# Value No.1 Energy & Chemical The Control of the Con

GS Caltex 2014 Sustainability Report







#### ABOUT THIS REPORT

As a representing energy and chemical company in Korea, **GS** Caltex is committed to creating economic, environmental, and social values throughout its entire production process. Every year, we share insights into our business practices and the progress we have made towards achieving the highest level of sustainability with our stakeholders from both inside and outside the company.

#### **Reporting Period**

This report covers our sustainability strategy, commitments, practices, and performance from January 1, 2014 to December 31, 2014. For the key quantitative performance, the results of the past three years[from 2012 to 2014] are shared for comparative analysis. Some of the highlights over the first half of 2015 are included in this report to ensure its timely release.

#### Scope of Report

The scope of this report encompasses the **GS** Caltex headquarters and major business facilities including Yeosu complex. A certain portion of the data was derived from the logistics center, lubricant plant, gas stations, filling stations, and affiliated companies. Any parts that require special attention are indicated accordingly.

#### Reporting Guidelines

The **GS** Caltex 2014 Sustainability Report was prepared in line with the G4 Core Guidelines of GRI(Global Reporting Initiative) and designed to take feedback from stakeholders in compliance with AA1000SES. The content of this report has been reviewed by internal professionals with GRI certification and external specialized agency. There are no significant changes in terms of its scope, boundaries, and measuring processes from the previous report.

For Additional Information

More information on **GS** Caltex can be found on the company website(www.gscaltex.com). If you have any questions or require more details on this report, please contact us.

**GS** Caltex CSR Team

**GS** Tower, 508, Nonhyeon-ro, Gangnam-gu, Seoul, Korea

+82-2-2005-1614

≥ c16895@gscaltex.com

#### Contents

#### INTRODUCTION

- 04 CEO Message
- 06 Corporate Overview
- 08 GS Caltex Vision & GSC Way
- **09** Corporate Governance
- 10 Ethics Management
- 11 Sustainability Management
- 12 Selection of Report Subject
- 14 **GS** Caltex 2014 at a Glance

#### MATERIAL ASPECTS

- 16 Management Activities for Sustainable Growth
- 20 Providing the Best Quality Products and Services for Customers
- 24 Environmental Management and Response to Climate Change
- 29 Reinforcement and Dissemination of Safety System
- 32 Employee Value Enhancement
- 36 Corporate Social Responsibility Activities

#### APPENDIX

- 40 Financial Data
- 41 GRI G4 Index
- 43 UN Global Compact
- 44 Third Party Assurance Statement



#### CEO Message

#### Dear valued stakeholders,

This year marks the tenth year since we published our first sustainability report back in 2006. The refining industry has seen many changes over the years, and we expect even more changes and challenges in the future. As a corporate citizen, we will continue to fulfill our social responsibility while building a strong foundation for sustainable growth and profitability.

Despite the uncertainties in the business environment with the slowdown of the global economy and plunging oil prices in 2014, **GS** Caltex has pushed forward with proactive initiatives to strengthen our internal competitiveness. As a result, **GS** Caltex was able to create value through the diversification of crude oil supply sources, development of biobutanol and LFT(Long Fiber Reinforced Thermoplastics), and process optimization through the V-Project.

Everyone at **GS** Caltex will continue our unified efforts to improve the profitability and reinforce the competitiveness of the company's core businesses. Our company will overcome the challenging business environment by strengthening the fundamentals, safety, and communication with the stakeholders.

We ask for your continued interest and support for **GS** Caltex's commitment to creating a sustainable and better future.



## Corporate Overview

Founded in 1967 as Korea's first private oil refiner, **GS** Caltex played a critical role in the nation's economic development and has grown into one of the leading exporters of petroleum products and petrochemicals to more than 20 countries worldwide. We will continue to make progress towards global leadership in the energy market as a strong energy supplier while contributing to our nation's economic growth.

#### **Corporate Profile**

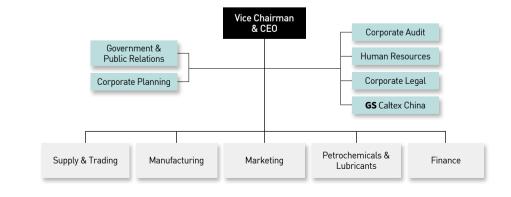
As of December 31, 2014

Profile	Description	
Name of company	<b>GS</b> Caltex Corporation	
Date of establishment	May 19, 1967	
Location of headquarters	GS Tower, 508, Nonhyeon-ro, Gangnam-gu, Seoul	
Overseas offices(branches)	China, India, Singapore, London, etc.	
No. of employees	3,059	
Type of industries	Crude oil refining industry	
Business domain	Petroleum, Petrochemicals, Base Oil & Lubricants	

## 12 2 GS Caltex China Co., Ltd. 2 GS Caltex(Langfang) Plastics Co., Ltd. 3 GS Caltex(Jinan) Energy Co., Ltd. 4 GS Caltex(Yantai) Energy Co., Ltd. 5 GS Caltex(Qingdao) Petroleum Co., Ltd. 6 GS Caltex(Qingdao) Energy Co., Ltd. 6 GS Caltex(Suzhou) Plastics Co., Ltd. 7 GS Caltex(Suzhou) Plastics Co., Ltd. 8 GS Caltex India Private Ltd. 9 GS Caltex Singapore Pte. Ltd. 10 GS Caltex Singapore Pte. Ltd. 11 GS Caltex Czech, s.r.o. 12 GS Caltex Abu Dhabi Branch

#### Overseas Network

### **Organization**As of December 31, 2014



#### **Business Domain**

**GS** Caltex **produces high quality petroleum products** using refineries with a daily capacity of 785,000 barrels\* and state-of-the-art automated production facilities including desulfurization plants for kerosene and diesel. As of 2014, we are focusing our resources on stabilizing the supply of petroleum products in the domestic market with more than 2,840 gas stations and 420 filling stations nationwide. About 66% of our sales is from exports, leading our country's economic development. Meanwhile, we have expanded our facilities to reflect technical innovation and respond to a fast changing market environment. In 2010, we went into full scale operation of our third VRHCR and replaced asphalt with high value-added light petroleum products, significantly increasing our profitability. In 2013, we started operation of VGO FCC and reached a daily process capacity of 268,000 barrels, the highest in Korea(achieving an upgrade rate of 34.6%). By doing so, we realized our vision of Perfect Complex and took our profitability and competitive edge to the next level.

\*In May 2014, the refining capacity increased from 775,000 barrels to 785,000 barrels by expanding Crude Distillation Unit #1.

**Our aromatic business** has now attained world-class scale and competitiveness through steady investment and optimum efficiency since its establishment in 1990. Currently, we are able to produce 2.8 million tons of aromatic products per year including 1.35 million tons of paraxylene, 0.93 million tons of benzene, 0.17 million tons of toluene, and 0.35 million tons of mixed xylene while ensuring that our growth momentum continues.

We began our production of polypropylene(PP) upon completion of the production facilities with an annual capacity of 120,000 tons in 1988. Since 2001, we managed to secure propylene from our own RFCC process and ensure stable supply of materials to ensure a competitive price in the market. In March, 2013, we secured an additional production of 250,000 tons of propylene and reached a total production capacity of 476,000 tons, thanks to a new VGO FCC. Furthermore, we are expanding our production bases by establishing GS Caltex(Langfang) Plastics Co., Ltd.(2006), GS Caltex(Suzhou) Plastics Co., Ltd.(2010), GS Caltex Czech, s.r.o.(2011), and GS Caltex Jinju Composite Resin Plant(2013) as part of our expansion plan for composite resin production while actively developing new markets.

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. More than 70% of our production is for global buyers, and we are increasing our presence in the global market by developing our sales network and prospecting new customers. **For our lubricant business,** we are maintaining a daily capacity of 9,000 barrels of lubricants with 9,000 tons of grease per year. We hold the highest market share and sales in the finished products market in Korea as our superior level of quality and technical expertise have been recognized. Our product portfolio ranges from automobiles and industrials to ships and special oils including more than 200 product categories with Kixx engine oil as our flagship brand. Based on our competitive advantage in the domestic market, we are making inroads into global markets including China and Russia and have established a local company in India in 2010 as we continue increasing our export volume.

## **GS** Caltex **Vision & GSC** Way

In January, 2014, we unveiled our new vision of operating as the 'Value No. 1 Energy & Chemical Partner'. We created this vision based on the feedback we collected and through in-depth discussion on our corporate governance to secure our position as a global energy and chemical player. We make sure that all members of **GS** Caltex align their vision with our corporate goals and apply the **GSC** Way into their daily practice.

#### **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.

## **GSC** Way



08

## Trust Fulfill one's role, and trust and respect one another. 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

Maintaining the highest level of Trust, Flexibility, Challenge, and Excellence, we...

- $\bullet$  Think ahead and are the first to act.
- Strategically utilize external resources and capabilities.
- Deliver tangible results.

We achieve our vision by applying the  $\boldsymbol{\mathsf{GSC}}$  Way in practice.

#### Corporate Governance

Structured approach to corporate governance has always been a part of **GS** Caltex's long-term sustainable growth. Our management has formed an advanced decision-making system led by the Board of Directors(BOD) to secure reliability and transparency within the company.

Our directors are nominated by GS Caltex, GS Holdings, GS Energy, and Chevron according to the internal policies and guidelines. All the directors are appointed at the General Meeting of Shareholders. The board of directors is comprised of ten directors who possess professional expertise and risk management capabilities. In 2014, three directors were from GS Caltex, one from GS Holdings, one from GS Energy, and five from Chevron.

As our Board members are executives from each company, their compensation schemes follow the internal policies of the 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 exerting their vote.

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 and regular meetings with Chevron resident director. Board members are provided with meeting materials at least one week before the actual meeting to ensure enough time to review the agenda items. Nine Board meetings were held in 2014 to review and approve key agenda items such as the 2015 business plan and the merger of **GS** Mbiz and **GS** GreenTech.

BOD operates separate committees such as Accountability Committee, Audit Committee (different from the Audit Committee under the commercial code), and LNG Procurement Management Committee. Each committee members is appointed at the BOD meeting every year. Four committee meetings were held in 2014.

#### BOD Members(as of June 2015)

	Title	Name	Position
	Inside Director	Dong-Soo Hur	Chairman, <b>GS</b> Caltex Corporation
		Jin-Soo Huh	Vice Chairman & CEO, <b>GS</b> Caltex Corporation
		Byong Yol Kim	President, Manufacturing, <b>GS</b> Caltex Corporation
		Wan Bae Rha	Vice Chairman & CEO, <b>GS</b> Energy Corporation
		Taik Keun Jung	President & CEO, <b>GS</b> Holdings Corporation
		A. B. Walz	Vice President, Chevron International Products
	Non- standing Director	J. S. Farrand	Vice President, Chevron Downstream & Chemicals
	Director	W. L. Stone	President & CEO, Star Petroleum Refining Company
		W. J. Miner	Country Chairman, Chevron Korea
		J. J. Kuehn	General Manager, Chevron Supply & Trading
			· · · · · · · · · · · · · · · · · · ·

#### Role of the Board Committees

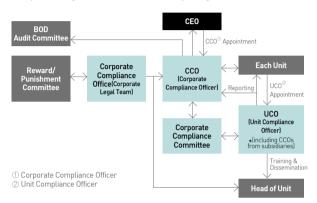
Title	Member	Roles
Accountability Committee	3	Review and discussion of governance-related issues
Audit Committee	4	Review and discussion of compliance program and major audit issues
LNG Procurement Management Committee	2	Review and discussion of LNG business-related issues

#### Ethics Management

At **GS** Caltex, we established the Code of Ethics as a foundation for ethical business practices in 1994 and implemented our voluntary compliance program in 2001. The internal control and ethical practices are reported to the Audit Committee under the BOD twice a year. In addition, the following system applies to the appointment of our corporate compliance officer and reporting process under the CEO's voluntary compliance policies.

We ensure that our voluntary compliance system is efficiently implemented by our CCO(Corporate Compliance Officer) and the UCO(Unit Compliance Officer) from each business division and subsidiary. We organize the Corporate Compliance Committee consisting of the CCO and UCOs to supervise and encourage ethical management business practices in the fields twice a year, and the BOD is informed of their activities. All our employees are required to take the CCP(Corporate Compliance Program) which provides guidance on ethical principles, fair business transaction, prevention of sexual harassment, data security, and CCM. We make sure to do everything we can to realize full compliance with ethical conduct in every aspect of our business.

