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LG CHEM

SUSTAINABILITY REPORT

ABOUT THIS REPORT

2013 Sustainability Report Digest

- Included opinions of executives on LG Chem's CSR activities
- Focused on the material issues selected through a materiality assessment
- Listed up the Disclosure on Management Approach (DMA) by issue

Reporting Period

- From January 1 to December 31, 2013 (13th business year)
※Included major activities of 2014 such as participating in the United Nations Global Compact (UNGC)

Reporting Boundary

- **Korea** Headquarters in Seoul, 10 manufacturing sites in Yeosu, Cheongju, Ochang, Ulsan, Gimcheon, Naju, Iksan, Daesan and Paju, and Research Park in Daejeon
- **China** LGCCI, a regional holding company, and 8 manufacturing subsidiaries in Nanjing, Dagu, Tainjin, Beijing, Guangzhou, Bohai, Botian and Yongxing

Reporting Cycle

- Every year since 2006 (latest report: April 2013)

Reporting Principles

- This report is aligned with the Core option in the G4 guidelines of the Global Reporting Initiatives (GRI).
※The GRI Index is presented in pages 72 - 75.
- The economic performance data is presented in accordance with Korean-International Financial Reporting Standards (K-IFRS), and the guidance provided in ISO 26000 and EICC requirements were reflected in the preparation of this report.

External Assurance

- The details of the third-party verification of this report can be found in pages 78 - 79.

More Information

- This report is published in Korean and English, given the diverse stakeholders, and can also be viewed on our website at <http://www.lgchem.com>.

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CEO Message

Dear Stakeholders,

LG Chem achieved KRW 23.1 trillion in sales and KRW 1.7 trillion in operating income last year in the midst of the slow-ing economic growth in emerging countries and depression in demand due to the delayed global economic recovery. Given such difficult conditions, our performance can be considered relatively satisfactory, and further, we continuously strengthened our core competence and competitiveness to gain market leadership in each business domain.

In 2014, the business environment is again expected to be challenging as it was last year. However, with strong determination and passion to lead the market, all executives and employees of LG Chem will make the utmost effort to achieve outstanding results. By securing differentiated competitiveness in existing businesses and advanced tech-nologies and impeccable quality in new businesses, LG Chem will grow into a global leading company.

Global Chemical Company with Sales of Over KRW 30 trillion by 2017

LG Chem will grow into a global chemical company with sales of over KRW 30 trillion by 2017. To that end, we have established the following series of management tasks: ▶ a global material company with strong R&D capabilities ▶ a workplace where talent can follow their dreams ▶ a responsible company that co-exists with society, and we will conduct a variety of activities to accomplish these tasks.

Best 'Solution Partner' that Contributes to Resolving Environmental and Social Issues with its Innovative Materials and Solutions

By figuring out the demands of various stakeholders on the pending environmental and social issues one step ahead and providing materials and solutions helpful to resolve those issues, LG Chem will emerge as a responsible company that co-exists and grows with society.

Responsible Company that Co-exists with Society

To accomplish one of our management tasks, 'a responsible company that co-exists with society,' we restructured our CSR organization in September 2013. CSR Team was newly formed to integrate internal and external communication channels, carefully listening to the voices of diverse stakeholders and planning and executing specific activities.

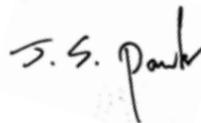
In addition, we joined the United Nations Global Compact (UNGC) in March 2014 to fulfill our responsibility as a global corporate citizen. LG Chem will strengthen its efforts to voluntarily comply with the 10 principles in 4 categories of human rights, labor, environment, and anti-corruption in its business activity at home and abroad.

This Sustainability Report, which is the 8th edition, mainly deals with the issues that stakeholders consider to be significant, and that have been thoroughly discussed over the last year in the aspects of economy, environment and society. In addition, this report covers manufacturing sites not only in Korea but also in China when it comes to the performance of CSR activities.

LG Chem will lay the foundation for sustainable and sound growth by pursuing active interaction and substantial growth with various stakeholders, and thus emerge as a well-respected and market-leading global chemical company. I would like to ask for your continuous support and encouragement.

Thank you.

May 2014
Vice Chairman & CEO
Jin Soo Park




INTERVIEW

What is your best description of 'a responsible company that co-exists with society'?

I often tell the employees at operation sites, "Be faithful to the basics." When we neglect some basic principles to pursue immediate gains or yield to temptation, problems arise from that point. Safety-related accidents, environmental accidents, unethical or illegal actions all occur when we become less faithful to the basics. In this regard, I believe that the first step toward 'a responsible company that co-exists with society' starts from being faithful to the basics.

Thus, LG Chem must be faithful to the basics in its business activities so that it does not have a negative impact on the environment and society. Moreover, it should grow into a company that provides innovative materials and solutions that are helpful in resolving pending and upcoming environmental or social issues through interaction and cooperation with various stakeholders. This is what I think 'a responsible company that co-exists with society' is.

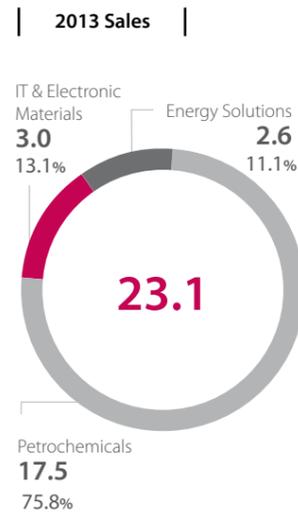
Then what are important factors in becoming 'a responsible company that co-exists with society'?

LG Group considers 'Harmony' as its traditional shared value. Moreover, we practice the LG Way, the core value of the group, based on which we act responsibly for and build trust with customers and society. In this regard, I think LG Chem has the basic constitution to become 'a responsible company that co-exists with society.' However, now is the time for us to step ahead to establish a global-level CSR management system. Among various activities for this purpose, I put much emphasis on safety & environment and shared growth with suppliers. Basic responsibilities, which might be neglected when focusing on short-term results, should never be overlooked.

Last of all, I would like to emphasize that it is important to spread CSR activities throughout the corporate culture. When CSR activities become a part of our corporate culture, they will become our own competitiveness that cannot be easily emulated by competitors, and thus we will be able to have the most ideal appearance of 'a responsible company that co-exists with society.'

Corporate Profile

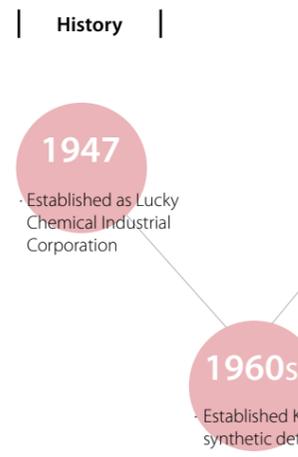
Since its foundation in 1947, LG Chem has served as Korea's representative chemical company, contributing to the development of the national economy and the enhancement of the quality of life through continuous technological development, new product introduction, and quality innovation based on its stable growth. We have established the production, sales, and R&D networks at home and abroad, expanding our business into the global market. We aim to grow into a world-class company that provides innovative materials and solutions by entering and competing in the new material business while pursuing higher value-added in existing businesses and nurturing future businesses centered on IT & electronic materials and energy solutions.



Company Overview	
Name	LG Chem, Ltd
Headquarters	LG Twin Towers, 128, Yeouui-daero, Yeongdeungpo-gu, Seoul, South Korea
Foundation	January 1947
Employees	20,430 persons (12,596 in Korea, 7,834 overseas) as of December 2013

Financial Snapshot	
Total Assets	KRW 17.4 trillion
Total Liabilities	KRW 5.7 trillion
Total Shareholders' Equity	KRW 11.7 trillion
Sales	KRW 23.1 trillion
Operating Income	KRW 1.7 trillion
Net Income	KRW 1.3 trillion

As of December 2013



OFFICE			
	Name	Location	
HQ	LG Chem, Ltd.	Korea	Seoul
			Beijing
			Shanghai
			Guangzhou
			Ningbo
			Chongqing
			Qingdao
			Shenzhen
			Hefei
			Xiamen
Marketing Subsidiary	LG Chem Hong Kong Ltd.	Hong Kong	Hong Kong
			New York
			Houston
			Los Angeles
			San Jose
Representative Office	LG Chem, Ltd. Moscow Office	Russia	Moscow
	LG Chem, Ltd. Bangkok Representative Office	Thailand	Bangkok
	Hochiminh Office	Vietnam	Ho Chi Minh
	Jakarta Office	Indonesia	Jakarta
	Singapore Office	Singapore	Singapore

Manufacturing Subsidiaries			
	Name	Location	Major Products
Korea	Yeosu Complex	Yeosu	NCC, SM, LDPE, HDPE, PVC, VCM, ABS, SAN, EPS, Acrylate, Oxo-alcohol, NPG, SBS, MBS, SB Latex, BPA
	Cheongju Complex	Cheongju	Electrolytes, Cathode materials, PCM, Photoresists, Rechargeable batteries
	Ochang Plant 1	Ochang	Rechargeable batteries, Display materials, Optical materials
	Ochang Plant 2	Ochang	Separators
	Ulsan Plant	Ulsan	Plasticizers
	Daesan Complex	Seosan	NCC, EO / EG, SM, BD, MTBE, B-1, PE, PP, Synthetic rubber, PVC, VCM
	Iksan Plant	Iksan	ABS compounds, EP
	Naju Plant	Naju	Octanol, Butanol, Plasticizers, Acrylic Acid
	Gimcheon Plant	Gimcheon	SAP
	Paju Plant	Paju	LCD glass substrates
China	Tianjin LG DAGU Chemical Co., Ltd.	Tianjin	PVC
	Tianjin LG BOHAI Chemical Co., Ltd.	Tianjin	VCM, EDC
	Tianjin LG BOTIAN Chemical Co., Ltd.	Tianjin	SBS
	Ningbo LG YONGXING Chemical Co., Ltd.	Ningbo	ABS, SAN, SBL
	LG Chemical (Guangzhou) Engineering Plastics Co., Ltd	Guangzhou	EP
	LG Chem (Tianjin) Engineering Plastics Co., Ltd	Tianjin	PC, PBT, PP, PA nylon, ABS
	LG Chem (Nanjing) Information & Electronic Materials Co., Ltd.	Nanjing	Rechargeable batteries, Polarizers
	LG Chem Display Materials (Beijing) Co., Ltd.	Beijing	Polarizers for TFT-LCD
	CNOOC & LG Petrochemicals Co., Ltd.	Huizhou	ABS
	LG Chem (Taiwan), Ltd.	Taipei	Polarizers
USA	LG Chem Michigan Inc.	Holland	Lithium-ion batteries, Battery packs
	LG Chem, Poland Sp. z o.o.	Poland	Wroclaw
	LG Polymers India Private Ltd.	India	Visakhapatnam
	LG VINA Chemical Company Ltd.	Vietnam	Ho Chi Minh
Japan	KLPE E LLP	Astana	Ethylene, PE

R&D Centers		
Name	Location	
Research Park	Korea	Daejeon
LG Chem Power Inc.	U.S.A	Troy
LG Chem, Ltd. Japan R&D Center	Japan	Tokyo

Business Domain

PETROCHEMICALS

LG Chem completed a vertically integrated structure in the petrochemical business through its mergers with LG Daesan Petrochemicals and LG Petrochemical in 2006 and 2007 respectively and takeover of Super Absorbent Polymer (SAP) business in 2008. The new structure enabled the company to generate great synergies among businesses by supplying basic petrochemicals and specialty materials at home and abroad in a stable manner. We strive to strengthen our competitiveness by increasing the proportion of premium products in a downstream process built upon our great cost competitiveness of basic petrochemicals.

LG Chem has responded more effectively to ever-changing market environments by diversifying its business structure and expanding its core businesses around the globe. Also, the company has developed new areas in the petrochemical industry, such as a high-performance/eco-friendly materials business, with its differentiated processes, market-leading products, and new materials development based on its long experience and advanced technology.



01 NCC/PO

LG Chem produces and supplies premium PE / PP with excellent quality recognized in the market.

We produce basic oil fractions such as ethylene, propylene, BD, and benzene through thermal cracking of naphtha and supply them for a variety of plastic products at home and abroad.

02 PVC

LG Chem has been recognized as the No.1 PVC maker in Korea with world-class quality and production capacity.

We are steadily developing new products and accumulating technologies for a wide variety of universal plastics that are used in construction and household items.

03 ABS

LG Chem is leading domestic and international markets as global No.1 ABS maker.

We supply various highly functional ABS materials that are widely used in electric and electronic products, automotive parts, industrial materials, and household items

04 EP

LG Chem is constantly increasing the sales of differentiated and high value-added products to lead the market.

We produce high-functional engineering plastic materials used for electric/electronic products, automotive parts and IT & electronic parts.

05 Acrylates & Plasticizers

LG Chem is a global major player in acrylates and OXO market, growing together with downstream customers.

We are seeking sustainable growth in propylene derivatives business by positioning as one of the major players in the SAP business with the development of eco-friendly plasticizers.

06 Synthetic Rubbers & Specialty Polymers

LG Chem produces and supplies rubbers and specialty polymers for various applications.

Our products include butadiene-based synthetic rubbers for tires and packing, MBS as impact modifier, SBS as asphalt and plastics modifier, latex for paper coating and gloves, and BPA which is the raw material of PC and epoxy.



Business Strategy		2013 Major Performance	
Vision	<ul style="list-style-type: none"> To optimize our portfolio by expanding technology-based business and by strengthening long-term competitiveness of our existing business 	Business	<ul style="list-style-type: none"> Secured the world's first position in NCC energy efficiency Achieved the most sales of ABS by reorganizing business portfolio to increase high profit products such as ASA, and heat resistant and transparent ABS Put a new SSBR plant into operation (Nov. 2013) Increased SAP sales to customers leading the market and completed the third SAP production line (Dec. 2013)
Strategy	<ul style="list-style-type: none"> Develop technology-based products and strengthen customer relations Enhance cost competitiveness in the existing business and increase high profit products Prepare for the future with overseas complex projects and discovery of potentially promising materials 	Strengthened R&D	<ul style="list-style-type: none"> Completed the development of process for producing butadiene from butene, and thereby solidified our own technology base to expand the synthetic rubber business in the long term Has designed a process for the commercialization of Carbon Nanotubes (CNT) and CO₂ plastics
		Sales	KRW 17.6 trillion

IT & ELECTRONIC MATERIALS

As the first company in Korea that successfully commercialized LCD polarizer in 2000, LG Chem has grown at a fast rate in the LCD materials industry such as polarizer and photoresist, as well as in the IT materials industry such as battery materials and circuit materials. In particular, LG Chem took the largest share in the global polarizer market in 2009, which used to be dominated by Japanese competitors, through a continuous reinforcement of R&D capability. Also, we developed the world's first 3D FPR (Film Patterned Retarder) that has contributed to expanding the 3D TV market.

Major products in this area do not attract much attention because they are not externally visible. However, they play an important role in the core functionalities of final products such as display products, mobile devices, and rechargeable batteries, thereby gaining more importance. In the midst of this changing environment, LG Chem strives to solidify its position as a global leading company with cutting edge parts and materials based on its differentiated technologies.

01 Optical Materials

LG Chem produces the key materials of display products such as polarizer and 3D FPR. Since 2009, we have remained No.1 in the global polarizer market. Based on excellent product development and mass-production technology, in 2010, we successfully developed 3D FPR for the first time in the world, contributing to the further growth of the 3D TV market.

02 Display Materials

LG Chem produces photoresist, which is a core material in the LCD color filter, and OLED materials as the next generation display material. We are pushing ahead with a new business of encapsulant for LED device to provide customers with unique solutions.

03 High Functional Materials

LG Chem is focusing its core capability on high functional materials such as films for touch panel; semiconductor package and circuit materials for smart phones and tablet PCs; and backsheet for solar cell, all of which have high growth potential.

04 Battery Materials

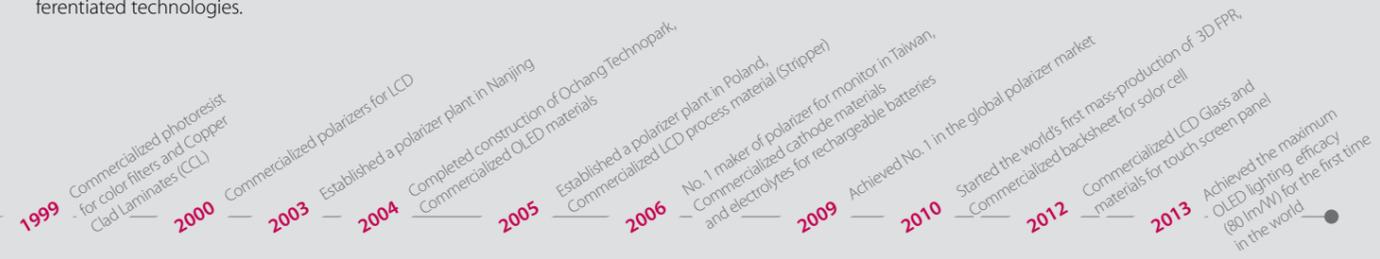
LG Chem produces cathode materials, electrolytes, and separators, which are core materials for rechargeable batteries. In addition to mobile batteries for IT devices, we are also responding to the electric vehicle and energy storage system markets, which have high potential for future growth.

05 LCD Glass Substrates

LG Chem produces glass substrates for LCDs, which are key LCD components and require high quality.

06 OLED Lighting

OLED lighting is considered the next generation light source due to its high efficiency and eco-friendliness with its closest spectral distribution to natural light. LG Chem is leading the global market with the excellent luminous efficiency and lifespan of OLED lighting.



Business Strategy		2013 Major Performance	
Vision	• To become No. 1 company in the IT & electronic materials business	Business	• Launched leading products : FPR integrated polarizer, Face Seal Adhesive for OLED (TV, POLED)
Strategy	• Maximize the performance of the existing LCD materials business • Solidify competitiveness by acquiring the core capabilities for new business • Explore new promising business and increase the number of leading products • Strengthen the organization and technology capabilities	Strengthened R&D	• Increased R&D investment into post-LCD such as OLED and battery materials • Developed the next-generation OLED core materials • Launched OLED lighting product with the maximum efficacy of 80 lm/W
		Sales	KRW 3.0 trillion



ENERGY SOLUTIONS

LG Chem began its research on lithium-ion batteries in 1995, and in 1999, claimed the title of first mass-producer of lithium-ion batteries commercially available in Korea. Since then, we have been providing market-leading eco-friendly energy solutions. For mobile batteries, we have solidified our global market share in the IT area from laptops and cellphones to tablets, while raking in more sales in new areas such as power tools and power drives. Automotive batteries with the world's best technical prowess have brought LG Chem additional sales orders and led to a solid customer base, strengthening its global presence as No. 1. LG Chem's power storage batteries have gained a foothold via pilot projects in Korea and the U.S., where the company has expanded into the power generation and grid businesses, preparing itself to become a top player in the world.

01 Mobile Batteries

With its high productivity and technological superiority, LG Chem accounts for 20% of the global market share.

Mobile batteries are widely used in portable media devices such as laptops, cell phones, and tablets. To align our productivity with the rapid growth of smartphones, ultra-book laptops, and tablets, we are assembling more production lines for lithium-ion polymer batteries. Also, we are providing differentiated solutions, including stepped batteries, based on our unique stack & folding technology. Moreover, our growth is accelerating in the non-IT sectors, such as power tools and e-bikes.

02 Automotive Batteries

LG Chem has maintained the undisputed No.1 position in the global automotive battery market with more than 10 years of R&D capability.

We are equipped with solutions for all types of electrical cars (Hybrid EV, Plugged-in EV, and Battery EV) based on our strong product development capability and manufacturing competitiveness. This allows LG Chem to supply battery cells, packs, and BMS (Battery Management System) to global carmakers such as GM, Ford, Renault, Hyundai-Kia, and Volvo. LG Chem expects increased revenue from its automotive battery business with its excellent technology capability and partnership with customers by taking more orders from the existing customers while securing new customers. Meanwhile, we plan to launch new products to meet customer needs in new applications such as Micro-HEV.

03 Batteries for Energy Storage System (BESS)

LG Chem holds excellent technology and mass-production capability for battery cells, packs and BMS.

LG Chem is securing new customers in the various BESS areas such as power grid, residential/industrial application and UPS.

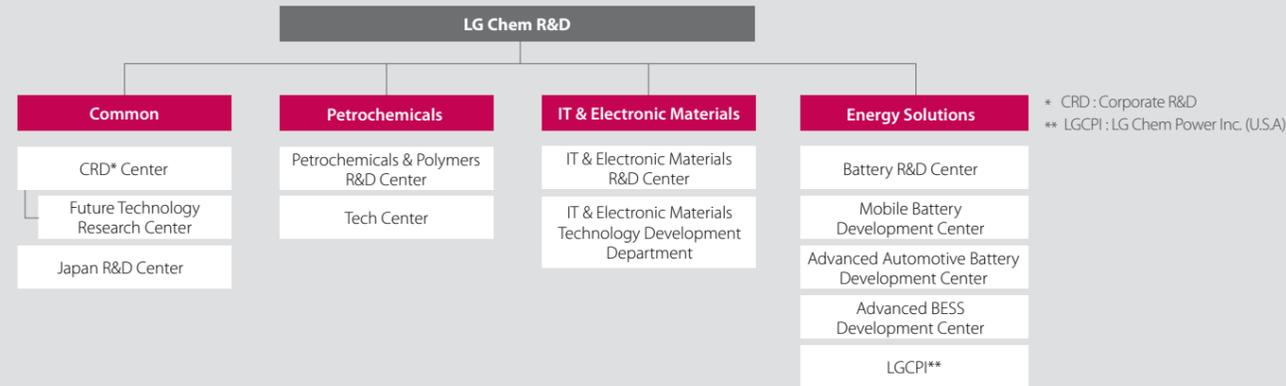


Business Strategy		2013 Major Performance	
Vision	• To become global No.1 lithium battery company	Business	<ul style="list-style-type: none"> • Successfully won a 2nd round of orders for automotive batteries - Saw visible result from promoting strengths of polymer batteries compared to prismatic batteries • Developed and launched new market-leading products - High-capacity battery for PHEV, and stepped battery
Strategy	<ul style="list-style-type: none"> • Mobile Battery: Rank No. 1 in the market • Automotive Battery: Lead the 2nd round market • ESS (Energy Storage System) Battery: Develop as a new growth engine 	Strengthened R&D	• Developed process for the mass production of new types of batteries that require high technology
		Sales	KRW 2.6 trillion

RESEARCH & DEVELOPMENT

LG Chem strengthens the competitiveness of its existing core foundation technology through differentiated technology innovation. It is also dedicated to nurturing a new growth engine by developing next generation materials and technologies. These are part of our efforts to become a leading global material-specialized company with solid R&D foundation.

R&D Organization LG Chem is operating R&D Centers specialized in each area.

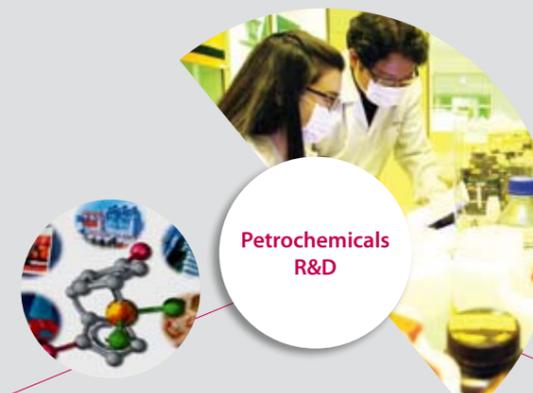


LG Chem is committed to enhancing the competitiveness of existing businesses and while securing technologies and developing products in the next generation new business area.

The CRD Center is continuously reinforcing core platform technologies including adhesion, coating, process, simulation and analysis techniques to improve the competitiveness of our current businesses. We also identify and promote promising opportunities in future new business areas through research on green energy materials, next-generation display materials, and high-functional new materials.



- Major Research Areas**
- Platform technologies - Coating, adhesion, printing/patterning, analytical solution, simulation, etc.
 - New materials for next-generation display and green energy
 - High-functional advanced materials and organic-inorganic composite materials

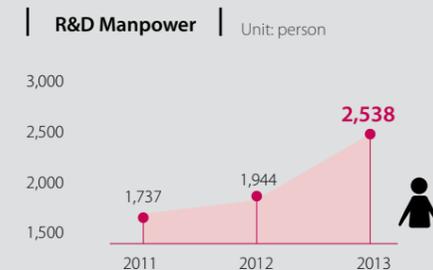
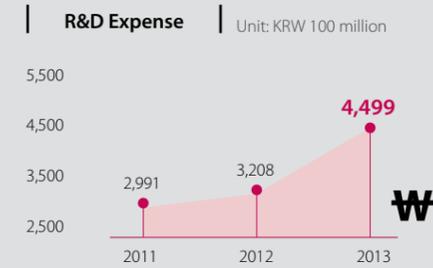


We established the Petrochemicals and Polymers R&D Center and the Tech Center to strengthen the competitiveness of the petrochemicals business and to develop high-functional eco-friendly product technology.

The Petrochemicals & Polymers R&D Center strengthens the competitiveness of existing businesses based on its core technologies of polymerization, catalyst, and process, and conducts R&D activities on new products. We focus our R&D capability on high functional/eco-friendly materials (CO₂ plastic, carbon nanotube, etc.) and the creation of new businesses. The Tech Center performs TS&D activities such as technical development support for polymers, material development, new uses/markets development, and technical education in the petrochemicals business. We provide customers with differentiated solutions by collaborating with the production, sales, and R&D divisions at the frontline.

- Major Research Areas**
- Functional polymers - ABS, metallocene PE, engineering plastic, etc.
 - Eco-friendly, high performance materials - SAP, synthetic rubber, carbon nanotube, CO₂ plastic, etc.
 - Development of catalyst technology and process - Organic/inorganic metal catalyst, process optimization technology, etc.

Research Investment and Manpower LG Chem has made unsparing investment for the future, including continuous expansion of R&D expenses and manpower.



* Included figures for IT & E Materials Technology Development Department since 2013 (KRW 58 billion, 176 persons)

Expansion of Research Infrastructure LG Chem continues to expand the research infrastructure to establish a foundation to lead the global materials industry.

