracts, technology development, and training.

Shared Growth Policy

Fair

Promote mutually beneficial business arrangement based on fairness and transparency.

Stable

Pay partners in cash, form long-term partnerships to promote sustainable business operation for partners.

Practical

Provide practical and effective management support including technological cooperation, training, and consulting programs.

Financial Support

We have implemented an array of financial support programs for small and medium-sized companies with which we do business with. When making purchases, we ensure 100% cash settlement and payment is made within 7 days upon receipt of invoices. In addition, we raised shared growth fund jointly with financial institutions for our partners that joined our shared growth program.

In particular, we decided to increase the fund from KRW 100 billion to KRW 200 billion. As a result, a low interest loan of KRW 53.1 billion was provided for 78 partners by the end of 2017. We also introduced a program where we make advance payment up to 20% of the projected monthly expenses for major shipping companies.

Technical Development Support

To secure technologies we need in the mid and long-term and to help our partners overcome their technical challenges, we have established the Productivity Innovation Program for partners.

We recognize the challenges that small and medium-sized companies face when it comes to technological development, due to a lack of human resources and access to reliable outside organizations. We provide support for securing human resources from government-supported research centers and finance their R&D projects without claiming any ownership or beneficial interest in the technology developed under this program. We also provide matching grants for service costs for small and medium-sized companies engaging in on-site innovation.

Recognizing the effectiveness of Productivity Innovation Program for strengthening the competitive advantages of our partners, we provided support for the development of technology, product and service and added a program to purchase developed products in 2017. In addition, we support market development for the commercialization and mass-production of products manufactured by small and medium-sized companies.

Through these programs, we supported 5 and 6 companies in 2016 and 2017 respectively, and are planning to support 17 companies in 2018 while working on maximizing the benefits by taking into account their individual needs and optimized support. Meanwhile, we are carrying out joint projects to develop new polymer and lubricant materials, improve the quality of lubricants, provide technological support and organize international seminars for

Go Together

We help our partners to maximize their productivity and gain competitive advantages in the market through 'Go Together' project.

industrial trends and new products while localizing imported materials and stabilizing supply through long-term contracts.

Education and Training Support

At **GS** Caltex, we provide 8 training programs for the maintenance partners of our Yeosu Complex to improve their job performance, safety and management expertise while our Marine Transportation Safety Support Center conducts safety training for our marine transportation partners on a quarterly basis.

Furthermore, we organize training programs for employees of logistics and shipping companies and partners as part of our nationwide customer service improvement program to raise safety awareness, prevent accidents and increase customer satisfaction. In addition, we help our partners establish ethics management training and a compliance program (Corporate Compliance Program) for the mutual growth and development of the company and employees. We also provide an internal control system such as a code of ethics and regulatory requirement design system.

ESG Risk Management on Supply Chain

We continuously review and improve our purchase process to promote fair standards in selection of partners and improve the level of ESG in our supply chain. In response to changing social and market environment, we make sure that our purchase process reflects global standards and disseminate this to our partners.

At the end of 2017, we established the Code of Conduct for our partners and strengthened requirement for compliance with the ESG factors. In the first half of 2018, we disclosed our Code of Conduct to about 340 major partners* and asked them to comply with the Code of Conduct, and conducted due diligence on two partners at their business sites. In the future, we will increase the number of partners that are subject to ESG due diligence to identify and deal with risk factors.

* Major partners are selected based on their size, strategic importance, and indispensability.

Partner Support Programs Performance

(Companies/Participants)

Classification		Training Program	2017 Result
Yeosu Complex	Partner Training by Category	Construction safety training program for supervisors	30/43
		TA safety supervision certification	3/56
		Practice training for signalmen	45/347
		Safety training for managers/ supervisors	20/22
		Training program for safety managers of partners	48/227
		Safety training for cargo crane operators	51/137
		Human error prevention/ rescue program	11/16
		Performance improvement program for managers	5/10
Head quarters	Safety Training	Safety training for ship owners/ crews	**4 times for 7 companies (250 persons/time)**
		JSA* training (supervisor/safety managers of partners)	8/17
		Safety training on open inspection	**Safety managers from 4 companies**
	Customer Service Improvement	Customer service improvement training for logistics center	**15 centers/ 600 participants**
Low-Interest Loan Support**			**78 companies/ KRW 53.1B**

* Job Safety Analysis

** As of December 2017

No. of Partners with Transaction Performance

1,456 Partners

Purchase Amount

KRW 1.128 trillion

No. of Partners Required to Agree with the Code of Conduct

Approx. 340 Partners

No. of Partners of On-site ESG Due Diligence

2 Partners

Corporate Social Responsibility CSR SYSTEM

CSR Strategy

To fulfill our social responsibility as a corporate citizen, we engage in various social contribution activities. By focusing on culture and art, environmental protection, and local community, we create values for our society at large.

We are committed to improving the quality of living and making the world a better place in which to live by providing art therapy for children through 'Maum Talk Talk' and building 'Yeosu Culture & Arts Park - **GS** Caltex Yeulmaru.' Also, as an energy company, we are paving the way to a sustainable future by engaging in various environmental protection activities and educational programs for conservation of marine resources. Additionally, we organize various local community support programs to give back to our community, especially through our employees donating their time and money to charitable efforts.

Slogan

Beautiful world through energy sharing

Areas of focus

culture & art, environmental protection, local community

Action principles

Integrity	Expertise	Stakeholder-oriented
engage in long-term and sustainable activities, based on the participation and support of employees, rather than financial/one-time support	promote cooperation with competent partners and focus on effectiveness and social contribution	organize social contribution programs based on the needs of local communities and stakeholders in nationwide business sites, including Yeosu Complex and Logistics Centers

CSR Performance

Classification	Unit	2015	2016	2017
Amount of Social Contribution*	KRW Billion	13.9	35.6	17.7
Annual Number of Volunteers	Persons	1,460	2,132	2,548

* Executed amount of social contribution purpose. It is different from donation in business report.

Corporate Social Responsibility KEY CSR ACTIVITIES

Maum Talk Talk

Understanding that children are our future and we have a responsibility to help them grow healthy and happy, we started the 'Maum Talk Talk' project in 2013. Maum Talk Talk is a group art therapy through which we help children interact with each other to develop their social skills and build self-confidence using art as a medium. They can learn to express their feelings, and interact, empathize and collaborate through group activities.

We have worked with some of the best art therapists and conducted qualitative management and studies to improve the effectiveness of art therapy. For the past 5 years, more than 160 art therapists participated in 10,652 hours of training under the supervision of ten professors.

In collaboration with the Ministry of Education's Wee Project, Good Neighbors Joeun Maum Center, the Maum Talk Talk Project has developed three programs including 'Maum Talk Talk Therapy', which is designed to help children who are having a difficult time adjusting to school, 'Maum Talk Talk Healing Class' for all first grade students in middle school, and 'Maum Talk Talk Healing Camp' with intensive art therapy for 3 days in a camp. As of 2017, a total of 12,546 students across the countries participated in the programs and learned how to express their feelings in a healthy way and improve their relationships with their peers.