#### Compliance Organizational Structure & Reporting Process



CCP Performance(Unit: person)

Classification		2012	2013	2014
No. of GS Caltex	Online	3,011	3,026	3,197
employees	Offline	261	159	137
No. of partners'	Online	16	-	-
employees	Offline	154	44	12

We revised our 'Code of Ethics' and 'Internal Compliance Regulations' to make sure that our overseas subsidiaries comply with our compliance program and reinforce their roles and responsibilities while continuing our efforts in improving the level of compliance for **GS** Caltex and subsidiaries. As part of these initiatives, all our employees pledged to uphold compliance early this year and sent out 3,130 official letters to our clients and partners to encourage ethical business practices. On a quarterly basis, we publish a web magazine called 'Ethics Virus' to raise our employees' awareness and set up a hotline to respond to ethics-related questions and provide consultation regarding business transactions with **GS** Caltex. We also ensure full anonymity in our hotline operation for our employees and stakeholders who report any unethical practices, corruption, and unfair business transactions.

 Chics Management Hotline +82-2-2005-6011
 Crievance Settlement(Sexual Harassment Claims) +82-2-2005-6012

 ■ Email ethics@qscaltex.com

We also recognize the importance of fair business practices and competition and promote compliance with laws through employee training programs and a mandatory internal review process against potential violations. By doing so, we are able to clarify the employees' obligation to comply with laws and proactively respond to any issues that may potentially compromise our compliance as part of our commitment to transparent and fair business practices.

#### Plan for the Future

At **GS** Caltex, we actively engage in the development of our training content and performance so that our online and offline programs will be more effective for our employees. We will continue our efforts to achieve the highest ethical standards and practices based on the Code of Ethics and Internal Compliance Regulations.

#### Sustainable Management

At **GS** Caltex, we actively pursue sustainable business practices based on our comprehensive risk management in economic, social, and environmental aspects with support from the CSR Strategy Framework and CSR Committee while focusing on establishing a practice-oriented sustainable management system. Since our establishment of the four CSR strategies in 2010, we have continued improving the CSR Strategy Framework based on which we manage and respond to various issues of our company.

#### Status of CSR Framework (2010-Present)

	Year	Description
2010	Four CSR Strategies	The Four CSR Strategies: Sustainable Operation, Reliable Energy, Accountable Engagement and Responsible Marketing were established to effectively manage the economic, social, and environmental aspects of the company.
	ISO 26000	86 indicators were defined based on ISO 26000 to internalize CSR and used to assess and improve the level of CSR over the past 3 years(2010-2012).
2012 CSR Performance Management System		The existing ISO 26000-based indicators were upgraded to 30 CSR performance management indicators to reflect actual business practices and introduce 'CSR Performance Management System'.
2014	CSR Management Topics	'CSR Management Topics and Expected Issues' were selected in consideration of global guidelines(e.g. GRI, UNGC, ISO 26000) and the existing CSR Performance Indicators for more proactive management.

Since 2010, **GS** Caltex has operated CSR Committee with the CEO as the chair. The committee helps discuss and make decisions on CSR-related issues while sharing their opinions on sustainability with other key committees, providing a corporate-wide perspective as part of its efforts to reinforce sustainable practices. The CSR Committee meetings were held 15 times from July 2010 to May 2015. Recently, the committee is discussing the ways to reinforce the coordination system among key committees and councils in line with the development of the CSR Strategy Framework.

#### CSR Committee/Status on Sustainability

Committee	Activities	
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	
Information Security Committee	Corporate-wide discussion and decision-making on information security and policies	
Risk Management Committee	Risk assessment/management on exchange rates and prices	
Environmental Safety Committee/Council	Decision-making on SHE(Safety, Health and Environment) policies and strategies	
Fair Trade Review Committee	Internal reviewing for fair and transparent business practices	
Industrial Safety Committee	Reviewing and resolution of key safety issues for employees	

#### Plan for the Future

At **GS** Caltex, we will continue to optimize the CSR framework to fulfill our social responsibility in an efficient and strategic manner. We will take a corporate-wide approach to ensure sustainable business practices by responding to changes in both the internal and external CSR environment and implementing more proactive measures.

## Selection of Report Subject

The topics of this report have been selected according to the GRI G4 guidelines in consideration of Stakeholder Inclusiveness, Sustainability Context, Materiality and Completeness. **GS** Caltex responds to each topic as follows.

#### Stakeholder Inclusiveness

At **GS** Caltex, we maintain close communication with all our stakeholders including the government, customers, local communities, and employees as we undertake various activities to achieve the highest level of sustainability. In this report, we focus on some of their key areas of interest we have identified through communication.

#### Classification of stakeholders & communication channels

Government	Unions	NGO	Subsidiaries	Partners
Public hearings, Discussions, Seminars     Website     Conference on economic cooperation	Joint Labor-Management conference     Joint Labor-Management volunteer activities     Joint Labor-Management campaign	CSR activities     Discussion     Website, Company Newsletter, Media Reports	Announcements including the CEO message     Website, Company Newsletter, Media Reports	Consultation meeting with partners     Web-portal for buyers     Survey on satisfaction level

Community	Customer	Shareholders & nvestors	Employees
CSR activities     Discussion     Website, Company Newsletter, Media Reports	Customer satisfaction survey     Communication channels including the customer center	Business Report     Disclosure	Company Newsletter, internal Bulletin board     Survey on employees

#### Sustainability Context

Our pool of sustainability issues consists of 31 issues based on the review of global guidelines and standards(e.g. GRI G4, ISO 26000) and our internal issues and materials, as well as external environmental analysis(e.g. benchmarks on leading companies, media research and survey results).

#### Pool of sustainability issues

Economy(5)	Society(5)	Environment(8)	Employees(8)	Customers(5)
Financial soundness New growth engine/ Diversification of business Market share Research & Development Ethical and fair practices	Communication with stakeholders     Mutual growth with partners     CSR activities     Investment in local communities     Protection of the rights of local communities	Energy management activities     Response to climate change e.g. greenhouse gas     Response to environmental regulations     Oil Spill     Compliance with environmental laws     Development of ecofriendly products     Air pollution control     Water pollution control	Employment and retention of human resource     Performance training program     Internal communication     Safety control based on risk factors     Employee healthcare     Promotion of safety culture     Balance between work and life     Labor-Management relationship	Pricing & customer satisfaction initiatives     Safety and health of customers     Accurate information about products and services     Fair marketing practices     Privacy

#### Materiality

We have conducted an evaluation on the materiality based on 'the impact on our growth' and 'the level of interest of external stakeholders'. The impact on our growth was identified through the survey on our employees in terms of both long and short-term performance while the level of interest of our external stakeholders was derived from the industrial benchmarks, media research, and survey on external stakeholders. The same criteria that were used last year have been applied to make sure that they are aligned with our long-term goals and how key issues are developed.

#### Result of materiality evaluation

Economy(2)	Society(3)	Environment(3)	Employees(4)	Customers(1)
Financial soundness     New growth engine/ Diversification of business	Communication with stakeholders     Mutual growth with partners     CSR activities	Energy management activities     Response to climate change e.g. greenhouse gas     Response to environmental regulations	Employment and retention of human resource     Performance training program     Internal communication     Safety control based on risk factors	Pricing & customer satisfaction initiatives

#### Completeness

We identified 13 key issues in terms of their completeness(2 from Economy, 3 from Society, 3 from Environment, 4 from Employees, and 1 from Customers). Among those issues, we apply the overall content for 'Communication with stakeholders', and the rest of the issues were divided into 16 key aspects defined in the GRI G4 guidelines. In this report, we focus on 6 topics to explain the economic, environmental, and social aspects of our business operation to our stakeholders. We also intend to monitor the existing CSR management and potential issues to prevent any associated risks.

Key Issues	Report Topics	G4 Aspect
Financial soundness     New growth engine/     Diversification of business     Mutual growth with partners	Management activities for sustainable growth	Economic performance     Procurement practice
Pricing & customer satisfaction initiatives	Providing the best-quality products and services to customers	Products & services     Product & service labeling     Customer privacy
Energy management activities     Response to climate change e.g. greenhouse gas     Response to environmental regulations	Environmental management and response to climate change	Energy     Emissions     Effluents and waste     Compliance     Overall
Safety control based on risk factors	Reinforcement and dissemination of safety system	Occupational health and safety Asset integrity and process safety
Employment and retention of human resource     Performance training program     Internal communication	Employee value enhancement	Employment     Training and education
CSR activities	CSR activities	• Indirect economic impacts • Local communities

#### **Trend Analysis**

When compared to the evaluation results in 2013, new issues such as 'Communication with stakeholders', 'Internal communication', 'Mutual growth with partners', and 'CSR activities' appeared on the list in 2014. This is mainly due to the fact that a lack of communication in the industries has resulted in some recent controversy. Issues such as 'Financial soundness', 'Performance training program', and 'Employment and retention of human resource' which made their entry in the list last year were also selected this year as we recognized the need for strengthening our competitive advantages, especially in light of the economic recession.

\*\* The measures we have taken regarding the Wu Yi San collision and oil spill which took place in January 2014 will be published separately and covered in the next report as they are still ongoing.

INTRODUCTION

#### Supply Human Resource Material Resource GS Energy 50% 3,059 employees 254M barrels of crude oil Chevron(Overseas) Holdings Ltd. 40% Chevron Global Energy Inc. 10% **Business** 2,840 gas stations /420 filling stations Refining Capacity Aromatic Production Capacity Base Oil Production Capacity 15 consolidated 15 global networks 16.62M membership 785,000 barrels/day 2.8M tons/year 1.3M tons/year subsidiaries subscribers **Segment** Oil Refining & Petrochemical /Marketing & Service Sales KRW 40.3T Value of Exports Investment in Facilities Investment in R&D Sales Investment KRW 335.7B KRW 39.81B **Export to 23 countries KRW 26.7T Value** Investment in CSR Activities Crude Oil Purchase Purchase(excl. Crude Oil) Low Interest Loan Program for Partners Total Employee Compensation Environmental Investment KRW 65.3B KRW 265.2B KRW 27.85B KRW 22.8B **KRW 28.3T** KRW 6.88T **Distribution**

MATERIAL ASPECT .1

Major stakeholder G4 Aspect

Shareholders & Investors/Employees/Partners Economic Performance/Procurement Practice



Management Activities for Sustainable Growth

The energy industry faces a myriad of challenges in both internal and external environments.

At **GS** Caltex, we take diversified approaches to overcome these challenges while strengthening our competitive advantages to achieve sustainable growth.

### DISCLOSURE ON MANAGEMENT APPROACH

#### Context & Challenge

#### Challenging internal and external business environments

- Fluctuating oil prices
- Sluggish global economic recovery
- Increasing competition from China and oil-producing countries in terms of refining capacity

#### **Our Progress**

- Build up internal competencies through V-Project
- Securing New Growth Engines through R&D
   Diversify business portfolio and
- ensure financial stability

   Promote mutual growth
- Promote mutual growth with partners

#### Our Commitment

- Continue V-Project
- Commercialize biochemical and composite materials
   Invest in facilities in line with
- Invest in facilities in line with profitability
- Improve cost efficiency
- Continue our commitment for mutual growth

Financial Performance of the V-Project [Cumulative Amount/Unit: KRW 100M]

\* The projection for 2015 is included.



#### Enhance Internal Competitiveness with the V-Project

At **GS** Caltex, we recognize the importance of strengthening the competitiveness of the 'crude oil-production-sales' value chain in order for us to generate a more stable profit structure in this increasingly uncertain and low-revenue business environment. With this goal in mind, we have carried out the V-Project, our company-wide mega project named after the 'Innovation in Our Value Chain' as well as 'Vision' and 'Victory' since 2013. Each year, we have expanded the areas of improvement through the V-Project. In 2013, the project began with 40 improvement activities for the 'Optimal Operation of Upgrading Units' and the scope has been extended to include 'Optimize Energy/Utility' and 'Optimize Petrochemical Production' in 2014. In 2015, we conducted activities to reduce costs and increase yields in the areas of 'Increase Competitiveness of Feedstock', 'Optimize Process Operation' and 'Maximize Product Value' in order to continuously improve profitability. As a result, we have improved our net yield, energy consumption and the mix of high value-added products which are the key indicators of the refinery competitiveness.