2013

Research Park (in Daedeok Science Complex, Daejeon)

- LG Chem's R&D hub
- 6th research building completed in 2013

2014

Gwacheon R&D Center

- Dry experiment-oriented research
- Operation starts in 2014

2017

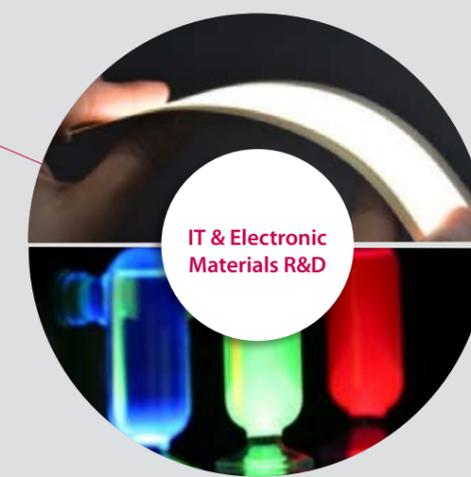
LG Science Park (Seoul)

- LG Group's comprehensive research complex
- Future source technology and activities to create synergies among affiliates
- Operation starts in 2017

We make efforts to obtain a solid global No. 1 competitiveness in the high-tech IT & electronic material sector based on differentiated core materials and process technologies.

The IT & Electronic Materials R&D Center develops core materials and process technologies based on material synthesis, coating, processing, and optical design techniques with the aim to develop market-leading products in the display, circuit and semiconductor, and green energy areas.

- Major Research Areas**
- LCD materials - Polarizing plate, photoresist, glass, etc.
 - Film Patterned Retarder for 3D display
 - OLED lighting/OLED materials
 - Battery materials - Canode materials, electrolytes, separators, etc.
 - Micro-electronics materials - IC package, Copper Clad Laminate, etc.



As a part of the effort to address depleting fossil fuel and environmental pollution issues, we provide energy solutions based on the research on lithium-ion batteries and materials.

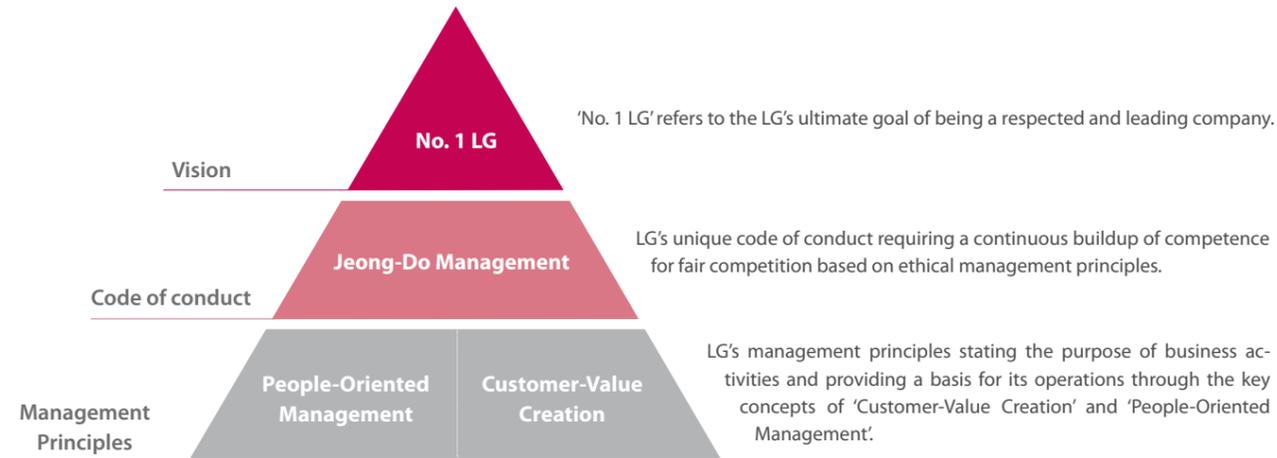
Battery R&D (Battery R&D Center and Battery Development Center) is focused on the technological capabilities of various areas, including electrochemistry, organic and inorganic materials, metals, and polymers, to conduct research into battery materials, such as cathode and anode materials, separators, and electrolytes. This became a foundation to develop high-capacity and high-energy batteries and systems for the smart phone, tablet PC, E-bike, xEV (HEV, Phev, BEV) and ESS.



- Major Research Areas**
- Battery materials - Cathode & anode materials, electrolytes, and separators
 - Mobile, xEV, and ESS (Energy Storage System) battery - Cylindrical, prismatic, polymer batteries
 - System - Pack (cooling and structure interpretation) and BMS (Battery Management System)

LG Way

The LG Way is a unique management philosophy that guides the thoughts and actions of LG employees. It is the call to attaining the ultimate goal of becoming 'No.1 LG' through the practice of LG's unique code of conduct, 'Jeong-Do Management', and LG's management principles of 'Customer-Value Creation' and 'People-Oriented Management'.

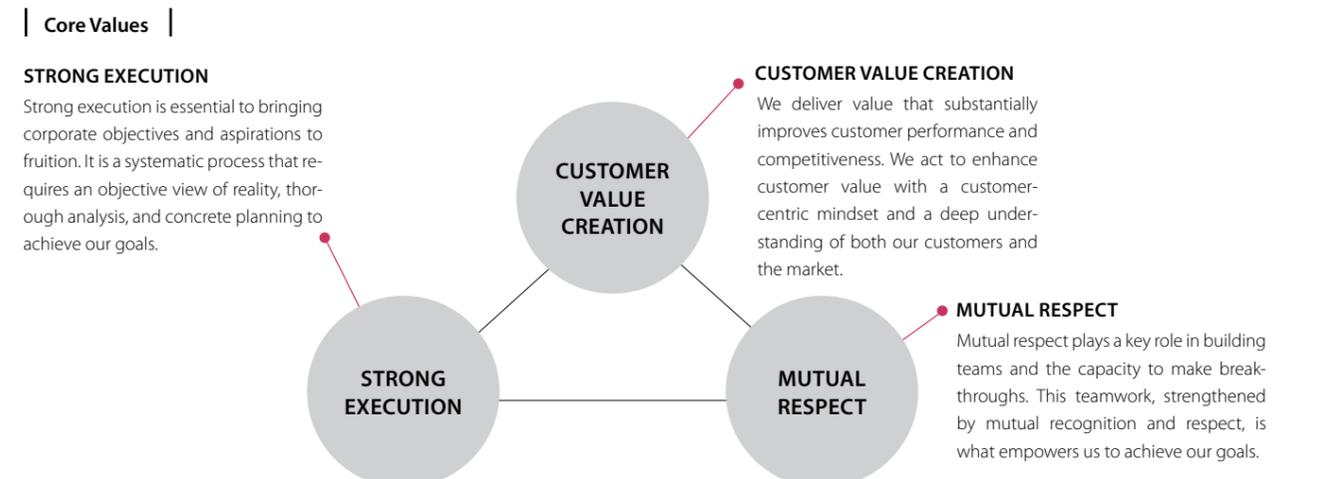


No. 1 LG	Code of conduct : Jeong-Do Management	Management Principles
Vision : No. 1 LG <ul style="list-style-type: none"> LG that customers can completely trust LG that is recognized to be the best in class by customers by impressing them with excellent quality and brand value LG that is the most attractive to investors LG that provides attractive value to investors with high return on investment LG that talented people want to join LG that provides the best workplace where the talented employees can work with a sense of ownership and enthusiasm LG that competitors find formidable but want to learn from LG that competitors find formidable yet respect as a benchmark by producing remarkable outcomes 	<ul style="list-style-type: none"> Integrity Work transparently according to principles and standards Fair transaction Provide equal opportunities and fair treatment in every transactional relationship Fair competition Improve capabilities with which one can fairly win the competition 	<ul style="list-style-type: none"> Customer-Value Creation <ul style="list-style-type: none"> • Customer-oriented • Delivery of substantive value • Innovation-driven creation People-Oriented Management <ul style="list-style-type: none"> • Self-management and creativity • Respect for human dignity • Capability development and actualization • Performance-based reward

LG Chem's Vision and Core Values

LG Chem is a global solution partner that provides differentiated customer values through its market leading products and services. We produce and supply materials and solutions that are essential for daily living to the whole world. We will continue to pursue a sustainable growth by incorporating achievements in environmental management and social responsibility.

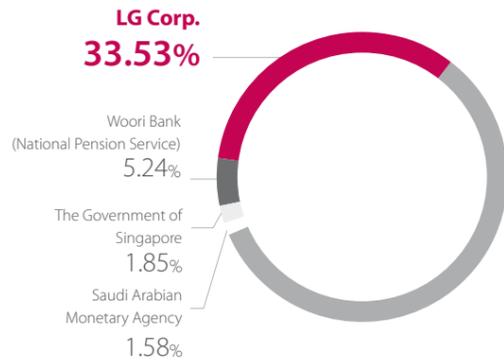
LG Chem actively participates in practicing the LG Way in order to achieve the vision of 'No.1 LG.' The vision of LG Chem is 'to be a global leader growing with customers by providing innovative materials and solutions.' This vision shows that achieving shared growth with our customers through differentiated value offering is what defines the purpose for LG Chem's existence and serves as the force that propels us to become a global leading company.



Corporate Governance

LG Chem's corporate governance stays transparent through the management led by professionals and the Board of Directors, and the operation of an independent Audit Committee.

Major Shareholders



Ownership Structure

Every year, LG Chem holds the general shareholders meeting, a key communication channel with shareholders through which the CEO makes a presentation on business status and collects opinions on major decision-making and management issues. Shareholders' opinions are thoroughly reviewed by the management and the Board of Directors, and then brought into management activities across the board. In addition, key business issues relevant to investors' interests are disclosed via the Data Analysis, Retrieval and Transfer System (DART) of the Financial Supervisory Service or on the websites of the Korea Exchange (KRX) and LG Chem. The total number of shares in LG Chem (common shares) is 66,271,100 as of the end of December 2013. The largest shareholder is LG Corp., possessing 33.53% of total shares.

Board of Directors

The Board of Directors undertakes the role and performs the function of highest decision-making body. To embed accountability in the management, the board reserves the right to hold the management accountable for any behavior that goes against shareholder interest as the directors retain the authority to appoint and dismiss executive managers. Also, the role of CEO and chairman has been split to reinforce the transparency and independence of the board.

There is a total of 11 directors presently sitting on the board at LG Chem, with 4 inside directors, 1 non-executive director, and 6 outside directors. The 6 outside directors, representing more than the majority, come from various fields of expertise and experience, such as chemistry, batteries, IT & electronics, technology, law, finance and accounting. They monitor the management on key issues of the corporate operation.

Additionally, ad-hoc meetings are convened to respond to any urgent management issues when the need arises. The board members pay visits to plants in Yeosu, Chengju, and Ochang in Korea as well as those in China to gain a hands-on perspective into company operations.

Board Secretariat

To support the board in performing its role and function effectively, we have placed the Board Secretariat under the Credit Management/Compliance Team. Prior to a board meeting, the secretariat briefs the outside directors on key management issues and meeting agenda so that the directors can make a detailed yet comprehensive analysis and review beforehand.

Committees under the BOD

The Audit Committee and Outside Director Nomination Committee are operated under the BOD of LG Chem.

Audit Committee / The Audit Committee is a decision-making body that plans, conducts, and evaluates internal audits. All three of the committee seats are filled by outside directors, so as to ensure the independence and transparency of the committee. Apart from quarterly committee meetings, the Audit Committee discusses significant issues frequently as they arise. Especially, the committee is briefed on quarterly earnings performance, management plans, and other important issues in the economic/environmental/social aspects, faithfully fulfilling its role as a monitoring mechanism.

Outside Director Nomination Committee / The Outside Director Nomination Committee is composed of one inside director or non-executive director and two outside directors. After a thorough review of potential candidates, the committee recommends qualified candidates with expertise in diverse areas of economy, environment and society, which may affect the corporate management, and also with an independence that allows them to avoid conflicts with the company's interest. The recommended candidates are formally appointed with the approval of the board and the general meeting of shareholders.

Meetings of the BOD and the Audit Committee in 2013



* As of April 2014

Board of Directors

Category	Name	Major Career Highlights and Concurrent Posts	Remarks
Inside Directors	Peter Bahnsuk Kim	· Former President of LG Petrochemicals · Former President of LG Chem · Chairman of the BOD and standing advisor of LG Chem	Chairman of the BOD
	Jin Soo Park	· Former President of Hyundai Petrochemicals · Former President of LG Petrochemicals · President of Petrochemical Company, President of Petrochemical Company of LG Chem, Vice Chairman & CEO of LG Chem ※ Concurrent post: LG MMA Co., Inc.	President
	Young Su Kwon	· Former CFO of LG Electronics · Former President of LG Display · President of Energy Solutions Company of LG Chem	President
	Young Ki Park	· Former Leader of IT & Electronics Materials R&D Center of LG Chem · Former Leader of Optical Materials Division of LG Chem · President of IT & Electronic Materials Company of LG Chem	President
Non-Executive Director	Juno Cho	· Former Leader of Info-Communication Division (North America) of LG Electronics · President & COO of LG Corp. ※ Concurrent post: LG Uplus, LG Hausys, LG International, LG CNS	Chairperson of the Outside Director Nomination Committee
Outside Directors	Ki-Myung Nam	· Former Minister of Government Legislation · Chair Professor of Law School at Chungnam University	Chairperson of the Audit Committee
	Seung-Mo Oh	· Former Head of the Growth Engine Project for Next Generational Battery · Professor in the School of Chemical and Biological Engineering at Seoul National University	Member of the Audit Committee
	Se-Jin Kim	· Former Member of the Subcommittee on National Competitiveness · President of Korea Fund Ratings	Member of the Audit Committee
	Il-Jin Park	· Former Director of LG Dow Polycarbonate · President of IJ International	Member of the Outside Director Nomination Committee
	Jang-Joo Kim	· Former Member of the Electronics and Telecommunications Research Institute · Professor of Materials Engineering at Seoul National University	Member of the Outside Director Nomination Committee
	Jin-Kon Kim	· Full Member of the Korean Academy of Science and Technology · Professor of Chemical Engineering at Pohang University of Science and Technology	

INTERVIEW WITH CORPORATE EXECUTIVES

The following are the interviews of the management in charge of key business activities for sustainable growth of LG Chem.



President **Sukjeh Cho**
(CFO)

What kind of efforts have LG Chem made to fulfill its social responsibility?

The concept of sustainable management or corporate social responsibility was not made overnight. It should be considered as part of the development process of corporate management. LG Chem has long been thinking about how to effectively practice ethical management, and eventually declared the LG Way, a unique management philosophy that emphasizes customer value and respects human dignity based on its code of conduct of Jeong-Do Management. Meanwhile, after going through the Asian financial crisis, the company adopted a holding company regime and introduced a BOD-centered management system as part of the efforts to improve its corporate governance and establish a global management system. In this regard, I would like to say that LG Group and LG Chem have been taking on a leading role in carrying out corporate social responsibility.

In the past, issues related to ethical management or corporate management were mainly discussed in the aspect of CSR. These days, however, safety & environment-related issues in the workplace have come to the fore as more serious issues. Regarding this, LG Chem has

drastically increased the investment expenses in safety & environment and strengthened its preventive activities. We are now spreading such activities to our overseas subsidiaries, especially those in China.

When it comes to the issues related to collusion and fair trade, which also have recently gained more attention, LG Chem as a global company is committed to strictly abiding by the law of each country and reprimanding those who commit a violation for their misconduct.

As the CFO of LG Chem, how do you evaluate the company's CSR activities and what are your suggestions for further improvement?

The CSR activities can be evaluated from various perspectives as they are involved with various areas. For instance, LG Chem has made much effort to increase energy efficiency and respond to climate change, and, I think, has been achieving decent performance lately.

From a CFO's perspective, I would like to say that making the company's business portfolio sustainable is also an important part of the CSR activities. Pursuing sustainable growth by establishing a more future-oriented, eco-friendly, and stakeholder-centered business structure is surely what a company can do to fulfill its social responsibility. LG Chem's effort in diversifying its business activities to automotive batteries and IT & electronic materials can be better understood with this perspective.

Making efforts to manage invisible risks is also highly important. Non-financial risks are being managed effectively at LG Chem based on employees' commitment to Jeong-Do Management and by strengthening the responsible departments such as Safety & Environment and Partner Collaboration. The internalization of risk management in employees by providing them with regular education and spreading the culture of taking the initiative is as much important as quantified risk management.



President **Jin-Nyoung Yoo**
(Research Park Leader)

Technology innovation is a prerequisite for securing sustainable competitiveness for material manufacturers like LG Chem. What kind of efforts is LG Chem making to achieve technology innovation?

The key to success for material companies lies in technology innovation, and groundbreaking innovation requires investment. Even in adverse situations, LG Chem has succeeded in building a world-class R&D infrastructure by constantly expanding the amount of R&D investment with a long-term perspective. In the past, fast emulation of quality products was sufficient to guarantee success to many companies, but things have changed now. With the goal of "Do what others haven't done, what didn't exist before," we are putting more weight on a first mover-related research. At present, we are striving to create a first mover industry by producing new materials such as green energy, next-generation displays, and high-functional materials.

To be a first mover, corporate culture is most important. A change in the corporate culture, which could be viewed as the DNA of a company, will bring about more competitiveness and an originality that cannot be easily emulated only through benchmarking. Based on the LG Way, the culture of LG Chem, namely, creativity, autonomy, innovation and cooperation, is becoming our competitiveness.

What is your forecast of green business and green product market? And what is LG Chem's priority in these areas?

More affordable and powerful automotive batteries are required for electric cars to be commercialized. At LG Chem, we are conducting research on next-generation batteries with more than double the capacity of the existing batteries, as well as batteries that are completely different from the lithium-ion batteries. We call these 'innovative batteries'. The same standard of innovative R&D is also underway for ESS batteries. I expect that these technologies will be commercialized by the mid-2020s, contributing to the revitalization of the national economy as well as our company.

What are your thoughts on the view that recruiting and retaining talent is important in becoming a 'global material company with strong R&D capabilities'?

Recruitment and retention of talent require a good corporate culture in addition to fair treatment. Researchers must be able to do research that is true to the term. Working as the leader of Research Park for more than 10 years, I have realized that those who are most focused are the most creative. Thus, the company must create an atmosphere where employees can freely conduct their own researches while sharing goals at the company level. I go abroad 5 times every year to scout global talent. However, what I do must be backed up by our current researchers to effectively attract qualified applicants. In this regard, I believe every one of our researchers is not only an employee but also a recruiting manager. Overall, I think making the current employees happy is the best and the most desirable HR strategy.



Senior Vice President **Kapcho Cho**
(Corporate Communications
Department Leader)

What is the reason that the Corporate Communications Department took charge of sustainability management of LG Chem?

Sustainability management of a corporation is a series of activities that must identify what both stakeholders and the public demand, establish a strategic direction, and introduce them to the management.

Accordingly, the company needs to be able to detect the changing environment and voices outside of the company in an accurate manner while it equips its employees to have the capacity to recognize and share them and apply them to their work.

The Corporate Communications Department was re-organized several times and, in September 2013, set up the current system that covers such areas as PR, fair trade, energy & climate change, safety & environment, and CSR. Also, as the Department is operated under the CEO, it can speed up the decision-making process and implementation whereby external opinions are quickly delivered to the entire organization and immediately applied.

This condition has maximized the role as the contact point linking the inside and the outside of the company in a systemic way and enabled a prompt and consistent response to the issues of energy & climate change and safety & environment, all of which have emerged as global challenges. In addition, cooperation among the teams of experts under the Department has become very efficient and thereby maximizing the synergy effect.

Recently, safety & environment has become an important social issue. How is LG Chem responding to it?

Based on the recognition that "safety & environment is the top priority in any kind of business activity," LG Chem always emphasizes the importance of safety & environment and strengthens the relevant departments and their control systems through field management starting from the CEO. From the operation side, the safety & environment-related organizations of major plants, which used to be under each business unit, are now governed directly by the CEO and have been strengthened. The leader of the Safety & Environment Department at the head office has been promoted to the executive level, and the Safety & Environment Audit Team was set up to monitor all operations at home and abroad.

From the management system side, LG Chem organized and operates the Safety & Environment Committee on a quarterly basis in order to operate and improve the safety & environment management system more efficiently. The Committee is composed of the CEO, executives of domestic and international operations, and leaders of plants, and convenes to share issues and best practices on safety & environment at home and abroad and discuss and plan better ways of capacity building.

LG Chem has decided to make an investment of KRW 140 billion in the safety & environment area this year, up 56% from KRW 90 billion of the previous year. However, such investment requires a change from each employee to bear actual fruits. To that end, the Corporate Communications Department will make continuous efforts to establish a culture where employees are encouraged to do the right thing and refrain from doing the wrong thing, and also to stimulate employees to internalize the idea of 'safety & environment management in daily life'.



Senior Vice President **Minhwan Kim**
(CHO)

As LG Chem is expanding its overseas business, the company now needs to manage the issues related to diversity and human rights at the global level. What is the current status of diversity and human rights management as well as challenges facing LG Chem?

I put much value on 'ontological equality,' which means that all human beings are equal in their existence. This idea is also reflected in one of our management principles, 'People-Oriented Management,' and is actively pursued by LG Chem with much emphasis on the diversity of employees. In fact, all our employees are given equal opportunities regardless of their gender, religion, disability, region, group or society they belong to, and those who achieve the highest performance are offered the highest compensation based on a fair evaluation. More efforts are being made to apply this principle not only in the head office or domestic plants but also in the overseas subsidiaries. In addition, much attention is now being paid to attracting more women talent and giving them opportunities to grow. All of these efforts are becoming more essential for global companies like LG Chem.

What kind of efforts is LG Chem making to create a workplace where employees can follow their dreams and pursue work-life balance?

At LG Chem, the CEO actually engages in securing talent. The best and the brightest are secured through a variety of recruiting programs, while the core talent are nurtured through diverse programs to grow into experts in their respective areas such as researcher, regional expert, and global talent. Moreover, our unique HR system, with its foundation on creativity and autonomy and emphasis on growth through work, has been highly appreciated.

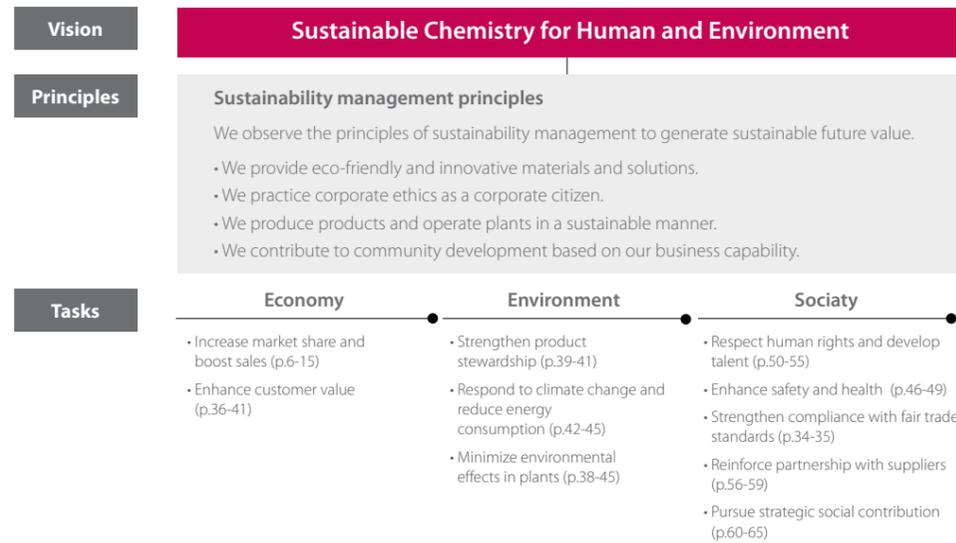
I believe that work-life balance can be realized only when the workplace becomes a place where employees feel happy. Rather than working on the employees' weaknesses, we focus on appreciating their strengths so that they feel happy and can immerse themselves in their work. This is how we enhance our performance, and this is the essence of our corporate culture. In a bid to create a working environment where employees can concentrate on their core task, our way of doing business has been made more practical : unnecessary reports are not drawn out, simple reports are made verbally or through text messages, and meetings are attended by the persons concerned only and finished within one hour.

Employee welfare allows our employees to immerse in their work, and therefore, definitely brings out high performance in return. LG Chem has introduced a selective welfare system that reflects the preference and lifestyle of each employee, and also the Employee Assistance Program (EAP) that helps employees resolve their personal matters and thereby fully focus on their work. We plan to continue developing more contents according to the needs of our employees.

Sustainability Framework

Sustainability Vision and Principle

LG Chem aims to become a chemical company that generates sustainable future value by putting priority on human beings and achieving harmony with the environment in all its business activities. To this end, we have established the vision of 'Sustainable Chemistry for Human and Environment' and corresponding principles and 10 key tasks in the aspects of economy, environment, and society. We will continue to establish specific plans for each task and take measures to enhance their execution, and thereby minimize the negative effects and maximize the positive effects of our business activities to become a global leading company that co-exists and grows together with society.



Sustainability Management Department

In September 2013, LG Chem established a CSR Team under the Corporate Communications Department Leader, directly governed by the CEO, at headquarters so that sustainable management is carried out in a more systematic and effective manner. The CSR Team serves as a means of communication with internal/external stakeholders on a variety of sustainability issues, and reports to the CEO immediately upon the occurrence of important issues or relevant achievements. The issues or activities requiring the awareness of the management are shared at the monthly managerial meetings, encouraging the management to have constant interest in sustainability management.