Maum Talk Talk Program Summary

Classification		2013	2014	2015	2016	2017
Maum Talk Talk Therapy	No. of Organizations	13	16	32	35	31
	No. of Children	1,410	1,278	1,456	1,412	1,828
Maum Talk Talk Healing Class	No. of Organizations	–	3	24	5	6
	No. of Children	–	560	1,484	734	897
Maum Talk Talk Healing Camp	No. of Camps	6	3	4	2	2
	No. of Children	738	292	208	114	135
Total		2,148	2,130	3,148	2,260	2,860

* Figures are different from previous year's one due to changes in calculation methods

Social Impact Analysis of Maum Talk Talk

In order to analyze the effectiveness of the Maum Talk Talk program and improve its reliability, we developed a diagnostic tool based on which we conduct surveys with program participants before and after they joined the program and include a control group to evaluate the effectiveness. We also collect feedback from their schoolteachers (evaluation of students' behavioral change) and program teachers (satisfaction survey) to improve the effectiveness of the program.

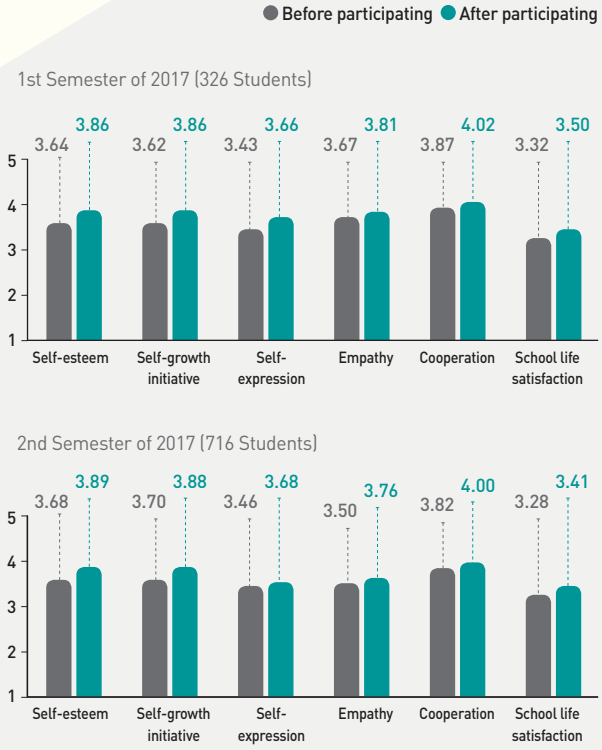
Through these surveys, we found out that Maum Talk Talk helped children improve their self-esteem and motivate them to grow as well as improve their social skills (e.g. self-expression, empathy, cooperation). In the case of Maum Talk Talk Healing Class, we collect feedback from therapists and volunteers to make it a better program.

The Maum Talk Talk programs provided in school are considered to have raised awareness in psychological therapy and art therapy programs for children. Meanwhile, we are developing the program to expand its areas of application for students with juvenile delinquency or involved in school violence. Through preventive and corrective activities, we can help these children to adapt to society and reduce social costs. By building a network with various partners including the Ministry of Education and Good Neighbors, we create values for society.

마음톡톡

I am your Energy GS 칼텍스

Psychological Change of Wee Center Program Participants



Maum Talk Talk Healing Camp

Corporate Social Responsibility LOCAL CSR ACTIVITIES

Local Talent Development Support

We organize various local talent development programs as part of our CSR activities for local community.

Our **GS** Caltex Energy Class is designed to help children pursue their dreams and develop visions for their future. Since 2010, more than 2,200 volunteers participated to assist various programs including job experience and educations on art/culture/envionment. In 2017, more than 1,200 local children participated in the 'exploring the history of my city' program designed to grow a sense of history and pride in their community.

We also provide 'English Lessons with Native Speakers in Remote Areas' program, scholarships, financial support for after-school classes and school uniforms for students from low-income families. Additionally, to help resolve youth unemployment issues in the local community, we signed the 'Extra-credits for Yeosu citizens' agreement with Yeosu City, which is effective from 2018, while providing financial support for the program named 'Warm table' serving free lunches for job applicants from low-income families.

Children's Environmental Education for the Future

Since 2012, we have organized the Green Energy School Program in a joint effort with the Green Fund to raise awareness in climate change and energy conservation for elementary school students. Through this program, we developed an environmental education kit with which specialized instructors visit schools and educate children on the importance of environment.

In addition, since 2011 we have supported the eco-experience programs for underprivileged children, senior citizens and people with disabilities with the Ministry of Environment and the Korea National Park while our employees volunteer to clean the environment in the coastal areas near the Yeosu Complex and Incheon Lubricant Plant.

Marine Resource Conservation

In 2017, we released 1 million fishes and 44 tons of clams in the sea to preserve eco-system and contribute to sustainable growth of the fishery industry. The project was carried out in cooperation with the Yeosu City and Fishery Association, and was met with great enthusiasm by local fishermen. We will continue to support local marine conservation through these projects in 2018.

Marine Seedling Release

Food Aid Program

At **GS** Caltex, we provide free lunches to 350 senior citizens on average, for 5 days a week through **GS** Caltex Soup Kitchen in Yeosu. Since its establishment in 2008, we provided a total of 778,000 meals up to December 2017 with more than 39,000 volunteers (18 volunteers per day on average) consisting of our employees and their family members. The program is recognized as a successful local collaboration model setting a great example for future community support projects.

GS Caltex Soup Kitchen in Yeosu

Volunteer Group Activities

In ten cities nationwide where our major business sites are located such as Yeosu Plant and Logistics Center, volunteer teams are organized at each division to participate in community-based volunteer activities. Each month, we organize 25 volunteer activities and help solve community problems such as senior citizen meal service, maintenance for welfare centers, outdoor activities for people with disabilities, and cleaning seaside park.

Our employees' family members also joined the volunteer activities for local community. They volunteer at the welfare facilities near their houses at any time they want on a regular basis.

Since 2005, we have engaged in various volunteer programs every May as part of the celebration for our corporate anniversary and have donated rice and household goods worth KRW 100 million as part of the Charity Event during the Chuseok holidays. We also donate Kimchi, heating fuel, and charcoal briquettes for those in need at the end of each year.

After volunteer activities, we collect feedback from the volunteers and use it to encourage participation and improve our volunteer activities for the future.

Charity Event

Corporate Social Responsibility

SOCIAL CONTRIBUTION THROUGH FOUNDATION ACTIVITIES

Supporting Culture and Arts through Yeulmaru

Yeulmaru is a landmark on the south coast of the Korean Peninsula that **GS** Caltex is building by investing more than KRW 110 billion since 2007. The name 'Yeulmaru' carries the meaning of 'a space full of the rolling waves of culture and art and where people can relax as if they were lying on the floor of a traditional house'. It represents a great example of collaboration between a corporation, local government, and communities for building infrastructure for culture and art. It comprises the Grand Theater, Small Theater and various types of exhibition facilities which are fully equipped with excellent audio and lighting facilities, taking the culture and art experience in Yeosu to the next level and meets the local communities' need for cultural spaces. Yeulmaru features a wide variety of genres including classical, opera, musical, concert, ballet, and plays to extend opportunities for people to enjoy cultural and art content.

In 2017, we undertook the Jangdo Island Development Project as the 2nd phase of the Yeulmaru Project with the aim to complete it by the end of 2018. Through the participation of artists and citizens, the island will be re-created as an 'Island of Art' and will include a multi-purpose exhibition space where exhibitions, education and experience programs will be provided as well as an atelier where artists can focus on creating art. In addition, Dadohae Garden will be created with a variety of flowers and trees to provide a unique experience for visitors.