Key Areas of Improvement & Financial Performance(Unit: Bil. KRW)

V Duningt	A	2013	2014	2015
V-Project	Areas of Improvement	Actual	Actual	Projection
	1. Enhance competitiveness of processing crude oil	18.2	6.1	1.8
Wave 1	2. Improve yields and feed mix	30.2	58.1	58.9
(2013)	3. Optimize sales	15.7	35.0	48.0
	Sub Total	64.2	99.2	108.7
	Optimize facilities operation	-	20.7	68.6
Wave 2	2. Optimize energy/utility	-	37.5	31.8
<b>Wave 2</b> (2014)	3. Optimize petrochemical production	-	2.8	5.2
	Sub Total	-	61.0	105.5
	Increase competitiveness of feedstock	-	-	6.6
Wave 3	2. Optimize process operation	-	-	27.5
(2015)	3. Maximize product value	-	-	4.1
(2013)  Wave 2 (2014)  Wave 3 (2015)	Sub Total	-	-	38.1
	Grand Total	64.2	160.2	252.3

<sup>\*</sup> The numbers have been rounded to the first decimal place.

#### Securing New Growth Engines through R&D

Our commitment to R&D will enable us to improve our competitive advantages and secure new growth engines. At **GS** Caltex, we focus on driving growth in the areas of biochemical and composite materials while achieving the highest level of customer satisfaction in the refinery and lubricant sectors. We are committing our best efforts to facilitate these R&D projects while exploring new business opportunities. In the biochemical sector, we are reviewing our opportunities in commercialization and technical expertise from securing biomass materials to development of production technologies and demand and are planning to pursue various activities including validation of technologies and downstream based on our scale-up research. In addition, we will focus our resources on the development of commercialization technologies with the technical expertise we have secured in the composite material sector and continue expanding our market and seek new areas of application by the development of physical properties. We intend to take more proactive measures to changing business environments and create a foundation for sustainable growth in existing sectors.

#### Investment in R&D(Unit: KRW 100M)

2014 - **398.1** 2013 - **458.7** 2012 - **434.2** 

#### Key R&D Projects

New	Biochemical	The original technology for producing bio-alcohol by fermenting microorganisms from biomass his been secured and is in the process of commercialization. We are also continuing our research to further improve its financial viability and sustainability.  Cosmetics & Personal Care  Agricultural Products					
Growth Engine	Composite Materials	Based on our technical expertise we have accumulated over the years, we are focusing our research resources in creating high added values in the composite material sector using our byproducts. Additionally, we are studying bio-based functional textile and engineering plastic composite materials in response to a strong market demand for eco-friendly materials.  Carbon Textile Composite Materials  Functional Textile					
Competitive Strength in Existing Sectors	Refinery / Process Catalyst	In response to a demand for higher quality and new environmental energy policies in refinery, we are researching quality control as well as the development of products and catalyst technologies as part of our efforts in increasing productivity and adding more value to semi-finished products.					

#### Commercialization & Increase in Supply of Carbon Fiber LFT

Our LFT(Long Fiber Reinforced Thermoplastic) is made by combining various types of plastic resins and additives using **GS** Caltex's exclusive processing techniques to increase its strength and durability against impact. It is only half the weight of existing steel materials with the same or lower level of strength. The polymer technology development team at **GS** Caltex undertook the development of carbon fiber composite materials for use as lightweight automobile parts in 2012. The mass-production was successfully launched in 2014, and they were exclusively supplied to Hyundai Kia Motors for certain Kia models, and more models are expected to be included in the future. In addition, we are negotiating with several European automakers for the supply of carbon fiber LFT materials. Currently, our production capacity reached 12,000 tons of carbon fiber LFT materials per year with new production facilities in Jincheon, Korea and Suzhou, China. We are planning to add more production facilities in Jinju to increase the annual production capacity to 20,000 tons by 2015.

#### Diversify Business Portfolio and Ensure Financial Stability

In response to low-margin fundamentals, we at **GS** Caltex are undertaking various business activities. Following the investment in the advanced facilities in 2013, we are diversifying our portfolio in the petrochemical sector and investing in the production facilities in the lubricant sector while restructuring our product lines based on the diversification of market channels, development of high value-added products, and improvement of our revenue stream. At the same time, we are focusing our resources to ensure our financial stability in response to the highly unpredictable and volatile business environment. By reinforcing our competitive advantages in the market, we are generating more stable cash flow and maintaining a proper level of cash and loan in consideration of our long and short-term strategies. We optimized our structure for loan expiration in line with our operational cash flow and secured sufficient credit line with banks as part of our plan to ensure stable funding and risk control. We also managed to secure condensate produced in the U.S. and crude oil from Alaska for diversification and cost reduction.

Low Interest Loan Program for Partners



#### Promote Mutual Growth with Partners

At **GS** Caltex, we promote and sustain mutual growth with our partners. We operate various partner support programs in areas such as finance, technical development, management, and training to help our partners improve competitiveness.



Support

At **GS** Caltex, we provide various financial support programs for small and medium-sized business operations. We settle our payment in full cash within 7 days from receipt of invoice and set up a mutual growth fund of KRW 100B for our partners jointly with financing institutions. As of the end of 2014, the fund has provided 86 companies with KRW 65.3B in low-interest loans. In addition, we introduced a program through which we pay 20% of the monthly dues in advance to 6 shipping companies under our long-term contracts.



We support patent application fees of our first and second-tier partners in order to safeguard new technologies and implemented a technology escrow system through which they can retain their intellectual properties at the government-designated centers. We organize seminars to provide technical training about polymer and lubricant materials as well as industrial trends and new product portfolio. We are also enacting a project for localizing imported materials and promote stable supply by entering long-term contracts.

## Management Consulting

We operate an energy diagnosis support program where we assess energy consumption levels of all our partners to identify waste elements and provide solutions to improve their energy efficiency. Additionally, we provide consultation for building KOSHA 18001 through site inspection to help create safer working environments and improve their productivity.



At our training support center, we are providing 17 courses designed to improve the level of safety, job performance, and management skills for our maintenance service partners at the Yeosu complex while 7 safety training courses are offered to shipping partners through the maritime transportation safety support center. We support the Corporate Compliance Program and ethical practice training program to ensure mutual support and growth with our partners while providing the framework for our code of ethics and internal control techniques.

#### Result of Partner Training Programs

	Category	Training Program	Result(Freq. /Participants)
		Construction safety training program for supervisors	2/21
		Human error prevention /rescue program	1/25
		Practice training for signalmen	5/188
Yeosu	Partner Training by Category	Practice training for scaffolding men	7/217
complex		Orientation program for new employees of partners	1/8
		Training program for hoist/crane operators	2/22
		Training program for maintenance staff of partners	3/70
		Performance improvement program for managers	1/11
	Subsidiary Safety	Firefighting training	1/8
	Performance Support	Human error prevention program	1/10
Headquarters -	Coaster Safety Training	Safety training programs for coaster owners /crews(17 vessels, 9 companies)	2/249
	Ethics/Human Rights	Importance and scope of ethical management	1/12

#### Mutual Growth Policies



MATERIAL ASPECT .2 Customer/Community/NGO/Subsidiaries Products & Services/Product & Service Labeling /Customer Privacy



#### **Providing the Best Quality Products** and Services for Customers

As petroleum and petrochemical products are mainly used as fuel and basic materials, it is essential to maintain high quality at all times. In this fiercely competitive market environment, there is an increasing need to differentiate our efforts for customer satisfaction. At GS Caltex, we focus our resources on improving the quality of our products and services and creating value for our customers at a corporate-wide level.

#### DISCLOSURE ON MANAGEMENT APPROACH Context & Challenge **Our Progress Our Commitment** • Solidify the foundation for • Increasingly competitive market • Consumer centered management practice Consumer centered environment • Market demand for high quality · Quality control activities management practice • Increased social interest in • Customer service center • Manage customer feedback • Service quality and on-site consumer rights training at gas stations • Customer privacy initiatives Marketing communication • Enhance authenticity and fair transaction programs

Customer Value Creation Process

**Consumer Centered Management** Consumer-Oriented Corporate **Culture & Protection of Consumer Rights and Interests** 

#### Strategic Planning

VOC-based Strategic Planning



#### Proactive **Protection System**

Quality/Service Management & Training



#### Internal Managemen

CCM System/CSC Operation/VOC Management



#### Remedial

Complaint Handling/ Standardization



#### Evaluation & Improvement

Operation Result Evaluation/VOC Sharing/ Fundamental Process Improvement

#### Maximize Customer Values

At GS Caltex, we operate our business in accordance with the CCM(Consumer Centered Management) which is operated by the Korea Consumer Agency and certified by the Fair Trade Commission for the purpose of ensuring that corporate activities are in line with consumers' needs and performing evaluations to find room for improvement. Its focus lies on the prevention of complaints from consumers, earning earn their trust while reflecting VOC as part of continuous improvement process. The objective is to provide the highest quality products and services while creating values and improving competitive advantages. GS Caltex introduced the CCM in 2006 and was certified for its excellent performance in 2010—a first in the refining industry. In 2013, we integrated the CCM Committee with our key decision-making executive committee to further increase its efficiency and expedite the reporting process. We mandated our CCM training program for all employees to internalize our consumer-centric management philosophy. Our commitment to customers was recognized by the industry, and we became the first oil company to be certified for three consecutive years while being selected as one of the top CCM performance management companies.

Our one-stop consultation service is provided through the CSC(Customer Service Center) to respond to customers' inquiries regarding our service and product quality. It has a dedicated team of service representatives who respond to customers' demands in an efficient and professional manner using an advanced communication infrastructure and processing system. We are constantly improving our service quality by monitoring our key action indicators and work process on a regular basis.

#### Improve Customer Satisfaction & Marketing Campaigns

At GS Caltex, we undertake cultural marketing campaigns and promotional events to increase the level of customer satisfaction. As a result, we were ranked in First Place in the gas station service category for 6 consecutive years according to NCSI(National Customer Satisfaction Index) measured by Korea Productivity Center as we were recognized for meeting our customers' high level of expectation and quality. We also received the highest mark in terms of speedy service-delivery and membership privileges as 'key quality factors'. We are continuing our efforts in delivering quality service to meet our customers' increasing expectations.

#### I am your Event

We have launched the promotional campaign called 'I am your Event' through which we offer various membership benefits in affiliation with movies, concerts, books, and vehicle maintenance service. One of the programs, 'I am your Cinema', has offered brunches and movies at the exclusive GS Caltex Theater on weekend mornings for more than 10 years and has received an enthusiastic response from our customers. As of 2015, we are adding more discount offers and maintenance service in addition to our cultural events.

#### GS&POINT

**GS**&POINT is our **GS** Group membership program through which we offer various benefits including sports, travelling, and cultural experiences under the theme of enjoying the 'Best Experience with Your Family'. Since its establishment in 2013, GS&Camping provided our customers with opportunities to travel with their families to popular destinations in the country 12 times in 2014. In 2014, we introduced our new campaign, 'GS&Kids', in which parents and their children can participate in programs such as Youth Soccer Class, Baseball Class, and Escort Kids. Thanks to these programs, GS&POINT was recognized for its excellent membership programs and won the 'Consumer Choice Quality & Satisfaction Award 2014' in June 2014.

**GS**&POINT Membership Subscribers [Unit: 10.000 Persons]



#### **GS&CONCERT 2014**

In November 2014, **GS** Caltex hosted the '**GS**&CONCERT 2014' for its **GS**&POINT members. Marking its third year since 2012, '**GS**&CONCERT' has provided a great opportunity for parents and their children to spend some quality time together as part of the promotional campaign for families, couples, and friends. In 2014, over 320 safety personnel were allocated and evacuation was simulated several times to ensure the safety of about 8,000 people in the audience. Along with the concert, we organized **GS**&STREET in which popular singers perform in outdoor settings so everyone can enjoy their performance, and **GS** Group affiliates and brands participated in various events. At **GS** Caltex, we will continue to bring high quality cultural content to people of all generations as part of our marketing campaign.

#### **Privacy - PIMS Certification**

In 2013, **GS** Caltex became the first domestic oil company to receive the PIMS(Personal Information Management System) certification endorsed by the Korea Communications Commission and reviewed by the Korea Internet & Security Agency. We successfully maintained the certification status through the follow-up review process. About 16 million **GS**&POINT subscribers and **GS** Caltex reward card holders can enjoy their membership benefits without worrying about their information security. In the future, we will continue to enhance our internal and external review process to maintain the highest level of security while providing the necessary administrative training programs and carrying out technical security initiatives for all our employees.