Sustainability Management Activities

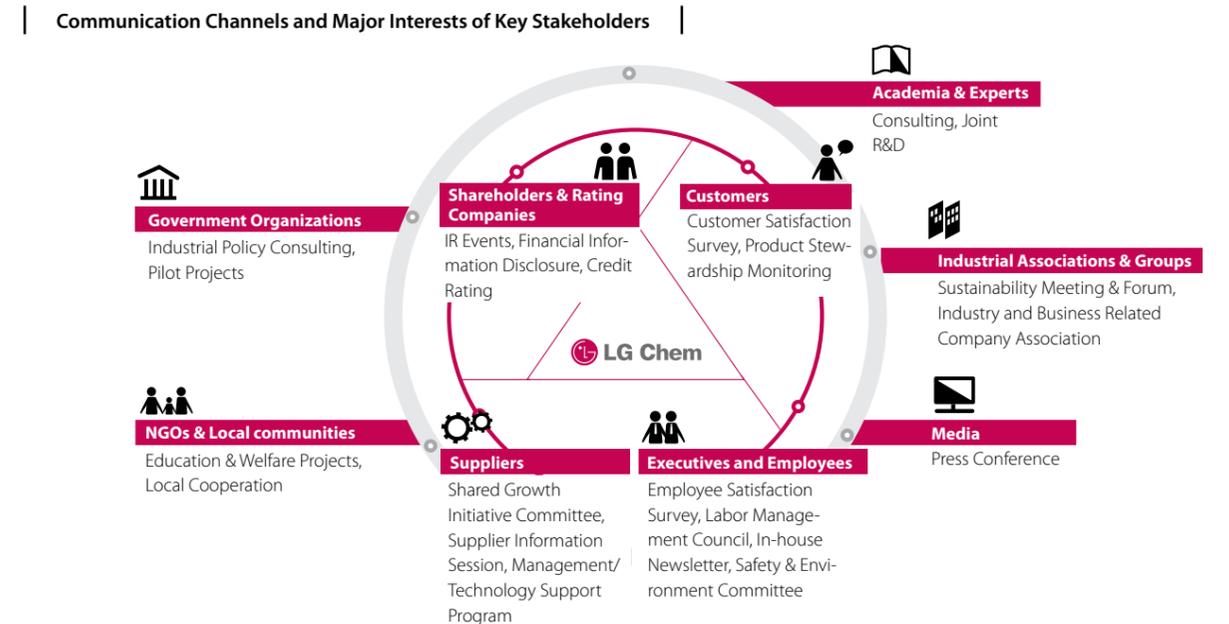
LG Chem joined the membership of UN Global Compact (UNGC) in March, 2014, which encourages the company to clarify its responsibilities and roles as a global corporate citizen, and to voluntarily improve and comply with the 10 principles in 4 sectors, namely human rights, labor, environment, and anti-corruption. The results of our efforts will be shared with our stakeholders through our annual sustainability report. Beginning in 2013, LG Chem has conducted an annual self-assessment of CSR activities at domestic plants and subsidiaries in China so as to effectively identify CSR-related risks. From the year of 2014, short-term or mid-and long-term improvement plans will be established with the consideration of the urgency or importance of the risks identified through the cooperation with the concerned departments, and monitoring activities and follow-up management will be conducted as well. For the internalization of CSR throughout the management, these activities will also be also promoted at all overseas subsidiaries and suppliers.



Stakeholder Engagement

Stakeholder Communication

LG Chem is making efforts to communicate and grow with our stakeholders. Key stakeholders to LG Chem, who directly or indirectly affect or are affected by our business activities, include shareholders and investors, customers, employees, suppliers, NGOs and local communities, academia and experts, industrial associations and groups, media, and government organizations. A variety of communication channels tailored for each stakeholder group are introduced on a regular basis, while feedback and information collected during this process are reflected in making decisions to further develop our sustainability management system. We described the activities we have pursued in response to the requests and interests raised by our stakeholders throughout the previous year and the subsequent results in this report.



Expectations of Major Stakeholders & LG Chem's Correspondence Efforts

Shareholders & Rating Companies	Customers	Executives and Employees	Suppliers	NGOs & Local Communities	Academia & Experts	Industrial Associations & Groups	Media	Government Organizations
Expectations · Long-term growth potential · Creation & distribution of profits · Transparent disclosure of company information	· Smooth communication with customers · R&D capability · Improved product quality and safety	· Improved corporate culture · Extensive participation in company operation · Cooperative labor-management relations · Enhanced employee welfare benefits · Strengthened safety & health for employees	· Management support and training activities for suppliers · Fair performance sharing with suppliers	· Strategic contribution to society · Investment in community · Local CSR activities of overseas offices	· Industry-academia collaboration · Technological development	· Response to new regulations · Management of chemical substances	· Creation & distribution of profits · CSR activities · Technology innovation	· Shared growth · Fair trade & regulatory compliance · Safety & health in operation sites
Correspondence Efforts · Sales promotion and market leadership consolidation (p.8-15) · Transparent BOD management (p.18-19)	· Collection of opinions for improvement and feedback through top management meeting (p.36-37) · Continuous R&D activity (p.14-15) · Labeling certification and acquisition (p.70-71) · Response to relevant standards such as EICC (p.76-77)	· Corporate culture innovation activities (p.55) · Fair recruiting and performance-based pay system (p.50-51) · Safety & environment audit and prevention activities (p.46-48) · Work-related disease prevention and health promotion activities (p.49)	· Technology and education support to suppliers, and creation of the Win-Win Fund (p.56-59) · Fair supplier selection process (p.59) · Support for shared growth through regular evaluations (p.59)	· Chemistry camp for the aspiring youth (p.62) · Creation of a library of hope (p.63) · Social contribution activities by each plant in China (p.64-65)	· Technology innovation (p.8-15) · Discovery of new growth engines (p.14-15)	· Stronger management of conflict minerals (p.41) · Stricter management of chemicals at plants and suppliers (p.40) · Test analysis of toxic substances (p.41)	· Sales promotion in each business area (p.8-13) · Active social contribution activities at home and abroad (p.60-65) · Technology innovation activities and discovery of new growth engines (p.14-15)	· Support for shared growth with suppliers (p.56-59) · Ethical management (p.30-35) · Safety & environment audit and education (p.46-48)

Report Content Selection Process

Report Content Selection Process

In the process of assessing the materiality of sustainability issues and deciding on what to include in this report, we considered the 4 principles in the Global Reporting Initiative (GRI), namely 'Sustainability Context', 'Materiality', 'Stakeholder Inclusiveness', and 'Completeness'. In particular, the principle of stakeholder inclusiveness was reflected throughout the whole process of selecting the report content.

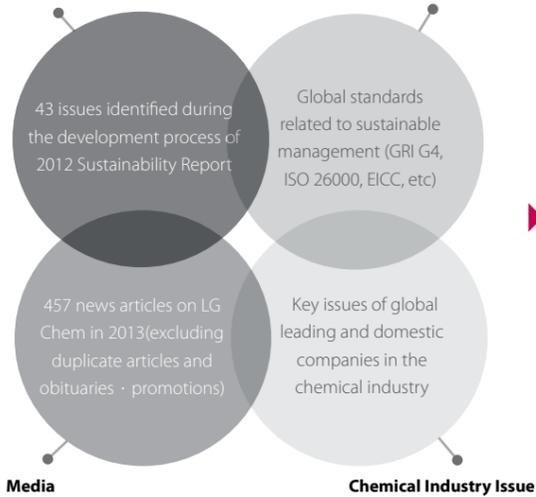
Report Content Selection Process	1. Identification of LG Chem-related Issues	2. Materiality Assessment	3. Report Content Determination
4 Principles in the Global Reporting Initiative (GRI)	Sustainability Context	Materiality	Completeness
	Stakeholder Inclusiveness		

In order to identify significant sustainability issues, we first analyzed the characteristics of the industry that LG Chem engages in as well as in the context of sustainability. In the materiality assessment process, we selected the key issues that are considered significant by our stakeholders, and determined whether the reporting scope, the aspects affected by the issues and reporting period would be applied appropriately based on the principle of completeness.

Identification of LG Chem-related Issues / To conduct a materiality assessment, related issues were identified through the following 4 steps. First of all, to secure consistency and comparability, we considered the 43 issues used for the materiality assessment in 2012 Sustainability Report. In addition, sustainability-related global standards, such as GRI G4, ISO 26000, and EICC, were studied for a better understanding of global trends, and the key sustainability issues of global leading and domestic companies in the chemical industry were analyzed to grasp the industry trends. Lastly, the issues closely related to LG Chem were identified through media analysis, leading to a final set of issue pool with 27 issues in 6 categories.

Issues of the Previous Year

Global CSR Trend



Economy & Management	Executives & Employees
<ul style="list-style-type: none"> Economic performance Discovery of new business and new growth engine Ethical management Technology innovation Intellectual property rights and patent security 	<ul style="list-style-type: none"> Work-life balance Health and safety Provision of equal opportunities and respect for diversity Human rights and labor rights HR development
Environment	Consumers & Products
<ul style="list-style-type: none"> Efforts to respond to climate change Energy efficiency Water consumption Prevention of air, water, and soil pollution Waste New & renewable, alternative energy Biodiversity and ecosystem 	<ul style="list-style-type: none"> Brand management Product stewardship and quality control Eco-friendly product life cycle Customer satisfaction Marketing activities
Community	Suppliers
<ul style="list-style-type: none"> Job creation Social contribution activities 	<ul style="list-style-type: none"> Encouragement of suppliers' social responsibilities Fair selection and evaluation of suppliers Shared growth

Materiality Assessment

In the process of identifying material issues, the social interest level and the internal influence level were reflected in a comprehensive way. First of all, in measuring the social interest level, the media exposure frequency of each issue in 2013, the awareness level of domestic and overseas companies in the same industry, and the results and feedback of the online survey conducted among external stakeholders were considered. Second, to analyze the relationship between LG Chem's strategies and management principles, the results of an employee survey and the opinions of the CSR Team at headquarters were collected. Based on the social interest level and LG Chem's influence level clarified through this process, a materiality assessment matrix was formulated, and the 10 major issues located at the upper right were identified as LG Chem's material issues.

Materiality Assessment Matrix



Material Issues	Report Content
Ethical Management	1. Ethical Management
Customer Satisfaction	2. Customer Value
Product Stewardship & Quality Control	
Efforts to Respond to Climate Change	3. Energy and Climate Change
Health & Safety	4. Safety, Environment and Health
HR Development	5. Human Resources Development
Shared Growth	6. Shared Growth with Suppliers
Social Contribution Activities	7. Social Commitment
Discovery of New Business and New Growth Engine	Business Domain
Technology Innovation	

Report Content Determination

Each issue was examined from the perspectives of completeness, including report coverage, report boundary of the concerned aspect, and report period, to see whether it effectively indicates the company's economic, environmental, and social achievements, and then was reviewed by the management. This report focuses on the material issues selected through this process. 'customer satisfaction' and 'product stewardship and quality control' were integrated into 'customer value' as they both are related to activities of enhancing customer values.

LG Chem's Internal & External Stakeholder Survey

LG Chem is committed to interacting with its internal and external stakeholders. To be specific, from January 24 to February 2, 2014, we conducted an online survey designed to identify the importance level of each issue and the sustainability level of the company, in both Korean and English so that the voices of diverse stakeholders can be heard. Overall, a total of 391 external stakeholders (academics and professionals, industrial associations and groups, the media, NGO and local communities, government organizations, shareholders and credit rating agencies, suppliers, customers, etc) and 2,868 internal stakeholders (executives and employees) participated in the survey. According to the results, 'product stewardship and quality control', 'customer satisfaction', 'discovery of new businesses and new growth engines' were considered the most material issues, ranked first to third (regardless of order) by both internal and external stakeholder groups. The survey enabled us to understand the kind of issues that need to be thoroughly discussed in this report, and also to reach a conclusion that internal and external stakeholders are on the same page when it comes to the kind of issues that are material to the company.



MATERIAL ISSUES

LG Chem strives to create sustainable future value by prioritizing human beings and seeking harmonization with the environment in all its business activities. We communicate with stakeholder groups in various ways, through which opinions are collected and reflected on the long-term direction for corporate business activities. In this way, we will make ceaseless efforts to become a global leading company that co-exists and grows with the society.

- 01 Ethical Management
- 02 Customer Value
- 03 Energy and Climate Change
- 04 Safety-Environment and Health
- 05 Human Resources Development
- 06 Shared Growth with Suppliers
- 07 Social Commitment

01 Ethical Management

All LG Chem employees at home and abroad pledge their commitments to Jeong-Do Management, LG's unique way of behavior, and practice LG Code of Ethics as a standard for action and judgment. LG Chem is also making efforts to become a responsible company by strengthening activities to check compliance in advance and go beyond simply abiding by the basic legal requirements. We inspect the compliance status and implement the voluntary management and improvement measures regarding internal policies which may be in violation of the relevant laws and regulations. Based on the belief that ethical management is fundamental for the corporate management, we continue to strengthen our self-examination and apply strict countermeasures on the violation cases.

Responsible Department — Internal Audit Teams 1 and 2, Ethics Office, Credit Management/Compliance Team, Public Affairs Team



/ Jeong-Do Management

Jeong-Do Management is LG's unique way of behavior which emphasizes fair competition by building capacity. It does not simply mean ethical management, but refers to our determination to create substantial performance based on competency. In 1995, LG officially declared Jeong-Do Management as part of its management principles. Under a holding company regime launched in 2003, LG proclaimed the LG Way in 2005 and is continuously implementing Jeong-Do Management.



LG Code of Ethics

LG Chem supports the order of free market economy and seeks the common interest of all our stakeholders so as to grow into the global No.1 company. To this end, LG Chem is actively encouraging all employees to comply with the LG Code of Ethics, the guiding principles that all employees must follow in their thinking and behavior. The LG Code of Ethics can be found at <http://ethics.lg.co.kr>.

CEO's Resolute Commitment

Every employee at LG Chem shares the CEO's resolute commitment that "our efforts to grow into a leading company should be based on Jeong-Do Management that discards bad practices without hesitation and is faithful to principles and basics."

Jeong-Do Management Promotion Activities

Code of Ethics / We continue to apply the Code of Ethics more strictly, including the prohibition of receiving any money or flowers for congratulations and condolences from stakeholders such as suppliers.

Action Programs

Ethics Hotline	• A reporting system for violations of the Jeong-do Management
Win-Win Growth Website	• A grievance mechanism for suppliers
Gift · Money Receipt Reporting System	• Employees who receive gifts voluntarily report to the Ethics Office, and the received gifts are put up for internal auction of which the proceeds are donated to social welfare organizations or the goods are donated in the name of the company.
Jeong-Do Management Pledge	• Employees of LG Chem and suppliers pledge their commitment to complying with the LG Code of Ethics and Jeong-Do Management principles.
Jeong-Do Management Survey	• All employees and suppliers are surveyed to assess their awareness of Jeong-Do Management and to identify the areas in need of improvement.

Promotion at Overseas Subsidiaries / LG Chem has reinforced its education on Jeong-Do Management not only at domestic local plants but also at overseas operation sites. Each subsidiary in China has an ethical affairs officer and a supervisor. In 2013, LG Group provided online education on Jeong-Do Management to Chinese subsidiaries, which also offered their own offline education to their office workers. Moreover, the Ethics Office offered three sessions of education on Jeong-Do Management to local employees in Mumbai, Vizag, and New Delhi in India.

We Do Not Receive Money for Congratulations or Condolences!

LG Chem carried out education on Jeong-Do Management at the 'Conference on Chemical Regulations' with 400 suppliers in attendance. The Ethics Office of LG Chem introduced LG's unique code of conduct and asked the participants to report to the Ethics Hotline if they find any case of LG Chem employees violating the Code of Ethics. LG Chem announced the strengthened Code of Ethics under which money or flowers for congratulations or condolences cannot be received and a meeting with suppliers must be reported in advance. Although a lot of companies make an internal determination for ethical management, it is exceptional that a company shows its determination before its suppliers and asks for their cooperation. In this way, LG Chem is making continuous and leading efforts to move forward and grow with its suppliers.

Responsible Teams

Internal Audit Teams 1 and 2

- Support on improving impediments to performance and competitiveness
- Manage risks of non-compliance or unfair trade and inefficiency

Ethics Office

- Establishes a sound corporate culture and strict discipline
- Improves inefficient institutions and practices

/ Compliance System

Appointment of Compliance Officer

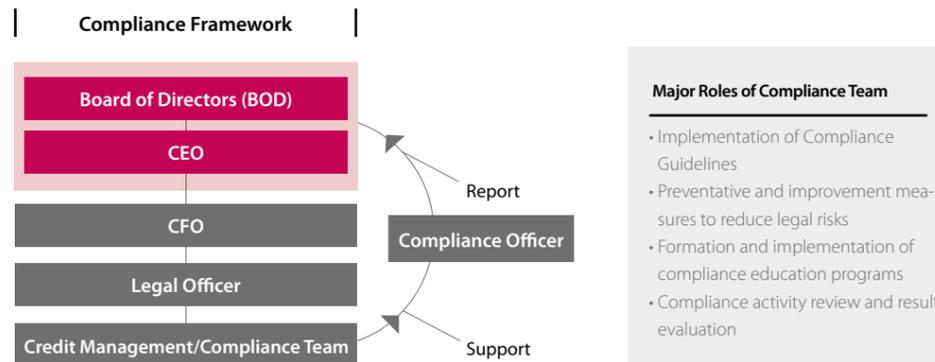
In accordance with the revised Korean Commercial Act, LG Chem appointed a Compliance Officer at the Board of Directors meeting held in April 2012 and established the Compliance Guidelines required for the operation of the compliance program. The Guidelines mainly present the establishment and implementation of preventative measures to reduce legal risks that may occur in the course of business. The applicable scope includes all activities related to the company operation and its employees. The Compliance Officer supervises compliance activities in accordance with the Compliance Guidelines by inspecting the compliance status of the company and its employees and implementing the improvement measures regarding the existing company policies which may violate the relevant laws and regulations.

Compliance Organization

LG Chem established the Compliance Part under the Legal Department in 2012 to identify the company-wide compliance status, to establish network with other departments, and to set up the directions for compliance activities. In 2013, the Compliance Part was expanded to become Credit Management/Compliance Team to establish a more stable organization for carrying out compliance activities.

Roles and Responsibilities of Compliance Team

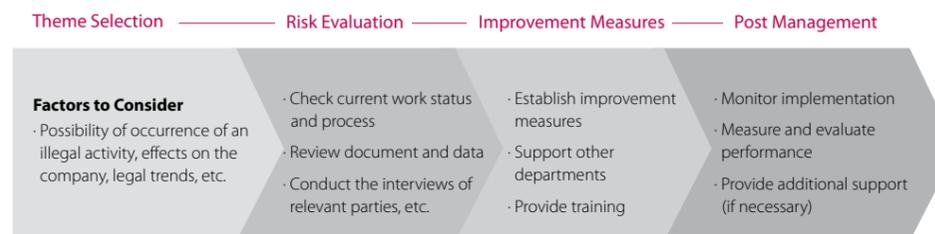
The Compliance Team inspects possible violation of applicable laws and regulations and employees' complying status of Compliance Guidelines on a regular or frequent basis. The Team also selects a main theme to establish preventative and improvement measures to reduce legal risks of the relevant area and supports other departments within the company. The Team continuously develops and performs customized compliance educational programs for each business unit and employment position. In addition, it reviews and monitors the results of compliance activities, including improvement measures and training, and inspects and evaluates the legal risk management.



Management Method of Compliance Activities

LG Chem conducts compliance activities by selecting an individual theme as a priority control target. This method enables us to evaluate the issues, establish the solution, and engage in intensive, in-depth improvement of individual risk.

Step by Step Process



Compliance Activities in 2013

The Compliance Team closely cooperates with relevant departments to maximize the effect of compliance activities. By utilizing relevant department's knowhow, and accumulated information and data, we were able to establish and implement improvement measures in an effective manner. In 2013, a group of compliance activities were executed along with Public Affairs Team (fair trade and external cooperation), Employee Relations Team (employee relations management), Safety & Environment Team (establishment of safety & environment policies and accident response) and Accounting Management Team (supervision of intra-company contracting).

01

Preventive of Cartel Prevention Handbook

- Identified associations and conference participation that may give rise to potential inappropriate contacts with competitors, and evaluated and classified the associated risks
- Set up an internal approval process and guidelines for participation and the behavior before and after participation
- Stipulated the prohibited acts with respect to direct contacts with competitors and collection or sharing of information about competitors through third parties
- Convened a conference to raise the awareness of cartel prevention and emphasize the importance of the policy implementation (participants included executives and team managers)

02

Publication of practice guidelines on transactions between subsidiaries

- Gave an explanation on extensive internal transactions and self-dealings and presented in detail the scope of counterparties and transaction amount for each case
- Provided education on prior inspection, legal requirements, and internal process for transaction between subsidiaries
- Held on-site conferences to provide practice guidelines to employees (Daejeon, Ochang, Cheongju, Daesan, Yeosu)

03

Publication of in-house subcontract guidelines

- Presented relevant legal regulations and precaution measure, labor relation issues, and countermeasures to accidents and disputes
- Enhanced the overall understanding of the roles of the relevant departments, identified major risk factors and introduced measures to facilitate cooperation with other departments to improve the management efficiency
- Held conferences at headquarters and regional offices



Conference on Intra-Company Contract Guideline

Plan for Compliance Activities

To secure competitiveness, it is necessary for a company to check law violation risks in the procurement process and also to disperse, reduce, and manage the risks properly with the suppliers in the distribution network. In this regard, LG Chem will select the improvements of procurement and quality control process as the key theme of its compliance support activities in 2014, and the activities will be spread to our overseas subsidiaries.

Themes for 2014 Activities



/ Fair Trade

Fair Trade Compliance Program

LG Chem has been running its own compliance program for fair trade since 1995, and was registered on the Korea Fair Competition Federation in 2002 as a company that operates a Fair Trade Compliance Program. With the declaration of the 'Practical Guidelines on Fair Competition' in 2006 for the first time in the Korean chemical industry, we established a system to prevent any legal violations, including specific behavioral guidelines for the observance of fair trade laws and regulations.

Operating Structure

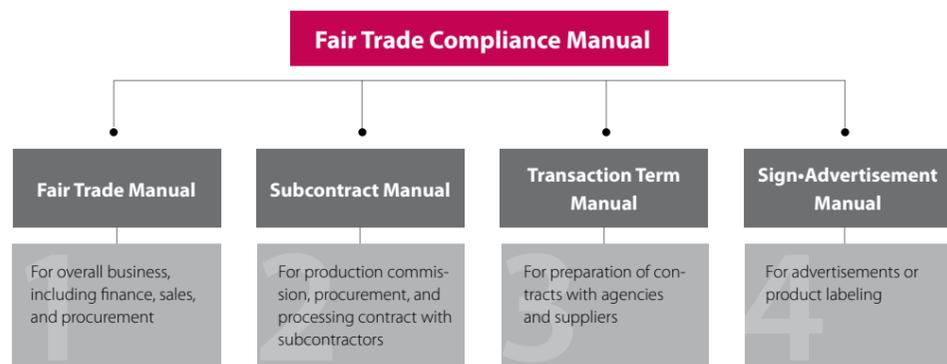
For the effective operation of the Compliance Program, a CP Team was formed under an executive-level CP Manager to take the responsibility for planning and implementing the program and reporting to the BOD. Moreover, to promote fairness in the handling of the subcontracts with our small-and medium-sized affiliates, we run the Internal Subcontract Review Committee to preliminarily screen any subcontract transaction over a certain amount (KRW 3 billion) to check the legitimacy. In addition, the LG Chem Internal Transaction Committee, chaired by the CFO, meets every quarter to examine the activities of the program and to seek better ways of making improvements.



Operation Performance

As part of the effort to promote fair trade, we provide annual training programs on international cartels, subcontracts, and internal transaction inspection and prevention. We have expanded the training program to include overseas plants since 2013, and modified the Fair Trade Compliance Manual based on the questions and answers of the previous program. In 2013, we mainly modified the subcontract manual that includes contents such as working-level guidelines and checklists and risks from breaching subcontract laws and regulations. The working-level manual is distributed to all employees through the intranet.

Contents of the Fair Trade Compliance Manual

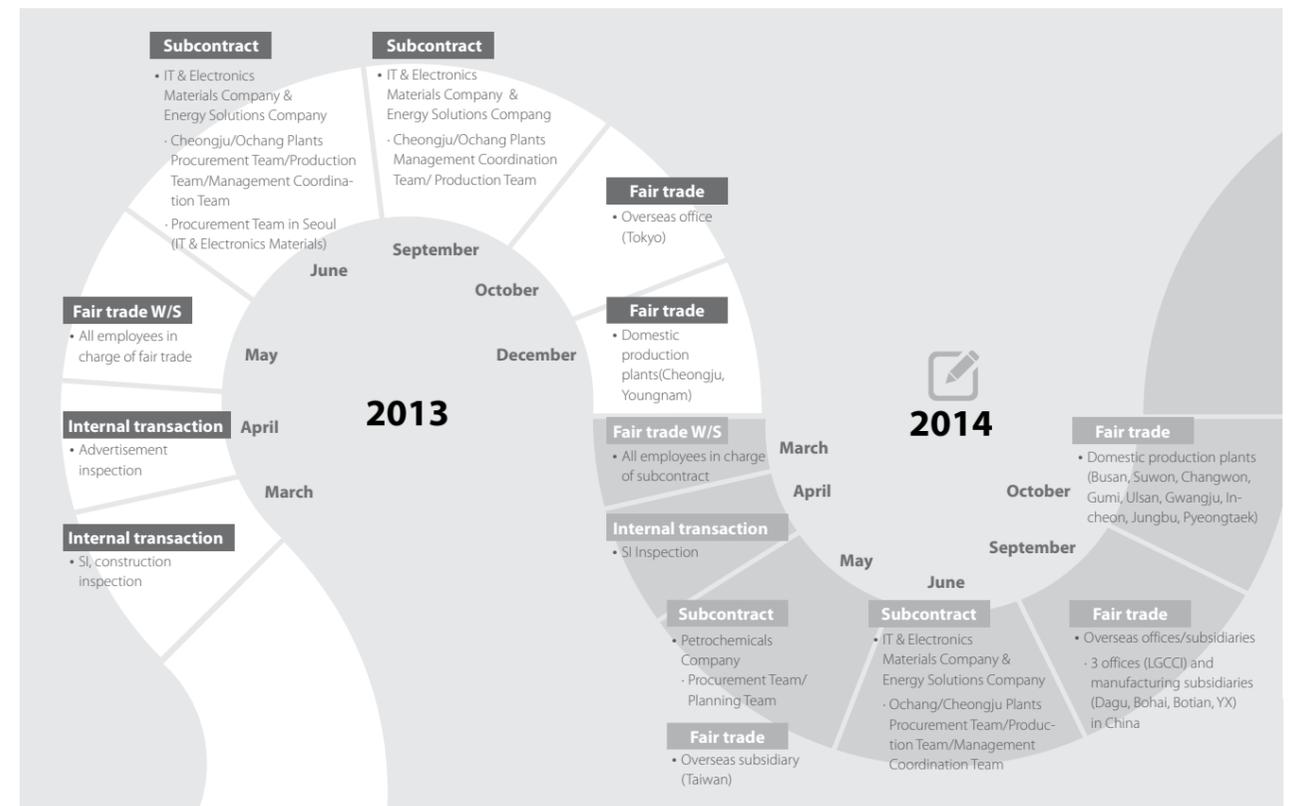


Operation Plans & Expectations

LG Chem is committed to incorporating fair trade into its corporate culture through a variety of activities to enhance employee awareness such as expansion of the Fair Trade Compliance Program and reinforcement of education on fair trade. In 2014, the inspection on cartels will be expanded to include 3 offices and 4 production plants in China, a subsidiary in Taiwan, and 9 domestic plants. In addition, the period of inspection on subcontract-related laws and regulations will be shortened from biennial to annual, while the range of inspection will be expanded from unit price-oriented to all subcontract law violation cases.