Classification	Unit	2015	2016	2017
Number of visitors to the performance	Persons	74,875	77,070	**66,196**
Number of visitors to the exhibition		31,484	28,432	**23,629**
Number of Performances, Exhibitions and Academy Events	Times	328	329	**345**

* Figures are different from previous year's one due to changes in calculation methods

Number of Visitors to Yeulmaru (Cumulative from 2012 to 2017)

628,408

Number of Performances, Exhibitions and Academy Events (Cumulative from 2012 to 2017)

1,672

Concert Performed at Grand Theater of Yeulmaru

Bird's eye view of Jangdo Island Development as the 2nd phase of the Yeulmaru Project

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Appendix

Financial Data (As of December 2017)

Consolidated Statements of Financial Position

(Unit: KRW 1M)

Category	2017	2016
Assets		
Current assets		
Cash and cash equivalents	1,200,846	1,491,635
Accounts and notes receivable	3,502,450	2,921,621
Short-term financial assets	1,010,553	1,067,023
Inventories	4,271,305	3,321,618
Prepaid income taxes	432	268
Other current assets	45,841	113,905
Total current assets	10,031,427	8,916,070
Non-current assets		
Long-term financial assets	233,648	339,005
Investments in associates	294,685	288,254
Property, plant, and equipment	9,364,164	9,567,579
Investment property	56,876	58,638
Intangible assets	70,528	79,842
Deferred income tax assets	3,642	510
Other non-current assets	28,827	33,967
Total non-current assets	10,052,370	10,367,795
Total assets	20,083,797	19,283,865
Liabilities		
Current liabilities		
Accounts payable-trade	2,947,404	1,850,332
Short-term financial liabilities	3,000,984	3,353,708
Income taxes payable	306,474	345,302
Other current liabilities	77,278	87,280
Total non-current liabilities	6,332,140	5,636,622
Non-current liabilities		
Long-term financial liabilities	2,838,062	3,581,995
Employees benefits	9,643	35,677
Deferred income tax liabilities	165,566	137,210
Other non-current liabilities	47,009	51,032
Total non-current liabilities	3,060,280	3,805,914
Total liabilities	9,392,420	9,442,536
Equity		
Common stock	260,000	260,000
Capital surplus	68,330	68,330
Capital adjustments	−61,189	−61,189
Accumulated other comprehensive income	−18,472	6,295
Retained earnings	10,442,708	9,567,893
Equity attributable to owners of the Parent Company	10,691,377	9,841,329
Non-controlling interests	–	–
Total equity	10,691,377	9,841,329
Total liabilities and equity	20,083,797	19,283,865

Consolidated Statements of Income

(Unit: KRW 1M)

Category	2017	2016
Sales	30,318,432	25,770,243
Cost of sales	−27,409,674	−22,772,526
Selling, general and administrative expenses	−907,204	−857,317
Operating profit	2,001,554	2,140,400
Share of profit (loss) of equity method accounted investees	10,977	11,874
Financial income	1,442,352	2,185,215
Finance costs	−1,330,610	−2,433,336
Other income	568,793	543,024
Other expenses	−758,108	−621,763
Profit (loss) before income taxes	1,934,958	1,825,414
Income tax expense	−496,831	−408,413
Profit (loss) for the year	1,438,127	1,417,001
Profit (loss) attributable to:		
Owners of the Parent Company	1,438,127	1,417,001
Non-controlling interests	–	–

Consolidated Statements of Comprehensive Income (Loss)

(Unit: KRW 1M)

Category	2017	2016
Profit (loss) for the year	1,438,127	1,417,001
Other comprehensive income (loss), net of tax:		
Items that will not be reclassified to profit or loss		
Remeasurements of defined benefit liability	3,676	−2,502
Changes in equity method accounted investee's capital	−188	176
Total	3,488	−2,326
Items that will be reclassified subsequently to profit or loss		
Net change in unrealized fair value of available-for sale financial assets	256	82
Changes in equity method accounted investee's capital	−412	−371
Effective portion of changes in unrealized fair value of cash flow hedges	−713	−6,298
Foreign currency translation differences	−23,898	−273
Total	−24,767	−6,860
Total comprehensive income (loss) for the year	1,416,848	1,407,815
Total comprehensive income (loss) attributable to:		
Owners of the Parent Company	1,416,848	1,407,815
Non-controlling interests		

ESG Data

Category	ESG Indicators	Data Summary	Page	Global ESG Standards
Governance	• Changes in location and operation (e.g. opening/closing, shutdown, and expansion of facilities) • Formation, maintenance, and change in equity structure	• There were no significant changes	–	• GRI 102-10
	• Availability of staff in charge of environment/human rights/labor issues • Appointment of executive officers who are responsible for economy, environment, and society • Right to report to the top decision-making body	• Environment: Head of Safety and Environmental Planning Division • Human Rights/Labor: Head of HR Office • CSR Committee and related committees report to the BOD	10	• GRI 102-11/14/20~21/26~34 • ISO 26000 5.2 /6.2/6.3.5/6.7/7.4.2~3/7.8 • UNGC Advanced 1/19~20
	• Policies/activities/system/training on fair business practice and anti-bribery and anti-corruption • Internal/external guidance/grievance handling programs for ethical and legal compliance • Percentage of employees taking ethics training • Scope of application for basic human rights activities/ policies	• Systematic compliance is ensured • Corporate compliance management extended to partners and subsidiaries • Ethics education for all employees • Universal human rights policies for partners and customers (UNGC 10 Principles)	33–36	• GRI 102-17/205-2 • ISO 26000 4.4/6.6.1~6.6.3/6.6.5~6 • UNGC Advanced 12~14
	• Consumer service support and activities to resolve complaints and disputes	• Consumer Centered Management (CCM) is adopted • Customer Service Center (CSC) in operation	42	• ISO 26000 6.7.6
	• Potential business impact reported publicly • Publicly reported risk mitigation measures • Descriptions of product, health, safety and environmental management systems • Describe how to monitor, track, evaluate, and manage product-related accidents	• Quality control is performed on the entire process from production to sale under ISO Quality Management System • EU REACH compliance is in progress	39–41	• ISO 26000 6.5.3~5/6.7.1~.2/ 6.7.4~5/6.8.8
	• Violations of the laws governing marketing communication e.g. advertisement, promotion, and sponsorship	• 0 cases (2015 - 2017)	–	• GRI 417-3 • ISO 26000 6.7.3
	• Violations of the laws governing product and service information and labeling • If no violations have been committed, simply state the fact.	• 0 cases (2015 - 2017)	–	• GRI 417-2 • ISO 26000 4.6/6.7.1~2
	• Communication of information about the product, service, and labeling	• MSDS and details are disclosed on the website	–	• GRI 417-1 • ISO 26000 6.7.1~3/6.7.5
	•Training and activities to raise awareness about products and services	• NCSI (National Customer Satisfaction Index) Ranked 1st in 9 consecutive years in the gasoline station category (2009 - 2017) • Service quality control system is operated • Customer service manuals are distributed • Star Service Team is operated • Star Festival is held	42–43	• ISO 26000 6.7.9
	• Human rights of public security companies • Training for private security providers • Reporting human rights issues for private and public security	• UNGC Universal Human Rights Principles are supported • Security companies licensed by local police departments have been hired, human rights are protected, and training for confidentiality and security is conducted on a regular basis	–	• GRI 410-1 • ISO 26000 6.3.5
	• Integrated management system for safety culture and crisis response throughout the supply chain and research/ production cycle	• PSM (Process Safety Management) is operated systematically	29	• SASB NR0101-19