#### Customer Index

Item	2012	2013	2014
PIMS certification	-	Certified	Certified
CCM certification	Recertified	-	Recertified
Average time it takes to handle customer complaints(days)	2.4	1.8	1.6
KSQI(Korean Service Quality Index)	High service quality	High service quality	High service quality
Membership subscribers(10,000 persons)	1,407	1,543	1,662
Domestic market share	25.1%	24.2%	24.9%

NCSI (National Customer Satisfaction Index)



22

#### **Service Quality Control**

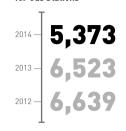
At **GS** Caltex, we operate a system to improve the quality of our service in four stages-service strategy planning, field training, evaluation and reward, and field practice enhancement-and distribute our 6 step service manual through both online and offline channels. Our service evaluation consists of offline monitoring, through which monitoring agents visit the site, and an online customer survey. The result is used to reward those sites with excellent service quality and improve the level of customer satisfaction. In addition, we implement our customer-oriented business practice to raise the level of overall service quality as we have held 'Start Festival' and selected gas stations and filling stations with a superior level of service since 1993. Partners with outstanding performance such as 'Star Partners' are awarded, and their operational know-how is shared among other partners.

#### Operation of Star Service Team

At **GS** Caltex, we organized the Star Service Team with service training experts to increase the level of customer satisfaction and provide standardized service. The team visits more than 1,000 stations nationwide each year and makes sure that the staff complies with the service manual, receives feedback from customers, and encourages the staff to improve their service quality. Since 2014, we have upgraded our service in terms of car washes and inspections and provided more professional training programs. The team shares their experience and case studies to ensure that their training is effective and meets customers to understand the quality level of service that they are receiving.

Quality Inspection Performance

#### Frequency of Quality Inspection for Gas Stations



#### Frequency of Quality Inspection for Filling Stations



#### Most Trusted Products

At **GS** Caltex, we apply internal quality control procedures that are stricter than the legal requirements under the Petroleum and Petroleum Substitute Fuel Business Act to provide fully compliant products and services and meet our customers' demands and expectations. Our quality management serves as a foundation for realizing our vision of growing as a 'Value No. 1 Energy & Chemical Partner'.

#### **Product Quality Control**

At **GS** Caltex, we are constantly monitoring any risk factors that may compromise our product quality. We conduct a thorough inspection for fake oil and a deceiving meter. These measures have had a direct impact on consumers as we build trust and ensure ethical practice in distribution. We are also operating 'Kixx Quality Service Vehicles' on site to identify any compromise in quality as part of our quality control in distribution channels since July 2007. The 'Kixx Quality Service Vehicles' perform quality inspections in **GS** Caltex stations nationwide and are dispatched in response to any complaints raised by consumers. In 2013, we started operating additional 'LPG Quality Service Vehicles' for filling stations and apply stricter quality control to prevent any legal violations, especially when the legal quality requirements are in the process of undergoing changes.

#### Eco-Friendly Product Development

At **GS** Caltex, we apply strict quality control throughout the entire production and sales process under ISO International Quality Certification System and develop eco-friendly products as part of our low-carbon energy policies. Our gasoline, kerosene and diesel are recognized for their superior quality as they are produced through the advanced refinery process.

Our commitment to the environment will continue as we join the Auto-oil research program, in which we research automobile fuel specifications in collaboration with auto manufacturers and the government to reduce greenhouse gas and exhaust gas while developing eco-friendly technologies such as biobutanol.

**GS** Caltex **High Quality Gasoline** contains a high-purity functional additive which protects the key parts of the engine and significantly reduces the emission of hazardous substances. It filters any unwanted materials and carbon residue to improve fuel efficiency while preventing the required octane value from increasing. This ensures that the vehicle provides a high level of driving comfort, especially in new cars.

**GS** Caltex **Diesel** with Ultra-low Sulfur offers great performance in terms of ignition and power output as it contains a high performance liquidity boost that prevents the formation of wax in winter. It also makes sure that the vehicles start in low temperature condition. It is produced at our advanced desulfurization facilities and meets world-class quality in terms of cetane number, lubricity, density, and content of poly-aromatic compound.

**GS** Caltex **Kerosene** is highly pure and eco-friendly with less emission of harmful gas as it is produced through our advanced refinery process. It produces less petroleum odor and helps promote comfortable environments. The content of sulfur is less than 30ppm, which is 30% of the legal limit.





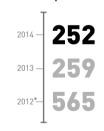
## Environmental Management and Response to Climate Change

At **GS** Caltex, we are committed to environmental protection and technical development to meet legal and social requirements and minimize the environmental risks in our business practice.



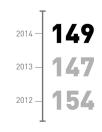
## Performance for Gas Stations No. of Inspected Gas Stations

Soil Contamination Prevention



\*The number increased in 2012 when all the stations were inspected due to the voluntary agreement.

#### No. of Clean Gas Stations



#### Enhance Environmental Management System

Since we declared our environmental policies in 1996, we have reinforced our management system so that we could set the highest priority on environmental protection.

#### Prevention of Air Pollution

In response to increasing social interest in air quality and related health issues as well as political demands for environmental health, we ensure strict compliance with the legal requirements and diversify our efforts to prevent air pollution.

At **GS** Caltex, we developed ways to improve our process operation and facilities by reducing contaminants and fuel consumption and introduced cleaner fuel such as LNG while establishing new facilities and expanding the Low NOx Burner in the existing heating furnace to reduce the emission of nitrogen oxide. We also invested a great deal of effort in building prevention facilities such as Electrical collector-Scrubber-RTO\*-VRU\*\*-NOx reductor to reduce dust, VOC, SOx and NOx. Since 2008, we have also added NOx reductors to our boilers and incinerators while replacing their catalysts on a regular basis to improve their efficiency. We also installed CleanSYS to automatically measure the emission of dust, SOx, NOx, and CO on a continuous basis and a monitoring network to manage the air quality around our production facilities more efficiently.

We signed the 2nd Gwangyangman Region Voluntary Environmental Agreement with the Ministry of Environment and Jeollanam-do in 2008 as part of our efforts to reduce air pollutants around the Yeosu National Industrial Complex. The goal of the agreement is to reduce the emission of air pollutants by 13% by 2016.

#### **Prevention of Soil Contamination**

At **GS** Caltex, we entered a voluntary agreement with the Ministry of Environment to protect soil environment(1st Phase: 2002-2012, 2nd Phase: 2013-2023) and as part of this agreement, we installed monitoring devices in all areas of the Yeosu complex to ensure constant monitoring of soil and underground water quality. In addition, we inspect all our directly operated stations for any soil contamination every 3 years and perform cleaning activities if needed. When establishing new directly-operated stations or replacing tanks, we implement our Clean Station with dual wall tanks, dual pipes, and leakage prevention sensors and provide training programs for our sales staff and station partners to raise their awareness in soil contamination.

#### **Prevention of Water Contamination**

AT **GS** Caltex, we manage wastewater produced during our production process on a daily basis through our monitoring system on the source of wastewater. To improve the recyclability of wastewater, we reuse it for the dealkalization facilities in the crude oil refinery process and installed carbon filters at our water treatment facilities to improve their efficiency. In August, 2014, we completed the improvement of our water treatment facilities, adding carbon filters to reduce contaminants produced in new process facilities. As a result, we managed to reduce the production of contaminants by 5% compared to 2013. We are planning to build a system for collecting highly concentrated wastewater separately and further improve its efficiency and stability in 2015.

<sup>\*</sup>RTO: Regenerative Thermal Oxidizer

<sup>\*\*</sup>VRU: Vapor Recovery Unit

Environmental Investment (Unit: KRW 100M)



#### **Hazardous Chemical Control Activities**

At **GS** Caltex, we monitor the consumption of hazardous chemical on a daily basis and review its result every month and quarter through SHE Integrated Information System. We set our internal goals for reducing emission and are reaching our target of reducing benzene, toluene and xylene through stable operation of ocean VRU, installation of aromatic Tank VRU and enhancement of LDAR(Leak Detection And Repair) system. Meanwhile, we entered 'Joint Prevention Agreement for Chemical Accident Emergency Response' with companies in the Yeosu Industrial Complex to respond to hazardous chemical spill on time and prevent additional damages while organizing emergency response teams, establishing prevention plans, and conducting joint response training. In 2014, we represented the second group of the Yeosu Industrial Complex and conducted a quarterly information sharing forum and half-yearly joint response training. In addition, we upgraded and added boxes of protective gears and medical kits to improve the level of response to accidents.

#### Recycling of Waste Materials

At GS Caltex, we recycle waste materials for various uses jointly with recycling companies.

- Recycle tank sludge(waste oil) for auxiliary fuel for cement plants.
- Recycle waste catalyst produced during cracking process for cement material and sewage sludge.
- Extract metal from catalyst containing transition metal by outsourcing.
- Recycle waste food for animal feed and compost.
- Recycle active carbon, synthetic resin, wood pallets and vegetable residues.

To maximize the recyclability of waste materials, we conduct training and inspection to ensure that waste materials are collected and stored separately without being neglected on the site through the waste material process system.

#### **Environmental Cleaning Activities**

As a corporate citizen, we, **GS** Caltex, engage in environmental cleaning activities on a regular basis. They include river cleanup for preserving water eco-system and cleaning activities around the Yeosu Industrial Complex while making contribution to our local communities by cleaning one of the popular tourist spots side known as 'Yeosu Getgagil'.

Status of Voluntary Environmental Management Agreements

Agreement	Activities
Voluntary Agreement for Purchase[2005-2016]	Promote the production, distribution and purchase of eco-friendly products(Eco-Labeling Certification and GR Mark Certification).
The 2nd Gwangyangman Region Voluntary Agreement(2012-2016)	Reduce emissions of air pollutants by 13% from 2008 to 2016.
Agreement for Voluntary Chemical Reduction (2013-2017)	Reduce emissions by 60% from 2009 to 2017(achieved the target reduction of benzene).
Voluntary Agreement for Soil Preservation [2013-2023]	Prevent soil contamination by oil spills and perform voluntary inspection and recovery.

#### Compliance with New Legal Requirements

Act	Activities
Chemicals Control Act(2015)	<ul> <li>External impact evaluation/Hazard control plan TF activities.</li> <li>TF activities for improving facilities under the Chemicals Control Act.</li> <li>Distribute personal protective gears under new regulations.</li> <li>Apply stricter rules on reporting.</li> </ul>
Act on the Registration and Evaluation, etc. of Chemical Substances (2015)	Build a chemicals control system(improve the purchase process, etc.)     Register chemical substances.
Clean Air Conservation Act(2015)	Upgrade the prevention facilities to improve their efficiency (e.g. replacement of NOx reductors and catalyst in SOx elimination process).

#### Environmental Monitoring System

System	Description
Onsite Measurement	Conduct measurement and analysis on a regular basis(e.g. air, water, waste materials).
TMS* Measure and control air/water pollutants in real time.	
LDAR**	Monitor VOC and LDAR.
Protection Kit Control System	Check and manage the inventory of protection kits.
Plant Drainage Control	Install oil detectors, pH meters and CCTVs.
Typhoon Monitoring System	Analyze the time of impact and take proactive measures against typhoon for Yeosu complex.
SHE System	Conduct general environmental management.