We will also reinforce education on fair trade to enhance internal capabilities. The education on fair trade will be provided as a regular course in the new and experienced employee training programs, and annual workshops on fair trade will be held for team leaders and persons in charge. In addition, we will minimize law violation risks by conducting prevention activities, including distribution of practical guidelines on internal transactions and subcontracts.

Operation Performance & Plans





02 Customer Value

Providing customers with differentiated values is a core element of sustainable management that determines the value of the company. Only the company that provides products and solutions that meet customers' potential demands can enjoy shared growth with customers in the rapidly changing environment. LG Chem continuously strengthens its innovation activities in order to improve customer values, and fulfills its responsibility for customers and products by securing quality competitiveness. Moreover, we contribute to the enhancement of customer value through the effort to minimize environmental and safety impact throughout the product lifecycle. The achievements of such efforts are managed and evaluated as a core target of the organization in each area.

Responsible Department ——— Quality Department, Safety & Environment Team (Eco-Product Rart)

Strategic Direction	Major Activities / Achievements	Goals / Plans
<ul style="list-style-type: none"> Strengthen customer value innovation activities 	<ul style="list-style-type: none"> Executed corporate culture innovation activities Promoted Solution Partner activities 	<ul style="list-style-type: none"> Strengthen corporate culture innovation activities Continue to implement Solution Partner activities
<ul style="list-style-type: none"> Strengthen quality competitiveness 	<ul style="list-style-type: none"> Implemented quality improvement activities by business unit (strengthen management on raw material suppliers, secure reliability in quality assessment, etc.) 	<ul style="list-style-type: none"> Increase customer satisfaction through continuous quality improvement
<ul style="list-style-type: none"> Produce more eco-friendly products 	<ul style="list-style-type: none"> Strengthened compliance with safety & environment regulations in overseas subsidiaries (pilot survey on material composition) Strengthened control of chemicals (re-inspection of all material compositions, Eco-friendly Supply Chain Guideline/Internal Regulations on Eco-Product Development) 	<ul style="list-style-type: none"> Expand the material composition survey to include all overseas subsidiaries Continue to strengthen the level of management on chemical

/ Customer Value Innovation Activities

LG Chem understands the situations the customers are in, problems they find difficult to address, and values that they need, even before they recognize them themselves, and provides innovative materials and solutions in an effort to provide the best customer value. We not only support customers for their short-term business success, but also identify their potential needs in pioneering a new market for mutual growth. To this end, through the continuous activities to change the corporate culture and the determination of the management, LG Chem has encouraged all executives and employees to become more customer-oriented and focus on the nature and core of customer value innovation. In addition, experts from various departments gather to have a more comprehensive and in-depth understanding of customers' concerns and needs and thus develop and execute the ways to create new values in an effective and swift manner. Such a cooperative corporate culture of LG Chem can be found in all areas ranging from R&D to production, quality, and sales so as to create various achievements.

From CEO Message (June 2013)

"Identifying even the potential demands of customers a step ahead and offering the best products and solutions far beyond their expectations are most important in our business activities."

Solution Partner

Solution Partner: a companion helping customers address their problems and bring about better results



Cases of Customer Value Creation

Support for Customer to Develop New Diaper and Increase Its Market Competitiveness

According to the needs of a customer that had difficulty in developing thin diapers due to lack of internal R&D capabilities, LG Chem provided innovative technical support based on its long experience and knowledge in diaper analysis and application technology. We offered the customer with a full range of solutions to improve diaper performance such as absorption force and speed and also to increase the SAP rate. As a result, the customer succeeded in launching a premium diaper with superior quality to that of its competitors. We, on our part, also achieved an innovative technological support platform and acquired the technology of SAP dispersion and optimal combination of subsidiary materials as well as core process technology.

Development of Acrylic Polarizer to Overcome Performance Limit of TAC Polarizer

Customers have an increasing demand for a polarizer that can realize a slim bezel product as part of the effort to strengthen their LCD TV competitiveness. The existing TAC polarizer's limited performance couldn't satisfy such needs due to its inherent property of matter. As such, LG Chem developed an acrylic polarizer with a new material to replace TAC based on its accumulated technological capabilities, and addressed quality issues and improved performance in a way to support customers to have a competitive edge in the LCD TV market. In addition, we established the foundation to take the lead in the polarizer market by acquiring differentiated technologies in the stages ranging from raw materials to polarizer manufacturing.

Development of New-Concept Atypical Stepped Battery that Utilizes Space Inside Electronic Devices

LG Chem identified the needs of customers for new solutions as ever-slimmer mobile electronic devices with curved designs lead to less spare space in the devices but customers require more use time. To find the measures to maximize space efficiency, all the related departments had heated debates and cooperated from the early stage and as a result, the stepped battery was developed based on our unique stack & folding technology to utilize the empty space inside electronic devices for battery installation. Through this solution, customers could increase the use time of their smart phones, and we were able to prove our capabilities in developing and manufacturing cells that realize the highest energy density inside electronic devices.

/ Quality Competitiveness

LG Chem has a systematic quality control system in place and operation to achieve the best customer satisfaction. We organized a specialized system in each business unit and division to provide the best quality management according to business and product characteristics. We focus our capabilities on securing quality competitiveness in all business areas from development and procurement to production and sales.

The petrochemicals business unit has the quality policy of securing quality competitiveness recognized by customers based on differentiated technologies. To that end, it has established the principles of identifying quality complaints at the early stage and preventing their re-occurrence. The Quality/Innovation part at headquarters, establishes and manages quality policies and directions for the business unit. Moreover, the planning team of each business division has a part or a person in charge of quality control to implement the self-regulated quality management system. In addition, it realizes differentiated properties of matters and functions from the development stage, and the QA team in the plants prevent the shipment of poor quality products by securing inspection reliability so as to maximize customer satisfaction.

Since the IT & electronics materials business unit has a product portfolio covering a wide range of businesses, it is important to conduct differentiated and professional quality control management with the consideration of each product's properties and nature. In this regard, each division operates its own quality organization to enhance the execution of business/product-specific quality improvement, and also conducts an inspection on a regular basis to have an overview of quality control activities. In particular, the Quality Committee at headquarters is convened every month under the chairmanship of the head of the business unit, participated by management strategy officers at headquarters, quality officers at each division, and heads of QA and CS teams to discuss monthly quality issues, report on Q-Cost performance, deal with major quality improvement tasks, and enhance quality competitiveness of key products, so as to secure quality competitiveness at the headquarters level.

The energy solutions business unit executes strategic quality control activities with distinctive goals: 'Launch Perfect Product,' 'Significant Improvement of Raw Material Quality,' and 'Elimination of Root Cause of Poor Quality Products.' The quality management coordination division under the business unit establishes and manages quality strategies and goals. In addition, the mobile business division and automobile/ESS battery division have organized their own groups in charge of quality management, which execute expertise-based activities to strengthen quality competitiveness, such as product and supplied part QA and quality system improvement. In particular, an exclusive research organization is in operation to secure product safety and reliability, which is very important for battery products. We have made multi-faceted efforts to achieve the target of zero safety issue by securing advanced quality evaluation technologies and developing examination methods. Nanjing Plant, the battery production base in China, has been equipped with the same system and also put the best quality control process in place to secure quality at the production stage and to enhance customer satisfaction with quality by quickly responding to customer complaints and field issues.

Efforts to Secure Competitiveness in Battery Quality

Development Quality	Raw Material Quality	Product Quality	Customer Quality
<p>Establishing a battery product development system</p> <ul style="list-style-type: none"> Setting up a work system by product development stage Defining a work process, division-specific R&R, and approval standards in 25 process documents Setting up PLM* IT System <p>Establishing an FMEA procedure</p> <ul style="list-style-type: none"> Establishing the company's own FMEA** procedure 	<p>Strengthening raw material suppliers management</p> <ul style="list-style-type: none"> Organizing quality guarantor of suppliers by part Operating an organization specialized in nurturing suppliers Establishing a quality system for suppliers, providing support for process improvement and work standardization 	<p>Establishing a battery manufacturing process</p> <ul style="list-style-type: none"> Establishing an integrated manufacturing process of 129 tasks Expanding at overseas subsidiaries <p>ERRC*** inspection</p> <ul style="list-style-type: none"> Rationalizing and matching of inspection & test standards 	<p>Integrating with customer's quality system</p> <ul style="list-style-type: none"> Integrating with the company's quality control system through the analysis of quality requirements of major customers and reflecting them in the supplier management standards to guide, diagnose, and nurture suppliers

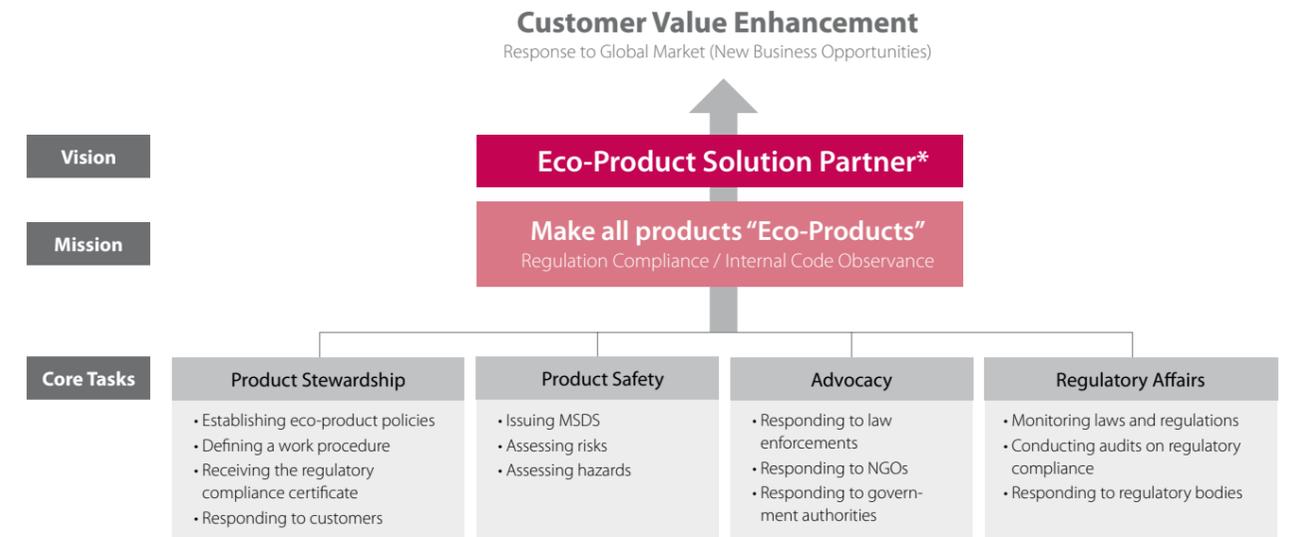
* PLM : Product Life-cycle Management ** FMEA : Failure Mode and Effects Analysis *** ERRC : Eliminate, Reduce, Raise, Create

/ Eco-Product

As a company that supplies the entire world with materials and products that are necessary for modern industries to develop and for people's convenience, we have a great responsibility for the impact that our products have on the environment and safety and thus strive to minimize their negative effects. We operate a system to minimize the impact our products have on the environment and safety throughout their entire production process from R&D to disposal, thereby producing more eco-friendly products.

Vision for Eco-Product

The approach of applying sustainability to the entire lifecycle of a product from R&D to disposal enables us to respond to the environmental risks that the product may pose as well as to the global market and also to create new business opportunities. In other words, making products greener is another way of helping customers succeed in their business. By providing more eco-friendly and competitive materials and solutions, LG Chem wants to contribute to the success of our customers as well as to a more sustainable future.



Reinforcement of Chemical Management / LG Chem has taken the lead in managing chemical substances based on its global standards. We have been building a database of chemical composition of each material since 2008 and established a system, in 2010, to identify and manage all chemical substances along with their amounts entering the company. We incorporated the ERP-based chemical management into the entire process of procurement and use activities, raising awareness of the importance of chemical management throughout the company. We also introduced a system that continuously monitors the changes in materials by time and in regulatory/business environments. We updated the chemical composition information by re-inspecting the 2,000 materials whose ingredients had been inspected already, and also checked MSDS for compliance with GHS. In addition, we notify suppliers on any inclusion of restricted materials such as toxic substances or new chemicals after a real-time verification to help them prevent any infringement of safety & environmental regulations.

Eco-Friendly Supply Chain Guideline and Internal Regulations on Eco-Product Development / LG Chem is making all-out efforts to minimize negative impacts on the environment and to produce more eco-friendly products. In this regard, we established the 'Eco-Friendly Supply Chain Guideline' and the 'Internal Regulations on Eco-Product Development,' so as to secure the eco-friendliness of products and minimize hazardous substances from the processes of product design and supply chain management. The 'Eco-Friendly Supply Chain Guideline' articulates the safety & environment-related requirements, and its use as a meaningful standard has led to the enhancement of the overall supply chain management level. The guideline is available on the Open Procurement System website (<http://open.lgchem.com>).

LG Chem recognizes the ever-tightening regulations on chemical substance management at home and abroad as a new business opportunity to build our competitiveness, not as a barrier we have to overcome. Accordingly, we enacted the 'Internal Regulations on Eco-Product Development' that stipulates much stricter rules about the company's product development and material procurement than the relevant laws. We provide the regulations in Korean and English to effectively manage risks that chemical substances pose to the safety and environment. The list of regulated substances is classified into 2 types, restricted substances and substances for reduction, according to the characteristics of the business units. In addition, efforts are being made to include contents that reflect the latest trends and are technologically significant. As a result, the regulations are operated with consistency in various situations and as a substantially meaningful standard throughout our business activities.

Management of Minerals Extracted from Conflict Areas / In 2012, we added conflict minerals to the list of banned substances in the 'Internal Regulations on Eco-Product Development'. This action was taken to conform to the efforts of the international community, which is trying to decrease inhumane crimes and establish peace in conflict areas, such as Congo and other neighboring countries, by prohibiting the direct and indirect purchase of 4 minerals (gold, tin, tungsten, and tantalum) produced there, and thus keeping the mineral money from being used to fuel the armed conflicts and human rights suppression. We raised the bar for ethical businesses in 2013, and reviewed the use of the conflict minerals more stringently. Moreover, we conducted a review on the 100 suppliers of raw subsidiary materials that have the possibility of using the conflict minerals. We encourage our suppliers to join our ethical efforts through these activities, and support the electrical & electronic product customers in the global market, who are very sensitive about the use of conflict minerals.

Test Analysis of Harmful Substances / The Corporate R&D center of the LG Chem Research Park analyzes harmful substances present in raw materials and finished goods to assess the environmental impact of our products. The following table shows specifically what we do when carrying out this analysis and environmental assessment.

Category	Description
Operation of an ISO 17025 Authorized Testing Laboratory	<ul style="list-style-type: none"> • Analysis on 6 hazardous RoHS substances (Cd, Pb, Hg, Cr(VI), PBBs·PBDEs) • Analysis on halogen free (Br, Cl, F) • HBCDD, 9 types of phthalates (DMP, DEP, DIBP, DNBP, BBP, DEHP, DNOP, DINP, DIDP) • Analysis on Sb, Be • Number of reports issued in 2013: 1,251
TVOC Assessment	<ul style="list-style-type: none"> • Assessment of TVOC and FA in raw materials, processes, and products and individual VOC study (P&T, Headspace, TD, etc.) - Green product/material assessment: IT & Electronics/Automobiles, etc.
Accreditation as an Authorized Testing Body	<ul style="list-style-type: none"> • Apr. 2007 TÜV RoHS Lab certification <ul style="list-style-type: none"> - 6 hazardous RoHS substances (self-analysis method) • May 2008 TÜV scope extension <ul style="list-style-type: none"> - Halogen free (Br, Cl: self-analysis method) • Sep. 2008 KOLAS scope extension <ul style="list-style-type: none"> - 6 hazardous RoHS substances (self-analysis method) • Jun. 2009 TÜV scope extension <ul style="list-style-type: none"> - 6 hazardous RoHS substances (IEC62321: 2008), HBCDD, 3 types of phthalates (DBP · BBP · DEHP) • Jun. 2010 KOLAS scope extension <ul style="list-style-type: none"> - 6 hazardous RoHS substances (IEC62321:2008) • Aug. 2011 KOLAS scope extension <ul style="list-style-type: none"> - Halogen free (Br, Cl, F: KS M 0180:2009) • Feb. 2012 TÜV scope extension <ul style="list-style-type: none"> - 9 types of phthalate (DMP, DEP, DIBP, DNBP, BBP, DEHP, DNOP, DINP, DIDP) - Halogen free (Br, Cl, F: KS M 0180:2009) • Apr. 2013 TÜV scope extension <ul style="list-style-type: none"> - Sb, Be (US EPA 3052:1996)

Conference on Chemical Regulations

LG Chem held the '2013 Conference on Chemical Regulations' on March 12, 2013 participated by 400 employees of 330 domestic suppliers. We shared the latest trends on safety & environment-related regulations we face, such as the Registration, Evaluation, Authorization & Restriction of Chemicals (REACH) in Europe. We operate a systematic and global management of chemical substances by conducting chemical composition surveys and re-inspection on a regular basis. The conference was designed to promote our efforts to prevent chemical-related accidents that have emerged as current social issue and our determination to cooperate with suppliers in achieving high-level safety management.

2013 Conference on Chemical Regulations



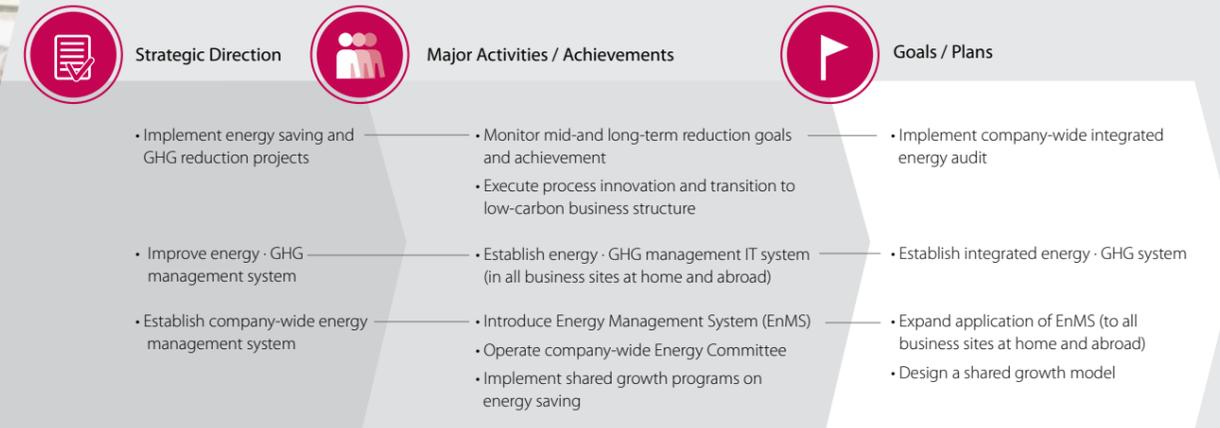


03 Energy & Climate Change

▲ Ochang 1 Plant Photovoltaic System

As climate change emerges as a global issue, the proactive determination to address it by companies has become an important social responsibility. Effective energy consumption and GHG reduction in business activities present companies with not only the risks, but also the opportunity to create new businesses. LG Chem strengthened its company-wide organization system and management system in order to effectively respond to regulations and to establish a green process. We monitor energy consumption and GHG emissions against the target on a regular basis, and encourage all our employees to voluntarily engage in energy saving activities with an incentive system.

Responsible Department — Energy/Climate Change Team



/ Energy & Climate Change

LG Chem has strengthened its competitiveness in relation to energy and greenhouse gases (GHG) by proactively responding to internal and external regulations on GHG and energy and promoting green business activities, in an effort to emerge as an innovative green company. In addition, for sustainable shared growth with SMEs, we will faithfully carry out our social responsibility by actively participating in energy saving efforts and sharing our diverse knowhow in saving energy and responding to regulations with our suppliers and SMEs.

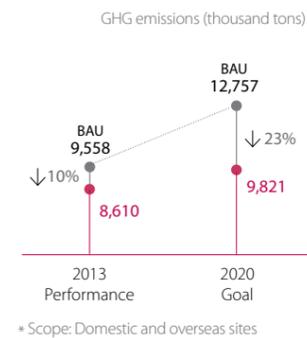
Vision

LG Chem intends to comply with energy & GHG regulations and to establish a green process so that the company can maintain its continuous growth. To this end, we plan to improve energy efficiency in all processes and reduce GHG emissions directly, while decreasing GHG emissions indirectly by manufacturing higher value-added products and transforming the existing manufacturing process into a lower energy consumption structure.

Strategy and Goal

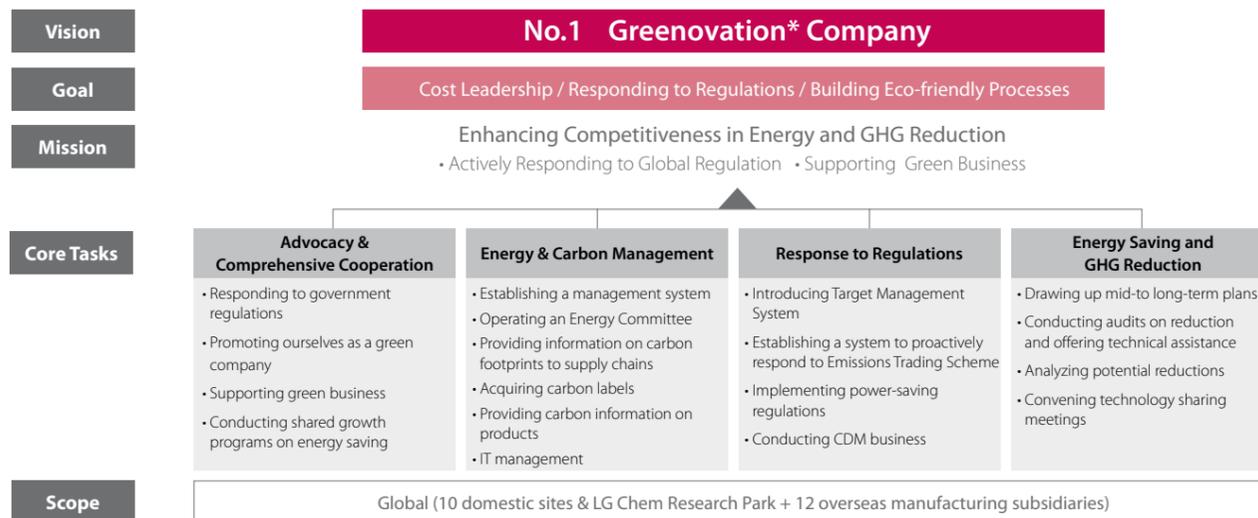
LG Chem is propelling the efforts to reduce GHG to 23% below BAU (business as usual) by 2020, to establish the mid-to long-term goal to reduce energy intensity, and to make continuous improvements. For this, we intend to apply EnMS to all operation sites at home and abroad and further decrease the level of GHG reduction by monitoring the performance through an IT system.

GHG Reduction Goals and Performance



Company-wide Active Reduction & Improvement of Energy·GHG Management System / LG Chem is making every effort to reduce GHG to 23% below BAU by 2020 and to achieve a green management system. The company now manages energy consumption and GHG emissions with the GHG and Energy Management System (GEMS) on a monthly basis, and will make further efforts to reduce energy consumption and GHG emissions by introducing the EnMS to more operations in 2014.

Extensive Application of EnMS / LG Chem acquired ISO 50001 in 2013 by introducing the EnMS to the VCM Plant in Yeosu, and plans to receive the accreditation for all operation sites at home and abroad in 2014. We will establish an organized energy management process by setting up an energy management plan that meets the ISO 50001 standards; monitoring the basic energy performance; training and improving the capabilities of the persons in charge; and reviewing the management performance. In this way, we expect to establish a company-wide energy management system while also raising the awareness of employees regarding the reduction of energy consumption.

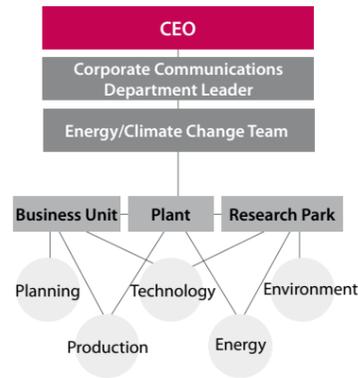


* Greenovation : The word is a combination of 'Green' and 'Innovation,' and it is LG Chem's manifestation to become the world's most innovative green company.

Shared Growth Program on Energy Saving

LG Chem is involved with diverse activities to promote sustainable shared growth between large corporations and SMEs. We participated in energy saving projects for shared growth among large, medium and small companies, organized by the Ministry of Trade, Industry and Energy, with 3 suppliers in 2012 and 4 suppliers in 2013. In 2014, through LG Chem's Win-Win Fund, we will share our energy saving technologies and know-how with our suppliers and thus help them raise their cost competitiveness. In addition, we will support them in effectively responding to various regulations, such as Target Management System and Emissions Trading Scheme, and thus building their capacity to respond to climate change. Through these efforts, we will contribute to reinforcing the management capability of SMEs whose energy demand and efficiency management need improvement and to establishing a sound energy ecosystem shared along with the government, large corporations, and suppliers.