Appendix

Category	ESG Indicators	Data Summary	Page	Global ESG Standards
Society	• Minimum ESG requirements needed for partner review • Minimum ESG requirements needed for new partner review • Inclusion and scope of ESG in contract • CSR monitoring on partners • Ratio of new partners reviewed for environmental compliance	• Additional points for ISO 9001 and ISO14001 certification when selecting partners for materials and service	51	• GRI 308-1 • ISO26000 6.3.5/6.6.6 • UNGC Advanced 2/9~11
	• Official process of identifying sustainability risk in supply chain • Supply chain management information disclosed externally • Activities for the enhancement of partner performance • Corporate policies, programs, and procedures for procuring products, services, and human resources • Strategies, programs, and procedures for the reinforcement of local partners and contractors	• Items for the evaluation of partners' management performance (trading performance/credit rating) • Sustainability improvement activities e.g. financial and technical support and safety and ethics training support	50–51	• IPIECA SE5 C1/SE7 C1/SE9 S1
	• Ratio of contracts for the prevention of corruption in a specific language (%)	• 100% (work process regulations covering legal compliance, fair practice, and transparency in Korean)	–	• IPIECA SE12 S1
	• A description of the processes and programs that recognize the local and global issues of employees' health and produce outcomes and plans • Explanation of current healthcare systems and recent improvements	• Healthcare programs are provided (e.g. musculoskeletal disease prevention program, smoking cessation program, metabolic syndrome management) • Affiliated clinics with medical staff (e.g. doctors, nurses, medical laboratory technologist, paramedics) are operated • MSDS management, protective gear, and work environment analysis are supported	32	• ISO26000 6.4.4 • IPIECA HS2 C1, S1
	• Availability of formal documents and process for employees' health and safety when introducing/ changing processes	• Processes are implemented or changed in accordance with company regulations. Through this process, the risk of introducing/changing processes is analyzed in detail for the consideration of employees' safety and health	–	
	• Percentage of Occupational Safety and Health Committee representing employees working under the organization's exclusivity • Level of operation in Occupational Safety and Health Committee	•100% •Composed of 8 members, held once every quarter	10, 48	• GRI 403-1,4 • ISO26000 6.4.4/6.4.6 • UNGC Advanced 6~8
	• Number of negotiations/agreements made with the union regarding changes in business management	• 0 (no significant changes in business management)	–	• GRI 102-41 • ISO26000 5.3 • UNGC Advanced 3~5
	• Ratio of new employee's wage against minimum wage by gender	• Production Engineering 213%, Office Staff 271% (There is no discrimination by gender)	–	• GRI 202-1~2 • ISO26000 6.8.1~2
	• Percentage of local senior executives	• 100%	–	• GRI 202-1~2 • ISO26000 6.8.1~2
	• Actions taken to abolish child and forced labor • Reporting on business sites with a risk of child labor • Actions taken to prevent child and forced labor • Employee training on human rights policies and processes • Corporate policies on human rights	• International Labor Organization Standards and UNGC Principles are complied with • Forced or child labor is strictly prohibited • Voluntary compliance programs for the prevention of sexual harassment and human rights have been implemented	66, 68	• GRI 408-1/409-1/412-2 • ISO26000 4.8/6.3.1~2/6.3.5/6.4.1~2 • UNGC Advanced 3~5

Category	ESG Indicators	Data Summary	Page	Global ESG Standards
Society	• Minimum notification period for changes in business management that have significant impact on employees • Availability of notification period and negotiation terms on collective agreement	• Employees are notified 30 days prior to termination of employment with justified cause, and 50 days for termination due to a business reason under Article 24 of the Labor Standards Act • A written notification for renewing collective agreement must be given at least 2 months before its expiration. Both parties must respond to collective bargaining at least 30 days before the expiration date. However, if there is no request for renewal, it is renewed automatically	–	• GRI 402-1 • ISO26000 6.4.3/6.4.5 • UNGC Advanced 15~18
	• Number of violation of natives' rights reported during the reporting period • Reporting of status and measures taken	• Not applicable	–	• GRI 411-1 • ISO26000 6.3.4/6.3.6~7 • IPIECA SE2 S1
	• Percentage of employees subject to performance & career review • Percentage of employees subject to performance evaluation by senior manager • Percentage of employees subject to multi-aspect evaluation • Percentage of employees subject to relative evaluation	• Percentage of employees subject to setting goal/mid-term review/year-end evaluation: 89% • Percentage of employees subject to Multi-aspect evaluation(percentage of employees subject to self-evaluation and evaluation by senior manager): 94% • Percentage of employees subject to relative evaluation(exclusive of absolute evaluation group): 90%	46	• GRI 404-3
	• Percentage of female manager	• Female manager: 0 executive officer, 16 senior managers, 88 department deputy managers	–	• UNGC Advanced 3-8 • IPIECA SE15 S2
Environment	• Senior position in charge of climate change	• Head of Safety and Environmental Planning Division	–	• UNGC Advanced 9~11
	• Potential opportunities and risk associated with climate change • How to respond to opportunity and risk factors related to climate change	• Financial impact of the GHG Emissions Trading System is analyzed in advance, and consistent response strategy is established	22–23, 39	• GRI 201-2 • ISO26000 6.5.5
	• Consideration of water stress level when undertaking a project	• Water stress level is considered when undertaking a project	–	• GRI 303-1 • UNGC Advanced 9~11
	• Initiatives for the improvement of energy efficiency and saving and their procedure • Activities for energy saving and GHG emission reduction • Energy used directly for electricity, heat, and vapor • Energy consumption/saving/sales to outside	• Energy saving goals are set • Consultation of energy experts and internal TF are in progress • Energy portal system is operated • No energy is sold outside	22–23	• GRI 302-1~2,4 • ISO26000 6.5.4
	• Hazardous waste materials under control/emissions/disposal process • Emission of normal waste materials • Activities for transporting hazardous materials • Amount and cases of critical oil spill	• Volume of waste material and hazardous chemical material control process are disclosed through sustainability report • No critical oil spills in 2015-2017	24–25, 27	• GRI 306-2~3 • ISO26000 6.3.3/6.5.4,/6.5.6 • UNGC Advanced 9~11
	• Availability of formal documents for analyzing the environment risk in new process and process changes • Operation of official system for implementing, applying and reporting environmental impact assessment	• Environmental impact analysis is conducted at all business sites - Third product wharf construction: post-environmental impact analysis - New project site construction: post-environmental impact analysis - Oil tank construction project in Sapo: post-environmental impact analysis - Oil and naphtha tank site construction: post-environmental impact analysis • Number of soil pollution investigations near stations - 261 times in 2015, 198 times in 2016, 138 times in 2017	–	• UNGC Advanced 9~11

Appendix

GRI Content Index

General Disclosures

GRI Standard	Disclosure Number	Description	Page	Note
Organizational Profile				
GRI 102	102–1	Name of the organization	7	
GRI 102	102–2	Activities, brands, products, and services	8–9, 14	
GRI 102	102–3	Location of headquarters	7	
GRI 102	102–4	Location of operations	7	
GRI 102	102–5	Ownership and legal form	7,38	
GRI 102	102–6	Markets served	7	
GRI 102	102–7	Scale of the organization	7	
GRI 102	102–8	Information on employees and other workers	7, Business Report 240-241	
GRI 102	102–9	Supply chain	51	
GRI 102	102–10	Significant changes to the organization and its supply chain	About this report	
GRI 102	102–11	Precautionary Principle or approach	39	
GRI 102	102–12	External initiatives	65	
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Strategy				
GRI 102	102–14	Statement from senior decision-maker	4–5	
Ethics and Integrity				
GRI 102	102–16	Values, principles, standards, and norms of behavior	6	
Governance				
GRI 102	102–18	Governance structure	38	
Stakeholder Engagement				
GRI 102	102–40	List of stakeholder groups	13	
GRI 102	102–41	Collective bargaining agreements	48	Collective agreement applies to all employees
GRI 102	102–42	Identifying and selecting stakeholders	12–13	
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GRI 102	102–46	Defining report content and topic Boundaries	12–13	
GRI 102	102–47	List of material topics	12–13	
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GRI 102	102–51	Date of most recent report	About this report	
GRI 102	102–52	Reporting cycle	About this report	
GRI 102	102–53	Contact point for questions regarding the report	About this report	
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GRI Content Index