<sup>\*</sup>Tele-Monitoring System / \*\*Leak Detection And Repair

#### Environmental Indicators

	Indicator	2012	2013	2014
	Dust	179	202.6	189.1
Volume of Air Pollutants	Nitrogen oxide(NOx)	3,410	4,279.7	4,010.9
(Ton)	Sulfur oxides(S0x)	7,113	7,644.8	
	Carbon monoxide(CO)	457	79         202.6         189.1           410         4,279.7         4,010.9           113         7,644.8         8,541.3           57         428.1         775.9           /5.8         30/5.8         30/4.8           /69.3         150/73.4         150/64.2           /55.8         180/58.1         180/55.5           /29.3         200/21.3         200/34.7           .19         169.28         145.45           3.37         157.13         161.79           .83         103.22         97.27           1.54         30/6.80         30/5.42           2.18         40/10.17         40/8.97           1.19         30/5.83         30/2.99           927         20,542         19,796           727         19,047         18,026           0072         23,744         24,525           0057         24,230         24,775           939         6,777         9,220           60         562         602           741         1,734         1,647           32         323         466           50         61.3         136.1	
	Dust	30/5.8	30/5.8	30/4.8
Concentration Level of Air	Nitrogen oxide(N0x)	150/69.3	150/73.4	150/64.2
Pollutants <sup>1)</sup> (ppm. Legal Req./ <b>GS</b> )	Sulfur oxides(S0x)	180/55.8	180/58.1	180/55.5
	Carbon monoxide(CO)	200/29.3	200/21.3	200/34.7
	Biochemical oxygen demand(BOD)	66.19	169.28	145.45
Volume of Water Pollutants	Chemical oxygen demand(COD)	118.37	157.13	161.79
(1311)	Suspended solids(SS)	80.83	103.22	97.27
Concentration Level of Water	Biochemical oxygen demand(B0D)	30/1.54	30/6.80	30/5.42
Pollutants 2)	Chemical oxygen demand(COD)	40/2.18	40/10.17	40/8.97
(ppm. Legal Req./ <b>GS</b> )	tentration Level of Water Pollutants [Ton]  Chemical oxygen demand(COD) 118.37  Suspended solids(SS) 80.83  Biochemical oxygen demand(BOD) 30/1.54  Chemical oxygen demand(COD) 40/2.18  [ppm. Legal Req./GS) Suspended solids(SS) 30/1.19  Designated waste 16,927  Recyclable 18,072	30/1.19	30/5.83	30/2.99
	Designated waste	16,927	20,542	19,796
Volume of Waste Material	General waste	15,727	19,047	18,026
(1011)	Recyclable	18,072	23,744	24,525
Volume of Waste Water(Ton/Day)	Annual average	22,057	24,230	24,775
	Caustic soda(Na0H)	4,939	6,777	9,220
Use of Hazardous Chemicals	Sulfuric acid(H <sub>2</sub> SO <sub>4</sub> )	460	562	602
(Ton)	Hydrochloric acid(HCl)	1,741	1,734	1,647
	Ammonia(NH <sub>3</sub> )	32	323	466
	Waste water & ocean contamination	150	61.3	136.1
Environmental	Air	300	184.6	12.2
Investment 3)	Volatile organic compounds	55	3.9	49.6
(KRW 100M)	Soil contamination	6	17.7	73.3
	Misc.	80	18.4	7.3

Note 1) Dust/S0x/N0x: Effluent quality standards and average concentration level of standard heaters and boilers.

CO: Effluent quality standards and average concentration level of incinerators.

Note 2) Effluent quality standards and concentration level of ocean effluence.

Note 3] The values for 2012-2013 are based on the Yeosu complex base while those for 2014(and onward) are based on the corporate-wide results.

#### GHG/Energy Management Plan



- Review opportunities to
- reduce energy consumption.
   Predict GHG emissions/reduction.



- Invest in reduction facilities.
- Introduce energy management system.
  Implement and respond to the goal
- Implement and respond to the go management system.



- Manage EII(Energy Intensity Index)\*
- Collect data on GHG emissions



- Reduce energy costs
- Achieve the reduction target in advance.
- \*EII(Energy Intensity Index)
  Developed by Solomon in the U.S. to compare energy efficiency by refinery process, the Energy Intensity Index(EII) indicates the amount of energy actually supplied to a process against the amount of energy required per production unit. If energy efficiency goes up, then the consumption per unit goes down and thus, the EII.

#### Reinforcement of GHG & Energy Management

At **GS** Caltex, we maintain the highest level of greenhouse gas and energy efficiency improvement activities including various energy innovation programs and the Solomon-Study program. As a result, we became the first domestic oil company to be certified by ISO 50001. We enact initiatives and implement the internal cap-and-trade system(**GS**-ETS) to promote the voluntary reduction of emissions as part of our proactive GHG and energy management.

#### **GHG Management Activities**

At **GS** Caltex, we engage in various activities under our mid and long-term carbon management plans in response to the change from the GHG/Energy Target Management System to GHG Cap-and-Trade System. To earn trust in terms of quantity, which is the most important aspect of the system, we constantly improved our MRV(Measuring, Reporting, Verification) System and organized a GHG task force to analyze the system and follow the reduction process while assigning the roles and responsibilities to organizations of interest. In addition, we established a procedure to reflect the result of impact analysis in our decision-making process while maintaining active communication with the refining industry and the government agencies including the Korea Petroleum Association as part of our commitment to system's advanced operation. At this time, we completed our application for quota under the operating guidelines and earned the quota for 3 years under the first planning term(2015-2017) in 2014. Based on our mid and long-term carbon management plan, we set the estimation on GHG and will continue our sustainable GHG reduction activities in consideration of various factors including the case studies, quota deferment and loan, and any additional flexibility measures.

#### **Energy Management Activities**

Due to the global economic recession and falling oil prices and increasingly strict regulations on climate change, the efficiency of production facilities including energy saving is now an essential part of corporate management. At **GS** Caltex, we implement our energy reduction programs by organizing a TF. We establish improvement plans for processes with pending maintenance schedules by undertaking study activities and invest in them to improve their efficiency. Recently, we invested in the atmospheric distillation process in 2014 based on the reduction plan established in 2012. We will continue this type of investment in the future. In addition, we set the goal for energy reduction by process each year and organize workshops and meetings on a regular basis to share ideas for saving energy as part of our daily management activities. As a result, we came up with more than 60 new ideas for energy efficiency and implemented them. Furthermore, we use our energy portal system to monitor consumption and improvement activities on a daily basis. Thanks to these activities, we saved about KRW 50 billion at our Yeosu complex in 2014 and reached a world-class level in the energy efficiency index and carbon emission index, setting a great example for other companies.

#### GHG Emissions(Unit: tCO2eq)

Туре	2012	2013	2014
Scope ① Direct Emissions (fixed combustion, mobile combustion and process emission)	6,283,089	6,824,874	6,500,458
Scope ② Indirect Emission (externally purchased steam and power)	1,348,271	1,601,917	2,024,761

#### Energy-Related Index (Unit: TJ)

Туре	2012	2013	2014
Scope ① Direct Energy Consumption  (all sources of energy excluding purchased power and steam)	87,458	91,937	88,292
Scope  Indirect Energy Consumption  [purchased power and steam]	11,596	13,415	17,270
Annual Energy Reduction	2,303	2,475	2,919

Value No.1 Energy & Chemical Partner
MATERIAL ASPECT .4

Major stakeholder G4 Aspect

overnment/Community/NG0/Employees/Partners Occupational Health and Safety/Asset Integrity and Process Safety



## Reinforcement and Dissemination of Safety System

Preventive activities for potential accidents related to safety are essential for gaining competitive advantage.

At **GS** Caltex, we are constantly reinforcing and promoting our safety systems in all areas of our business.



#### Duties of Each Position in IIF Program



Actively express the opinions for safety



#### Coaching IIF in Action

Give directions to workers in an effective manner for safe operation.



Provide education on organizational behaviors and establish safety culture.

Safety & Health Performance Indicator

#### TRIR\*(Total Recordable Incident Rate)



#### **DAFWR\*\***(Day Away from Work Rate)



- \*TRIR(Total Recordable Incident Rate)
  Number of incidents(any injuries, illnesses and fatalities
  excluding those equivalent to or less serious than
- excluding those equivalent to or less serious than incidents requiring first-aid) occurred for every 200,000 working hours.
- \*\*DAFWR(Day Away From Work Rate)
  Number of incidents that cause a loss of one or more days' work per every 200,000 working hours.

#### **Dissemination of Safety Culture**

At **GS** Caltex, we place the highest priority on safety and ensure that all our employees and partners set a high standard and establish a positive safety culture. Since 2014, we appointed CSO(Chief Safety Officer) who reported directly to CEO to respond to changes in SHEQ in a more effectively, timely manner and enhance our Safety First Leadership. In addition, we organized Safety Assessment Team for safety assessment, incident investigation to fine root causes, risk assessment and safety & environment audit, and PSM Team for process safety management at Yeosu complex to strengthen organizational capability and maintain world class safety performance.

#### Safety Culture based on Communication & Trust

At **GS** Caltex, we introduced the IIF(Injury Incident Free) Program with aim to ensure safety of our employees and promote communication in potentially unsafe conditions for the first time in the industry. The program allows us to assign roles to workers, supervisors, and managers and share knowledge and action plans through job training while fostering internal facilitators to promote our safety culture. In 2014, we implemented various safety management programs to incorporate our process safety management system into our daily activities and ensure that leaders set good examples for their teams.

#### Process Safety Management

At **GS** Caltex, we operate our onsite safety management system through which we established the PSM(Process Safety Management) System under the Industrial Safety & Health Act to promote voluntary compliance with safety standards and prevent major industrial incidents. As of 2014, our Yeosu complex received the highest grade(P) in four out of five sub-divisions, and nine of our logistics centers achieved the highest grade. Meanwhile, our R&D center and Incheon lubricant production facilities introduced KOSHA 18001. Since then, they have maintained their certification status through making continuous improvements.

#### Cooperation with Partners on Safety Management

At **GS** Caltex, we are operating various programs to motivate our partners' employees to comply with our safety guidelines and raise their awareness in safety. We foster experts in risk assessment through our cooperation program and use it to prevent incidents through various support programs including mutual growth cooperation group, safety environment contest and reward program, and KOSHA 18001 certification program. In addition, we support incident and injury free resolution conference and job certification for high risk work to help our partners improve their safety management practice.

#### **Emergency Response System**

#### Enhancement of Emergency Response Capability through Emergency Drills

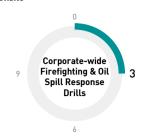
At **GS** Caltex, we revised our entire emergency response manual and applied it in our emergency drills to reflect the recent industrial incidents and events. The revised manual specifies the roles of our employees and local citizens in the event of an emergency from its early stage, as well as communication with the government to ensure more consistent and effective response and minimize the environmental impact. We conduct our emergency drills at both the corporate-wide level and organizational level under the supervision of the Emergency Response Committee while organizing a joint prevention drill with the Coast Guard Safety Bureau and Korea Marine Environment Management Corporation to improve the level of response to oil spills in real life situations and develop expertise in the identification of information, rescue activities, material detection, boundary setting, spilled material recovery, and use of personal protective gear.

#### Efficient Emergency Response & Equipment Maintenance

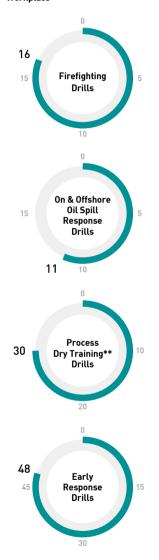
At **GS** Caltex, we operate emergency response teams at our headquarters and each business operation to respond to industrial incidents such as fire and oil spill and minimize loss of life and property damage. At our Yeosu complex, more than 200 first-line emergency agents and 100 daily duty workers as second-line agents are ready to respond to emergency situations.

Emergency Response Drills in 2014 (Frequency)

#### Onsite



#### Workplace\*



- \*The drills at the workplace are based on the Yeosu complex, and internal drills are conducted under the guidelines of each workplace.
- \*\*A type of drill based on an emergency response scenario.

In addition, the facilities are equipped with seven chemical fire engines, 2 fire engines, 4 oil spill recovery vessels, three fire boats, and 10 ladder trucks and cargo cranes in case of any industrial incidents in proximity to our site.

#### **Proactive Risk Management**

#### Risk Analysis on Wharf Facilities

When it comes to petrochemical production facilities, wharves play a significant role in the entry and release of materials and products and are important to consider avoiding serious incidents. At **GS** Caltex, we organized a dedicated team of experts specializing in vessel, risk assessment, and wharf facilities to inspect the wharf facilities in the Yeosu complex and nationwide logistics centers and conduct the self-assessment on our safety operation and emergency response system. We address any areas of improvement and maintain the safety of our vessel and wharf system.

#### Safety Assessment in Design & Planning Stages

To prevent even the smallest issue in the design and construction stages that can lead to serious incidents, we are operating the Project Safety Management Process through which experts in safety, environment and facilities identify risk factors from the designing phase of a new project. We introduced 'Periodic Safety Review during Construction' and 'Pre-Startup Safety Review' for the first time for petrochemical production facilities. As a result, we managed to save maintenance costs and significantly reduce the incident rate for projects. In addition, we conduct a safety inspection to improve the facilities, systems, and protocols from the maintenance planning stage when it comes to processes that require maintenance work. We also use cutting edge 3D modeling techniques to measure and minimize the impact of noise when undertaking a new project.