Energy & Climate Change Response Organization



Organizational Structure

LG Chem runs Energy/Climate Change Team to strengthen the LG Chem's energy saving activities and respond to a variety of climate change regulations in a systematic manner. The Energy/Climate Change Team is responsible for formulating strategies to respond to regulations at home and abroad, preparing mid-to long-term plans for GHG and energy saving, analyzing the risks and opportunities inherent in climate change, and promoting shared growth programs on energy saving. Each plant has an energy manager, responsible for energy saving with the government and SMEs as well as planning and implementing GHG reduction projects. Apart from developing new GHG reduction technologies, our R&D center, Research Park, is conducting the carbon-LCA (Life Cycle Assessment), which analyzes GHG emissions over the entire life cycle of a product from its production to disposal. We also implement much of our capabilities in developing innovative technologies, such as the battery for electric cars and the Energy Storage System (ESS). Such efforts have contributed not only to greening the businesses of LG Chem, but also to saving energy and resolving power shortage problems in Korea.

Operation of Company-Wide Energy Committee / LG Chem is strengthening its organizational structure to build capacity in coping with energy and climate change issues. For example, a company-wide Energy Committee was organized to contribute to the prompt decision-making of the executives and the enhancement of communication between the executives and plants at home and abroad. The committee is involved in various activities related to energy and climate change, while sharing practical ideas and technologies and performances and also giving incentives to our employees so voluntary energy saving efforts are encouraged. Through such efforts, our organized system in response to energy saving and climate change regulations is being recognized as a benchmark case for other companies.

Construction of Company-Wide Energy Committee



LG Chem Honored with Silver Medal at Energy Saving Contest



LG Chem's systematic management has made fruitful results and been highly appreciated at home and abroad. Through our company-wide energy management as well as bold investment such as the introduction of the EnMS and the ESS and innovative improvement of the manufacturing process, we have saved an annual average of KRW 53.8 billion over the past 5 years. In recognition of such achievements, LG Chem's Senior Vice President Cho Kap-ho has been presented with the Silver Medal. It is believed that such performance will not only raise the competitiveness of the company itself, by saving energy cost, but also create new jobs and new growth engines, for example, through the development of the battery for electric cars and distribution of the ESS, contributing to the sustainable growth of the society in harmony with the government's green policies.

The 35th Energy Saving Contest

Energy Saving and GHG Reduction Projects and Performance

While participating in the national efforts to save energy, we set the mid-to long-term reduction targets to be reached by 2020, and monitor our reduction performance every year. In order to achieve these energy saving and GHG reduction targets, each plant is actively engaging in process innovation activities, and each business unit is also pressing on with activities to make a transition to a low energy consumption business structure. A representative example is the Yeosu NCC Plant, which was ranked No.1 in energy efficiency in the world. Including all plants at home and abroad, LG Chem reduced energy cost over KRW 80 billion in 2013, which is KRW 10 billion more than the previous year, gaining a competitive edge in cost. Furthermore, we are reviewing our GHG reduction performances that have been verified by the government and the feasibility of offset projects in an effort to reduce the risks that may arise from the Emission Trading Scheme. Such efforts are expected to reduce the cost risk caused by emission trading onwards.

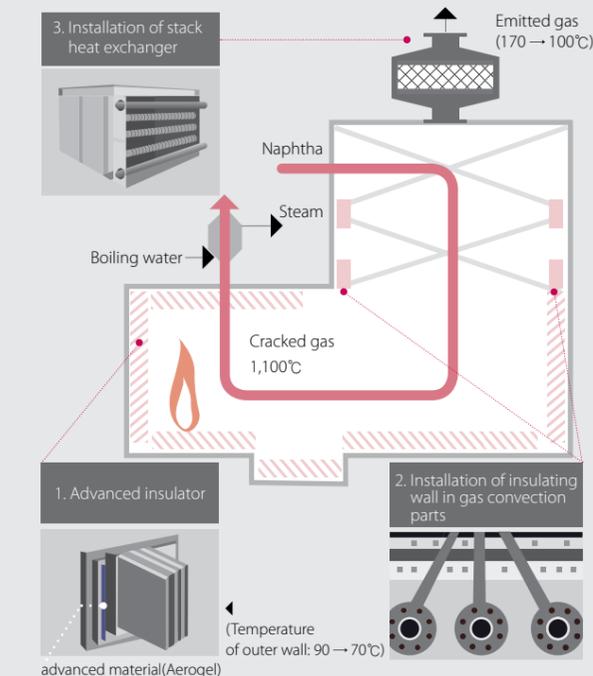
Good Practice for Energy Saving

Yeosu NCC achieved the world's No. 1 energy efficiency

LG Chem has created many innovative cases by conducting voluntary energy saving activities, going beyond responding to regulations. In particular, the Yeosu NCC Plant whose energy cost accounts for 62% of its total manufacturing costs, excluding the raw material costs, introduced innovative ideas and technologies to enhance the energy efficiency of naphtha cracking facilities, achieving the highest level of energy efficiency in the world. Through such efforts, LG Chem was ranked first place in terms of energy competitiveness out of 115 NCC companies around the world according to a survey by Solomon Associates, a U.S. energy consulting company, in February 2013. The survey shows that the energy intensity of the plant stood at 4,170 kcal/kg, which is more than 40% lower than that of other NCC's in the world. Even when compared to the average of global top 25% companies, it is more than 24% superior in energy efficiency.

In 2014, we will continue to secure the global No. 1 competitiveness in energy efficiency by improving the energy intensity to below 3,000 kcal/kg, which is an unprecedented level of energy efficiency. We will not rest on our laurels but continue our innovative activities for energy saving so that we can secure cost competitiveness and participate in energy saving activities.

Main Ideas for NCC's Energy Saving



Performances

Better Energy Intensity (kcal/kg, Ethylene)



Comparison to Competitors

Category	LG Chem	Global Top 25% Companies	Global Average
Energy Intensity (kcal/kg, Ethylene)	4,170	5,561	7,460
Energy Cost (KRW 100 million/year)	Base	+1,310	+3,100

* Based on research by Solomon Associates (compared energy competitiveness of 115 petrochemical companies worldwide)



04 Safety • Environment & Health

It is the company's fundamental responsibility for its employees and for the environment to have systematic and preemptive management on a safe work environment and health issues. It is very important to minimize negative influence and risks from business activities by eliminating potential risks and supporting the healthy life of employees by taking proactive, rather than reactive, measures. LG Chem is striving to establish company-wide strategies for safety, environment & health and targets by business site, and incorporate related items in the executive and organization evaluations to systematically manage achievements and improvement plans.

Responsible Department — Safety & Environment Team, Safety & Environment Audit Team, SH&E Team in each business site, HR Service Team

 Strategy Direction	 Major Activities / Achievements	 Goals / Plans
<ul style="list-style-type: none"> • Establish a corporate culture that prioritizes safety and environment • Strengthen activities to prevent safety & environment accidents • Reinforce capabilities regarding safety & environment capabilities and the level of management • Prevent occupational diseases and strengthen health enhancement activities 	<ul style="list-style-type: none"> • Executed CEO on-site management • Implemented company-wide online education • Strengthened safety & environment organization and audits • Set up safe environment strategies and goals • Executed training course for process safety management experts • Implemented work environment assessment • Operated health promotion programs 	<ul style="list-style-type: none"> • Continue to implement CEO on-site management • Execute additional online education for more participants • Strengthen safety & environment audits (high risk areas) • Manage records of violation cases, accidents, and targets • Operate company-wide safety & environment committee and workshop • Implement course to nurture experts in safety & environment • Establish company-wide safety & environment guidelines and IT system • Strengthen occupational disease prevention campaign • Continue to operate health promotion programs

/ Safety & Environment

At LG Chem, we consider safety & environment as one of our top management priorities and make continuous efforts to enhance our competitiveness and power of execution in this area. In 2013, we conducted a thorough audit on safety & environment and provided employees with relevant education, so as to minimize the safety & environment-related risks in our business activities. We will constantly strengthen our competitiveness in this area by establishing a company-wide safety & environment audit system as well as mid-and long-term strategies, based on which we can completely prevent safety & environment-related accidents and deal with new regulations in a preventative manner.

Improvement of Safety & Environment Departments

With a strong determination expressed by LG Chem's CEO to put top priority in safety & environment in all business activities, we have improved our safety & environment system throughout the company and enhanced the roles and responsibilities of the safety & environment departments. In 2013, we promoted the Safety & Environment Department at headquarters to the executive level and newly established a Safety & Environment Audit Team, while strengthening the power of execution across the company by increasing the number of employees in the concerned departments at each plant. LG Chem will make its safety & environment management system more effective and systematic through close cooperation among the concerned departments of all the domestic and overseas workplaces.

Reinforcement of Safety & Environment Audits and Accident Preventive Measures

audits on 10 domestic plants and 14 overseas subsidiaries in regard to legal matters such as licensing, systematic management of corrosion and deterioration of facilities, and operation of initial reaction system in cases of emergency. A series of short and long-term improvement plans were established based on the results of the audits and the level of safety & environment management has been constantly enhanced through a regular check-up of compliance. In 2014, areas with high risk of safety & environment-related accidents, such as the liquid product logistics system and high-risk facilities, will be identified and put under stricter management. In addition, mid-and long-term strategies on safety & environment management across the company as well as the goals of each plant will be set to clarify the responsibilities and authorities of each department and thus to effectively prevent safety & environment-related accidents. Based on these efforts, accident prevention activities will be continuously conducted through the management of safety & environment-related accident rate and investment execution rate, operation of the company-wide Safety & Environment Committee, and mandatory introduction of safety & environment-related items to the executive and department performance evaluation.

Enhancement of Safety & Environment Management Capability and Level

Employees in charge of safety management at workplace are provided with education on Process Safety Management (PSM) through 10 sessions. In 2013, a total of 6 education sessions were held while outside experts were invited to in-house camp training where employees could enhance their safety management capability by learning about process safety-related regulations as well as real business practices through theory and practice. In 2014, education on technology to nurture safety & environment experts will be additionally provided along with that on PSM. Moreover, a company-wide guideline on and computing system of safety & environment management will be prepared to upgrade the level of our safety & environment management to that of global standard.

Establishment of Corporate Culture with Priority on Safety & Environment

LG Chem is making a variety of efforts to internalize the culture that prioritizes safety & environment in every business activity and also to encourage the management to take the initiative in the activities. The CEO emphasizes the importance of safety & environment at operation sites through his regular visits, and executives and team leaders discuss how to bolster the importance of safety & environment in corporate management at their leadership training sessions. In addition, all employees, including office workers, received online education under the goal of increasing the company-wide awareness of safety & environment, promoting the understanding of relevant standards and principles and strengthening the execution of prevention activities. Also, the safety & environment departments across the company gathered at the 'Safety & Environment Management Workshop' and discussed effective measures to continuously enhance company-wide awareness.



Online Safety & Environment Education

CEO's Visit to Operation Sites – Emphasis on Safety & Environment

Based on his belief that the key of market leadership lies in operation site management, the CEO made relay visits to major operation sites, including Yeosu Complex, Daesan Complex, and Yongxing Plant in China. At every operation site he visited, he made sure to first receive a report on the safety & environment issues, and conducted a thorough examination on the key issues of each plant and ways to respond to emergency situations. During his visit to Yongxing Plant in China on July 15, he re-emphasized the importance of safety & environment as a key priority in every business activity, saying, "Not only relevant departments, but also each of us has a responsibility for safety & environment. Safety & environment is an action, and this action needs to be practiced by all employees, including those in production and factory affairs." The CEO will continue his visits in 2014, spreading the management principle that prioritizes safety & environment throughout LG Chem's operation sites.



Cheongju Plant Process Safety Review Board

Safety & Environment Activities at Operation Sites

Cheongju Plant - Safety & Environment as top priority in business activities / Cheongju plant organized the 'Process Safety Review Board', coming up with a process through which the relevant departments take advantage of their expertise in reviewing the safety aspects of the plant expansion project in its earliest stage. Though requiring more time and expenses than before, it enabled the expansion of the plant that was safety guaranteed and increased the interest of all employees and executives in securing safety. The achievements and know-how we have obtained through the operation of the board will be systemized, and the guidebook will also be updated so as to establish our safety standards. In addition, we will incorporate safety as a distinct part of our corporate culture by strengthening company-wide safety education.

Daesan Plant - Creation of Safety-First Culture with Execution / Daesan Plant has dedicated the year 2013 to the establishment of a safety-first culture with execution throughout our business site. While strengthening our self-safety responsibility, we have executed safety patrol, safety audit, labor-management joint observation tour, etc. on a regular basis. Safety & health education was also strengthened so that each employee is required to take the total 24 hours of regular safety & health education, while more thorough education was provided for supervisors and new employees. We have also operated in-house safety broadcasts 3 times a week and published an in-house EHS newsletter in order to reinforce our safety execution ability. In addition, we have improved the safety management of suppliers by strengthening regular safety & health education for them as well as for new visitors. In April, we had an agreement ceremony for co-existence and cooperation in safety & health with our suppliers. This was a part of LG Chem's industrial accident prevention programs with suppliers, and received much interest from the government, with the participation of the Ministry of Employment and Labor's Boryeong District Office Chief, Director of the Center for Major Industrial Accident Prevention, Director of the Industrial Accident Prevention Department, and Labor Supervisor. LG Chem and its suppliers showed strong determination to maintain mutually organic relations for safety and once again considered the importance of safety at the special lecture following the ceremony.



Daesan Plant Safety & Health Coexistence Cooperation Agreement Ceremony

Beijing Plant in China-Safety & Environment Management Reinforcement / Even though legal evaluations are not required for our Beijing Plant, we voluntarily executed a 'safety status assessment' in an effort to systematically respond to the recently tightening safe manufacturing policies and plant safety management standards. The safety status assessment helps businesses to come up with safety measures by evaluating the level of risks and harmful elements in the product lifecycle and estimating the potential accident risks. The Beijing Plant completed the evaluation according to 12 items by the end of 2013, and as a result, the awareness of the importance and necessity of safety as well as the safety management level have been enhanced. The Beijing Plant not only continues to strengthen safety & environment management in the workplace, but also supports its suppliers for their own safety & environment management. In March 2013, we newly formed an environmental procurement division to execute safety & environment inspection on the supplier that cleans sealed plastic boxes for packaging. The on-site inspection includes storage and use of dangerous chemicals, special equipment management, fire-fighting facility layout within plant, execution of safety education, employee health, etc. As a result of the inspection, the modification of 20 problems identified was recommended to the supplier along with guidelines. After a 3 month period of modification, the supplier came to provide best quality services to the Beijing Plant.

/ Health

LG Chem has created a pleasant work environment through various proactive health management activities. Its headquarters and domestic and overseas business sites implement various activities to prevent occupational diseases and support all employees to lead a healthy life.

Occupational Disease Prevention Activities

LG Chem executes work environment inspection on a regular basis to control exposure to hazardous chemical substances by process and to establish the best work environment guidelines. We have also established a leakage detection system to guarantee a safe and pleasant work environment. In an effort to minimize the occurrence of occupational diseases among employees, we inspect and improve hazardous factors at work that pose a burden on the musculoskeletal system, while reinforcing preventive activities through education and explanation on related diseases and also providing employees with physiotherapy and medical counseling.

Health Promotion Activities

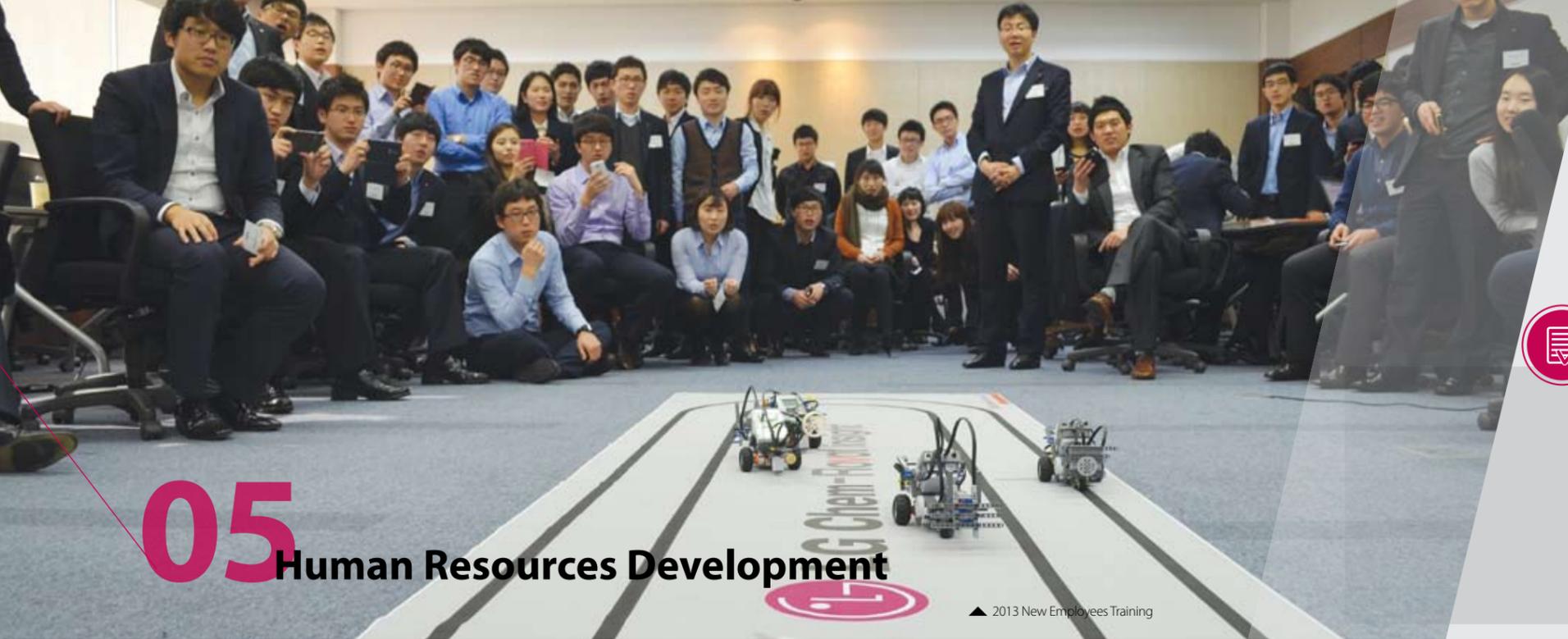
LG Chem runs a health promotion program in connection with local hospitals to provide professional healthcare solutions tailored to each employee. Every year, medical check-up and continuous counseling are provided to promote the health of employees. A health promotion center is in operation at each site to help employees regularly check and manage health conditions on their own. Each plant has established and manages a reduction target in the rate of employees with health issues. We provide the high risk groups with regular tracking management and customized management programs such as metabolic syndrome management and body fat reduction. We conduct anti-smoking/anti-drinking campaigns and send out health journals on a regular basis, encouraging employees to enhance their awareness of health promotion. A psychological counseling center is also in operation to help employees maintain a sound mind. The center offers a variety of psychological tests that help employees identify their individual personalities and aptitudes for various duties, along with on and off-line customized counseling on their personal lives. In addition, a team building program is in place to make communication smooth and healthy, and at special times, such as Family Month, external experts are invited to discuss a wide range of issues that arise in daily life, allowing employees to benefit from the professional help.

1. Fitness Club in Nanjing Plant
2. Psychology Lecture at Nanjing Plant

Health Activities at Operation Sites

Gimcheon Plant - Providing suppliers with health education and managing employees with health issues / Gimcheon Plant encourages its employees to promote their health by offering various programs. Beginning in August, we offer health education not only to our employees but also our suppliers to raise their awareness of health, while having professors of the designated hospitals make a quarterly visit to operation sites. In addition, health officials visit the plant twice a month to conduct examinations on employees with health issues and provide them with medical counseling. In October, we completed a checklist for the management of employees having problems with their musculoskeletal system given the characteristics of their jobs. Gimcheon Plant will continue its effort to convey accurate health information and activities to promote the interest of its employees in health promotion.

Nanjing Plant in China- Support for Employee Health / The Nanjing Plant has built a facility for the health and leisure of employees. The facility is well equipped with a gym that has more than 30 different types of fitness equipment, a ping-pong table, a yoga and dance room, and showers, and is flexibly operated from 08:00 to 20:00 considering the different lifestyles and work hours of employees. It also provides employees with psychological counseling for their healthy and stable state of mind. In cooperation with Nanjing Normal University, psychology doctors are invited to offer 2 sessions of counseling a week and 4 lectures a year. Moreover, we make much effort to encourage employees to have stability of mind and promote its importance through a monthly psychology column and a bi-annual psychology promotional journal.



05 Human Resources Development

▲ 2013 New Employees Training

It is very important for the company to secure and train excellent talent in order to improve its distinctive competitiveness. In addition, it is essential to establish a work environment where each individual can demonstrate capabilities to the fullest for better performance and provide fair evaluation and treatment according to performance, which will enhance employee satisfaction and retention. LG Chem has established the principles in HR management that we respect our employees' creativity and autonomy, prioritize each individual's capabilities, and guarantee employees the treatment suitable for their performance. Based on the principles, we have established and executed the strategies to secure and nurture outstanding talent and promote the corporate culture in which employees focus on the essence and core of the work and realize creative ideas. Moreover, we incorporated the core talent turnover rate and the face-to-face interview rate into the KPI of executives and organizations to evaluate performance and to promote improvement.

Responsible Department — HR Planning Team, Talent Recruiting Team, HR Development Team, Corporate Culture Team



Strategy Direction

- Secure outstanding talent in the future growth business and R&D areas
- Nurture talent to lead the market and to have business achievements based on the LG Way
- Establish a market-leading corporate culture



Major Activities / Achievements

- Recruiting talent at home and abroad supervised by the management
- Operating various programs to secure talent early
- Nurturing a candidate pool of HPI*, next generation global business leaders, and division leaders
- Strengthened prior training for subsidiary presidents, resident employees, and supervisors
- Selected and implemented the 7 innovations for improving corporate culture
- * HPI : High Potential Individual



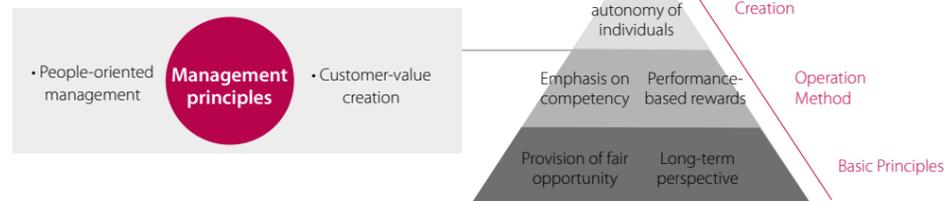
Goals / Plans

- Early securing, prior verification, and nurturing of outstanding human resources in the future growth engine business and R&D areas
- Nurture entrepreneurs to lead the market
- Support business performance through global capability development
- Establish the corporate culture in which employees focus their way of work on creating customer value

/ Human Resources Principle

In order to realize 'Customer-Value Creation' and 'People-Oriented Management,' which are the management philosophies of LG, a series of human resources principles have been established and used as the index of human resources and corporate operation. With the belief that the creativity of individuals is the source of value creation, we respect diversity and autonomy of employees and encourage them to develop their potential and bring out their maximum performance. LG Chem employs the best talents and guarantees fair opportunities without discrimination, and provides the highest compensations to the talents that achieve the highest performance according to our fair and objective evaluation.

LG Chem's HR Principles



Best Capability · Best Performance · Best Reward

HIGHEST CAPABILITY	HIGHEST PERFORMANCE	HIGHEST COMPENSATION
<p>We hire talent from all around the world, regardless of race, nationality, and gender.</p> <ul style="list-style-type: none"> Recruiting people with creativity and unique individuality Job placement with consideration for individual preference and aptitude Offering incentives to core talent, based on their market value, business impact, etc. 	<p>We present the top talent with challenging tasks and more training opportunities to develop them into our core human resources, based on fair and objective evaluation</p> <ul style="list-style-type: none"> Objective and fair evaluation system Systematic training opportunities for each level and skill One-on-one career development session Well-devised career development system 	<p>We provide the highest compensation to top talent regardless of race, nationality, gender, religion, disability, region and group</p> <ul style="list-style-type: none"> Annual salary system linked to individual capability and performance Performance-based fair rewards Fast track promotion system

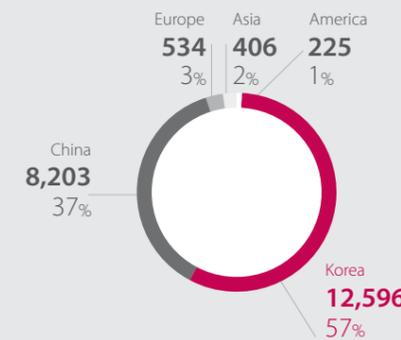
Talents Envisioned by LG Chem



Employment Status

Employees by Region

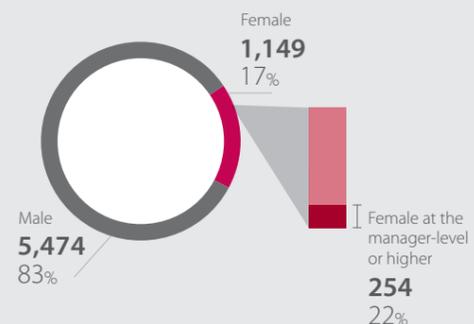
Unit : Person



Employees by Gender (Korea)

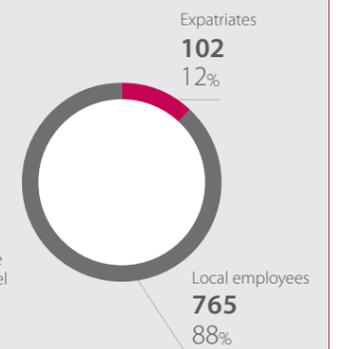
Unit : Person

* Office workers



Percentage of Managers (China)

Unit : Person



/ Securing Talent

Recruiting Global Talent

LG Chem has been actively encroaching into the global market to make the leap forward to becoming a world-class chemical company. We are working towards the localization of our overseas subsidiaries by securing and cultivating outstanding local talent. In the case of China, each subsidiary is actively securing new recruits by conducting on-campus recruiting at major universities within the respective regions, and conducting on a rolling basis the recruitment of outstanding talent with the required capacity to do local business. In the case of the US and Europe, we rely on local recruiting firms to bring in highly qualified talent of manager-level or higher positions.