Material Topics

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Anti-corruption 2016*				
GRI 103	103–1, 2, 3	Management Approach	33–36	
GRI 205	205–2	Communication and training about anti-corruption policies and procedures	34–36	
GRI 205	205–3	Confirmed incidents of corruption and actions taken	–	No such cases
Anti-competitive Behavior 2016				
GRI 103	103–1, 2, 3	Management Approach	33, 36	
GRI 206	206–1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	–	No violations
Energy 2016				
GRI 103	103–1, 2, 3	Management Approach	21	
GRI 302	302–1	Energy consumption within the organization	23	
GRI 302	302–4	Reduction of energy consumption	23	
Emissions 2016				
GRI 103	103–1, 2, 3	Management Approach	21	
GRI 305	305–1	Direct (Scope 1) GHG emissions	22, 71	
GRI 305	305–2	Energy indirect (Scope 2) GHG emissions	22, 71	
GRI 305	305–7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	27	
Environmental Compliance 2016				
GRI 103	103–1, 2, 3	Management Approach	21	
GRI 307	307–1	Non-compliance with environmental laws and regulations	–	No significant violations
Employment 2016				
GRI 103	103–1, 2, 3	Management Approach	46	
GRI 401	401–1	New employee hires and employee turnover	46	
GRI 401	401–2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	49	
Occupational Health and Safety 2016				
GRI 103	103–1, 2, 3	Management Approach	28	
GRI 403	403–1	Workers representation in formal joint management–worker health and safety committees	48, 60	
GRI 403	403–2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	32	
Local Communities 2016				
GRI 103	103–1, 2, 3	Management Approach	52	
GRI 413	413–1	Operations with local community engagement, impact assessments, and development programs	52–53	

* Indicates topic name and issue year of GRI Standards

Appendix

GRI Content Index

Other Standards

GRI Standard	Disclosure Number	Description	Page	Note
Economic Performance 2016				
GRI 201	201–1	Direct economic value generated and distributed	14	
Indirect Economic Impacts 2016				
GRI 203	203–1	Infrastructure investments and services supported	52–54	
Water 2016				
GRI 303	303–1	Water withdrawal by source	27	
Biodiversity 2016				
GRI 304	304–1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	26	
Effluents and Waste 2016				
GRI 306	306–2	Waste by type and disposal method	27	
Supplier Environmental Assessment 2016				
GRI 308	308–1	New suppliers that were screened using environmental criteria	51	
GRI 308	308–2	Negative environmental impacts in the supply chain and actions taken	51	
Labor/Management Relations 2016				
GRI 402	402–1	Minimum notice periods regarding operational changes	61	
Training and Education 2016				
GRI 404	404–2	Programs for upgrading employee skills and transition assistance programs	47	
GRI 404	404–3	Percentage of employees receiving regular performance and career development reviews	46	
Diversity and Equal Opportunity 2016				
GRI 405	405–1	Diversity of governance bodies and employees	46	
GRI 405	405–2	Ratio of basic salary and remuneration of women to men	60	
Non-discrimination 2016				
GRI 406	406–1	Incidents of discrimination and corrective actions taken	67	No such cases
Child Labor 2016				
GRI 408	408–1	Operations and suppliers at significant risk for incidents of child labor	67	No such operations
Forced or Compulsory Labor 2016				
GRI 409	409–1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	67	No such operations
Human Rights Assessment 2016				
GRI 412	412–2	Employee training on human rights policies or procedures	45, 67	
Supplier Social Assessment 2016				
GRI 414	414–2	Negative social impacts in the supply chain and actions taken	51	

UN Global Compact

Since we joined the UN Global Compact, we have been fully committed to its ten principles covering human rights, labor, the environment, and anti-corruption. We have reported our progress to the COP (Communication on Progress) every year. At **GS** Caltex, we will continue to improve our compliance with the UN Global Compact and its principles.

Classification	Principles	Related Activities	Report Pages
Human Rights	1. Businesses should support and respect the protection of internationally proclaimed human rights. 2. Businesses should make sure they are not complicit in human rights abuses.	• Providing education on in-house sexual harassment prevention and human rights protection for all employees	45
		• Establishing **GS** Caltex Human Rights Policy	67
Labor	3. Businesses should uphold freedom of association and effective recognition of the right to collective bargaining. 4. Businesses should uphold elimination of all forms of forced and compulsory labor. 5. Businesses should uphold effective abolition of child labor. 6. Businesses should uphold elimination of discrimination in respect of employment and occupation.	• Operating a labor union and guaranteeing freedom of engaging in the union	48
		• Maintaining a communication channel through the point of contact in the union	48
		• Abiding with the regulations of the International Labor Organization and the UNGC principles	65, 67
		• Prohibiting discrimination by gender regarding wages, evaluation and promotion	67
		• Offering equal opportunity of employment online	46
Environment	7. Businesses should support a precautionary approach to environmental challenges. 8. Businesses should undertake initiatives to promote greater environmental responsibility. 9. Businesses should encourage the development and diffusion of environmentally friendly technologies.	• Establishing and practicing SHEQ management policies	29
		• Responding the GHG Emission Trading System (ETS)	22
		• Building environmental monitoring system	22–27
		• Making improvement in compliance with new environmental laws	25
		• Signing and performing voluntary environmental management agreement	26
		• Developing more efficient and eco-friendly products	40
Anti-corruption	10. Businesses should work against corruption in all its forms, including extortion and bribery	• Submission of the employee pledge for voluntary compliance	34–35
		• Expanding Voluntary Compliance System and Strengthening the role of Compliance Officer	34–35

UN SDGs

At **GS** Caltex, we support the principles of SDGs announced by the UN in 2015 and aligned our sustainability practice to some of the 17 Sustainable Development Goals. In the future, we plan to establish strategies and strengthen their implementation to achieve the goals.

Appendix

GS Caltex Code of Ethics

Purpose

GS Caltex is striving to build an optimal business portfolio and maximize synergies with the goal of growing into the leader in total energy service. The Company's objectives are to provide customer satisfaction by offering top quality products and services, pursue mutual prosperity with suppliers and business partners, help employees grow by providing fair opportunity and support, maximize shareholder value through outstanding performance, and promote sustainable growth of the Company and society by building a safe workplace, protecting the environment and contributing to local communities. With that in mind, **GS** Caltex prepared the Code of Ethics which sets forth the standards for decision-making and conduct for all employees of **GS** Caltex.

1. Customer Satisfaction

We recognize that customers form the basis of our growth and profits and will satisfy customers by providing them with genuine value.

1.1 We shall respect and give priority to customers' opinions in conducting our business.

1.2 We shall provide top quality products and services that meet customers' demands and expectations.

1.3 We shall protect customer Information and interests and keep our promises to customers.

2. Co-prosperity with Business Partners

We shall build mutual trust and cooperation with business partners through fair and transparent transactions for mutual development.