#### Safety & Health Training

At **GS** Caltex, we established our Safety Training Center on a land area of 19,000m² where our employees and employees from our partners learn how to identify risk factors in workplaces and experience incidents in real life. The facilities include 24 indoor and outdoor training courses, video room(with 40-70 seats) and a display room with personal protective gears for more professional and effective training sessions. When it comes to high risk jobs, we provide practice-based training and a qualification system. Our new employees are required to take more than 60 hours of safety and health training programs that cover such topics as protective gear, firefighting, emergency response, and human errors.

#### Safety & Environment Audit

Our Safety Environment Audit enables us to check compliance with safety regulations and identify any vulnerabilities in our safety environment system while generating new ideas for safety. At **GS** Caltex, we conduct our own safety & environment audit on all business operations each year in addition to the internal audit on safety and environment. In 2014, we organized a dedicated safety assessment team to carry out the safety & environment audit and discuss ways to improve and achieve incident and injury free workplaces.

#### **Employee Health Management**

At **GS** Caltex, we provide various health care programs including a musculoskeletal disorder prevention program, smoking cessation program, and healthcare lecture to help our employees lead healthy and productive lives. For our Yeosu complex, we are operating a medical clinic with a team of dedicated professionals including doctors, nurses, medical technologists, and emergency medical technicians as well as provide cutting-edge equipment to ensure that our employees are provided with emergency medical services, blood testing, hearing test and X-ray services, as well as thorough follow-up care in an efficient manner. In addition, we provide various health care supports including MSDS management and training programs on wearing protective gear and work environment control to further enhance our employees' health and well-being.

Major stakeholder G4 Aspect

Employees/Unions Employment/Training and Education



#### **Employee Value Enhancement**

Human resources are the most sustainable and competitive advantage for any organization. At **GS** Caltex, we focus on developing our human resources and providing various supports for employees to grow professionally.



No. of Employees(Unit: Person)



Employee Salary(Unit: KRW 100M)



Average Years of Employment [Unit: Year]



#### **Employment & Retention of Human Resource**

At **GS** Caltex, we recognize the importance of human resource and seek passionate, creative individuals who will lead the future of the energy industry. We value diversity and actual qualifications of our employees rather than focusing on their academic background. To do this, we reset the score of applicants in each stage of the hiring process, and our interviewers are not allowed to view their academic records: applicants are thus judged based on their level of competency. In addition, we have introduced an academy-industry internship program, chemical engineering leadership, and mentoring program to recruit talented, qualified individuals. The academy-industry internship program combines an academy-industry scholarship program and internship program to provide an opportunity for applicants to prove their qualifications and experience what it is like to work for our company. The chemical engineering leadership is a course that is co-established by the company and the university and allows the executive officers of the company to share their know-how and knowledge in practice with students. The mentoring program helps students to gain a working knowledge and understanding of business practices from our employees.

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 jobs and positions and ensure that their performance is evaluated based on their roles and responsibilities in a fair and objective manner. We closely align employees and business goals to drive success and have our employees prepare a report on how to achieve their job performance. Each year, we conduct a mid-term review on their progress and seek ways to improve their performance through self-reflection and constructive coaching. 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 observation at all times and implement the follow-up interview and feedback. The objection system about result of evaluation is also implemented.

The level of compensation for our employees is determined based on our business performance, increase in prices, external and internal working environment, and competitiveness while ensuring that compensation is in line with performance through our performance management system. We apply a fixed amount of pay raise for each pay grade and consider the same level of performance as the same level of contribution while taking into account the result of the performance evaluation, contribution, and value when determining individual compensation. High performers are rewarded with additional incentives to motivate our employees to improve their performance. As a result, the level of compensation for our employees varies depending on performances, and the base salary of the highest earner is 8.4 times of the average base salary of employees excluding him in 2014. At **GS** Caltex, we will continue to improve our compensation system to make sure that our employees' performance is fully recognized and rewarded in a transparent, fair manner.

#### Talent Development

At **GS** Caltex, we believe human resources are the most important asset needed to realize our vision of 'Value No. 1 Energy & Chemical Partner'. That is why we have established our competency model based on '**GSC** Way', 'Job Competency' and 'Leadership' for our talent development. We focus on developing expertise and leadership skills based on corporate values and core behaviors by providing all our employees with practical programs helpful in achieving performance goal. Our programs are designed with a focus on substance and include leadership training, job training, coaching/mentoring, various practice courses, and external qualification courses. Every member of our organization can freely choose any training programs guided by his/her competency level, while additional long and short-term training programs are available for talented employees.

#### Talent Development Model



Development of leadership competency based on market environment and business strategy.



Job Competency (Common Areas/ Specialized Areas)

#### Business Acumen (Refinery Process, Finance)

Communication Creativity Analysis/Planning Job Competencies by job

category

Job Competency consists of common areas required of all employees and specialized areas based on each job category.



#### GSC Way

(Corporate Values

Trust/Flexibility
Challenge/Excellence
Proactive
Collaboration
Performance-Driven

Our fundamental values and code of conduct required of all **GS** Caltex people are promoted with corporate values and core behaviors.

#### Leadership Development Programs

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. 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 executives and team leaders to help them improve the leadership skills required to perform their duties. Our internal coaching program helps employees to adapt to organizational environment and bring out their full potential. Our mentoring program in which team leaders or seniors play the role of mentors is also available to new employees on 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 refining process and corporate finance as well as courses for improving individual communication skills, creativity, and skills of planning and analysis. The specialized areas are developed with analysis of all the jobs and tasks in our organization and built into training programs.

#### High Potential Individual Development

At **GS** Caltex, we believe talent development is an essential part of sustainable growth. We provide selected high potential individuals with the opportunity to earn various academic degrees including MBA in eminent domestic or global colleges and training program 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.

#### Welfare and Benefits for Work-Life Balance

#### **Health Care System**

We provide annual medical check-ups for all our employees and their spouses as part of our employee health care program. Employees over 35 years of age receive full medical check-ups every year, while their spouses over 35 years of age receive the check-ups every other year. In addition, we cover full medical expenses not only for our regular employees but also for their spouses and underage children. We also make sure that our employees get diagnosis and prescription services at the medical clinics located at the headquarters and the refinery.

#### Resort Facilities Support System

As part of refresh and recharge program for our employees, we provide condominiums (205 accounts) and resort facilities all year around. We cover a part of the accommodation expenses for the resort facilities, and specially during summer vacation, resort facilities in some of our employees' favorite locations (e.g. Seoul, Gangwon, Baekam, Yeosu, Haeundae) are provided free of charge.

#### **EAP**(Employee Assistance Program)

Our Employee Assistance Program is designed to help our employees deal with job-related stress, career development, child care, and legal issues. Via this EAP, employees can get helps with one-on-one counseling by designated specialists regarding diverse issues, organizational and individual. This counseling service is provided by the company free of charge.

#### **Jiyeseul Childcare Center**

In order to ease employees' burden of child rearing, company runs a childcare center located near the headquarters in Seoul. The childcare center building is composed of two ground floors and one underground floor on a land area of 430 m². The center can accommodate up to 58 children, and it is managed by a professional childcare service provider. There are 11 nursing teachers, who provide age-based childcare programs for children between 1 and 4 years of age. The company pays the full cost of operation, excluding government support and expenses for special activities.

#### **Club Activities Support**

As part of our employee welfare program, we provide monetary support for leisure clubs up to KRW 1.6M per club a year, including special support for the clubs' external event participation. Currently, there are more than 50 clubs with over 1.700 members.

#### **Promotion of Internal Communication Channels**

At **GS** Caltex, we operate the 'Junior Board' and 'Nanumteo' to promote our internal communication. The Junior Board is a communication channel that generates new and creative ideas and presents people's opinions directly to the top management. The members are selected from managers and assistant managers once a year. Since its establishment in October, 1993, a total of 384 members have served the board for 22 years(41st members at present). Until now, 162 ideas have been presented, 56% of which have been implemented. The Nanumteo is an online bulletin board where our employees can share their ideas and thoughts while discussing ways to improve their work processes and presenting ideas for new business. Since 2003, 174 ideas have been registered each year on average. These ideas are reviewed by individual teams for application in practice.

#### HR-Related Indicators

	tem	Unit	2012	2013	2014
Training Hours/Employ	/ee	Hour(s)	79.1	68.2	56.3
	Executive Officer		52	54	55
	Office Staff		1,542	1,535	1,450
	Production Engineers		1,331	1,358	1,313
No. of Employees by Employment Type	Support	_	52	53	51
Employment Type	Contract, Dispatched		212	187	152
	Misc.	Persons	63	46	38
	Total	- 1 0130113	3,252	3,233	3,059
No. of Employees by Location	Seoul, etc.	_	1,566	1,507	1,406
	Yeosu		1,686	1,726	1,653
	Total		3,252	3,233	3,059
No. of Retirees			303	236	322
Rate of Retirement		%	10.7	7.3	10.5
Rate of Female Employ	/ees	%	11.4	8.6	10.4
Rate of Employees with	n Disabilities	%	1.54	1.59	1.71
Labor Union Members		Members/Eligible	1,302/1,799	1,299/1,717	1,298/1,769
No. of Labor Dispute Ca	ases	Case	0	0	0
Annual Training Invest	ment(excl. indirect cost)	KRW 100M	72.8	64.2	31.5
Years of Employment		Year	14.2	14.6	15.1
Salary of	Production Engineers		3,184	3,285	3,285
New Employees	Office Staff	KRW 10,000 -	4,010	4,150	4,150
Newly Employed		Person	187	76	50

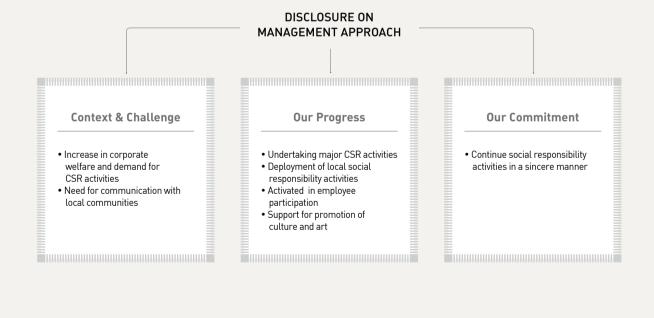
 $\divideontimes$  Certain employee data may be different from the previous report due to changes in criteria.

Major stakeholder G4 Aspect

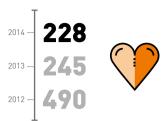
Community/Employees/NGO Indirect Economic Impacts/Local Communitie

## Corporate Social Responsibility Activities

At **GS** Caltex, we undertake social responsibility activities in consideration of our business areas and local communities with active participation and support from our employees.



Investment in CSR Activities (Unit: KRW 100M)



#### **Undertaking Major CSR Activities**

At **GS** Caltex, we launched 'Mom Talk Talk' to help underprivileged children relieve their psychological distress as part of our major CSR activities. For 2 years starting in 2013, more than 4,300 children suffering from depression, anxiety, lethargy, and aggressiveness have experienced the Mom Talk Talk at nationwide local centers, support organizations, and 'Yeosu Culture & Arts Park - **GS** Caltex Yeulmaru'. In order to improve the quality of psychotherapy for children, we help train therapists and provide various support programs, including a healing class for middle school students and facilities support at the local centers. In 2015, we are providing the Mom Talk Talk program to help students adapt to their schools and eliminate school violence in collaboration with the Wee Project organized by the Ministry of Education.

We also organized training programs for therapists with top experts in fine art, theater, dance/ choreography to further improve its quality. A dedicated team of more than 40 professional therapists were carefully selected through a strict qualification process and in-depth interviews with professors. They have attended more than 150 hours of theoretical study and practice, as well as case study presentations and supervision to improve their expertise.

At 19 Mom Talk Talk Network Centers nationwide including Good Neighbors Joeun Maum Center(cumulative), the therapists counseled more than 2,700 children for the last 2 years. Based on our experience and know-how we have accumulated over the years, we are now collaborating with the Ministry of Education to the Mom Talk Talk to the Wee Center. The center provides teenagers with counseling on school violence and adaptation to school life as a counseling organization under the District Office of Education. Through Mom Talk Talk, we provide group art therapy and emotional support for children.

'Mom Talk Talk Camp' takes place at the Yeosu Culture & Arts Park - GS Caltex Yeulmaru for 3 days, providing 8 sessions of intensive art therapy in combination of painting/playing, music/choreography, and music/painting, and each session lasts 90 minutes. Thanks to all the hard work and dedication from therapists, supervising professors, and volunteers, and the natural environment of GS Caltex Yeulmaru overlooking the sea, the camp provides a great healing effect for participants.