Securing Global Talent

We have carried out the 'BC (Business & Campus) Tour & Tech Fair', directly supervised by the CEO and executives, in the US and Japan for nine consecutive years since 2005. This fair is designed to introduce our company to outstanding local students and interview them. Furthermore, we have continued the efforts to recruit outstanding global R&D talent through the 'LG Techno Conference,' which is co-organized by LG affiliates.



BC Tour & Tech Fair

Pre-Employment Program

We are focused on the pre-employment of highly qualified talent such as engineers who develop the next generation products and product/process engineers who are required for future growth businesses. For the selected talent through the pre-employment program, we provide various opportunities such as supporting school tuition and giving on-the-job training or employment guarantees, to pre-secure more talent who can help us lead the market.

Pre-Employment Program

R&D Industrial Scholarship Program	A scholarship offered to R&D masters and doctors at home and abroad - Employment guaranteed after graduation
Industry-Academic Collaboration Program	Customized training and industrial scholarships provided to masters, doctors and specialists from universities who have signed an MOU with the company
On-the-job Engineer Training and Internship Program	Designed for undergraduates in the 1st semester of the 4th year, who receive on-the-job training in the division in which they want to continue working after graduation - This nurtures and double checks the potential of on-the-job engineers.
Global Internship	Outstanding undergraduates at home and abroad with various majors are secured, nurtured, and verified - Carried out along with the "Executive/team leader mentoring" to enhance the connection with the training and the employment
Industry-Academic Collaboration Internship	A long-term internship (4 months) for undergraduates that awards school credits. Employment guaranteed after graduation



Signing Ceremony for the Agreement on Industry-Academia Training between LG Chem & KAIST

/ Talent Development

Based on the belief that talented employees are the key source of differentiated competitiveness, LG Chem has established systematic HR management strategies closely linked to its business goals and strategies, and is exerting much effort to develop outstanding talent. We run systematic training programs with the aim of nurturing future entrepreneurs to lead the market, developing job-specific competencies to secure best quality competitiveness, and strengthening global competency and leadership capacity based on core values to carry out successful global businesses.

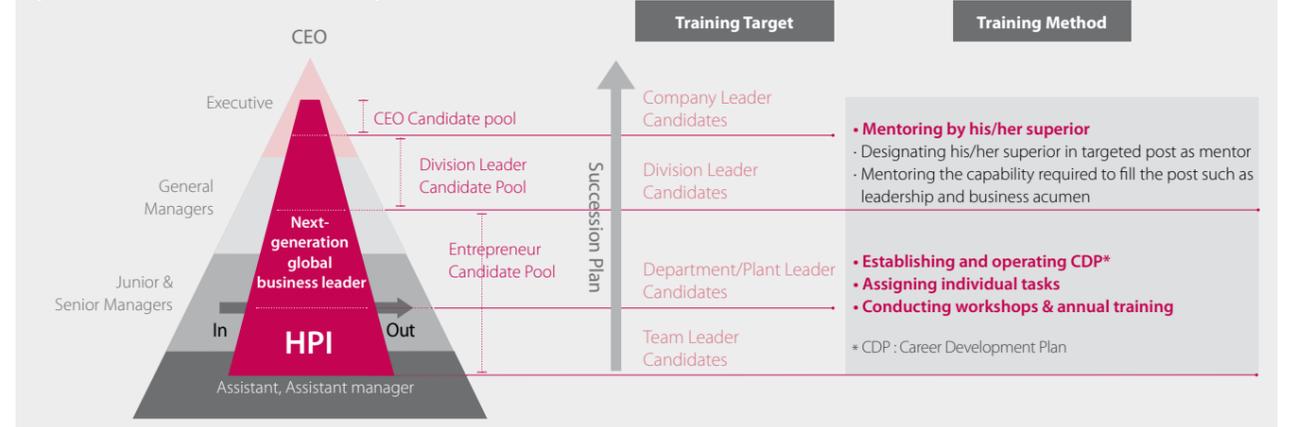
HPI Training Programs



Core Talent Development for Market Leadership

In order to maintain the position as a market leader, it is very important to discover individuals with business capabilities and leadership competency at an early stage and nurture them into future entrepreneurs. LG Chem has established an entrepreneur nurturing system in connection with Succession Plan for our future entrepreneurs, including the candidates for the position of division leader, the next-generation global business leaders, and High Potential Individuals (HPIs). Taking up 5% of office workers, the HPI is the talent pool for future entrepreneurs. The training programs for them are annually provided for the first three years and for those in their fourth year or higher, an annual workshop is held to discuss business strategies and issues to enhance their business insight. Furthermore, to nurture future entrepreneurs, we operate training programs for the division leader candidates and the next-generation global business leaders to help them gain insight into the general management based on comprehensive introspection. In 2012, we started running a taskforce team to systematically nurture entrepreneurs. The team is fostering the mentoring and coaching activities to improve their business capabilities and leadership competency.

Entrepreneur Nurturing System



Expert Competency Enhancement

To secure the best quality competitiveness, training employees to be experts in their respective areas is very important. To this end, we operate the LG Chem Academy to strengthen the capabilities of production technology experts. The Academy provides 37 courses in the petrochemicals area, 32 in the IT & electronic materials area, and 74 in the battery area. Our internal experts develop educational programs and also give lectures on the knowledge and skills accumulated over the years. Moreover, in 2013, as part of the efforts to help new employees bring out the best in them as soon as possible, we developed the e-learning/mobile-learning system consisting of 12 courses (9 for on-the-job training and 3 for general/common education) as a regular training support system that minimizes the limits of time and space. All LG Chem employees are allowed to sign up for and take the on-the-job training e-learning courses on the website of the LG Chem Cyber Academy. The general/common e-learning courses are designed to provide the contents related to issues that all employees should be aware of, such as safety & environment and information security. These learning programs not only enable the employees to develop themselves but also strengthen their expert competency required for successful business performance.

Level-based Leadership Competency Enhancement

We offer leadership programs for all employee levels, based on the belief that each and every employee is a potential leader. These innovative programs, based on our core values of the LG Way, are designed to develop the leadership capacity at each employee level. The second year course for assistants and assistant managers aims at helping them find a new meaning in their jobs and effectively play the role of middleman. The courses for the junior managers or higher levels focus on the capacity building of employees as potential leaders. For the second-year senior managers, who are likely to take the position of team leader at any time, the courses emphasize their essential role as potential team leaders.

Level-based Leadership Training Structure

Course Name	Targets	Contents
TL (Team Leader)	Team Leader	· Discussing and drawing management direction to lead the market · Clarifying action agenda as a team leader
SL (Senior Leader)	2nd-year Senior Manager	· Building capacity as a potential team leader - Job Facilitator - Relations Linker - Performance Coaching
JL (Junior Leader)	2nd-year Junior Manager	· Enhancing basic capability as a potential leader by discovering individual strength and weakness
AL (Assistant Leader)	2nd-year Assistant Manager	· Recognizing the role as an effective mediator within the company · Devising the way to guide and mentor juniors
Together	2nd-year Assistant	· Finding a new meaning in the job based on the experience over the previous year

Global Competency Training Structure



Global Talent Development

At LG Chem, we enhance our competitiveness by reinforcing our capacity as a global organization in a systematic way so as to make our overseas business operations more successful. Targeting the employees who directly contact our global customers, LG Chem offers a variety of training programs to improve their foreign language skills and business etiquette as well as to strengthen capacity related to the respective jobs. Furthermore, we provide our employees with long-term camp training on a regular basis to enhance their foreign language competencies such as English, Chinese, and Japanese. In addition, those scheduled to be dispatched to overseas subsidiaries or branch offices are trained to build up their global leadership and management skills beforehand. Also, LG Chem runs local expert development programs to nurture talents who will take charge of overseas businesses in the strategic regions such as China, India, Brazil, Russia, and the Middle East, and dispatches those experts to the regions for 3 to 6 months, encouraging them to learn the local languages and conduct market research. In this way, they are trained to develop the capabilities required for their task when they are dispatched in the future.

Team Leader Leadership Enhancement Program

From March 12 to April 10, 2013, the Team leader Leadership Enhancement Program was held over 5 sessions, under the theme of "Strictly following the principles and basic rules" and "Innovation of working styles." At this program, team leaders had a discussion on environment & safety, Jeong-Do management, and rules and regulations related to corporate operation, emphasizing the importance of following principles and standards. Furthermore, they shared the ways to innovate not only company-wide working styles but also those of each business unit, and discussed the direction of improvement in working styles with their team members. After returning to their operation sites, they came up with specific action plans with their team members and had them successfully implemented.

Team Leader Leadership Enhancement Program



/ Corporate Culture

According to the LG Way, the management philosophy on which LG employees base their thinking and behavior, LG Chem encourages its employees to build a creative and autonomous work environment where they can strengthen their global capacity and show excellent performance.

Direction for Corporate Culture Innovation

In order to achieve the ultimate goal of becoming 'No.1 LG' in this globally competitive environment, LG Chem needs to take a leap forward to emerge as a market-leading company. To that end, our members are focusing more on the essence and core of differentiated customer value creation and making efforts to bring out creative ideas. In addition, they strive to accomplish their goals in a self-initiated manner and create synergy effects through active cooperation between organizations. Such innovation in working styles goes hand-in-hand with strict observation of principles and basic rules.

7 Innovations for Improving Corporate Culture for Market Leadership

The internal/external business environment has been rapidly changing in recent years. Accordingly, LG Chem has selected and implemented 7 major tasks, focusing on what must be strictly adhered to and what should be continuously innovated.

7 Innovations for Improving Corporate Culture for Market Leadership		
Innovation of working styles	Listening-Discussion-Practice and Simplification of Protocol	· Listen carefully / Discuss intensely / Act thoroughly / Protocol is for our customers
	Work Intensive & Smart	· Reporting & meeting improvement: Simplifying report formats and avoiding unnecessary meetings · Reduce overtime work and holiday work through intensive work · Encourage vacation leaves for refreshment to raise productivity
	Self-initiated Work	· Take initiative to undertake new challenges and achieve goals in spite of any obstacles
Observation of Basic Rules and Principles	Promotion of Collaboration	· Create synergy between teams and organizations through collaboration
	Observing principles of safety & environment	· Make safety & environment principles part of your habitual routine
	Implementing Jeong-Do management	· Fair job practices: Accurate and honest reports; transparency in operation of business partners; proper use of corporate assets
	Observing work regulations	· Manage commuting times & diligence and indolence, observing break times

Customized Organization Development Program for Chinese Market

In 2013, as part of the effort to innovate the working styles at 9 operation sites in China, 5 team-based corporate development programs were developed, suitable for local conditions. Those 5 programs consist of 'active communication,' 'team membership,' 'increasing momentum to achieve goals,' 'enhancing initiative,' and 'strengthening positive attitude.' Each team can choose a program that it will take according to its needs. 37 in-house lecturers were trained to run the programs at the operation sites in China, and a total of 48 teams (648 attendees) participated in the programs in 2013. LG Chem is committed to innovating its corporate culture not only in Korea but also in its overseas branches through the continuous operation of corporate development programs developed and supported by the head office.

Promotion Activities on Corporate Culture Innovation for Market Leadership

We are promoting a series of activities to set up a corporate culture as a market leader, so as to provide differentiated value to our customers. We will continue our efforts for innovation and change to establish such a corporate culture throughout the company.

Spreading and Sharing 7 Innovations

- Sending a notice to the executives and leader groups ▶ supporting the leaders to take the initiative in changing the corporate culture
- Applying the market leadership module to the mandatory training courses and sharing with all members

Team Development Program

- Implementing customized programs for each team to establish the working style focused on essence and core

Corporate Culture Campaign

- Running the Focus Board* twice a month (all operation sites at home and abroad)
- * Focus Board: Abbreviated form of Market Leadership Focus Board

Organization Development Program Tailored for China

- Developing and implementing organization development programs tailored for China with the consideration of local conditions, in an effort to innovate the working styles at the operation sites in China

동반성장관련 협력회사 간담회



06 Shared Growth with Suppliers

▲ Meeting between IT & Electronic Materials Procurement / Logistics and Suppliers

It is essential for companies to secure stable and long-term cooperative relationship with reliable suppliers in order to achieve stronger competitiveness and sustainable growth of their own as well as the industry. Also, since a company's business activities have overarching influence on the entire product and service value chains, it is very important to manage social responsibilities of suppliers in addition to providing support to them. LG Chem seeks to achieve a sound and healthy shared growth with suppliers by establishing a systematic mutual cooperative relationship. To ensure effective management and improvement, performance related to shared growth is included as one of the Key Performance Indicators that are used to evaluate the executives of procurement department.

Responsible Department — CSR Team, Procurement Department



/ Shared Growth with Suppliers

In the spirit of Jeong-Do Management, LG Chem carries out a policy of shared growth with its suppliers that is grounded in a fair trade culture. We provide our suppliers with long-term, consistent, and practical support. Our aim is to achieve shared growth by establishing the order of fair trade through such a policy and raising competitiveness through various support for our suppliers.

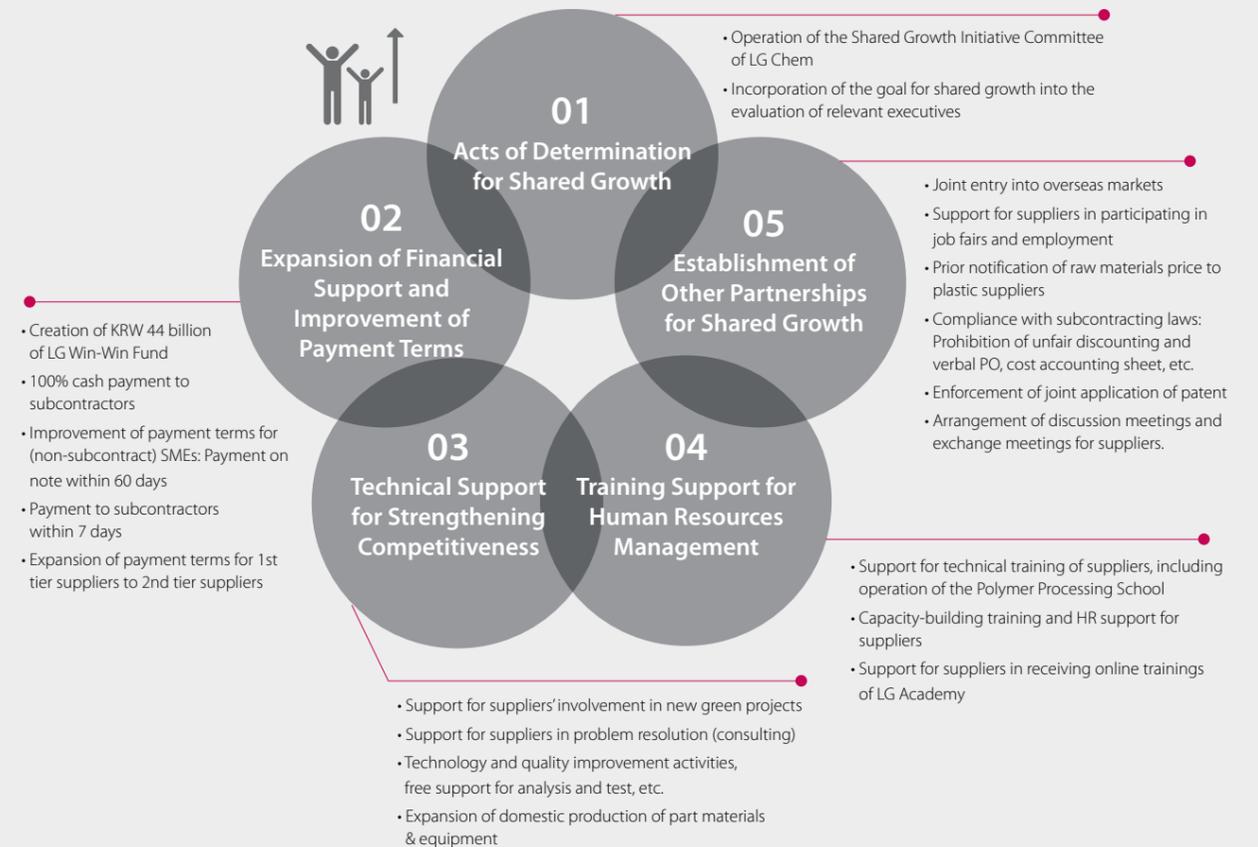
From CEO Message (May 2013)

"In order for LG Chem to lead the global market and to be the global No. 1 company, we need to grow together with the outstanding suppliers."

Shared Growth Support System

The shared growth policy of LG Chem is carried out under the direct leadership of the management. We have selected the five major tasks for shared growth and established the LG Chem Shared Growth Initiative Committee, which is chaired by the CFO and composed of 11 executives from different areas, in order to directly involve the management in the efforts toward achieving shared growth with small and medium-sized suppliers. The Committee convened twice in 2013 and reviewed the performance and discussed future plans to more effectively push forward our activities for shared growth. In addition, we created the Partner Collaboration Department and CSR Team in September 2013 to strengthen the driving force for our shared growth activities and carry them out in a more systematic way.

Five Major Tasks for Shared Growth





Shared Growth Agreement Ceremony for LG Group's Joint Support to Suppliers

Major Tasks and Performance for Shared Growth in 2013

LG Chem recognizes its suppliers as business partners and believes that achieving shared growth with them is essential for sustainability management. We, therefore, actively pursue shared growth projects that produce real outcomes. We signed shared growth agreements with our suppliers, developing and providing comprehensive support and cooperation initiatives for small and medium-sized suppliers in various areas such as finance, technology, training, market development, and communication. In January 2013, LG Chem concluded shared growth agreements with 47 first tier suppliers. As an effort to take the leadership in spreading the culture of shared growth throughout the supply chain, we also encourage our first tier suppliers to sign agreements with second tier suppliers.

LG Chem and JIWOO TECH realized shared growth through a close partnership and exchange of technological prowess that exercises the strengths of both parties

Based on the resolute commitment of the top management, LG Chem is operating various programs to support its suppliers, particularly focusing on technical support. Among the technical support programs, the joint development project with JIWOO TECH is considered as a representative and meaningful case. JIWOO TECH is a company that specializes in manufacturing precision industrial machinery. When LG Chem built additional production lines of optical films in Nanjing, JIWOO TECH participated in the joint project to domestically produce the core facilities that had been imported in the past. LG Chem and JIWOO TECH launched the project in July 2012, and completed the development of domestic facilities with better function and quality than the imported facilities. The newly developed facilities have been used in the production lines since April 2013. With this effort, LG Chem reduced the facility cost and established a production line for a small volume of products, while JIWOO TECH obtained the order for the whole facility of the process for polarizing film, the core of the relevant production line, and thereby substantially increased the sales volume by over 50% and 30% in 2012 and 2013, respectively.

Partnership with Suppliers

The operation of the Open Procurement System has enabled LG Chem to improve not only the access of new suppliers but also the fairness and convenience of the work process. We are making continuous efforts to improve the system to follow the paradigm shift from simple management of suppliers to achievement of shared growth.

Transparent Selection of New Suppliers Based on Openness and Fairness

Through the Open Procurement System or OPEN (<http://open.lgchem.com>), LG Chem selects new suppliers in a fair and open manner. Any supplier that wants to start doing business with LG Chem may apply by registering on the OPEN website. A decision to accept or reject an application of registration is made based on the results of the self-evaluation of the applicants and the selection criteria of LG Chem for new suppliers. In this way, the barrier for new suppliers to apply for transaction with LG Chem has been lowered.

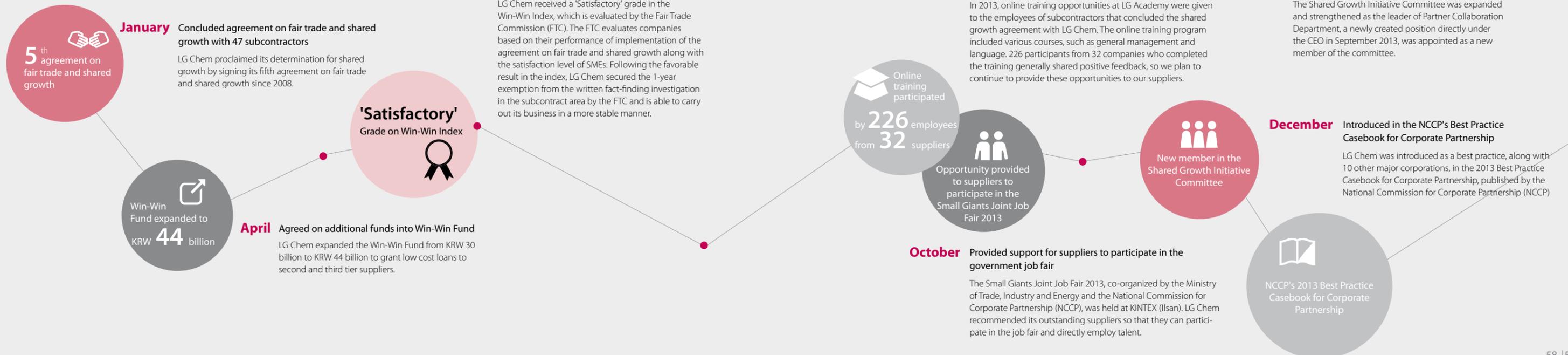
Support for Overseas Subsidiaries to Secure Openness and Fairness in Local Purchases

LG Chem has completed the establishment of the same Open Procurement System for Chinese subsidiaries to secure openness and fairness in the local purchasing process. In addition, along with the process standardization through the system, the purchasing rules, know-how, and guidelines were reorganized to secure transparency in the operation and management of suppliers. To strengthen purchasing competency of overseas subsidiaries, we plan to continuously expand our support, such as providing trainings and holding information exchange sessions on a regular basis.

Supporting and Fostering Suppliers with the Regular Evaluation System

LG Chem conducts regular evaluations in various aspects to foster its suppliers and realize shared growth. On top of the technical and financial status, suppliers are fairly evaluated in terms of compliance with environmental regulations, shared growth (improvement of payment conditions for second tier suppliers), and labor and human rights laws and regulations (identifying unfair labor practices and internal strikes) and then provided with feedback. In particular, we continuously strengthen the criteria related to safety & environment, human rights, and labor in order to thoroughly manage and protect not only LG Chem but also our suppliers. Suppliers with outstanding results are offered incentives such as improvement of payment terms and the preferred right to use the Win-Win Fund, while those with poor results that fall below the standard are required to submit action plans for improvement. These measures have been designed for the development of both LG Chem and our suppliers.

Major Shared Growth Activities in 2013



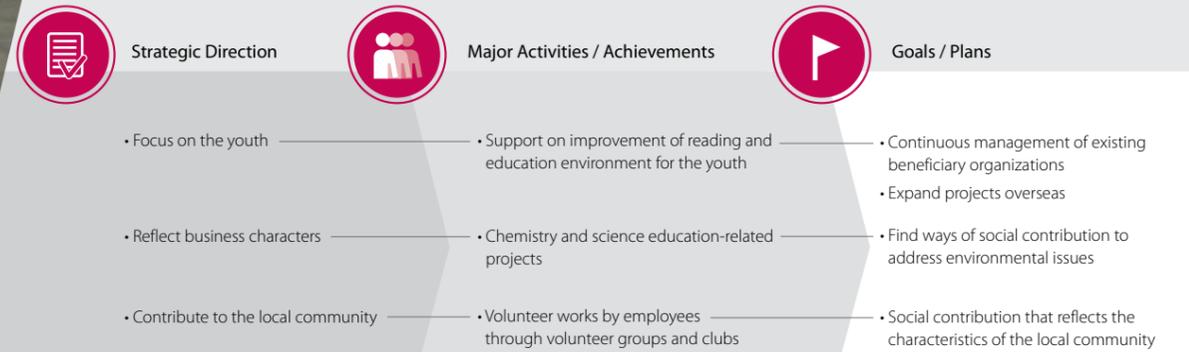


07 Social Commitment

▲ Library of Hope 'Chaeknaru'

LG Chem recognizes various influences that we could have on local communities and citizens around the world as we engage in vibrant business activities in many different countries. With this in mind, we continue social contribution activities utilizing our business characteristics and expertise in an effort to reinforce our positive influences. Selecting four major areas, we are systematically operating various programs for teenagers and have a plan to gradually expand the programs to the global level. We collect and evaluate feedback from our stakeholders, including direct beneficiaries of social contribution activities and reflect them in our improvement plans in order to provide more effective programs.

Responsible Department — CSR Team



/ Social Commitment

As a leading chemical company, LG Chem is committed to becoming a socially responsible company that co-exists and grows with society, while also contributing to the development of the national economy. In line with the slogan of the LG Group for its social contribution activities, 'Love that makes young dreams come true,' our social contribution activities focus on children and youth who can be easily marginalized but have limitless potential. As a corporate citizen partner that provides future solutions to our youth, we will continue to carry out social contribution activities for the youth and do our utmost to fulfill our social responsibility.

Social Commitment Framework

The social contribution activities of LG Chem are systematically performed in four major areas: youth education, youth welfare, local community support, and global social contribution. In particular, our expertise as a chemical company is fully exhibited in carrying out the activities for youth education. A variety of education programs are run to raise the interest of the youth in science and technology and to contribute to nurturing young talent. At the same time, a series of welfare projects for the economically marginalized have been implemented in a bid to help ease an ever-deepening income gap and to grant equal opportunities to the youth of the low-income bracket. Such projects include improving the education environment and supporting their cultural life. Noting that a company can grow sustainably only with the development of its local communities, we carry out diverse social contribution activities around our operation sites at home and abroad. In addition, we look for the ways to contribute to the development of host countries and regions where our subsidiaries are operating and to conduct global social contribution activities.