2.1 We shall build partnerships by providing equal opportunity to business partners and Guaranteeing reasonable transaction terms.

2.2 We shall conduct transactions as equal partners and shall refrain from abusing our position to engage in unfair conduct in any form.

3. Respect for Employees and Basic Ethics

We and our employees will faithfully fulfill their duties to spur mutual growth and development based on mutual trust and respect.

3.1 We shall respect each employee and treat each Individual fairly based on his/her ability and performance so that all employees may realize their full potential.

3.2 Our employees will treat each other with mutual respect, and clearly distinguish between work and personal affairs and carry out their work in a transparent manner to fulfill their respective responsibilities.

4. Protecting Shareholder Interests

We shall protect shareholder interests through efficient and transparent management worthy of shareholders' trust and investment.

4.1 We shall realize sound profits through efficient management to protect shareholders' return on investment.

4.2 We shall respect shareholders' right to know relevant information and provide necessary information in a timely and transparent manner.

5. Responsibility to Society

We shall comply with national laws and regulations and fulfill our social responsibility as a corporate citizen.

5.1 We shall contribute to national development through job creation and faithful payment of taxes.

5.2 We shall work with local communities for sustained development and play a leading role in creating a happy future for all people.

5.3 We shall prohibit engaging in improper solicitation, bribery, and actions that may disrupt the market. We comply with laws and treaties that regulate international commercial trade, and anti-corruption, and we take care to exercise good commercial practices and culture.

5.4 We shall respect human dignity and rights and support freedom, equality, and the value of coexistence.

6. Safety, Health and Environment, Management

We shall do our best to protect the environment and create an accident-free workplace.

6.1 We shall make efforts to prevent pollution and fulfill our environmental responsibility.

6.2 We shall place priority on the health and safety of employees and business partners and create a safe and pleasant workplace free of accidents.

GS Caltex Human Rights Policy

Introduction

As a global corporate citizen, **GS** Caltex recognizes the importance of human rights, universal values of humanity, and respects the rights of stakeholders in its and employees' activities.

GS Caltex complies with various state and local labor laws, and in order to support and implement the human rights/labor standards of international organizations such as UN and ILO, operates its human rights/labor-related processes including internal/external communications and grievance handling/remedying procedures.

In order to implement the above, **GS** Caltex hereby declares its human rights policy as follows.

1. Protecting basic human rights

Humane treatment

We will respect our employees, and endeavor to prevent mental or physical inhumane treatment, such as verbal abuse, sexual violence, or physical abuse, to them.

Non-discrimination

In operating our personnel system which covers hiring, promotion, compensation, and training opportunities, we will not engage in unjust discrimination on the basis of race, skin color, gender, language, faith, nationality, disability, social status, etc.

Prohibiting forced labor

We will not force labor which unduly restricts mental or physical freedom, e.g., by assault, intimidation, or imprisonment, and is against a person's free will, nor require workers to hand over their IDs or other important personal documents, as a condition of employment.

Prohibiting child labor

We will comply with the minimum employment age as prescribed in the state and local laws, and will not expose youth to any work environment harmful and dangerous to human bodies.

2. Protecting labor rights

Complying with legal working hours and working conditions

We will comply with work hours and guarantee minimum wage as prescribed in state and local laws, and comply with labor-related laws governing social insurance membership, provide recesses and vacations, etc.

Creating a safe work environment

We will strictly comply with health and safety standards as required by state and local laws. We will conduct periodical training/education reflecting legal requirements, and promote workers' safety awareness through safety culture activities.

Building productive labor-management relations

In order to foster a healthy organizational culture, we will grant opportunities for communication between the company and employees, will guarantee labor union membership and collective bargaining, and will not impose undue disadvantages on employees by reason of labor union activities.

3. Protecting stakeholders' human rights

Privacy

We will protect customers' and other stakeholders' personal information in accordance with state and local laws, and will not use the same without the information-holder's prior approval nor use the same for any other purposes. Also, we will transmit true information and not provide false information.

Local community engagement

We will manage changes in local communities caused by our workplaces' potential social and environmental impacts.

So that residents near the workplaces can raise their concerns for potential impacts and solve the same, we will listen to local communities' opinions and endeavor to reflect the same in our business activities.

GS Caltex will do its best to prevent human rights violations which can occur in the process of business activities and exclude third-parties' undue involvement in human rights violations. Further, **GS** Caltex will continuously improve this human rights policy by reflecting domestic and overseas trends.

Appendix

Code of Conduct for **GS** Caltex Partners

Introduction

At **GS** Caltex, the Code of Ethics, established in 1994, has functioned as the foundation for ethical business practices in every aspect, and the Corporate Compliance Program, introduced in 2001, further improved ethical standards in **GS** Caltex. The voluntary compliance management policies begin with the CEO but are deeply-rooted throughout the company together with the appointment of Corporate Compliance Officers and a reporting system already in place.

Also, we intend to promote shared and sustainable growth by ensuring that we fulfill our ethical and social responsibilities not only toward our customers, shareholders, and employees but also other stakeholders such as partners, local communities, and the environment, throughout the entire business process.

Reflecting the resolve to implement ethical management and mutual growth with our partners, **GS** Caltex has enacted the Code of Conduct for **GS** Caltex Partners (hereinafter "this Code"), through which we intend to request our partners to respect their workers' human rights, build a safe, eco-friendly work environment, and comply with corporate ethics.

Partners shall endeavor to comply with this Code, and shall request all its sub-partners to do the same.

With the increasing need for transparency in companies' ESG (Environmental, Social, Governance) data and legislation of CSR disclosure in the EU, sustainability has become more important than ever. We promise to continue our sustainability efforts to achieve our vision of becoming a 'Value No. 1 Energy & Chemical Partner'. We appreciate your continued interest and support for us as we continue to create a sustainable and better future.

1. Respecting Workers' Human Rights

1.1 Prohibiting forced labor

A partner shall enter into an official labor contract with every worker in a language the worker can understand in compliance with legal requirements, and all labor shall be voluntary labor, not forced labor, which includes slave labor and human trafficking. Also, in respect for the worker's will in any circumstances, a partner shall allow them to resign from the company of their free will or allow them to suspend work in cases of illness, temporary disability, etc.

1.2 Protecting youth workers

A partner may not hire anyone under 15 years of age (or minimum employment age under the law), and in cases where it is hiring youth employees under 18 years of age, they shall not be given dangerous work or overtime or night work.

1.3 Complying with work hours

Work hours for a partner's employees shall not exceed maximum work hours under applicable laws, and at least 1 day of holiday shall be guaranteed every 7 days. In addition, maximum work hours and maximum overtime hours under applicable laws shall be complied with, and workers shall be allowed recesses, weekdays off, vacation, and paid/unpaid leave in accordance with the law.

1.4 Wages and benefits

A partner shall comply with minimum wage provisions under applicable laws, and comply with the benefits system, under applicable laws, including that for salary, overtime allowance, employee benefits, and salary deduction. Base salary should not be reduced as a means of discipline.

1.5 Humane treatment

A partner shall take reasonable measures to prevent workers from being discriminated against on the basis of race, skin color, gender, age, sexual orientation, sexual identity, and nationality, place of origin, religion, disability, marital status/pregnancy, labor union membership, or political inclination.