**'Middle School Class Healing'** is a part of the Mom Talk Talk program designed to help students overcome academic pressure, bullying, and school violence by developing social skills and self-esteem. Therapists provides art therapy in various forms including play/painting, dancing/painting, and music/painting for groups of 10 or more students for 12 times a year.

Mom Talk Talk Program Summary

Year	Center Therapy		Camp		Class Healing		Takal
rear	Centers	Children	Camps	Children	Schools	Children	Total
2013	13	1,410	6	738			2,148
2014	16	1,278	2	292	3	560	2,130
2015(Scheduled)	31	1,391	4	250	26	1,632	3,273
Total		4,079		1,280		2,192	7,551

**GS** Caltex Love Sharing Center



#### CSR Activities for Local Communities

As part of local communities, **GS** Caltex accepts its responsibility for the improvement and welfare of the communities. To prevent and solve problems and to assist development of the communities, **GS** Caltex actively engages in CSR activities in Yeosu where our major complex is located.

#### **GS** Caltex Love Sharing Center

Since May 2008, we provide free meals for more than 350 senior citizens 5 days a week as part of our '**GS** Caltex Love Sharing Center'. In 2014, 85,935 meals were provided, which makes 527,389 meals in total so far. The program is supported by the **GS** Caltex Employees' Wives Club, the **GS** Caltex Retired Employees Club and 16 local women's voluntary service groups with 18 volunteers participating each day. As of 2014, 26,637 volunteers were recorded to have participated in this program.

#### Hope Energy Class for Local Children's Center

Since 2010, we have organized the 'Hope Energy Class for Local Children's Center' where volunteers participate in various experience and learning programs to help underprivileged children pursue their dreams. In 2014, more than 200 volunteers provided over 1,500 children from 39 local children's centers with various programs including career planning, job experience, Korean history, painting/crafting and psychotherapy.

#### English Lesson with Native Speakers in Remote Areas

Since March, 2007, we have provided 'English Lesson with Native Speakers in Remote Areas' for students living in places with inadequate educational resources. In 2014, native English speaking teachers visited 13 schools with more than 190 students on the islands and gave weekly English lessons.

#### **GS** Caltex Scholarship Program

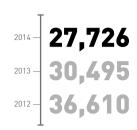
At **GS** Caltex, we have awarded scholarships to middle, high and college students in Yeosu since 1996 as part of our human resource development program. In 2014, our scholarship amounted to KRW 250 million with more than 240 students, making our total scholarships worth KRW 5.7 billion with about 7,700 students.

#### **Active Employee Participation**

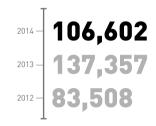
At **GS** Caltex, we are engaging in various employee participation programs nationwide. Our corporate-wide volunteer service activities have taken place in May around the anniversary of our incorporation while our employees donate more than 3,000 personal items through the 'Weaja flea market' every October. At the end of each year, we take part in various volunteer service programs including briquette delivery service for senior citizens, special meals at welfare facilities, and Christmas presents for orphanage. As of 2014, more than 7,200 employees have volunteered for these programs.

Individual volunteer activities are also actively carried out in each region including the headquarters and Yeosu complex. There are 28 individual volunteer groups organized at the Yeosu complex, and they participate in more than 20 volunteer activities each month, providing electrical and boiler repair service, taking pictures for funerals, and supporting the experience disabilities program. In addition, our employees volunteer to join one-on-one mentoring programs for teenagers, support meal services at welfare centers, help people with disabilities enjoy outdoor activities, and improve living environments for teenagers from low income families. A total of 251 individual volunteer activities were carried out with 1,715 participants in 2014.

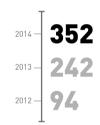
Total Hours of Employees' Volunteer Activities



Annual No. of Visitors to Yeulmaru (Unit: Person)



Annual No. of Concerts & Exhibitions



Meanwhile, we are actively participating in various donation programs. The amount of our employees' donations reached KRW 800 million in 2014. More than 1,500 employees donate each year, and the company matches the amount of their donation through our 'Matching Grant' system. Furthermore, our labor union members donate and raise a social service fund which is used as a resource for providing free meals after school hours and school uniforms for middle school students from low income families. The company also matches the donations made by union members.

#### Promotion of Culture & Art through Yeulmaru

Opened in May 10, 2012, the Yeosu Culture & Arts Park - **GS** Caltex Yeulmaru is a landmark of the south coast of the Korean Peninsular, which the **GS** Caltex invested more than KRW 110 billion. The name 'Yeulmaru' carries the meaning of 'a space full of rolling waves of culture and art and where people can relax as if they are lying down on a floor of a traditional house', and it represents a great example of collaboration among a corporation, local government, and communities for building infrastructure for culture and art as part of the commitment for mutual benefits and sustainable growth.

It is fully equipped with the state-of-the-art audio and lighting facilities with Grand Theater and Small Theater with 1,021 and 302 seats, respectively. The park also features multi-purpose exhibition halls 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 the opportunities to enjoy quality cultural and art contents after EXPO 2012 Yeosu. In 2014, some of the long-time favorite musicals such as 'Guys and Dolls' and 'Broadway 42nd Street' were put on the stage as original performances, making Yeosu a popular tourist destination in Korea. The 'Person and People' sculpture exhibition was held to celebrate its 2nd year anniversary, and it portrayed people's lives from multiple perspectives and established personal connections with audiences. The exhibition 'The Arts in Textbooks' provided a great opportunity to see masterpieces we had only seen in textbooks, and it was a popular attraction for students on their winter break and people from all generations.

Yeulmaru is diversifying its efforts to grow as a leading culture and arts space in Korea. Taking the year 2014 as a starting point for achieving excellence in customer service, we established an online and offline feedback system and conducted customer satisfaction surveys as part of our efforts to increase and improve our communication channels. In addition, we provided educational lectures on various subjects including classical, fine art history, travelling for cultural experiences, and humanities, as well as practice lessons on vocal music and musicals in English language to further extend cultural experience. From 2014, we are hosting the 'Music Camp with Yonsei University' each year as part of our CSR activities for art education.

#### Consolidated Statements of Financial Position(Unit: KRW 1M)

Category	2014	2013
Assets		
Cosh and each equivalents	E00 00E	/00 721
Cash and cash equivalents	509,005	600,721
Accounts and notes receivable	2,714,803	3,266,605
Short-term financial assets	982,721	1,130,636
Inventories	3,593,104	5,210,040
Prepaid income taxes ————————————————————————————————————	4,652	364
Other current assets ——————————————————————————————————	487,019	594,085
Total current assets	8,291,304	10,802,45
Non-current assets		
Long-term financial assets	352,851	399,028
Investments in associates	274,037	282,860
Property, plant and equipment	10,372,965	10,655,48
Investment property	36,534	44,969
Intangible assets	62,762	64,392
Deferred income tax assets	1,027	2,375
Other non-current assets	34,697	33,740
Total non-current assets	11,134,873	11,482,845
Total assets	19,426,177	22,285,29
Liabilities		
Current liabilities		
Accounts payable-trade	2,250,137	3,346,710
Short-term financial liabilities	3,438,786	3,763,590
Income taxes payable	5,133	69,019
Other current liabilities	113,332	145,09
Total current liabilities	5,807,388	7,324,41
Non-current liabilities		
Long-term financial liabilities	5,184,413	5,541,949
Employee benefits	87,645	32,05
Deferred income tax liabilities	137,587	279,823
Other non-current liabilities	66,090	97,38
Total non-current liabilities	5,475,735	5,951,215
Total liabilities	11,283,123	13,275,630
Equity		
Common stock	260,000	260,000
Capital surplus	66,270	66,270
Capital adjustments	-59,129	-58,92
Accumulated other comprehensive income	-1,340	14,193
Retained earnings	7,877,253	8,728,129
Equity attributable to owners of the Parent Company	8,143,054	9,009,666
Non-controlling interests	. ,	,,=0
Total equity	8,143,054	9,009,666
Total liabilities and equity	19,426,177	22,285,296

#### Consolidated Statements of Income(Loss) (Unit: KRW 1M)

Category	2014	2013
Sales	40,258,357	45,659,771
Cost of sales	-39,896,451	-43,919,469
Selling, general and administrative expenses	-818,231	-840,222
Operating profit(loss)	-456,325	900,080
Share of profit(loss) of equity method accounted investees	-12,203	-7,677
Finance income	1,160,144	1,197,077
Finance costs	-1,535,928	-1,455,374
Other income	544,323	264,890
Other expenses	-498,065	-371,701
Profit(loss) before income taxes	-798,054	527,295
Income tax benefit(expense)	121,840	-153,628
Profit(loss) for the year	-676,214	373,667
Profit(loss) attributable to:		
Owners of the Parent Company	-676,214	373,667
Non-controlling interests		-

#### Consolidated Statements of Comprehensive Income(Loss)(Unit: KRW 1M)

Category	2014	2013
Profit(loss) for the year	-676,214	373,667
Other comprehensive income(loss), net of tax:		
Items that will not be reclassified to profit or loss		
Remeasurements of defined benefit liability, net of tax	-25,170	3,168
Changes in equity method accounted investee's retained earnings, net of tax	8	557
Total	-25,162	3,725
Items that will be reclassified subsequently to profit or loss		
Net change in unrealized fair value of available-for sale financial assets, net of tax	-3,243	7,388
Changes in equity method accounted investee's capital, net of tax	386	127
Effective portion of changes in unrealized fair value of cash flow hedges, net of tax	-19,958	-6,637
Foreign currency translation differences, net of tax	7,282	-2,266
Total other comprehensive loss for the year, net of tax	-15,533	-1,388
Total comprehensive income(loss) for the year	-716,909	376,004
Total comprehensive income(loss) attributable to:		
Owners of the Parent Company	-716,909	376,004
Non-controlling interests		-

#### **GRI G4 Index**

#### **General Standard Disclosures**

Indicator	Description	Page	Degree of Disclosure	External Assura
Strategy and	·	r age		
G4-1	CEO statement	05	•	44~45
Organizationa			-	
G4-3	Name of reporting organization	06	•	
G4-4	Primary brands, products, and services	07		
G4-5	Location of the organization's headquarters	06	•	
G4-6	Countries of operation(list of countries where business operations are located or sustainability issues are directly related)	06	•	
G4-7	Nature of ownership and legal form	15	•	
G4-8	Markets served(regional division, areas of business, types of customers/beneficiaries)	06,07	•	
G4-9	Scale of the organization	06,15	•	
G4-10	Breakdown of employment type, contract and regional workforce	35	•	44~45
G4-11	Percentage of total employees covered by collective bargaining agreements	35	•	
G4-12	Organization's supply chain related to key activities, products and/or services	14~15	•	
G4-13	Significant changes during the reporting period		No significant changes	
G4-14	whether and how the precautionary approach or principle is addressed by the organization	11	•	
G4-15	List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses.	43	•	
G4-16	List memberships of associations/such as industry associations/ and national or international advocacy organizations	43	•	
Identified Ma	terial Aspects and Boundaries			
G4-17	List of all entities including key business units, operating companies, subsidiaries and joint venture companies	06	•	
G4-18	Defining report contents	12~13	•	
G4-19	Material aspects identified in the defining process	12~13	•	
G4-20	Aspect boundary within organization	16,20,24,29,32,36	•	44~45
G4-21	Aspect boundary outside organization	16,20,24,29,32,36	•	
G4-22	The effect of any restatements of information provided in previous reports, and the reasons for such restatements.	35	•	
G4-23	Significant changes from previous reporting periods in the Scope and Aspect Boundaries	02	•	
Stakeholder I	Engagement			
G4-24	List of stakeholders engaged	12	•	
G4-25	The basis for identification and selection of stakeholders with whom to engage	12	•	
G4-26	Types of engagement, the organization's approach to stakeholder engagement	12	•	44~45
G4-27	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns	13	•	
Report Profile	·			
G4-28	Reporting period	02	•	
G4-29	Date of most recent previous report	02	•	
G4-30	Reporting cycle	02	•	
G4-31	Contact point for questions regarding the report or its contents	03	•	44~45
G4-32	Reporting standard selected by organization	02	•	
G4-33	Policy and current practices with regard to seeking external assurance for the report	02	•	
Governance				
G4-34	Governance structure	09	•	44~45
Ethics and Int	tegrity			
G4-56	Description of the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics.	10	•	44~45