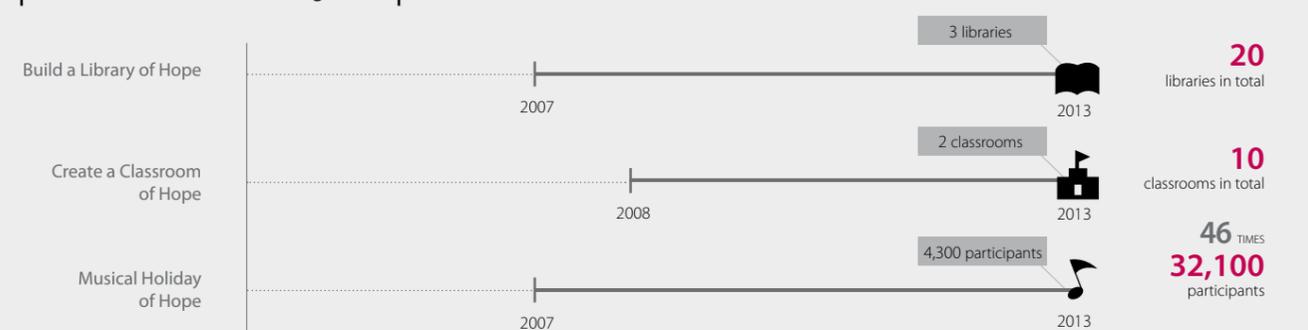
Social Commitment Vision



Records of 'Youth Education' Programs



Records of 'Youth Welfare' Programs



Four Major Areas for Social Contribution

Youth Education /

· Fascinating Chemistry! LG Chem Chemistry Camp

The LG Chem Chemistry Camp is one of our representative social contribution activities that uses our expertise as a chemical company. Since its launch in 2005, the camp has been held for middle school students every year, to help them familiarize with science through exciting experiments and practical exercises such as creative structure building activity. This 3-day event is accompanied with other programs such as personality education and vision lectures that help the youth grow into healthy members of the society.

· Chemistry Frontier Festival

The 'Chemistry Frontier Festival' is a chemistry festival to find and cultivate future talent of the 21st century in science and technology and also to increase the high school students' interest in chemistry. Jointly sponsored by six petrochemical companies, including LG Chem, and organized by the Korea Petrochemical Industry Association, this program has been held annually since its launch in 2004. Through various chemistry experiments, the festival participants learn the true values of chemistry that are closely related to our daily lives such as environment, energy, life, social study, and traditional science. The winners in the top rank are given various benefits, including a chance to receive overseas training as well as special employment privileges if they join one of the co-hosting companies.

· Junior Science Class

The 'Junior Science Class' for the youth at elementary schools and childcare centers in Daejeon has been held since 2004. Our researchers at the LG Chem Research Park are voluntarily participating in holding more than 20 after-school science classes every year. This program is one of LG Chem's representative talent donation activities, encouraging children to discover the excitement of experiments and also to develop their dreams.



Junior Science Class

Fascinating Chemistry! LG Chem Chemistry Camp

LG Chem held four sessions of chemistry camp in January 2013, which was attended by some 400 youth. Middle school students, gathered from all over the country, had a chance to step closer to chemistry, participating in diverse and exciting experiments such as making lip balm, cooking molecular gastronomy, and making mini cars that operate on salt water. In addition, various other programs were also held, including special lectures on personality education, vision setting, and special performances using scientific principles, which were designed to help youth grow into healthy members of the global society.

Fascinating Chemistry! LG Chem Chemistry Camp



Youth Welfare /

· Build a Library of Hope

LG Chem has implemented the 'Build a Library of Hope' project of which the goal is to spread a reading culture among the youth who will play a leading role in the future, and also to provide a cultural venue for local residents who have been culturally marginalized. This project is one of LG Chem's representative programs for youth welfare, in line with the slogan for social contribution, "Corporate Citizen Partner that Provides Solutions for the Future of Youth." Since the launch of this project in 2007, we have been opening libraries at the steady pace of 2 to 3 libraries in elementary and middle schools per year. Not only do we support the operation and management of the libraries, but we also provide various outreach programs, such as reading education and 'Meet the Author' sessions to promote the libraries. Including the 3 libraries newly opened in 2013, a total of 20 libraries are in operation now. We will continue expanding such activities to help local communities from the long-term perspective, so as to pursue mutual growth with the local communities in a sustainable way.

· Create a Classroom of Hope

'Create a Classroom of Hope' is an activity that began in 2008 to create a pleasant education environment for the youth, who have relatively poor social support. Every year, one or two youth education facilities are renovated to improve the education environment. After renovation, voluntary activities are carried out by employees of LG Chem to 'Create a Classroom of Hope.' This community service was provided at social welfare centers in Banghwa2-dong and Singil (Seoul) in 2013, adding to a total of 10 Classrooms of Hope so far.



Create a Classroom of Hope

· Musical Holiday and Mecenat Programs

Through the 'Musical Holiday and Mecenat Programs', various musical performances are performed for soldiers and residents in areas with limited access to cultural events. This program has been continuously provided since 2007 in the military frontlines such as Uleung-do, Baekryung-do, and Gangwon Province, contributing to the cultivation of emotions of military servicemen, enhancement of the culture in barracks, and improvement of the cultural welfare of the military. Consequently, we were given the honor of winning the 'Cultural Management Award' at the Mecenat Awards 2009, and received appreciation plaques twice from the Ministry of Defense. In 2013, six performances of the musical 'Bachelor's Vegetable Store', which depicts the hopes and dreams of young men and therefore can be easily related to the young soldiers in the military, were successfully held.

Local Community Support /

· Social Contribution by Operation Site

Various social contribution activities are conducted in our ten operation sites across the country to solve the difficulties in local communities. In 2013, a series of activities for the youth were performed in such ways as renovating community child centers and providing scholarships and school uniforms. Furthermore, a variety of activities such as support for the elderly to receive eye surgery as well as for multicultural families were also provided. To support the social contribution activities at each operation site, our employees raised around KRW 300 million in funds and actively participated in volunteer activities amounting to 21,889 hours of volunteer work.



Event for multicultural families (Daesan Plant) to watch an LG Twins baseball game

· Hobby Clubs' Community Service

LG Chem is strongly encouraging its employees to participate in community service and contribute their talent in diverse and voluntary ways. The community services by hobby clubs voluntarily started as small units, but have steadily grown since 2009 when the company decided to support those clubs. In 2013, the clubs in ten operation locations across the country performed 187 community service activities.

The 20th Library of Hope, Jilpoong

LG Chem's 20th Library of Hope, the Jilpoong Library, was completed on December 7, 2013. It was built in the YMCA Youth Center in Hakdong, Yeosu (Jeollanam-do) where the residents are culturally underprivileged. Besides bookshelves, this library also has a video-audio room to watch videos and group study rooms for meetings and discussions. In particular, approximately 1,700 books out of the 2,500 books donated by LG Chem were provided by the employees of the Yeosu Plant who voluntarily raised funds and collected used books.

Global Social Contribution (Social Contribution Activities by Chinese Subsidiaries)

Youth Education /

· 'Attractive Chemistry' class

LG Chem's regional holding company and Yongxing Plant in China are carrying out various social contribution activities using our expertise as a chemical company. In November 2013, the members of Aixin She (Loving Heart Society) of the Petrochemicals Sales Department and TC Department of the regional holding company visited the attached elementary school of Beijing University and offered the 'Attractive Chemistry' class. The employees carefully prepared for the class with interesting chemistry experiments that can raise the interest of students. The Yongxing Plant held 'Attractive Chemistry' classes for children and kindergartners in local schools in the Zhejiang province, in July and November 2013. The employees of the Yongxing Plant also raised funds to build safe roads for the children.

In the years to come, more information on social contribution activities will be exchanged among the Chinese subsidiaries of LG Chem, and such activities will be continued based on a sense of mission to provide the youth with science education.



1. Regional holding company in China_ 'Fun Chemistry' Class for Students of Elementary School Attached to Peking University

2. Yongxing Plant_ 'Fun Chemistry' Class for Children

Youth Education /

· LG Chem Library of Love

LG Chem continues to develop the welfare and the education environment for the youth. In June 2013, volunteers from LG Chem's Guangzhou Plant visited Kulong Elementary Schools 1 and 2 in Luogang to deliver 30,000 yuan-worth of books, computers, and office supplies. Guangzhou Plant has, so far, provided 300,000 yuan-worth of stationary and sports apparatus and equipment since it built the LG Chem Library of Love in 2007.



1. Guangzhou Plant_ Support Activities for 'LG Chem Library of Love'

2. Yongxing Plant_ Recovery Aid for Yuyao Flooding Disaster

· Support for Flood Recovery in Yuyao and School Lessons

Yongxing Plant took part in the restoration of flood damage in Yuyao where typhoon Fitow hit hard. In order to help the schools where all the classrooms were flooded and could not continue to teach the students, the management from Yongxing Plant called an emergency meeting. Also, the plant provided 100 pairs of desks and chairs and 4,000 books, all together worth 52,000 Yuan, so that schools could resume class.



· Delivery of Art Supplies to Elementary School

Employees of Nanjing Plant visited Yanziji Elementary School to give the students backpacks filled with art supplies. The head and the employees of the regional holding company visited the art exhibition of the students to appreciate and purchase the artwork and emphasized the importance of a positive learning attitude to the students. The company has also established action plans by plant to develop and implement the educational environment of the local students.

Community /

· Hygiene & Environment Enhancement Project

The regional holding company in China cooperated with the China Women Development Foundation to improve hygiene conditions in poor areas by starting a project to improve toilet conditions in Hebei. The company built new toilets in 2 schools in Hebei and donated sports apparatus and equipment to the schools. Along with this, LG Chem provided relevant news articles to the Hebei community on a daily basis to let the people know the importance of hygienic practices.

· Environment Cleaning Activities

As part of public services, 50 employees of Beijing Plant of LG Chem have been campaigning environment cleaning activities for 4 years. In August 2013, 60 administrative staff members of Beijing Plant voluntarily picked up garbage on the adjacent roads and nearby subway stations of the plant. Consequently, not only has the environment surrounding the plant improved, but the garbage volume has also reduced considerably. Beijing Plant will continue to do such a job on a regular basis to protect the environment and to raise the people's awareness about public services. Also, Yongxing Plant has actively participated in the environment cleaning campaign of the Chinese subsidiaries by cleaning the nearby reservoirs.

· Experience Korean Culture Event

In July 2013, the employees of the administrative and HR teams of Yongxing Plant held an event for the local students to experience traditional Korean culture. This event included classes to promote Korean culture, trying on traditional garments, and making Kimbap. The employees led the classes about geography, history, celebrities, traditional houses, and currency, while the students had the chance to wear Hanbok, the traditional Korean dress, and to learn traditional etiquette. Later, the LG Chem employees demonstrated how to make Kimbap, and the students could practice following the demonstration. The Chinese students showed a keen interest in Korean culture, asking many questions.



1. Beijing Plant_ Environment Cleaning Activities

2. Yongxing Plant_ Experience Korean Culture Event

Chinese Regional Holding Company of LG Chem Wins "2013 Top Company - Promotion & Image Award"

The Chinese regional holding company of LG Chem received the "2013 Korea Top Company - Promotion & Image Award" on September 27, 2013. LG Chem's various activities to fulfill its social responsibility and play a role as a sustainable and environment-friendly company were highly appreciated, resulting in winning the award. The company reaffirmed its strong will to carry out more active social contribution activities to contribute to preserving and improving the environment of the local communities in China.

APPENDIX

- Sustainability Performance Data
- Sustainability Management Index
 - GRI G4
 - ISO 26000 (International Guideline on Social Responsibility)
 - EICC (Electronic Industry Citizenship Coalition)
 - 10 Principles of UN Global Compact
- Independent Assurance Statement
- Membership of Organizations and Associations / Awards Received
- Glossary
- Participant Information

Sustainability Performance Data

Economic Data

Economic Performance		Unit: %		
		2011	2012	2013
Stability Indicators	Current Ratio/Debt-to-Equity Ratio	153.6	171.8	174.7
	Debt-to-Equity Ratio	57.5	54.0	48.8
	Dependency on Borrowings	26.0	27.4	25.7
Profitability Indicators	Operating Income Margin	12.5	8.2	7.5
	Net Income Margin	9.6	6.5	5.5
	ROA	15.5	9.5	7.5
	ROE	24.7	14.7	11.4
Growth Indicators	Sales Growth	16.5	2.6	(0.5)
	Operating Income Growth	(0.1)	(32.2)	(8.8)
	Net Income Growth	(1.4)	30.6	(15.6)
	Total Assets Growth	20.6	8.5	5.2

Economic Performance by Business		Unit: KRW 100 million		
		2011	2012	2013
Petrochemicals	Sales	172,654	175,143	175,452
	Net Income	23,291	14,362	13,320
IT & E Materials	Sales	31,417	32,707	30,248
	Net Income	3,743	4,357	3,789
Energy Solutions	Sales	22,686	24,780	25,736
	Net Income	1,175	387	3,230
Others	Sales	-	-	-
	Net Income	(21)	(3)	(2)
total	Sales	226,757	232,630	231,436
	Net Income	28,188	19,103	17,430

Sales by Region		Unit: %		
		2011	2012	2013
Korea (Domestic market)		44	43	43
China		43	42	44
The Americas		7	8	7
Southeast Asia		6	7	6
Western Europe		3	4	5
Others		13	13	13
Consolidated Adjustment		(16)	(17)	(19)

Distribution of Economic Value				
Corporate Tax				
Unit: KRW 100 million				
		2011	2012	2013
Income tax expenses from continuing operations		6,270	3,742	3,307
Procurement Status (2013)				
Unit: KRW 100 million				
Business	Amount	Items	Use	Supplier
Petrochemicals	113,820	Naphtha, EDC, etc.	PE/PVC raw materials	GS Caltex, OXY Chem, etc.
IT & E Materials	16,016	TAC Film, Cobalt, etc.	Polarizer raw materials	Fuji, etc.
Energy Solutions	10,893	Anode materials, Cathode materials, Separators, etc.	Battery raw materials	Hitachi, Mitsubishi, etc.
Total	140,728			

Labor Cost		Unit: KRW 100 million, KRW million/person		
		2011	2012	2013
Total Annual Payroll		6,772	7,265	9,043
Total Payroll Per Capita		63	62	72

· Salaries for women and men are equal and awarded without discrimination (salaries of top management excluded)

· Total payroll: Excludes welfare benefits and retired DB (direct benefit) or DC (direct compensation). This is only for workplaces within Korea (foreign entities excluded)

Dividends				
		2011	2012	2013
Net Income During the Term (KRW 100 million)		21,697	15,063	12,706
Primary & Diluted Earnings Per Share (KRW)		29,069	20,318	17,211
Dividend Ratio (Par value, %)		80	80	80
Total Dividend (KRW 100 million)		2,945	2,945	2,945
Dividend Payout (%)		13.6	19.6	23.2
Dividend Yield (%)		1.26	1.21	1.34

Environmental Data

All LG Chem operation sites in Korea and China are operated under the environment management system. Each operation site has set up directions, strategies, and goals in detail and has improved and monitored performances continuously. If necessary, they are verified by a third audit institution.

In order to use resources efficiently, the operation sites continue to reduce the use of raw materials and water and find ways to recycle waste and wastewater. Also, they have established and kept monitoring disposal facilities and systems to prevent the pollution of air, water, and soil. By doing so, they are making continuous efforts to prevent pollution and possible accidents and to reduce pollutant emissions.

Production		Unit: ton		
		2011	2012	2013
Korea		12,401,297	13,090,003	13,831,606
China		1,628,383	1,708,174	1,900,294

Environmental Investment		Unit: KRW 100 million, RMB million		
		2011	2012	2013
Korea		377	278	514
China		99	38	45

Raw Materials		Unit: ton, ton/product ton		
		2011	2012	2013
Korea	Total raw materials used	13,374,592	14,200,330	14,959,766
	Intensity	1.08	1.08	1.08
China	Total raw materials used	1,662,835	1,736,874	1,523,427
	Intensity	1.02	1.02	0.80

· Total amount of raw materials recycled at Korean workplaces in 2013 was 46,627 tons.

Water		Unit: m ³ , m ³ /product ton		
		2011	2012	2013
Korea	Total water used	41,273,364	49,114,397	57,282,786
	Intensity	3.33	3.75	4.14
China	Total water used	5,743,645	5,959,692	6,547,159
	Intensity	3.53	3.49	3.45

Energy		Unit: TJ, GJ/product ton		
		2011	2012	2013
Korea	Direct energy	80,206	86,589	87,542
	Indirect energy	32,111	37,048	48,151
	Subtotal	112,304	123,624	135,676
	Intensity	9.06	9.44	9.81
China	Direct energy	2,466	1,868	1,843
	Indirect energy	10,681	11,501	11,160
	Subtotal	13,147	13,369	13,002
	Intensity	8.07	7.83	6.84

· For Korea, the data before 2013 was modified to abide by the statement rules of the government.
· For China, the data before 2013 was modified due to inventory expansion, and also to abide by the emissions trading regulation of Tianjin City.

Greenhouse Gas		Unit: tCO ₂ -eq, tCO ₂ -eq/product ton		
Scope 1 & Scope 2 Emission		2011	2012	2013
Korea	Direct emission	4,248,459	4,623,589	4,697,356
	Indirect emission	1,697,471	1,865,117	2,466,167
	Subtotal	5,945,916	6,488,689	7,163,510
	Intensity	0.479	0.496	0.518
China	Direct emission	178,807	130,380	129,836
	Indirect emission	1,266,136	1,331,655	1,316,737
	Subtotal	1,444,943	1,462,036	1,446,573
	Intensity	0.887	0.856	0.761

· For Korea, the data before 2013 was modified to abide by the statement rules of the government.

· For China, the data before 2013 was modified due to inventory expansion, and also to abide by the emissions trading regulation of Tianjin City.

Scope 3 Emission		Unit: tCO ₂ -eq		
		2011	2012	2013
Power for resale		8,592	9,040	8,849
Wastewater treatment		14,731	15,727	16,471
Waste treatment	General waste	10,139	9,763	9,726
	Designated waste	2,140	2,411	3,009
Water use		13,703	16,306	19,018
Business trips of employees				1,398

· Only limited to operation sites in Korea

· Emissions due to business trips have been calculated systematically since 2013

Wastewater		Unit: m3, m3/product ton, %		
		2011	2012	2013
Korea	Total amount	11,508,574	12,286,422	12,868,071
	Intensity	0.93	0.94	0.93
	Recycled amount	1,504,299	1,069,140	1,748,978
	Recycling Rate	11.6	8.0	12.7
China	Total amount	3,324,691	3,505,509	3,708,207
	Intensity	2.04	2.05	1.95
	Recycled amount	1,332,919	1,441,138	1,387,493
	Recycling Rate	28.6	29.1	27.2

Water Pollutant		Unit: ton, kg/product ton					
		2011		2012		2013	
		Amount	Intensity	Amount	Intensity	Amount	Intensity
Korea	COD	563	0.045	565	0.043	634	0.046
	T-N	174	0.014	238	0.018	197	0.014
China	COD	202	0.124	219	0.128	104	0.055
	NH ₃ -N	28	0.017	13	0.008	8	0.004

Air Pollutant		Unit: ton, kg/product ton					
		2011		2012		2013	
		Amount	Intensity	Amount	Intensity	Amount	Intensity
Korea	Dust	158	0.013	162	0.012	164	0.012
	NOx	974	0.079	1,099	0.084	1,040	0.075
	SOx	624	0.050	505	0.039	383	0.028
China	Dust	75	0.046	85	0.050	130	0.068
	NOx	15	0.009	18	0.011	34	0.018
	SOx	57	0.035	54	0.031	6	0.003

Waste by Type		Unit: ton, ton/product ton		
		2011	2012	2013
Korea	General waste	140,650	122,698	121,626
	Designated waste	29,692	30,297	37,635
	Subtotal	170,342	152,995	159,261
	Intensity	0.014	0.012	0.012
China	General waste	13,821	15,416	18,051
	Harmful waste	6,184	8,856	9,194
	Subtotal	20,005	24,272	27,245
	Intensity	0.012	0.014	0.014

* Recycling rate in Korean and Chinese operation sites marked 67% and 66 %, respectively, in 2013.

Hazardous (Toxic) Chemicals		Unit: ton, ton/product ton		
		2011	2012	2013
Korea	Total amount used	1,967,645	2,653,306	3,364,981
	Intensity	0.159	0.203	0.243
China	Total amount used	1,206,921	1,226,999	853,991
	Intensity	0.741	0.718	0.449

Certification for Environment Management (ISO 14001)		
Korea	Daesan Plant	Ochang Plant 1
	Gimcheon Plant Gimcheon Plant	Ulsan Plant
	Naju Plant	Paju Plant
	Yeosu Plant	Research Park
	Iksan Plant	
China	Bohai	Nanjing
	Botian	Guangzhou
	Dagu	Yongxing
	Beijing	Tianjin

Social Data

Employment by Age and Gender		Unit: person					
		2011		2012		2013	
		Male	Female	Male	Female	Male	Female
Korea	50 or above	1,084	2	1,300	2	1,430	2
	40 - 49	2,798	26	2,900	33	3,001	45
	30 - 39	3,532	413	3,738	483	2,872	684
	Under 30	2,387	533	2,724	557	4,022	540
	Total	9,801	974	10,662	1,075	11,325	1,271
China	50 or above	18	1	21	1	29	1
	40 - 49	157	20	178	22	205	31
	30 - 39	779	516	839	543	1,020	726
	Under 30	2,430	2,358	2,958	2,565	3,118	2,704
	Total	3,384	2,895	3,996	3,131	4,372	3,462

Employment Creation		Unit: person					
		2011		2012		2013	
		Male	Female	Male	Female	Male	Female
Korea		1,559	163	1,136	167	975	238
China		1,827	2,475	2,171	2,049	2,127	2,250

Retirement Status of Korea		Unit: person, %		
		2011	2012	2013
Retired Employees	Male	266	275	312
	Female	54	66	42
	Total	320	341	354
Retirement Rate	Male	2.71	2.58	2.75
	Female	5.54	6.14	3.30
	Total	2.97	2.91	2.81

Maternity Leave		Unit: person		
		2011	2012	2013
Korea		132	146	147
China		228	317	170

* In 2013, 63 out of 65 employees who used maternity leave returned to work (Korea).

Actions Taken on Breaches Reported		Unit: no. of cases, person		
		2011	2012	2013
Investigation by Ethics Office		50	48	68
Disciplinary actions taken against persons involved	Strong	17	6	10
	Light	7	6	1

Labor-Management Collaboration

LG Chem believes in horizontal relations between labor and management in lieu of a vertical structure, and promotes collaborative labor-management culture where employees and the management respect one another on an equal footing. Embracing the principles of 'Customer-Value Creation' and 'People-Oriented Management', LG Chem has established a cooperative labor-management partnership. We aspire to materialize labor-management partnership as one community that helps to build our global competitiveness, enrich the lives of our employees, and contribute to social development through sustainable performance. Therefore, we developed a unique collaboration model that facilitates interactive participation and cooperation in the three different dimensions of corporate management, field operation, and collective bargaining.

Labor Union Status		Unit: person		
		2011	2012	2013
Korea		5,137	5,535	5,593
China (Trade Union)		4,562	5,180	5,817

* LG Chem guarantees employees the right to association and three basic labor rights.