1.6 Non-discrimination

A partner shall take reasonable measures to prevent workers from being discriminated against on the basis of race, skin color, gender, age, sexual orientation, sexual identity, and nationality, place of origin, religion, disability, marital status/pregnancy, labor union membership, or political inclination.

1.7 Respecting freedom of association and the right to collective bargaining

A partner shall respect workers' right to freely organize and join a labor union and to associate with other workers in order to engage in collective bargaining and peaceful assembly and demonstration, and also guarantee the right to refuse to do such acts. Also, workers or workers' representatives shall be allowed to freely communicate and share, with the partner's management, opinions and grievances on labor conditions and management policy without fear of discrimination, retaliation, threat, etc. and there shall be a complaint mediation process put in place for them.

2. Safe Working Environment

2.1 Occupational safety

A partner shall, through risk evaluation, identify risk elements to which workers may be exposed, analyze the causes, predict the results, and then in order to remove/control such risk elements, conduct work process designs, technical/administrative controls, preventive maintenance, work safety procedure formulation, and continuous safety education, and if necessary, provide workers with appropriate personal protection equipment.

2.2 Preparing for emergencies

A partner shall identify potential industrial disasters/diseases, and establish response plans thereof, in advance.

2.3 Preventing industrial accidents and illnesses

A partner shall establish procedures to prevent and manage workers' industrial accidents and occupational illnesses and to suppress recurrence thereof.

2.4 Managing exposure to hazard factors in the work environment

A partner shall periodically measure and evaluate hazardous chemicals, noise, dust, high temperature, radiation, etc. in the workplace to which workers may be exposed, and protect workers through technical measures and management/supervision to control the same.

2.5 Managing physically-challenging work

A partner shall identify workers' exposure to physically-challenging work such as long hours of repetitive manual work, and handling of heavy items, and establish methods of removing or minimizing the same.

2.6 Equipment safety

A partner, in order to secure workplace safety, shall formulate and implement work safety procedures and guidelines according to the characteristics of the work, and in cases including adoption of new machinery or equipment, changes in facility, or repetition of safety accidents in the same work, shall revise the relevant procedures or guidelines and conduct sufficient training for the workers.

2.7 Providing dormitory and sanitation facility

A partner shall see to it that all places that are related to workers' location such as workplaces, sanitation facility, and housing facility, are free from health, safety and pollution risks.

2.8 Safety, health education and communication

A partner shall conduct safety and health-related education and training for workers performing works which could affect their safety and health, formulate internal operating standards meeting those of applicable laws, and establish and operate annual plans. Also, safety information including such operating standards shall be announced to the workers.

3. Eco-Friendly Business Site Management

3.1 Complying with environmental laws

A partner shall comply with its legal obligations such as environmental permits and reporting required by chemicals-related laws and with **GS** Caltex's environmental and quality standards.

3.2 Preventing pollution and reducing resources/energy consumption

A partner shall endeavor to prevent environmental pollution and reduce its energy consumption and waste emissions through improvement of production processes, changes in equipment/process, substitution of materials, recycling/reuse of materials, normal operation of environmental pollutant-emitting/preventing facilities, etc.

3.3 Chemicals management

A partner, by accurately identifying the state of handling chemicals which exist in the workplace, shall dutifully perform its responsibilities under the chemicals-related laws and also prevent risks to workers' health or the environmental.

3.4 Waste and wastewater management

A partner shall identify the characteristics of waste and wastewater from the workplace, emit/dispose of them after managing/processing the same in accordance with the law, and take measures to reduce emissions thereof.

3.5 Air pollution management

A partner shall identify the characteristics of volatile organic compounds, aerosol, corrosive gas, dust, ozone layer-depleting materials, and combustion by-products in the work processes, process them in accordance with applicable laws, and then emit them.

3.6 Complying with regulation on hazardous materials in the products and process

A partner shall comply with laws and regulations which prohibit or restrict use of specific materials.

Appendix

4. Complying with Corporate Ethics

4.1 Complying with ethical management and prohibiting unjust enrichment

A partner, pursuant to **GS** Caltex's ethical management policy, shall prohibit all forms of bribery, corruption, unjust enrichment, and embezzlement, and continuously supervise and check for compliance with anti-corruptions laws.

4.2 Information disclosure

A partner shall disclose information on its state of labor/safety and health/environmental management, management activities, corporate governance, financial conditions and performance in accordance with applicable laws and industry practices.

4.3 Protecting intellectual property rights ("IPRs")

A partner shall respect all IPRs, protect the relevant IPRs in cases of technology/know-how transfer, and protect the security of **GS** Caltex's information.

4.4 Fair trade, advertising, and competition

A partner shall comply with regulations/standards on fair trade, advertising, and competition.

4.5 Protecting identity and prohibiting retaliation

A partner shall run a whistle-blowing channel which guarantees confidentiality and anonymity so that workers can raise issues without fear of retaliation.

4.6 Privacy

A partner shall protect the personal data of all its stakeholders including partners, clients, consumers, and employees, and when collecting, keeping, processing, transmitting, and sharing the personal data, shall comply with laws related to privacy and information security.

5. Management System

5.1 Management's expression of resolve for compliance

A partner shall put in writing management's resolve to comply with and continuously improve this Code and post the same in the workplace, and management shall periodically check the state of compliance with this Code.

5.2 Responding to outside requirements

A partner shall identify requirements made by new laws/regulations and the customers including requirements hereof and periodically review compliance therewith.

5.3 Risk evaluation and management

A partner shall periodically identify its risks in terms of human rights, occupational safety, environment, and corporate ethics as contained herein, and establish plans to manage high-impact risks with high chance of occurrence.

5.4 Establishing and managing goals

A partner shall establish, and periodically evaluate, the goals and execution plans to improve performances in terms of human rights, occupational safety, environment, and corporate ethics.

5.5 Education, training and communication

A partner shall conduct education and training for its managers and workers for the purpose of complying with this Code and the law, and communicate with its workers, partners, and customers concerning its policies, goals, and performances.

5.6 Collecting employees' opinions and improving this Code

A partner shall collect and listen to workers' opinions on this Code and use them to improve this Code.

5.7 Documentation

A partner, in preparing and keeping documents and records, shall comply with relevant regulation.

5.8 Partners' responsibilities

A partner shall request its sub-partners to comply with this Code, and help them to join the ethical/environmental/social management activities which **GS** Caltex conducts pursuant to this Code.

5.9 Sustainable procurement

A partner, in procurement transactions with its sub-partners, shall formulate ethical/environmental/social policies and procedure for sustainable procurement, and then conduct procurement accordingly.

GHG Assurance Statement

Introduction

DNV GL Business Assurance Korea Ltd. ("DNV GL") was commissioned by **GS** Caltex Corporation ("**GS** Caltex") to verify the **GS** Caltex's Greenhouse Gas Inventory Report for the calendar year 2017 ("the report") based upon a reasonable level of assurance. **GS** Caltex is responsible for the preparation of the GHG emissions and Energy consumption data on the basis set out within the guidelines for the reporting and certification of emissions of the greenhouse gas emission trading system (Notification No. 2017-40, Ministry of Trade, Industry and Energy). Our responsibility in performing this work is to the management of **GS** Caltex only and in accordance with terms of reference agreed with them. DNV GL expressly disclaims any liability or responsibility for any decisions, whether investment or otherwise, based upon this assurance statement.