#### Specific Standard Disclosures

#### ECONOMIC

Indicator	Description	Page	Degree of Disclosure	External Assurance	
Economic Perfor	mance				
	Generic DMA	16,24	•		
EC1	Direct economic value generated and distributed	14~15,40	•	44~45	
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	28	•		
Indirect Economi	c Impacts				
	Generic DMA & Aspect-specific DMA	36	•	// /5	
EC7	Development and impact of infrastructure investments and services supported	37~39	<b>—</b> 44~45		
Procurement Pra	octices				
	Generic DMA & Aspect-specific DMA	16	•	44~45	
EC9	Proportion of spending on local suppliers at significant locations of operation	19	•		

#### ENVIRONMENTAL

● Full ● Partial O None N/A Not Applicable

Indicator	Description	Page	Degree of Disclosure	External Assurance
Energy			•	
	Generic DMA & Aspect-specific DMA	24	•	
EN3	Energy consumption within the organization.	28	•	
EN6	Reduction of energy consumption.	28	•	44~45
EN7	Reductions in energy requirements of products and services	23	•	
Emissions				
	Generic DMA & Aspect-specific DMA	24	•	
EN15	Direct greenhouse gas(GHG) emissions(Scope 1)	28	•	
EN16	Energy indirect greenhouse gas(GHG) emissions(Scope 2).	28	•	44~45
EN19	Reduction of greenhouse gas(GHG) emissions.	28	•	
EN21	NOx, SOx, and other significant air emissions.	27	•	
Effluents and Wa	ste			
	Generic DMA	24	•	
EN22	Total water discharge by quality and destination.	27	0	
EN23	Total weight of waste by type and disposal method.	27	•	44~45
EN24	Total number and volume of significant spills.	27	•	
0G5	Volume of discharged and disposed industrial water	27	•	
Products and Ser	vices			
	Generic DMA	20	•	
EN27	Extent of impact mitigation of environmental impacts of products and services	23	•	44~45
Compliance				
	Generic DMA	24	•	,, , <u>,</u>
EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	25~26	•	44~45
Overall	·			
	Generic DMA	24	•	
EN31	Total environmental protection expenditures and investments by type	27	•	44~45

#### LABOR PRACTICES AND DECENT WORK

Indicator	Description	Page	Degree of Disclosure	External Assurance
Employment				
	Generic DMA & Aspect-specific DMA	32	•	
LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	35	•	44~45
LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	34~35	•	
Occupational He				
	Generic DMA & Aspect-specific DMA	29	•	
LA5	Percentage of total workforce represented in formal joint management–worker health and safety committees that help monitor and advise on occupational health and safety programs		• (All workers)	
LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	30	0	44~45
LA7	Workers with high incidence or high risk of diseases related to their occupation	30~31	0	
Training and Ed	ucation			
	Generic DMA	32	•	
LA9	Average hours of training per year per employee by gender, and by employee category	35	•	44~45
LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	33~34	•	

#### SOCIETY

Indicator	Description		Degree of Disclosure	External Assurance
Local Communi	ties			
	Generic DMA & Aspect-specific DMA	36	•	
S01	Percentage of operations with implemented local community engagement, impact assessments, and development programs	38	•	44~45
Anti-Corruption				
	Generic DMA & Aspect-specific DMA	10	•	
S03	Total number and percentage and of operations assessed for risks related to corruption and the significant risks identified	10	0	44~45
S04	Communication and training on anti-corruption policies and procedures	10	•	
Asset Integrity 8	& Process Safety			
0G13	Total number of process safety events performed as part of business activities	31	•	44~45

#### PRODUCT RESPONSIBILITY

• Full	• Partial	O None	N/A Not Applicable

Indicator	Description	Page	Degree of Disclosure	External Assurance
Product and Serv	Product and Service Labeling			
	Generic DMA & Aspect-specific DMA	20	•	// /5
PR5	Results of surveys measuring customer satisfaction	22	•	44~45
Customer Privac	у			
	Generic DMA	20	•	
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data		[Zero customer complaints]	44~45

#### **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 and reported our progress to the COP(Communication on Progress).

At **GS** Caltex, we will continue to improve our compliance with the UN Global Compact and its principles.

Sector	Principles	Related activities	Results(pages)
Human	Businesses should support and respect the protection of internationally proclaimed human rights.	Providing education on in-house sexual harassment prevention and human rights protection	10
rights	Businesses should make sure they are not complicit in human rights abuses.	Running welfare system for employees' work and life balance	34~35
	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	Operating labor union and guaranteeing freedom of engaging in the union Discussing issues related to human rights through the CSR Committee	
	Businesses should uphold the elimination of all forms of forced and compulsory labor.	Abiding to the regulations of the International Labor Organization and the UNGC principles	44.00.05
Labor	5. Businesses should uphold the effective abolition of child labor.	<b>** GS</b> Caltex strictly prohibits every kind of forced labor and child labor in all workplace	11,32~35
	Businesses should uphold the elimination of discrimination in respect of employment and occupation.	Prohibiting discrimination by gender regarding wages, evaluation and promotion Offering equal opportunity of employment online	
	7. Businesses should support a precautionary approach to environmental challenges.	Establishing Environmental Management Principles     Obtaining Certificate of the Energy Management System     Adopting the internal cap-and-trade system(GS-ETS)	24~28
Environ- ment	Businesses should undertake initiatives to promote greater environmental responsibility.	Signing the Voluntary Agreement of Hazardous     Chemicals management with local government and     companies in the Yeosu Complex	24 20
	Businesses should encourage the development and diffusion of environmentally friendly technologies.	Developing High Quality Products     Conducting R&D of Biochemical	17~18
Anti- corruption	Businesses should work against corruption in all its forms, including extortion and bribery	Signing of all employees for the pledge of voluntary compliance  Expanding Voluntary Compliance System and Strengthening the role of Compliance Officer  Run training programs on compliance	10

#### **Third Party Assurance**

#### To the Stakeholders of GS Caltex

The Korea Productivity Center ('the KPC' or 'the assurance provider' hereafter) was commissioned to perform a third-party assurance engagement of the '2014 GS Caltex Sustainable Management Report' (hereafter 'the Report') by **GS** Caltex. The KPC presents its findings as follows.

#### Responsibility and Independence

The responsibility for the information and statements included in the Report lies solely with **GS** Caltex. The KPC is responsible for the assurance findings generated in the Report. As an independent assurance provider, the KPC was not engaged in the preparation of the Report in any other way and does not have any interest in GS Caltex in a way that may hamper its independence as an assurance provider.

#### Assurance Standards

The KPC performed a Type 1 moderate level assurance engagement in accordance with AA1000AS (2008)<sup>1</sup>. Following these assurance standards, the KPC verified the Report against such principles as inclusivity, materiality, and responsiveness in accordance with AA1000APS (2008)<sup>2</sup>. In addition, the KPC verified whether the Report complied with the GRI G4 Guidelines.

#### Limitations

This assurance engagement covers **GS** Caltex's 2014 performance in accordance with the assurance standards stated above. The KPC verified the financial data through financial statements and publicly announced materials. In addition, the KPC verified the environmental and social performance data by performing a Type 1 and sample-based moderate level assurance engagement. On-site inspections were limited to GS Caltex's corporate headquarters in Seoul, Korea. It should be noted that the results may change in cases where additional verification processes are carried out.

#### **Assurance Methods**

The KPC adopted the following methods in assuring this Report.

- The KPC verified whether the Report met the requirements of the Core Option of the GRI G4 Guidelines.
- The KPC verified whether the Report abided by the principles that concern the report content and quality in accordance with the GRI G4 Guidelines.
- The KPC verified the appropriateness of the report content, and any errors regarding the representation of such content, through comparative analyses made with other sources.
- The KPC conducted on-site inspections of the headquarters in Seoul to verify the evidence of major data and information as well as internal process and systems.

#### Findings

The KPC believes that the Report is a sincere and fair representation of GS Caltex's sustainability management initiatives and achievements. The KPC verified that the Report satisfies the requirements of the Core Option of the GRI G4 Guidelines

The KPC has verified that the Core Option's requirements have been met in the case of General Standard Disclosures. As for Specific Standard Disclosures, the KPC has examined the DMA (Disclosure on Management Approach) and Indicators regarding the Material Issues that were derived from the following report item decision process.

Material Aspect	DMA & Indicators
Economic Performance	Generic DMA, G4-EC1, EC2
Procurement Practices	Generic & Aspect-specific DMA, G4-EC9
Employmen	Generic & Aspect-specific DMA, G4-LA1, LA2
Training and Education	Generic DMA, G4- LA9, LA10
Indirect Economic Impacts	Generic & Aspect-specific DMA, G4-EC7
Local Communities	Generic & Aspect-specific DMA, G4-S01, S02
Occupational Health and Safety	Generic & Aspect-specific DMA, G4- LA5~LA7
Asset Integrity and Process Safety	Generic DMA, G4-OG13
Energy	Generic & Aspect-specific DMA, G4-EN3, EN6, EN7
Emissions	Generic & Aspect-specific DMA, G4-EN15, EN16, EN19, EN21
Effluents and Waste	Generic DMA, G4-EN22, EN23, EN24, OG5
Compliance	Generic DMA, G4-EN29
Overall	Generic DMA, G4-EN31
Products and Services	Generic DMA, G4-EN27
Product and Service Labeling	Generic & Aspect-specific DMA, G4- PR5
Customer Privacy	Generic DMA, G4- PR8

#### • Inclusivity: Shareholder Engagement

In compliance with the Principles of Inclusivity, GS Caltex categorizes its stakeholders into nine groups: the government, labor unions, NGOs, subsidiary companies, partner companies, regional communities, customers, stockholders and investors, and employees. The KPC verified that GS Caltex clearly defined the communication channels and expectations of each group and garnered the opinions of its stakeholders through active interaction and dialogue.

#### • Materiality: Selection and Reporting of Key Issues

Based on the issues of the last report, GS Caltex has selected a comprehensive report topic through issues of companies within the same industry, media analyses, and international standards in sustainable management such as the GRI G4 Guidelines, ISO26000, and others. The KPC has also verified that issues that are important to GS Caltex have been selected through surveys of internal and external stakeholders. With regards to the 12 key issues derived from the materiality evaluation, a report scope regarding the stakeholders has been proposed and it has been verified that GS Caltex's current status of responses has been disclosed in each page of the report in a balanced manner.

#### • Responsiveness: Organizational Response to Issues

The KPC verified that the Report properly demonstrates GS Caltex's awareness of the key issues that would impact stakeholder judgment of its performance and that it undertook measures to resolve such issues. Through the Report, GS Caltex is faithfully disclosing the actions and performance of their responses to key issues in sustainable management.

#### Recommendations

KPC rates highly the range of endeavors and achievements made by GS Caltex to advance its sustainability and presents the following recommendations to enhance **GS** Caltex's future reports and its level of sustainability management.

- It is the KPC's opinion that it is important to propose objectives and produce reports regarding their activities and results for making sustainable performance improvements of the key issues. Through such proposals and reports, the stakeholders shall be able to understand the current status of **GS** Caltex's pursuit of sustainable management.
- A continuous and systematic communications channel needs to be established between GS Caltex and the stakeholders. The KPC also recommends a council that can gather the opinions of various outside stakeholders and, through such things as interviews with experts and stakeholders, opinions should be gathered directly and reflected in the sustainable management activities.



Hong Soon-Jick, Chairman and CEO
of Korea Productivity Center

Jamy Sonn Jick



Kim Dong-Soo, Director Lee Yang-Ho, Team Leader Jeong Yeong-Hoon, Expert Adviser

D.S. Kim 1/0/2 -

The Korea Productivity Center Sustainability Management Center is an assurance agency officially certified by Accountability, which established AA1000 (international standards for stakeholder engagement and assurance), and is qualified to perform independent assurance engagements. Our Assurance Committee is comprised of competent experts who have ample experience in sustainability management consulting and assurance and have completed relevant professional training.

AA1000 Assurance Standard (2008): A global assurance standard developed by Accountability that provides methods for reporting on an organization's management of sustainability issues beyond financial indicators including its adherence to the Accountability Principles Standard and the reliability of its sustainability performance information. AA1000 Accountability Principles Standard (2008): Global assurance principles developed by Accountability that provide a framework for the AA1000 standards

<sup>2</sup> AA1000 Accountability Principles Standard (2008): Global assurance principles developed by Accountability that provide a framework for the AA1000 standards.