Accident Rate & Intensity Ratio				
		2011	2012	2013
Korea	Accident rate (%)	0.19	0.34	0.32
	Intensity ratio	0.05	1.63	0.06
China	Accident rate (%)	0.50	0.37	0.32
	Intensity ratio	0.11	0.07	0.02

* Intensity Ratio= Lost labor days / Total labor hours x 1000

Certification for Safety Management			
Korea	OHSAS 18001	Daesan Plant	Ochang Plant 1
		Gimcheon Plant	Research Park
		Yeosu Plant	
Korea	KOSHA 18001	Daesan Plant	Iksan Plant
		Naju Plant	Ochang Plant 1
China	OHSAS 18001	Bohai	Nanjing
		Botian	Yongxing
		Dagu	

Social Contribution Cost		Unit: KRW 100 million, RMB 10 K		
		2011	2012	2013
Korea		252	245	210
China		195	121	268

Sustainable Management Index

GRI G4 General Standard Disclosure

■ Core Option

Category	Indicators	Contents	Page	External Verification
Strategy and Analysis	G4-1	Statement from the most senior decision-maker of the organization (CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and the organization's strategy for addressing sustainability	4 - 5	78 - 79
	G4-2	Description of key impacts, risks, and opportunities	4 - 5	78 - 79
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	G4-9	Scale of the organization	6 - 7	78 - 79
	G4-10	Total number of men and women workers by employment type, employment contract, workforce status, and region, portion of work by contractors, significant variations in employment numbers	51	78 - 79
	G4-11	Percentage of employees covered by collective bargaining agreements	In principle, all employees are allowed to join the labor union.	78 - 79
	G4-12	Organization's supply network	56 - 59	78 - 79
	G4-13	Any significant changes during the reporting period regarding size, structure, ownership, or supply network	There was no significant change in 2013.	78 - 79
	G4-14	Whether and how the precautionary approach or principle on risks of sustainable management issues is addressed by the organization	24	78 - 79
	G4-15	List of externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses	80	78 - 79
	G4-16	List of memberships in associations (such as industry associations) and/or national/international advocacy organizations in which the organization	80	78 - 79
Identified material Aspects and Boundaries	G4-17	All entities included in the organization's consolidated financial statements or equivalent documents, including those not covered in the report	26 - 27	78 - 79
	G4-18	Processes for defining the report content and the aspect boundaries and how the organization implemented the Reporting Principles for Defining Report Content	26 - 27	78 - 79
	G4-19	List of all the material aspects identified in the process for Defining Report Content	26 - 27	78 - 79
	G4-20	Aspect boundaries within the organization for each material aspect	26 - 27	78 - 79
	G4-21	Aspect boundaries outside the organization for each material aspect	26 - 27	78 - 79
	G4-22	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statements	See notes of each data	78 - 79
	G4-23	Significant changes from previous reporting periods in the Scope and Aspect Boundaries	26 - 27	78 - 79
Stakeholder Engagement	G4-24	List of stakeholder groups engaged by the organization	25	78 - 79
	G4-25	Basis for identification and selection of stakeholders with whom to engage	25	78 - 79
	G4-26	Organization's approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group	25	78 - 79
	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, including through its reporting and the stakeholder groups that raised the key topics and concerns	25	78 - 79

■ Core Option

Category	Indicators	Contents	Page	External Verification
Report Profile	G4-28	Reporting period (such as fiscal or calendar year) for information provided	2	78 - 79
	G4-29	Date of most recent previous report (if any)	2	78 - 79
	G4-30	Reporting cycle (such as annual, biennia)	2	78 - 79
	G4-31	Contact point for questions regarding the report or its contents	83	78 - 79
	G4-32	'In accordance' option the organization has chosen (core vs. Comprehensive) and the GRI Content Index for the chosen option, and the reference to the External Assurance Report, if the report has been externally assured	2, 78 - 79	78 - 79
	G4-33	Organization's policy and current practice with regard to seeking external assurance for the report; if not included in the assurance report accompanying the sustainability report; scope and basis of any external assurance provided; the relationship between the organization and the assurance providers; whether the highest governance body or senior executives are involved in seeking assurance for the organization's sustainability report	2	78 - 79
Governance	G4-34	Governance structure of the organization, including committees under the highest governance body and any committees responsible for decision-making on economic, environmental and social impacts	18 - 19	78 - 79
	G4-35	Process for highest governance body delegating authority over sustainability management-related tasks to senior executives and other employees	18 - 19	
	G4-36	Whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental, and social topics	18 - 19	
	G4-37	Process for consultation between stakeholders and the highest governance body on economic, environmental, and social topics	18 - 19	
	G4-38	Composition of the highest governance body and its committees	18 - 19	
	G4-39	Whether the Chair of the highest governance body is also an executive officer	18 - 19	
	G4-40	Nomination and selection processes for the highest governance body and its members	18 - 19	
	G4-41	Processes for the board of directors to ensure conflicts of interest are avoided and managed.	18 - 19	
	G4-48	Highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material aspects are covered	26 - 27	
	G4-49	Process for communicating critical concerns to the highest governance body	24	
Ethics and Integrity	G4-56	Organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics	16 - 17, 30 - 35	78 - 79
	G4-57	Internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity	16 - 17, 30 - 35	78 - 79
	G4-58	Internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity	16 - 17, 30 - 35	78 - 79

GRI G4 Specific Standard Disclosure

Category	Aspect	Indicators	Contents	Page	External Verification	
Economic	Economic Performance	G4-EC1	Direct economic value generated and distributed	6 - 7, 68		
		G4-EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	42 - 45		
	Market Presence	G4-EC5	Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation	68		
		G4-EC6	Proportion of senior management hired from the local community at significant locations of operation	51		
	Indirect Economic Impacts	G4-EC7	Development and impact of infrastructure investments and services supported	18 - 19		
		G4-EC8	Significant indirect economic impacts, including the extent of impacts	60 - 61, 68		
	Procurement Practices	G4-EC9	Proportion of spending on local suppliers at significant locations of operation	59		
	Environmental	Material	G4-EN1	Materials used by weight or volume	68	
			G4-EN2	Percentage of materials used that are recycled input materials	68	
Energy		DMA	Disclosure on management approach	43	78 - 79	
		G4-EN3	Energy consumption within the organization	69	78 - 79	
		G4-EN4	Energy consumption outside the organization	69		
		G4-EN5	Energy intensity	69	78 - 79	
		G4-EN6	Reduction of energy consumption	42 - 45, 69	78 - 79	
		G4-EN7	Reduction in energy requirements of products and services	42 - 45, 69		
		Water	G4-EN8	Total water withdrawal by source	69	
G4-EN9			Water sources significantly affected by withdrawal of water	No such water sources in Korea		
Emissions		DMA	Disclosure on management approach	43	78 - 79	
		G4-EN15	Total direct greenhouse gas (GHG) emissions	69	78 - 79	
		G4-EN16	Total energy indirect greenhouse gas (GHG) emissions	69	78 - 79	
		G4-EN17	Other indirect greenhouse gas (GHG) emissions	69	78 - 79	
		G4-EN18	GHG emission intensity	69	78 - 79	
		G4-EN19	Reduction of greenhouse gas (GHG) emissions	69	78 - 79	
		G4-EN21	NOX, SOX, and other significant air emissions	69	78 - 79	
		Effluents and Waste	G4-EN22	Total water discharge by quality and destination	69	
			G4-EN23	Total weight of waste by type and disposal method	70	
Products and Services		DMA	Disclosure on management approach	37	78 - 79	
		G4-EN27	Extent of mitigation of environmental impacts on products and services	36 - 40	78 - 79	
		G4-EN28	Percentage of product sold and their packaging materials that are reclaimed, by category	All packaging materials are recycled by recycling suppliers		
Compliance		G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	See business report		
Overall		G4-EN31	Total environmental protection expenditures and investments, by type	69		
Supplier Environmental Assessment		G4-EN32	Percentage of new suppliers that were screened using environmental criteria	40 - 41		
		G4-EN33	Significant actual or potential negative environmental impacts in the supply chain, and actions taken thereof	40 - 41		
Labour Practices and Decent Work		Employment	G4-LA1	Total numbers and rates of new employee hires and employee turnover by age group, gender, and region	70	
	G4-LA2		Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	50 - 55		
	G4-LA3		Return to work and retention rates after parental leave, by gender	70		
	Labor/Management Relations	G4-LA4	Minimum notice periods regarding operational changes (also applies to the case it is specified in collective bargaining agreements)	Complies with national law		

Category	Aspects	Indicators	Contents	Page	External Verification	
Labour Practices and Decent Work	Occupational Health and Safety	DMA	Disclosure on management approach	47	78 - 79	
		G4-LA5	Percentage of total workforce representing the formal joint management-worker health and safety committees that help monitor and advise occupational health and safety programs	46 - 49		
		G4-LA6	Type of injury, rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	71	78 - 79	
		G4-LA7	Employees with high incidence or high risk of diseases related to their occupation	46 - 49	78 - 79	
		G4-LA8	Health and safety issues covered in formal agreements with trade unions	46 - 49		
	Training and Education	DMA	Disclosure on management approach	51	78 - 79	
		G4-LA9	Average hours of training per year per employee, by gender and by employee category	50 - 55	78 - 79	
		G4-LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	50 - 55		
		G4-LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	50 - 55		
	Diversity and Equal Opportunity	G4-LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	51, 71		
	Equal Remuneration for Women and Men	G4-LA13	Ratio of basic salary and remuneration of women to men by employee category and by significant locations of operation	68		
	Supplier Assessment for Labor Practices	G4-LA14	Percentage of new suppliers that were screened using labor practices criteria	56 - 59		
		G4-LA15	Significant actual or potential negative impacts on labor practices in the supply chain, and actions taken thereof	56 - 59		
	Human Rights	Freedom of Association and Collective Bargaining	G4-HR4	Operations and suppliers identified as having violated or having significant risk of violating the right to exercise freedom of association and collective bargaining, and measures taken to support these rights	71	
		Child Labor	G4-HR5	Operations and suppliers identified as having significant risk of incidents of child labor, and measures taken to contribute to the effective abolition of child labor	71	
Forced or Compulsory labor		G4-HR6	Operations and suppliers identified as having significant risk of incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor	77		
Assessment		G4-HR9	Total number and percentage of operations subject to human rights reviews or impact assessments	56 - 59		
Supplier Human Rights Assessment		G4-HR10	Percentage of new suppliers that were screened using human rights criteria	56 - 59		
		G4-HR11	Significant actual or potential negative human rights impacts in the supply chain, and actions taken thereof	56 - 59		
Society		Local Communities	DMA	Disclosure on management approach	61	78 - 79
			G4-SO1	Percentage of operations that implement local community engagement, impact assessments, and development programs	60 - 65	78 - 79
			G4-SO2	Operations with significant actual or potential negative impacts on local communities	60 - 65	
	Anti-corruption	G4-SO3	Total number and percentage of operations assessed for risks related to corruption, and significant risks identified	30 - 35		
		G4-SO4	Communication and training on anti-corruption policies and procedures	30 - 35		
	Anti-competitive Behavior	G4-SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices, and their outcomes	See business report		
	Compliance	G4-SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	See business report		
	Supplier Assessment for Impacts on Society	G4-SO9	Percentage of new suppliers that were screened using criteria for impacts on society	56 - 59		
		G4-SO10	Significant actual or potential negative impacts on society in the supply chain, and actions taken thereof	56 - 59		
	Grievance Mechanisms for Impacts on Society	G4-SO11	Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms	60 - 65		
Product Responsibility	Customer Health and Safety	G4-PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	36 - 40	78 - 79	

ISO 26000 (International Guideline on Social Responsibility)

Core Subject	Issue	Page
Organizational Governance	Decision-making Process and Structure	6, 22-24, 50-55, 68-71
Human Rights	Due Diligence	30
	Human Rights Risk Situation	30
	Avoidance of complicity	59
	Resolving Grievances	31, 49
	Discrimination and Vulnerable Groups	50, 51, 71
	Civil and Political Rights	50, 51, 55, 71
	Economic, Social, and Cultural Rights	50 - 55, 71
Labor Practices	Fundamental Principles and Rights at Work	50-55, 71
	Employment and Employment Relationships	50, 51, 71
	Conditions of Work and Social Protection	50, 51, 70, 71
	Social Dialogue	71
	Health and Safety at Work	46-49
Environment	Human Development and Training in the Workplace	52-54
	Prevention of Pollution	38 - 45, 69 - 70
	Sustainable Resource Use	42 - 45, 69 - 70
	Climate Change Mitigation and Adaptation	42 - 45, 69 - 70
Fair Operating Practices	Protection of the Environment, Biodiversity and Restoration of Natural Habitats	65
	Anti-Corruption	30-33, 59
	Responsible Political Involvement	N/A
	Fair Competition	34, 35
	Promoting Social Responsibility in the Value Chain	56-59
Consumer Issues	Respect for Property Rights	30
	Fair Marketing, Factual and Unbiased information, and Fair Contractual Practices	34-36
	Protecting Consumers' Health and Safety	38-41
	Sustainable Consumption	36-41
	Consumer Service, Support, and Complaint and Dispute Resolution	36, 37
	Consumer Data Protection and Privacy	N/A
Community Involvement and Development	Access to Essential Services	36, 37
	Education and Awareness	36, 37
	Community Involvement	60-65
	Education and Culture	60-65
	Employment Creation and Skill Development	51, 52, 71
	Technology Development and Access	14, 15
	Wealth and Income Creation	42-45
	Health	46-49
Social Investment	56-59	

EICC(Electronic Industry Citizenship Coalition)

Category	Page	Category	Page			
CB - Basic Company Information	CB1 Customer Designation	8-13	FL - Labor Management and Ethical Conduct	FL7 Wages and Benefits	50	
	CB2 Company Contact Information	3		FL8 Humane Treatment	71	
	CB3 Supplier Company's Characteristics	6-13, 22		FL9 Non-discrimination	50-51	
CL - Supplier Company's Characteristics	CL1 Management Accountability on Labor & Ethics	22, 30, 82		FL10 Freedom of Association	71	
	CL2 Labor/Ethics Policy & Procedure	30, 50, 59		FL11 Ethical Business Practices	30-35	
	CL3 Labor/Ethics Management System Status	30-35, 50-55, 71, 82		FL12 Facility Labor/Ethics Management System Status	30-31	
	CL4 Labor/Ethics Management System Elements	30-35		FL13 Labor/Ethics Management System Elements	30-35	
CH - Health, Safety, and Environmental Management	CH1 Management Accountability and History on HSE	46, 47, 70, Refer to business reports		FH - Health, Safety, and Environmental Management	FH1 Facility Contact information for HSE	3, 6-13, 22
	CH2 HSE Policy and Procedures	39, 46, 47			FH2 HSE Management Accountability and History	46, 47, 70, Refer to business reports
	CH3 HSE Management System Status	38-41, 46-49			FH3 HSE Policy and Procedures	39, 46, 47
	CH4 HSE Management System Elements	38-41, 46-49			FH4 Occupational Safety and Machines	46-48
FB - Basic Facility Information	Customer Designation, Supplier Facility Contact Information, Supplier Facility Characteristics	3, 6-13, 22			FH5 Emergency Preparedness	46-48
	FB2 Contract Information on Suppliers	6-13, 22			FH6 Occupational Injury - Illness and Physically Demanding Work	46-48
	FB3 FB3 Suppliers' Characteristics	6-13, 22			FH7 Industrial Hygiene	39-41, 46-48
FL - Labor Management and Ethical Conduct	FL1 Facility Contact Information for Labor and Ethics	3			FH8 Living Conditions	49, 50
	FL2 Management Accountability and History	30, 32, 34, Refer to business reports			FH9 Environmental Permits	39-41
	FL3 Labor and Ethics Policy & Procedures	30, 50, 59	FH10 Pollution Prevention		42-45, 69, 70	
	FL4 Freely Chosen Employment	50	FH11 Hazardous Substances		46-48, 70	
	FL5 Child Labor Prohibition	71	FH12 Wastewater & Solid Waste		69, 70	
	FL6 Working Hours	Compliance with legal working hours	FH13 Airborne Emissions		42-45	
			FH14 Product Content		36-41	
			FH15 Management System Status		39, 46, 47	
			FH16 Management System Elements		38-41, 46-49	

10 Principles of UN Global Compact

10 Principles	Contents	Page
1. Businesses should support and respect the protection of internationally proclaimed human rights; and	Based on LG Group's principle of People-oriented Management, LG Chem advocates internationally declared human rights protection norms such as the UN Global Compact. Based on this, we protect labor rights at the company and strengthen the human rights item in the evaluation process of our suppliers, striving to manage and prevent human rights issues.	38, 50
2. make sure that they are not complicit in human rights abuses.		
3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	LG Chem established a fair HR principle, provides equal opportunities and compensation to its employees, and complies with international conventions on the prohibition of child labor and forced labor.	55
4. the elimination of all forms of forced and compulsory labor;		
5. the effective abolition of child labor; and		38
6. the elimination of discrimination in respect of employment and occupation.		
7. Businesses should support a precautionary approach to environmental challenges;	LG Chem follows GHG emission regulations and joins GHG reduction initiatives at home and abroad by setting up goals to reduce GHG emission and energy intensity in each operation. In addition, the company operates the Energy Committee and the Energy Management System, and applies an eco-friendly system to all stages from product development to manufacturing.	46, 47, 49
8. undertake initiatives to promote greater environmental responsibility; and		
9. encourage the development and diffusion of environmentally friendly technologies.		30, 31
10. Businesses should work against corruption in all its forms, including extortion and bribery.	Since the declaration of Jeong-Do Management in 1995, LG Chem spares no effort to end corruption by introducing the Compliance Program (CP) for fair trade, implementing the Gift/Money Receipt Reporting System, strengthening the code of conduct, and carrying out law-abiding activities by theme.	35, 36

Independent Assurance Statement

To the Stakeholders of LG Chem

The Korea Productivity Center was requested by LG Chem Ltd to provide independent assurance on the information presented in LG Chem's 2013 Sustainability Report and hereby provides following assurance statements:

Responsibility and Independence

The Report is prepared by LG Chem, which entitles a complete responsibility for the information, opinions, and content of the Report. The Assurer's responsibility is to provide independent assurance statements on the Report. As an independent assurance provider, the Assurer neither participated in the publication of the Report nor engaged in any conflict or interests that undermine its state of independence.

Verification Standards

The independent assurance was performed in accordance with Type 2 and a moderate level of assurance engagement based on AA1000AS(2008) assurance standards. The assurance statement checked suitability of inclusivity, materiality, and responsiveness by following AA1000APS(2008) assurance principles. Moreover, it checked whether the information on the Report is compliant to GRI G4 Guideline standards.

Limitations

The Assurer conducted an assurance engagement on LG Chem's 2013 performance by following the above assurance standards. We verified the reliability of LG Chem's performance on the Report in following manners: financial data was verified by the financial statement and disclosed documents audited by the auditing agency and environmental and social performance data was verified by applying Type 2 and a moderate level of assurance engagement. Furthermore, on-site inspection was limited to Seoul headquarter and if further assurance process is performed, the result may change accordingly.

Methodology

The following method was used to provide the assurance about the Report

- Verified whether requirements from the core option on GRI G4 Guidelines were fulfilled
- Verified consistency with the principles dictating the content and quality of sustainability reports based on the GRI G4 Guidelines.
- Verified objectivity and appropriateness of key issues selected and content in the Report by reviewing media research and performing benchmark analysis.
- Verified the suitability of the information and expression error through comparison analysis with other publication
- Verified the evidence of data and information through on-site inspection on Seoul headquarter and internal process and system.

Findings & Conclusion

The Assurer verified that the Report accurately and fairly illustrates LG Chem's sustainability management activity and performance. Moreover, through the assurance, the Assurer verified that LG Chem's Report fulfilled the requirements of GRI G4 Guideline's Core Option.

In case of General Standard Disclosures, the Assurer verified that the Report is written in compliance with the requirements of Core Option. For Specific Standard Disclosures, the Assurer reviewed Disclosure on Management Approach (DMA) and indicators about material issues by using the reporting criteria process below.

Material Issues	DMA & Indicators
Ethical Management	G4-56, G4-57, G4-58
Customer Value	DMA-Products and Services, G4-EN27, G4-PR1
Energy & Climate Changes	DMA-Energy, G4-EN3, G4-EN5, G4-EN6 DMA- Emissions, G4-EN15, G4-EN16, G4-EN17, G4-EN18, G4-EN19, G4-EN21
Safety Environment and Health	DMA-Occupational Health and Safety, G4-LA6, G4-LA7
Human Resource Development	DMA-Training and Education, G4-LA9
Shared Growth with Suppliers	N/A
Social Commitment	DMA-Local Communities, G4-SO1

- AA1000AS(2008) : AA1000 Assurance Standard(2008) is an international assurance standard, set by AccountAbility, that provides method of reporting sustainability management issues by evaluating the organization management on performances, compliance with principles, and reliability of performance information.
- AA1000APS(2008) : AA1000 AccountAbility Principles Standard(2008) is an international assurance standard set by AccountAbility that provides principles of AA1000 standards

Inclusivity : Participation of Stakeholders

LG Chem categorizes stakeholders into 9 groups (e.g. shareholders, clients, contractors, and etc.) in order to be compliant with the principle of inclusivity. It clearly separates each group's communication channel and expectation and gathers stakeholders' opinions through active communication. Especially, the Assurer thinks highly of LG Chem's effort to strengthen the communication with its contractors by establishing win-win cooperation and participating in win-win growth committee activity.

Materiality : Significant Issue Identification and Reporting

LG Chem organized sustainability management issues into 6 categories and total of 27 issues by using sustainability management international standard such as GRI G4 Guidelines, ISO26000, and EICC, analyzing media research, and researching other chemical companies' issues. Moreover, the Assurer drew out 10 material issues through the materiality testing that focuses on social interest level and LG Chem's influential level. These issues are proportionally distributed to each page of the Report.

Responsiveness : Response to Issues

LG Chem comprehended expectations that can affect stakeholders' performance, took responsive actions accordingly, and appropriately depicted the information into the Report. It uses the Report to publicly disclose its responsive activities and performance regarding sustainability management material issues. Particularly, establishment of CSR team, recognition of sustainability management as part of its valuable task, and creation of a separate department for sustainability management are highly applauded.

Recommendation

The Assurer highly values LG Chem's diverse efforts and performance to improve its sustainability and we suggest the following to improve sustainability reporting and condition.

- Establishment of sustainability management strategy system is needed in order to systematically promote sustainability management. Henceforth, based on sustainability management strategy system, its promotion tasks and KPI should be drawn out. By continuously managing this process, LG Chem's sustainability management activity and performance can be depicted with more details in the report.
- This report covers 8 production centers in Korea and China. We suggest LG Chem, as a global company, to expand the coverage of the Report to enhance sustainability management activities and performance of the entire foreign production centers.
- Stakeholders participate as LG Chem gathers their opinions through survey and interviews within the company. There is a need to strengthen activities that can gather stakeholders' direct opinions and verify their expectations. Other than interviews with the board of directors, different communication channels, such as interviews with experts outside of company or representatives of other groups of stakeholders and committee meetings, are necessary.



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진홍

The Sustainability Management Center of Korea Productivity Center is an assurance agency officially certified by AccountAbility [organization established AA1000, the international standard for stakeholder participation and verification] and is qualified to independence assurance engagements. Our Assurance Committee is comprised of competent experts who have in-depth experience in sustainability management consulting and assurance and have completed the relevant training.

Membership of Organizations and Associations

CSR	Industry
UN Global Compact Network Korea	Korea Petrochemical Industry Association
Korea Business Council for Sustainable Development (KBSCD)	Korea Chemicals Management Association
Business Institute for Sustainable Development (BISD) of KCCI	Korea Chemical Industry Council of KCCI
Climate Forum of National Assembly	International Institute of Synthetic Rubber Producers (IISRP)
Green Company Council	Korea Vinyl Environmental Council
Korea Fire Safety Association	Korea Information Display Society (KIDS)
Korea Environmental Management Association	Korea Specialty Chemical Industry Association
Korea Mecenat Association	Korean Society of Automotive Engineers
Fair Competition Federation	Korea Smart Grid Association

Awards Received

- Green Car Awards: Green Technology Awards from Ministry of Knowledge and Economy
- 47th National Taxpayers Day : Achievement of KRW 400 Billion of National Tax
- International Conference for Large and Small Business Cooperation: Excellent Partner Award for Shared Growth
- Good Corporation Award organized by Citizens' Coalition for Economic Justice: Best Company for Metal, Non-metal, Chemical Industries
- DJSI Asia Pacific & DJSI Korea Dow Jones Sustainability Index (DJSI): DJSI Asia Pacific & DJSI Korea
- Hankyoreh Economic Research Institute's East Asia 30: Excellent Company for East Asia 30
- Global Standard Management Awards: Best Manufacturer for Sustainable Management Report
- Chosun Daily Advertisement Awards : Best PR for Chemistry Industry
- 35th Energy Saving Contest : Silver Tower Order of Industrial Service Merit
- Carbon Disclosure Project (CDP) Awards : Sector Leader for Raw Materials

Glossary

Term	Contents	Page
3D FPR(Film Patterned Retarder)	A space-division method for 3D that delivers images using a patterned retarder film placed on the screen and viewed with 3D glasses	10
ABS	Thermoplastic resins formed from three types of monomers-Acrylonitrile, Butadiene, and Styrene	8
BAU(Business As Usual)	Estimate of carbon emission if a company does not take special action (low carbon and green growth, etc.)	42
COD(Chemical Oxygen Demand)	Chemical Oxygen Demand (COD) : In environmental chemistry, the chemical oxygen demand (COD) test is commonly used to indirectly measure the amount of organic compounds in water	70
EICC (Electronic Industry Citizenship Coalition)	A coalition of the world's leading electronics companies working together to improve CSR, requiring them to comply with CSR guidelines in the global supply chain. LG Chem also follows EICC guidelines, and covers them in page 60.	26
EnMS(Energy Management System)	EnMS (Energy Management System): An internationally standardized system for the company to continue managing energy efficiency and thereby reduce costs at the company level	43
ERP(Enterprise Resource Planning)	A total information system, designed to ensure the efficient management of all human and physical resources in the enterprise used for business activities, with an aim to reinforce business competitiveness	40
ESS(Energy Storage System)	Energy Storage System: Energy storage to save excess power generated by power plants and then to transmit the power later	15
GEMS(Greenhouse gas and Energy Management System)	A GHG and energy management system to analyze and manage climate change-related risks	44
GHS(Globally Harmonized System)	Globally Harmonized System of Classification and Labelling of Chemicals (GHS): A worldwide initiative to promote standard criteria for classifying chemicals	40
GRI G4	The latest guidelines published by the Global Reporting Initiative (GRI) in May 2013 on the Sustainable Management Report. In its Sustainability Report, LG Chem followed the GRI G4 Guidelines, covered in page 58.	26
ISO17025	Globally recognized standards developed by ISO specifically for testing and calibration labs that intend to seek accreditation.	41
ISO26000	Guidelines on CSR for institutions, including corporations, established by the ISO	26
KOLAS (Korea Laboratory Accreditation Scheme)	Korea Laboratory Accreditation Scheme: A governmental administrative office established by Korean Agency for Technology and Standards of the Ministry of Knowledge Economy	41
LCA(Life-Cycle Assessment)	A technique for assessing the environmental performance of a product by quantifying the amount of energy and materials consumed and emitted from the lifecycle of the product to evaluate their impact on the environment	43
MSDS(Material Safety Data Sheet)	MSDS (Material Safety Data Sheet) : A document that contains information on how to work safely with chemical materials, including descriptions on the name of the chemical material, their physical chemical properties, hazards, risks, emergency procedures in the case of explosion or fire, and their environmental impacts	39
NCC(Naptha Cracking Center)	The Naptha Cracking Center is the plant with facilities for pyrolyzing naphtha to produce petrochemical feedstock like ethylene and propylene	8
NH3-N(Ammonia Nitrogen)	NH3-N (Ammonia Nitrogen): One of the indicators to measure the level of water pollution	70
NOx(Nitrogen Oxides)	NOx (Nitrogen oxides): The primary air pollutant produced mostly by the direct combination of atmospheric oxygen and nitrogen oxidized in the combustion process	70
REACH(Registration, Evaluation, Authorization and Restriction of Chemicals)	A European Union (EU) regulation on all chemicals of which 1 ton or more are produced or imported per year, that requires the registration, evaluation, authorization, and restriction of chemicals depending on their production and import volumes and risks to human health and the environment	40
SAP(Super Absorbent Polymer)	Super Absorbent Polymer: Polymers that can absorb and retain several hundred times the amount of liquid as their own mass	9
SOx(Sulfur Oxides)	Sulfur oxides: A gas primarily emitted from fossil fuel combustion such as coal and oil that holds sulfur and causes acid rain	70
Stack & Folding	LG Chem's patented battery technology that aligns and stacks Bi-Cells made with severed parts of anode materials, cathode materials, and separators according to product design	12
Stepped Battery	Layers of batteries consisting of different sized Bi-Cells to maximize the inner space of smart devices	37
T-N(Total Nitrogen)	An indicator of water pollution that refers to the sum of organic and inorganic nitrogen compounds	70
TVOC	Total volatile organic compounds: Hydrocarbons volatilized into air and causing strong odor or ozone	41

Participant Information

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CSR Team
Planning Team. Petrochemicals
Strategic Planning Team. IT&E Materials
Strategic Planning Team. Energy Solution
Credit Management/Compliance Team
Planning & Coordination Team
IR Team
Strategic Planning Team. Research Park
Ethics Office
Public Affairs Team
Safety & Environment Team
Energy/Climate Change Team
HR Planning Team
Talent Recruiting Team
HR Development Team
Corporate Culture Team
Global HR Team
HR Service Team
Employee Relations Team
Procurement Strategy Team. Petrochemicals

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Business Planning Team
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HR Development Team
LGCE BJ. Facility & Environment Team
LGCC TJ. Operating Management Team
LG BOHAI. Factory. Environment Team
LG BOTIAN. Production Team
LG DAGU. Management Dept. HR & GA Team
LGCE NJ. HR & GA Dept. Safety & Environment
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