Scope of Assurance

The GHG emissions data covered by our examination comprise Direct emissions (Scope 1 emissions), Energy indirect emissions (Scope 2 emissions):

- GHG emissions under verification : GHG emissions in 2017
- Organizational boundary for reporting : **GS** Caltex (in Korea)

Verification Approach

The verification has been conducted by DNV GL from January through March 2018 and performed in accordance with the verification principles and tasks outlined in the guidelines for the reporting and certification of emissions of the greenhouse gas emission trading system (Notification No. 2017-40, Ministry of Trade, Industry and Energy) and the verification guidelines for the operation of the greenhouse gas emission trading system (Notification No. 2017-12, Ministry of Strategy and Finance). We planned and performed our work so as to obtain all the information and explanations deemed necessary to provide us with sufficient evidence to provide a reasonable verification opinion concerning the completeness of the emission inventory as well as the reported emission figures in ton CO_2 equivalent. As part of the verification process;

- We have reviewed the greenhouse gas emissions and energy consumption report for the calendar year 2017
- We have reviewed and verified the process to generate, aggregate and report the emissions data

Conclusions

As a result of the work described above, in our opinion, nothing has come to our attention that would cause us to believe that the greenhouse emissions set out in **GS** Caltex's report are not fairly stated. The greenhouse gas emissions of **GS** Caltex for the year 2017 were confirmed as below:

〈 **Greenhouse Gas Emissions of GS Caltex in 2017** 〉

GS Caltex	Annual Greenhouse Gas Emissions (tCO_2e)		
	Direct emissions(Scope1)	Indirect emissions(Scope2)	Total emissions
Yr 2017	6,364,585	1,442,829	7,807,414

※ In order to report the GHG emissions as an integer, the rounded number on the statement might be different from the real number with ± 2 tCO_2.

※ Total emissions = Scope 1 + Scope 2

This Assurance Statement is valid as of the date of the issuance (11st May 2018). Please note that this Assurance statement would be revised if any material discrepancy which may impact on the Greenhouse Gas Emissions of **GS** Caltex is subsequently brought to our attention. In the event of ambiguity or contradiction in this statement between English version and Korean version, Korean shall be given precedent.

11st May 2018

DNV GL Business Assurance Ltd

Country Manager In-Kyoon Ahn

Appendix

Third Party Assurance Statement

This Assurance Statement has been prepared for **GS** Caltex Corporation in accordance with our contract but is intended for the readers of this Report.

Terms of engagement

Lloyd's Register Quality Assurance (LRQA) was commissioned by **GS** Caltex Corporation to provide independent assurance on its '**GS** Caltex 2017 Sustainability Report' ("the report") against the assurance criteria below to a limited level of assurance using LRQA's verification procedure. LRQA's verification procedure is based on current best practise, is in accordance with ISAE 3000 and uses the principles of AA1000AS (2008) - inclusivity, materiality, responsiveness and reliability of performance data.

Our assurance engagement covered **GS** Caltex Corporation's operations and activities in Korea and specifically the following requirements:

- Confirming that the report is in accordance with:
  - GRI Standards: Core option
- Evaluating the accuracy and reliability of data and information for only the selected indicators listed below:
  - GRI 200 (Economic): 205-2, 205-3, 206-1
  - GRI 300 (Environmental): 302-1, 305-1, 305-2, 305-7, 307-1
  - GRI 400 (Social): 401-1, 401-2, 403-1, 413-1

Our assurance engagement excluded the data and information of **GS** Caltex Corporation's suppliers, partners and any third-parties mentioned in the report.
LRQA's responsibility is only to **GS** Caltex Corporation. LRQA disclaims any liability or responsibility to others as explained in the end footnote. **GS** Caltex Corporation's responsibility is for collecting, aggregating, analysing and presenting all the data and information within the report and for maintaining effective internal controls over the systems from which the report is derived. Ultimately, the report has been approved by, and remains the responsibility of **GS** Caltex Corporation.

LRQA's Opinion

Based on LRQA's approach nothing has come to our attention that would cause us to believe that **GS** Caltex Corporation has not, in all material respects:

- Met the requirements above
- Disclosed accurate and reliable performance data and information as all errors or omissions identified during the assurance engagement were corrected
- Covered all the issues that are important to the stakeholders and readers of this report.

The opinion expressed is formed on the basis of a limited level of assurance and at the materiality of the professional judgement of the verifier.

Note The extent of evidence-gathering for a limited assurance engagement is less than for a reasonable assurance engagement. Limited assurance engagements focus on aggregated data rather than physically checking source data at sites. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

LRQA's approach

LRQA's assurance engagements are carried out in accordance with our verification procedure. The following tasks though were undertaken as part of the evidence gathering process for this assurance engagement:

- Assessing **GS** Caltex Corporation's approach to stakeholder engagement to confirm that issues raised by stakeholders were captured correctly. We did this through reviewing documents and associated records.
- Reviewing **GS** Caltex Corporation's process for identifying and determining material issues to confirm that the right issues were included in their Report. We did this by benchmarking reports written by **GS** Caltex Corporation and its peers to ensure that sector specific issues were included for comparability. We also tested the filters used in determining material issues to evaluate whether **GS** Caltex Corporation makes informed business decisions that may create opportunities that contribute towards sustainable development.
- Auditing **GS** Caltex Corporation's data management systems to confirm that there were no significant errors, omissions or mis-statements in the report. We did this by reviewing the effectiveness of data handling procedures, instructions and systems, including

those for internal verification. We also spoke with those key people responsible for compiling the data and drafting the report.

- Reviewing supporting evidence made available by **GS** Caltex Corporation at their head office in Seoul and Yeosu Complex in Yeosu-si, Korea.
- Checking that the GRI Content Index allows stakeholders to access sustainability indicators.

Observations

Further observations and findings, made during the assurance engagement, are:

- Stakeholder inclusivity:

We are not aware of any key stakeholder groups that have been excluded from **GS** Caltex Corporation's stakeholder engagement process.

- Materiality:

We are not aware of any material issues concerning **GS** Caltex Corporation's sustainability performance that have been excluded from the report. It should be noted that **GS** Caltex Corporation has established extensive criteria for determining which issue is material and that these criteria are not biased to the company's management. **GS** Caltex Corporation has established a database to manage their performance considering key environmental, social and governance issues, and has set up goals so as to contribute to sustainability. We expect **GS** Caltex Corporation to report its progress against those goals in the future report.

- Responsiveness:

Despite the increase in sales in FY 2017 compared to FY 2016, **GS** Caltex Corporation has achieved greenhouse gas emissions reduction.

- Reliability:

GS Caltex Corporation has reliable data management systems.

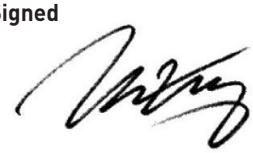
LRQA's standards, competence and independence

LRQA implements and maintains a comprehensive management system that meets accreditation requirements for ISO/IEC 17021 Conformity assessment – Requirements for bodies providing audit and certification of management systems that are at least as demanding as the requirements of the International Standard on Quality Control 1 and comply with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants.

LRQA ensures the selection of appropriately qualified individuals based on their qualifications, training and experience. The outcome of all verification and certification assessments is then internally reviewed by senior management to ensure that the approach applied is rigorous and transparent.

This verification engagement is the only work undertaken by LRQA for **GS** Caltex Corporation and as such does not compromise our independence or impartiality.

Signed **11th June 2018**



Tae-Kyoung Kim LRQA Lead Verifier

On behalf of Lloyd's Register Quality Assurance Limited

17th Floor, Sinsong Building, 67 Yeouinaru-ro, Yeongdeungpo-gu, Seoul, Korea

LRQA reference: SEO00000260

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